Lee County, Florida
DEPARTMENT OF COMMUNITY DEVELOPMENT
ZONING SECTION
STAFF REPORT

Case Number: DCI2023-00052
Case Name: Pelican Landing Mixed Use Planned Development
Area Subject to Request: 430 +/- Acres
Case Type: Minor Planned Development Rezone
Sufficiency Date: January 21, 2025
Hearing Date: April 10, 2025
Commissioner District: #3 (Commissioner Mulicka)

REQUEST:

RVi Planning + Landscape Architecture, on behalf of the Kersey Smoot Investments, LLC, has filed an application to rezone approximately 430 +/- acres from Residential Planned Development (RPD) and Commercial Planned Development (CPD) to Mixed Use Planned Development to allow a maximum of 729 dwelling units (100 single-family and 629 multi-family), 25,000 square feet of office use, 27 golf holes and 318 hotel rooms with private onsite recreation and accessory uses. Building heights range from 290 feet within Tract MU to 50 to 110 feet for mid-rise multi-family residential buildings and conventional residential dwelling types.

The subject property is located north of Coconut Road and West of US 41 adjacent to the City of Bonita Springs and the Village of Estero. The site has access to Coconut Road, which is a major collector roadway maintained by Lee County, via Saltleaf Boulevard, a privately-maintained road. The parcel is located within the Suburban, Outlying Suburban, and Wetlands Future Land Use Categories. A legal description and sketch and description of the subject property are attached as Attachment B of the staff report.

SUMMARY:

Staff recommends **APPROVAL** of the applicant's request subject to the conditions and deviations attached hereto as Attachment C.

The applicant has requested seven new deviations (Deviations 1, and 9 through 14) from internal roadway design relief, signage and building setbacks, and internal buffering requirements (Attachment E). The applicant is requesting to carry forward previously approved deviations per Resolutions Z-94-014 and Z-98-066 and Administrative Amendments ADD2021-00190A and ADD2021-00191 (Deviations 2 through 8). Staff recommends approval of these deviations as outlined in Attachment C.

HISTORY OF PARCEL:

The subject property is part of an overall Development of Regional Impact (DRI2005-00001) that encompasses 2,749.25 acres of land located north and south of Coconut Road as shown per Map H, which is currently under review due to discrepancy in acreage and threshold changes (Attachment F). The DRI provides thresholds for residential density for multi-family and single-family dwelling units, commercial retail

uses, commercial office uses, hotel uses, golf course, and indigenous areas per the Land Use Summary Table per Map H as further described below. The applicant has a concurrent DRI/Development Order Amendment to revise the thresholds for the commercial retail, commercial offices, and hotel units (DRI2025-00001).

The overall 2,516.65-acre Pelican Landing Development of Regional Impact is comprised of several planned developments that include Pelican Landing CPD/RPD, Kersey Smoot RPD, and Raptor Bay RPD. The overall land acreage is currently under review to revise acreage discrepancies that have occurred over time. The following details provide the history of each DRI DO Amendments and zoning approvals that condition the intensity and density as the DRI boundary changed over the years:

Pelican Landing CPD/RPD (DRI Third and Fourth Amendment) (1,121.5 acres)

Pelican Landing CPD/RPD is approximately 1,121.5 +/- acres and was rezoned (Resolution Z-94-014) from Agricultural (AG-2), Residential Planned Development (RPD), Two-Family Conservation (TFC-2), and Industrial Marine (IM) to Residential Planned Development (RPD) and Commercial Planned Development (CPD) (Attachment G). Pelican Landing RPD/CPD permitted 2,616 dwelling units, 520,000 square feet of commercial office, and a 450-unit convention hotel on a total of 1,121.5 +/- acres. Building heights range from 35 feet above average grade to 200 feet above flood elevation (Attachment G). Development of Regional Impact (DRI) Development Order #1-9293-121 was approved August 29, 1994 to allow 4,050 residential units consisting of 665 single-family dwelling units and 3,385 multi-family dwelling units, 600,000 square feet of commercial retail, 210,000 square feet of commercial office 2,400 parking spaces to support the commercial retail, 700 parking space to support the commercial offices, 450 unit hotel, 50,000 square feet for a conference center, 65 wet boat slips, 150 dry boat slips, and various recreational amenities on approximately 2,100 =/- acres (Attachment G). The DRI approved 87 acres of upland preserves, 507 acres of salt and freshwater preserves and 208 acres of surface water management lakes.

Pelican Landing CPD/RPD (DRI Fourth Amendment) (2,373 acres)

The fourth amendment to the Pelican Landing DRI revised the dwelling units to 4,400 residential units, of which 665 are single-family and 3,735 multi-family units, 461,050 square feet of retail commercial and 245,000 square feet of office commercial. The parking to support the retail was required to be up to 2,310 parking spaces and 820 parking spaces to support the office uses. The hotel rooms were revised to 750 hotel/motel units, 50,000 square feet for a conference center, 65 wet boat slips and 150 boat slips (Attachment H)

Spring Creek (added 273 acres of the Spring Creek DRI)

Pelican Landing DRI Development Order (DO) was amended to incorporate 273 acres and the conditions from Spring Creek DRI #10-7677-9 to the Pelican Landing DRI via the third amendment to the Pelican Landing DRI DO (Attachment I). The third amendment revised the dwelling units from 4,050 residential units to 4,400 and revised multi-family dwelling units from 3,385 to 3,735 multi-family dwelling units. The commercial retail intensity was amended from 600,000 square feet to 540,000 square feet of commercial retail. The commercial office intensity was amended from 210,000 square feet to 245,000 square feet. The

retail parking was amended from 2,400 to 2,699 parking spaces and the office parking was amended from 700 to 820 parking spaces. Hotel, conference center, and boat slip entitlements did not change.

Kersey Smoot RPD (204 acres)

Kersey Smoot RPD is approximately 204 acres and was rezoned (Resolution Z-98-066) from Agricultural (AG-2) and Two-Family Conservation (TFC-2) to Residential Planned Development (RPD) to permit a maximum of 362 dwelling units, not to exceed 45 feet in height with a maximum of three habitable floors, 150 dry boat storage slips not to exceed 45 feet in height, and a golf course. The resolution noted that the dwelling units and dry boat storage slips are a part of the approved Pelican Landing DRI #1-9293-121 (Attachment J). The DRI was amended to add the 204 acres of Kersey Smoot RPD to the Pelican Landing DRI #1-9293-121 (total of 2,577 acres) without increasing the overall density of 4,400 dwelling units or the 150 dry boat slips and adjust the land use tabulations and Map H (Attachment J).

Addition of Baywinds Parcel (Pelican Landing CPD/RPD DRI Seventh Amendment

The Seventh DRI DO Amendment added 72 acres from Baywinds Parcel to the 2,577 acres of the Pelican Landing DRI. The applicant requested to add the existing boat ramp located on the Baywinds Parcel and revise the saltwater and freshwater wetlands from 614 acres to 635 acres, the stormwater management lakes from 227 acres to 234.68 acres, and the public and private rights-of-way from 145 acres to 162.16 acres (Attachment K).

City of Bonita Springs Jurisdictional Boundary Change

The Tenth Amendment to the Pelican Landing DRI revised the legal description and defined the jurisdictional line between the City of Bonita Springs and unincorporated Lee County. Approximately 1249.8 acres of the Pelican Landing DRI are located within the City of Bonita Springs; approximately 1216.45 acres of the Pelican Landing DRI are located within the unincorporated area of Lee County; and approximately 282+/- acres of the 2,748.25-acre total constitutes the Spring Creek West DRI, which is in the City of Bonita Springs (Attachment L).

Change in Density and County Acreage

The Twelfth Amendment to the Pelican Landing DRI amended the legal description and Map H to include a 1.45-acre tract for the purpose of constructing a maintenance facility, reduce the number of residential dwelling units from 4,400 to 3,912 residential units, and change the mix of unit types to allow an increase in single-family units from 665 to 930 and reduce the multi-family units from 3,735 to 2,982 (Attachment M).

Subject Request and Seventeenth Amendment

The Thirteenth to the Sixteenth Amendments to the Pelican Landing DRI were requests for new buildout dates due to various States of Emergency. The applicant has submitted a companion DRI DO Amendment Seventeen (DRI2024-00001) to change the overall acreage from 2,749.25 acres to 2,516.65, decrease the City of Bonita Springs portion from 1,249.8 acres to 1,213 acres, and increase the unincorporated Lee

County portion from 1,217.9 acres to 1,253.25 acres. The residential density is changed from 3,912 units to 4,400 units.

Pelican Landing includes Planned Developments that were approved to allow certain entitlements that are consistent with the DRI DO thresholds. The Planned Developments include Pelican Landing CPD/RPD and Kersey Smoot RPD (Resolution Z-07-031) within Lee County, and Raptor Bay RPD within the City of Bonita Springs. Pelican Landing CPD/RPD approved 3,912 total units with 503 units in Bonita Springs and 362 units in the Kersey Smoot RPD. The zoning resolutions are attached with the companion DRI DO Amendments to track the changes in land within unincorporated Lee County and the land entitlements (Attachments G through M).

CHARACTER OF THE AREA:

The subject parcel is north of Coconut Road and West of US 41 surrounded by land within the City of Bonita Springs and Village of Estero jurisdictions. Coconut Road is a County-maintained road located in the City of Bonita Springs and is classified as a major collector road. The project abuts West Bay Club to the north, which is in the Village of Estero; Saltleaf Golf Preserve (aka Coconut Point Hyatt/Pelican Landing/Bayview) abuts the west side of the subject property and is located in the City of Bonita Springs; and El Dorado Acres Residential Subdivision abuts the east side of the subject property and is within unincorporated Lee County; CPD (Commercial Planned Development) portion of Pelican Landing abuts the southeast property line and is within unincorporated Lee County; and the Fountain Lakes, Marsh Landing, Meadowbrook residential communities abut to the northeast and are in the City of Bonita Springs. The residential development to the south of Coconut Road is within the City of Bonita Springs. Property immediately surrounding the subject property is depicted in Attachment B of this report and can be characterized as follows:

North

The subject property abuts West Bay Club which is in the Village of Estero. The applicant has approved lakes, golf course and indigenous preserve areas that have been completed. The north portion of the subject property abutting West Bay Club has a preserve and golf course. The Master Concept Plan depicts a 30-foot Type F buffer along the north property line. There are no buildings proposed in this area.

East - Village of Estero

The east property line partially abuts Fountain Lakes RPD, Marsh Landing RPD, and Meadowbrook RPD residential communities along the northeast portion of the subject property. These residential communities are within the Village of Estero and consists of single-family residential dwelling units. The northeast property line of the subject property is developed with a golf course and preservation area abutting Fountain Lakes RPD and open storage, maintenance, and preserve area abutting the Meadowbrook RPD.

East – Unincorporated Lee County

El Dorado Acres is a single-family subdivision that is conventionally zoned Residential Single-Family (RS-1). The subject property has an existing golf course separated from El Dorado Acres by a 30-foot-wide Type-F buffer. The applicant is proposing mixed-use development in the southeast corner of the subject property in the current location of the golf course maintenance facility. The southeast corner abuts Bayview II

Commercial Planned Development (Resolution Z-19-024), which is approved for boat storage and accessory and commercial parking lot (Attachment N). El Dorado Acres and the Bayview II Commercial Planned Development are within unincorporated Lee County.

South

The subject property abuts Coconut Road, which is a County-maintained collector road that connects to US 41 to the east.

South – Villages of Estero and City of Bonita Springs

South of Coconut Road are a mix of residential communities that include multi-family buildings consisting of high rise to low rise buildings at The Colony, which abuts Estero Bay to the west. East of The Colony is Pelican Landing, which consists of single-family and townhouse dwelling units ranging from 45 to 65 feet in height. The development south of Coconut Road also includes conservation areas and a golf course.

West – Unincorporated Lee County

The subject property abuts Estero Bay, which is an aquatic preserve, along the northwest corner.

West – City of Bonita Springs

The remaining western property line abuts the Bayview Subdivision, which is under construction, and Hyatt Regency at Coconut Point.

MASTER CONCEPT PLAN AND SCHEDULE OF USES

The applicant is proposing to retain the existing access to Coconut Road as depicted on the Master Concept Plan (Attachment C). The site is being designed to have a Mixed Use (MU) Tract with access to Coconut Road that includes residential, multi-family residential, warehouse (mini, hybrid, and public) as a residential accessory use, and a mix of commercial uses (Attachment O). North of the MU Tract is the existing golf course with surrounding conservation areas. East of the preserve areas, the applicant is proposing residential development with single-family and multi-family and restaurant associated with the golf course within the Residential (RES) Tract. The Multi-Family (MF) Tract is proposed to be single-family and multi-family residential with hotel/convention center, healthcare facilities, continuing care, and assisted living facilities with residential and recreational accessory uses. The RES and MF Tracts do not have access to Coconut Road within unincorporated Lee County lands. Interconnections between the subject property and Coconut Plantation Drive are depicted on the Master Concept Plan and access easement agreements are attached (Attachment P).

Staff has revised the Schedule of Uses proposed within the MU Tract to add Accessory Residential Uses to the schedule with a subset referencing the Warehouse, Hybrid, Mini, and Public (Attachment C) proposed by the request. The applicant is requesting the warehouse use to support the residential uses within Pelican Landing only.

Staff is codifying all conditions pertaining to the subject property and recommending an additional condition requiring the remnant Kersey-Smoot RPD and Pelican Landing RPD zoning resolutions to be amended to

remove the subject property from their legal boundaries and amend the allowable densities within Kersey-Smoot RPD (241 units) and Pelican Landing RPD proportionally. The recommended condition is tied to the issuance of a development order for the subject property's MF Tract along the north property line.

AVAILABILTY OF PUBLIC SERVICES:

Public Services are defined by the Lee Plan as "*the requisite services, facilities, capital improvements, and infrastructure necessary to support growth and development at levels of urban density and intensity*." The level of public services currently serving the subject property are as follows:

Public water and Sewer: The proposed project is within the Bonita Springs Utilities, Inc. service area for potable water, sewer, and irrigation. The developer will be required to install all off-site and on-site utility line extensions necessary to provide service to the project. The Letter of Availability from Bonita Springs Utilities, LLC states that the estimated usage for the project is 301,400 gallons per day and the Water Treatment Plant and Water Reclamation Facilities have the capacity to treat the estimated usage (Attachment Q).

Police, fire, and emergency services: Emergency Management Services Medic Station #29 and Estero Fire Station #42 is located northeast of the subject property at 8005 Sweetwater Ranch Boulevard, approximately 2.5 miles away from the subject property. The Lee County Sheriff's office is located at 9990 Coconut Road, approximately 2.0 miles from the subject parcel.

Schools and Parks

Estero High School is approximately three miles to the northeast from the subject property located at 21900 River Ranch Road. Spring Creek Elementary School is located at 25571 Elementary Way which is approximately 3.5 miles southeast of the subject property. **The applicant did not provide a letter from the School District indicating that the school district has the capacity to serve the residential units proposed.**

Public transit and pedestrian facilities: The property is near existing routes on the Lee County Walkways and Bikeways Map and Lee County Greenways Master Plan per **Lee Plan Maps 3-D and 4-E**. A shared-use path and on-road bikeway currently exist along US 41 per **Lee Plan Map 3-D**. The applicant will be required to provide a sidewalks along Coconut Road per **LDC Section 10-256**. The south side of Coconut Road has an existing sidewalk, but the north side has an incomplete sidewalk. The closest LeeTran bus stop is located along US 41 to the east of the subject property. The bus stop serves Routes 140 and 240 going southbound. The closest northbound bus stop is located across US 41 and serves Routes 140 and 240 going northbound. Prior to development order approval, the applicant will be required to provide sidewalks internal to the project and abutting the subject property in accordance with LDC Section 10-256. The applicant has requested a deviation to allow a bike lane on one side of the street.

PROPERTY DEVELOPMENT REGULATIONS & OFF-STREET PARKING:

The applicant proposes property development regulations that include maximum heights, minimum setbacks, maximum lot coverage (Attachment O). The applicant is proposing building heights ranging from 50 feet to 290 feet. The buildings within the MU Tract that abut single-family residential to the east are limited to 50 feet with commercial, residential, and accessory structures (i.e. warehouse, hybrid) uses. The

buildings within the GC Tract are limited to 50 feet and include the pro shop, maintenance building, and club house to support the golf course. The buildings within the RES Tract are limited to 110 feet and abut indigenous preserve to the east and the Saltleaf / Pelican Landing / Raptor Bay development, which is approved for 290 feet (20 stories over parking) and the Hyatt Coconut Point Resort at 213 feet (18 stories). The applicant is proposing buildings within the MF Tract to be a maximum 290 feet height. The MF Tract abuts West Bay Club to the north, which has 290-foot buildings. Staff finds the proposed property development appropriate to facilitate development in accordance with the MCP.

DEVIATIONS:

The applicant has provided a strikethrough and underline document that codifies all conditions from previous zoning resolutions and administrative approvals (Attachment R). The previous deviations from resolutions have been either been struck or brought forward as indicated in Attachment C. The Schedule of Deviations and Justifications are included as Attachment E and are describe as follows:

Deviation #1 is being requested from LDC Section 10-296, which requires local private roadways to provide a minimum bike lane width of five feet, and a minimum sidewalk width of six feet on both sides of the right-of-way, to allow for five-foot sidewalks along one side of internal roadways in all tracts. Staff is recommending **APPROVAL** of this deviation due to the infill nature of the development and the partially built areas surrounding the subject property that play an integral role in interconnectivity through the access easements (Attachment P).

Deviation #2 is being requested from LDC Section 34-2013(a), which requires the parking lot design to permit vehicles exiting the parking lot to enter the street right-of-way or easement in a forward motion, to allow for individual parking spaces to back onto right-of-way easements in the RES, MF and MU Tracts. Staff is recommending **APPROVAL** of this deviation. This deviation was previously approved per Resolutions Z-94-014, Deviation 2 and Z-98-066, Deviation 1.

Deviation #3 is being requested from LDC Section 34-935(c)(2), which requires internal roads and drives to be no closer than 25 feet to the development perimeter, to allow a zero-foot minimum separation for internal development parcels, and a 15-foot separation for external parcels within the MF, RES, and MU Tracts. Staff is recommending **APPROVAL** of this deviation. This deviation was previously approved per Resolution Z-98-066, Deviation 2.

Deviation #4 is being requested from LDC Section 30-152, which requires identification signs to be set back a minimum of 15 feet from any right-of-way easement, to allow for a setback of zero feet within the MF, RES, and MU Tracts. This deviation was previously approved per Resolution Z-98-066, Deviation 5 with a condition stating that the applicant must demonstrate that sight distance requirements are met and consistent with the LDC. Staff is recommending **APPROVAL** of this deviation.

Deviation #5 is being requested from LDC Section 34-2474(b)(6) which requires that recreation centers and ancillary facilities be located at least 40 feet from residential dwelling units, to allow for a minimum of 20 feet for the internal development parcels in which they are located, but not for parcels adjacent to or external

to the property. Staff is recommending **APPROVAL** of this deviation. This deviation was previously approved per Resolution Z-98-066, Deviation 11.

Deviation #6 is being requested from LDC Section 10-329(d)(4), which requires lake bank slopes to be sloped at a 6:1 ratio from the top of bank to a water depth of two feet below the dry season water table, to allow a minimum ratio of 4:1 slope on all lake banks in all tracts. Staff is recommending **APPROVAL** of this deviation. The deviation was previously approved in ADD2021-00190A.

Deviation #7 is being requested from LDC Section 34-2020(b), which requires six parking spaces per hole for golf courses, to allow a five percent reduction of required parking spaces at the golf clubhouse only. This deviation was previously approved per ADD2021-00191, Deviation 13. All conditions imposed by ADD2021-00191 are incorporated into the request and there are no changes to the golf course proposed by this request. Staff recommends **APPROVAL** of this deviation.

Deviation #8 is being requested from LDC Section 34-935(f)(1)e, which limits the height of buildings in the Planned Development zoning category within the Outlying Suburban land use category to 45 feet, to allow for a maximum height of 290 feet over above the minimum flood elevation in the MF tract, 110 feet within the RES tract, and 50 feet within the MU and GC tracts. The development has an existing interface buffer and indigenous preservation areas along the west, east, and portions of the north property lines which is in compliance with LDC Section 34-2175. The buildings area setback from the north and east property lines due to the golf course and conservation areas. Staff is recommending **APPROVAL** of this deviation. Resolution Z-94-014, Deviation 12 approved additional height above 45 feet to allow 20 stories over parking with 15 percent open space to be provided for each multi-family building and a minimum building separation of 125 feet for all buildings over 75 feet.

Deviation #9 is being requested from LDC Section 10-416(d), which requires a Type C/F buffer where multi-family residential uses and commercial uses abut, to allow for no internal buffers in all tracts. Staff is recommending **APPROVAL** of this deviation due to the subject property being a mixed-use infill development. Type C buffers require an eight-foot wall with 15-foot-wide buffer and Type F buffers require a 30-foot-wide buffer with trees and shrubs. A Mixed Use Planned Development is designed to provide connectivity between uses, which walls and large buffer areas do not provide.

Deviation #10 is being requested from LDC Section 34-2020, which requires parking spaces to be provided for Recreation Facilities, Indoor at four spaces per 1,000 square feet of floor area, to allow for parking spaces related to Recreation Facilities, Indoor to be calculated at one space per 1,000 square feet of floor area where such facilities are private for residents only and integrated within mid- and high-rise buildings only within the MF, MU, and RES tracts. Staff recommends **APPROVAL** of this deviation. The development is being designed with mid- and high-rise buildings with amenities located within each building. The development is private and gated and provides walkable connections between uses.

Deviation #11 is being requested from LDC Section 34-935(b)(1), which requires all buildings and structures to be set back from the development perimeter a distance equal to the greater than one-half the height of the building or structure, to allow setbacks from the development perimeter within all development tracts

to be a minimum of 0 feet for buildings adjacent to property in other tracts within the Pelican Landing MPD, outside the Pelican Landing MPD if within the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs, and to Estero Bay, and a minimum of 50 feet from the north property boundary. Staff is recommending **PARTIAL APPROVAL** of the deviation except for Estero Bay. The west portion of the subject property is preservation area with a 20-foot wetland setback as depicted on the MCP. This area is known as the Interface Area with uses listed in the Schedule of Uses as passive recreation, water management, wetland marsh, boardwalks, etc. The 0-foot setback for buildings along the west MF Tract must be established from the 20-foot preserve setback and not the property line. Staff cannot support a 0-foot setback from the west property line based on the finding that the 0-feet setback will impact public health, safety, and welfare by increasing the potential for impacts to wetland areas and habitat.

Deviation #12 is being requested from LDC Section 34-935(e)(4), which requires a minimum separation of buildings of one-half of the sum of their heights where there are two or more principal buildings on a development tract, to allow a minimum building separation of 35 percent of the sum of the building heights for buildings greater than 35 feet in height within the MU, MF, and RES tracts. Staff is recommending **APPROVAL of this deviation subject to a letter of no objection from the Estero Fire District.** The applicant is proposing infill development within the areas outside of the existing golf course and preservation tracts.

Deviation #13 is being requested from LDC Section 10-416(d)(1), which requires a buffer area along the entire perimeter of the proposed development whenever the proposed development abuts a different use, to allow no perimeter buffers where onsite preserve areas abut the MPD perimeter or where adjacent to property that is either owned by the Applicant or adjacent to the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs. Staff recommends **APPROVAL** of this deviation except for the southeast property line. Staff is recommending a condition to extend the Type F buffer being proposed by the applicant between the golf course and El Dorado Acres to extend to Coconut Road. This will provide additional screening for the view shed from the southwest corner of El Dorado Acres into the MU Tract. The homes in El Dorado Acres are 35 feet to 45 feet in height, and Tract MU has a maximum building height of 50 feet. This will provide additional screening to be compatible with surrounding uses. Deviation #13 is applicable to perimeter buffers that must be met with preservation and/or conservation areas.

Deviation #14 is being requested from LDC Section 10-285, which requires a connection separation of 330 feet on major collector roads in Future Non-Urban Areas, to allow a connection separation of 215 feet on Coconut Road. The Lee County Department of Transportation has reviewed the deviation request and has no objection to the deviation since the proposed access to Coconut Road is an existing driveway that is aligned with Via Veneto Boulevard to the south (Attachment V).

REVIEW CRITERIA:

LDC Section 34-145 establishes the review criteria for rezoning requests. Before recommending approval of a rezoning request, the Hearing Examiner must find the request:

a) Complies with the Lee Plan;

b) Meets the Land Development Code and other applicable County regulations or qualifies for deviations;

c) Is compatible with existing and planned uses in the surrounding area;

d) Will provide access sufficient to support the proposed development intensity;

e) The expected impacts on transportation facilities will be addressed by existing County regulations and conditions of approval;

f) Will not adversely affect environmentally critical or sensitive areas and natural resources; and

g) Will be served by urban services, defined in the Lee Plan, if located in a Future Urban Area category.

For Planned Development rezoning requests, the Hearing Examiner must also find:

a) The proposed use or mix of uses is appropriate at the proposed location;

b) The recommended conditions provide sufficient safeguards to the public interest and are reasonably related to the impacts on the public's interest expected from the proposed development; and

c) That each requested deviation:

    1) Enhances the achievement of the objectives of the planned development; and

    2) Preserves and promotes the general intent of this Code to protect the public health, safety and welfare.

The applicant has provided a narrative that addresses the planned development rezoning request with analysis against the applicable criteria (see Attachment D). The following provides staff's analysis of the request, as measured against the established criteria in LDC Section 34-145(d)(4).

REVIEW CRITERIA ANALYSIS:

<u>Complies with Lee Plan.</u>

The subject property is within Suburban, Outlying Suburban, and Wetlands Future Land Use Categories. **Lee Plan Policy 1.1.5** states that the Suburban Future Land Use Category consists of predominately residential areas providing housing near more urban areas with a maximum density of six units per acre. **Lee Plan Policy 1.1.6** states that the Outlying Suburban Future Land Use Category is characterized by its peripheral location in relation to established urban areas and is predominately rural and low density in character with a maximum density of three units per acre. The applicant has provided a Preliminary Density Calculation that is Attachment T. This document demonstrates how the applicant is complying with the maximum density allowed in each FLUC. The existing preservation areas depicted on the MCP and the Interface Area are all within the Wetlands Future Land Use Category. **Lee Plan Policy 1.5.1** describes the Wetlands Future Land Use Category as very low-density residential uses and recreational uses that do not have an adverse impact on the ecological function of the wetlands. Density from preserved saltwater wetlands along the west property line is limited to one unit per 20 acres and cannot be calculated at the

upland future land use category dwelling unit ratio of six or three units per acre per **Lee Plan Table 1(a).** Density from preserved freshwater wetlands may be calculated at the upland future land use category density of six or three units per acre. All density from impacted wetlands, whether fresh or salt, must be calculated at one unit per 20 acres. The mitigation for wetland impacts, the preservation and restoration of the indigenous open space areas, and the conservation easement recordings have all been completed and monitoring is ongoing. The proposed rezoning is an infill development proposing structures and infrastructure within impacted areas. Staff finds the request, as conditioned, to be consistent with **Lee Plan Policies 1.1.5, 1.1.6, 1.5.1 and Goal 124.**

Lee Plan Policy 1.6.5 along with **Table 1(b)** provide the location, distribution, and limits of land uses. The proposed development has 57.31 acres of residential development associated with the residential portion, and the allocation for the Estero Planning District is 94 acres. Staff finds the request, as conditioned, to be consistent with **Lee Plan Policy 1.6.5 and Table 1(b).**

Lee Plan Objectives 2.1, 2.2, and Policy 2.2.1 are concerned with minimizing urban sprawl and encouraging growth in areas that currently have public services, adequate road capacity and emergency services to support the proposed development and its residents. The subject request is considered infill development. The surrounding road network is established with schools, EMS, Fire, Police, and public transportation provided within three miles of the development. The subject property has been developed as part of previous zoning approvals with conservation easements, open space tracts, and golf course amenities established. The applicant's request is to rezone to remove the previously entitled commercial uses and provide a mix of office uses and a variety of residential uses within the Pelican Landing DRI. Staff finds the request, as conditioned, to be consistent with **Lee Plan Objectives 2.1, 2.2 and Policy 2.2.1.**

Lee Plan Objective 4.1 and subsequent Standards provide the thresholds water and sewer services to support a development and the environmental protection factors to be designed within the proposed development scheme. The applicant has provided the necessary Letter of Availability from the City of Bonita Springs stating that they have capacity to support the development for potable water and sanitary sewer. **Staff is requesting letters from the Estero Fire District as it pertains to Deviation #12 for the separation of buildings and the School District of Lee County to ensure the schools within the school district have capacity.** The preservation and restoration areas within the development are within conservation easements per the previous zoning requirements and development order approvals. Staff finds the request, as conditioned, to be consistent with **Lee Plan Objective 4.1 and subsequent Standards.**

Lee Plan Policies 5.1.1, 5.1.2, 5.1.5, 5.1.7, and 5.1.10 shape how the residential portion of the planned development is designed to ensure that the surrounding uses are protected, allow density to be distributed throughout the property even if portions of the land are in different land use categories, ensure that future residents have amenities within proximity to their homes, and that residents have access to sidewalks and bicycle paths to safely access the amenities within the development. Although requesting deviations from sidewalk design requirements and the amount of parking supporting the amenities, the alternatives being provided as part of the deviations is providing sidewalks on one side of the road, and have amenities located in each mid-to-high-rise residential building to limit driving within the development to promote a cohesive development pattern. The applicant is sensitive to the location of the 290-foot buildings limiting them to the MF Tract along the north property line and set back 50 feet from West Bay Club, which has maximum

building heights of 290 feet. The MU Tract is limited to office uses and accessory structures such as the warehouses to support the development. Buffers have been proposed where indigenous preservation areas do not exist along the north and southeast property lines. Staff finds the request, as conditioned, to be consistent with **Lee Plan Policies 5.1.1, 5.1.2, 5.1.5, 5.1.7, and 5.1.10.**

The applicant is requesting to rezone the subject property to Mixed Use Planned Development. To allow the rezone to MPD, the applicant must propose 30,000 square feet of commercial development on two or more acres and residential development of 50 or more dwelling units per **LDC Section 34-940**. The applicant is proposing 25,000 square feet of office uses and 5,000 square feet of accessory commercial uses associated with the private on-site golf course and residential amenities. **Lee Plan Objective 6.1 and subsequent policies** are used to evaluate the access to the commercial uses, the public services, the buffering and screening, proximity to similar developments, and how environmental considerations affect the surrounding uses. As previously mentioned, the applicant has designed the project as an infill development by not impacting the permitted preservation areas, utilizing the existing drive that has access to Coconut Road, proposing to provide 30-foot-wide Type F buffers where the preserve areas do not abut the perimeter of the property, and the location of the varying building heights in relation to the surrounding uses. The applicant has proposed the tallest buildings on the MF Tract where it is integrated with the abutting Pelican Landing RPD and similar heights within West Bay Club. The mid-story buildings are being proposed within the RES Tract, which is located between Pelican Landing RPD and the subject property's preserve and golf course tracts. The preserve and golf course tracts provide separation between the 110-foot RES Tract and the El Dorado Acres 35-foot to 45-foot single-family residential subdivision. The MU Tract is limited to 50-foot building heights with setbacks of 30 feet, which is the buffer width in this area. Staff finds the request, as conditioned, to be consistent with **Lee Plan Objective 6.1 and subsequent policies.**

Lee Plan Objective 11.1 and Policy 11.1.2 does not allow residential densities to be calculated from the entire project area within the Suburban and Outlying Suburban Future Land Use Categories. Therefore, the applicant must calculate the density from the individual density allocations per the future land use categories as demonstrated per Attachment T.

Lee Plan Policy 59.1.3 maintains floodplain regulations in accordance with the most recently adopted Flood Insurance Rate Maps and other available resources. The proposed project is located within FEMA flood zones AE-11 and X. The Halfway Creek Floodway is within the AE-10.5 flood zone and is depicted on the proposed MCP as a preserve area. No structures are proposed within the floodway.

Lee Plan Objective 60.1, and Policies 60.1.1, and 60.1.2 provide the design goals for the surface water management systems to protect groundwater and incorporate and restore natural surface water flowways and associated habitats. The applicant is not impacting the established wetland preservation areas that support the development and provide groundwater recharge. Lee County Natural Resources staff provided a staff memorandum that analyzed the existing conditions pertaining to water quality and the bald eagle management plan (Attachment U). Staff finds the request, as conditioned, to be consistent with **Objective 60.1, and Policies 60.1.1, and 60.1.2.**

Lee Plan Objective 60.4 and Policies 60.4.1, 60.4.2, and 60.4.3 pertain to incorporating natural surface water systems into the design of the development. The applicant is incorporating 81.24 acres of wetland

preservation in the Eco-Park Area and the 60-acre South Florida Water Management District Conservation Area into the stormwater management. The applicant has provided a Stormwater Management Plan explaining how the system will be designed (Attachment W). The lakes within the development areas have been built under previous LDC Section 10-329 with lake bank slopes of 4:1 and future lakes will be designed at 4:1 utilizing Deviation #6. Staff finds the request, as conditioned, to be consistent with **Objective 60.4 and Policies 60.4.1, 60.4.2, and 60.4.3.**

Lee Plan Policy 101.3.2 restricts development in Coastal High Hazard Areas to uplands except as needed for the provision of public facilities. A portion of the subject property is within the Coastal High Hazard Area in accordance with Lee Plan Map 5-A. The proposed project does not include any State wetland impacts and the State wetland limits were previously reviewed and approved on a portion of the property per SFWMD Permit 36-03813-P.

Meets this Code and other applicable County regulations or qualifies for deviations.

Future development order applications must comply with the Land Development Code and Lee Plan. The deviations that are requested were previously approved and the new deviations are necessary to develop the subject parcel in a way that does not affect the surrounding uses and preserves the existing indigenous open space areas.

Compatibility with existing and planned uses in the surrounding area.

As previously stated above, the proposed development is compatible with the surrounding land uses.

Sufficiency of Access and Transportation Impacts.

A portion of the proposed development has existing access to Coconut Road, a major collector road. The remaining development is interconnected with the Pelican Landing RPD through access easements (Attachment P). The applicant submitted a Traffic Impact Statement providing analysis demonstrating a 264-trip reduction due to the elimination of 147,000 square feet of commercial uses (Attachment S). Per the Traffic Impact Statement, the access is sufficient to support the proposed development.

The expected impacts on transportation facilities will be addressed by existing County regulations and conditions of approval.

As stated previously, the proposed project is proposed to have access to Coconut Road, a County-maintained major collector. Trips are being reduced due to the reduction of commercial intensity proposed by this request. The applicant provided a Traffic Impact Statement, and the Department of Transportation provided a staff memorandum (see Attachments S and V) demonstrating the trip generation reduction associated with the request. Impacts to transportation facilities and necessary site improvements will be evaluated and required at time of development order.

No adverse impacts to environmentally critical or sensitive areas and natural resources.

The site was previously approved, and development order issued for the preservation of 81.24 acres of wetland and 60 acres of SFWMD conservation, which exceeds 50 percent of the required open space to be indigenous preserves. The MCP depicts the Southern Bald Eagle nest surrounded by preservation and the land within 50 feet of the Halfway Creek mean high water preserve. The preserve areas within the subject property provide habitat for wildlife to feet and raise young. The applicant has provided the Pelican Landing Protected Species Survey, Raptor Bay Golf Course Renovation Preservation and Restoration Plans, and Raptor Bay Bald Eagle Management Plan attached as Attachments X.

Will be served by urban services, defined in the Lee Plan, if located in a Future Urban area category.

As noted, and defined above, the subject property is located within future suburban area. Nevertheless, the subject property has adequate access to urban services to accommodate the development proposed by the request. Future improvements required by the LDC at time of local development order approval will further improve urban services and pedestrian facilities surrounding the subject property.

Supplemental Planned Development Criteria

Staff finds the request to be consistent with the following additional criteria:

a) The proposed use or mix of uses is appropriate at the proposed location;

b) The recommended conditions provide sufficient safeguards to the public interest and are reasonably related to the impacts on the public's interest expected from the proposed development; and

c) That the deviations carried forward from past approvals are consistent with the development pattern proposed in the MPD rezoning and the new deviations proposed**, which have conditions and additional information requested (Letter of No Objection from Estero Fire Department).**

   1) Enhance the achievement of the objectives of the planned development; and

   2) Preserve and promote the general intent of this Code to protect the public health, safety and welfare.

CONCLUSION:

Based upon an analysis of the application and the standards for approval of planned development rezonings, staff finds the request to be consistent with the established review criteria. The Mixed Use Planned Development rezone is consistent with the Suburban, Outlying Suburban, and Wetlands future land use designation and the applicable goals, objectives and policies of the Lee Plan. The request, as conditioned, is appropriate in the context of its surroundings. Staff recommends **APPROVAL** of the request to rezone the property from Residential Planned Development (RPD) and Commercial Planned Development (CPD) to Mixed Use Planned Development to allow a maximum of 729 dwelling units (100 single-family and 629 multi-family), 25,000 square feet of office use, 27 golf holes and 318 hotel rooms with private onsite recreation and accessory uses, with maximum building heights ranging from 290 feet within Tract MU to 50 to 110 feet for mid-rise multi-family residential buildings and conventional residential dwelling types subject to the conditions attached as Attachment C of this report.

ATTACHMENTS:

A. Expert Witness Information
B. Legal Description, Boundary Sketch, and Case Maps
C. Conditions, Deviations, and Master Concept Plan September 6, 2024
D. Applicant's Narrative
E. Applicant's Schedule of Deviations and Justifications
F. DRI2024-00001, Map H
G. Pelican Landing RPD/CPD Resolution Z-94-014
   Pelican Landing DRI #1-9293-121, adopted August 1994
H. Pelican Landing RPD/CPD Resolution Z-96-055 (add Spring Creek)
   Pelican Landing DRI #1-9293-121, adopted November 1996
I. Pelican Landing RPD/CPD Resolution Z-97-073
   Pelican Landing DRI #1-9293-121, adopted November 1997
J. Pelican Landing RPD/CPD Resolution Z-98-066, (add Kersey Smoot)
   Pelican Landing DRI #1-9293-121, adopted September 1998
K. Pelican Landing RPD/CPD Resolution Z-99-065
   Pelican Landing DRI #1-9293-121, adopted December 1999
L. Pelican Landing RPD/CPD Resolution Z-02-002
   Pelican Landing DRI #1-9293-121, adopted February 2002
M. Pelican Landing RPD/CPD Resolution Z-06-069
   Pelican Landing DRI #1-9293-121, adopted December 2006
N. Bayview II Commercial Planned Development Resolution Z-19-024
O. Applicant's Schedule of Uses and Property Development Regulations
P. Access Easements
Q. Bonita Springs Letter of Availability
R. Applicant's Inventory of Existing Conditions
S. Applicant's Traffic Impact Statement
T. Preliminary Density Calculation
U. Natural Resources Staff Report
V. Department of Transportation Staff Report
W. Applicant's Stormwater Management Plan
X. Pelican Landing Protected Species Survey
   Raptor Bay Golf Course Renovation Preservation and Restoration Plans
   Raptor Bay Bald Eagle Management Plan

Attachment A

LEE COUNTY STAFF EXPERT WITNESS INFORMATION
PROVIDED PURSUANT TO AC-2-6, SECTION 2.2.b(5)(F)3.

Case Number: **DCI2023-00052**
Project Name: **Pelican Landing MPD**
Hearing Examiner Date: **April 10, 2025**

Beth Workman, Principal Planner, Zoning, 1500 Monroe Street, Fort Myers, FL 33901

- Previously qualified as an expert witness by the Lee County Hearing Examiner. Current resume is on file with the Hearing Examiner.
- Seeking to be qualified as an expert witness in the Lee County Land Development Code, Lee Plan, and Environmental Sciences.
- Report and documents are submitted with the Staff Report for this case. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

Kate Burgess, Principal Planner, 1500 Monroe Street, Fort Myers, FL 33901

- Qualified as an expert witness in the Lee County Land Development Code and Lee Plan.
- Report and documents are submitted with the Staff Report for this case. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

Ally Hall, Plan Reviewer, Development Services, 1500 Monroe Street, Fort Myers, FL 33901

- Seeking to be qualified as an expert witness in the Lee County Land Development Code and Lee Plan.
- Staff reviewed and provided comments for sufficiency. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

Robert Price, Director, Department of Transportation, 1500 Monroe Street, Fort Myers, FL 33901

- Previously qualified as an expert witness by the Lee County Hearing Examiner. Current resume is on file with the Hearing Examiner.

- Seeking to be qualified as an expert witness in the Lee County Land Development Code and Lee Plan.
- Report and documents are submitted with the Staff Report for this case. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

Jillian Scholler, Deputy Director, Department of Transportation, 1500 Monroe Street, Fort Myers, FL 33901

- Previously qualified as an expert witness by the Lee County Hearing Examiner. Current resume is on file with the Hearing Examiner.
- Seeking to be qualified as an expert witness in the Lee County Land Development Code and Lee Plan.
- Report and documents are submitted with the Staff Report for this case. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

Nic DeFilippo, Senior Environmental Planner, Planning, 1500 Monroe Street, Fort Myers, FL 33901

- Previously qualified as an expert witness by the Lee County Hearing Examiner. Current resume is on file with the Hearing Examiner.
- Seeking to be qualified as an expert witness in the Lee County Land Development Code, Lee Plan, and Environmental Sciences.
- Report and documents are submitted with the Staff Report for this case. Additional documents that may be relied upon and used as evidence during the hearing include: the Lee County Land Development Code, the Lee Plan, and documentation submitted by the applicant as part of the subject application.

ATTACHMENT B

Rhodes and Rhodes Land Surveying
28100 Bonita Grande Drive, STE 107
Bonita Springs, FL 34135
239-405-8166

LEGAL DESCRIPTION

A PORTION OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE), TOGETHER WITH A PARCEL OF LAND LOCATED IN SECTIONS 5, 6, 7, AND 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA; THENCE RUN NORTH 01°34'59" WEST, ALONG THE EAST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 7, A DISTANCE OF 40.03 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE SOUTH 89°42'53" EAST, ALONG THE BOUNDARY OF LAST SAID LANDS, A DISTANCE OF 25.01 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN THE FOLLOWING SEVEN (7) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 89°42'53" EAST, 1,242.78 FEET TO A POINT ON THE EAST LINE OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, THE SAME BEING A POINT ON THE WESTERLY BOUNDARY OF EL DORADO ACRES, AN UNRECORDED SUBDIVISION, AS RECORDED IN OFFICIAL RECORDS BOOK 82, PAGE 474 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; COURSE NO. 2: NORTH 01°27'43" WEST, ALONG LAST SAID LINES, A DISTANCE OF 2,612.02 FEET TO THE MOST NORTHWEST CORNER OF EL DORADO ACRES; COURSE NO. 3: SOUTH 89°52'45" EAST, ALONG THE NORTHERLY BOUNDARY OF SAID EL DORADO ACRES, A DISTANCE OF 610.69 FEET TO THE NORTHWEST CORNER OF LOT 8, BLOCK NUMBER 14 OF SAID EL DORADO ACRES; COURSE NO. 4: SOUTH 01°17'58" EAST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 132.29 FEET TO THE SOUTHWEST CORNER OF SAID LOT 8; COURSE NO. 5: SOUTH 89°39'36" EAST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 75.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 8; COURSE NO. 6: NORTH 01°17'58" WEST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 132.58 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; COURSE NO. 7; SOUTH 89°52'45" EAST, ALONG THE NORTHERLY BOUNDARY OF SAID EL DORADO ACRES, A DISTANCE OF 587.45 FEET TO THE SOUTH 1/4 CORNER OF SECTION 5, TOWNSHIP 47 SOUTH, RANGE 25 EAST, SAID LEE COUNTY, FLORIDA, THE SAME BEING A POINT ON THE WESTERLY PROLONGATION OF THE NORTHERLY BOUNDARY LINE OF MEADOWBROOK OF BONITA SPRINGS, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 60, PAGES 53 THROUGH 59 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE SOUTH 89°13'02" EAST, ALONG LAST SAID LINES, A DISTANCE OF 2,581.04 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 5, THE SAME BEING A POINT ON THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 5 AND A POINT ON THE EASTERLY BOUNDARY OF FLORIDA GULF LAND COMPANY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 59 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE NORTH 00°35'20" WEST, ALONG SAID LINES, A DISTANCE OF 2,103.32 FEET TO A POINT ON THE WESTERLY BOUNDARY OF THOSE LANDS DESCRIBED AS A 100.00 FOOT FLORIDA POWER AND LIGHT COMPANY EASEMENT (PARCEL B) AND RECORDED IN DEED BOOK 244, PAGES 138 THROUGH 140 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE NORTH 21°22'09" WEST, ALONG THE WESTERLY BOUNDARY OF LAST SAID LANDS, A DISTANCE OF 660.57 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 5, THE SAME BEING A POINT ON THE NORTHERLY BOUNDARY OF LAST SAID PLAT; THENCE SOUTH 89°05'10" WEST, ALONG LAST

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Sophia Ludlam, GIS Planner
Lee County
8/5/2024

SAID LINES, A DISTANCE OF 2,362.08 FEET TO THE CENTER OF SAID SECTION 5, THE SAME BEING A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING EIGHT (8) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 89°07'39" WEST, 2,592.74 FEET; COURSE NO. 2: SOUTH 01°54'31" EAST, 92.62 FEET; COURSE NO. 3: SOUTH 88°43'54" WEST, 349.45 FEET; COURSE NO. 4: SOUTH 01°16'23" EAST, 162.43 FEET; COURSE NO. 5: NORTH 81°48'03" WEST, 600.65 FEET; COURSE NO. 6: SOUTH 45°44'29" WEST, 523.57 FEET; COURSE NO. 7: SOUTH 01°15'33" EAST, 775.71 FEET; COURSE NO. 8: SOUTH 89°14'26" WEST, 199.41 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3627, PAGES 2061 THROUGH 2083 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA (CONSERVATION EASEMENT #1), THE SAME BEING A POINT ON THE MEAN HIGH WATER LINE OF ESTERO BAY; THENCE RUN THE FOLLOWING TWENTY TWO (22) COURSES ALONG LAST SAID LINES; COURSE NO. 1: SOUTH 04°39'14" EAST, 104.21 FEET; COURSE NO. 2: SOUTH 20°14'29" EAST, 105.00 FEET; COURSE NO. 3: SOUTH 68°35'55" WEST, 154.32 FEET; COURSE NO. 4: SOUTH 13°48'24" EAST, 50.99 FEET; COURSE NO. 5: SOUTH 36°09'47" WEST, 64.03 FEET; COURSE NO. 6: SOUTH 02°29'49" EAST, 50.00 FEET; COURSE NO. 7: SOUTH 26°14'47" EAST, 54.63 FEET; COURSE NO. 8: SOUTH 18°08'21" EAST, 51.92 FEET; COURSE NO. 9: SOUTH 52°41'29" EAST, 78.10 FEET; COURSE NO. 10: SOUTH 31°44'44" EAST, 57.31 FEET; COURSE NO. 11: SOUTH 28°08'16" EAST, 55.46 FEET; COURSE NO. 12: SOUTH 10°27'59" EAST, 50.49 FEET; COURSE NO. 13: SOUTH 04°01'02" EAST, 63.86 FEET; COURSE NO. 14: SOUTH 14°29'27" EAST, 88.09 FEET; COURSE NO. 15: SOUTH 19°11'46" EAST, 52.20 FEET; COURSE NO. 16: SOUTH 35°06'58" EAST, 59.36 FEET; COURSE NO. 17: SOUTH 12°16'28" EAST, 49.94 FEET; COURSE NO. 18: SOUTH 02°32'45" WEST, 50.98 FEET; COURSE NO. 19: SOUTH 15°30'26" WEST, 84.12 FEET; COURSE NO. 20: SOUTH 20°31'47" EAST, 72.71 FEET; COURSE NO. 21: SOUTH 17°54'30" EAST, 56.94 FEET; COURSE NO. 22: SOUTH 46°11'03" EAST, 61.03 FEET; THENCE NORTH 89°20'35" EAST, A DISTANCE OF 1.00 FEET TO A POINT ON THE EASTERLY BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2013000240450 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TWENTY-THREE (23) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 02°48'29" EAST, 247.54 FEET; COURSE NO. 2: SOUTH 13°36'38" EAST, 49.89 FEET; COURSE NO. 3: SOUTH 18°52'38" EAST, 49.96 FEET; COURSE NO. 4: SOUTH 28°04'28" EAST, 51.29 FEET; COURSE NO. 5: SOUTH 10°24'54" EAST, 50.55 FEET; COURSE NO. 6: SOUTH 11°27'49" WEST, 56.18 FEET; COURSE NO. 7: SOUTH 04°21'29" EAST, 50.65 FEET; COURSE NO. 8: SOUTH 24°52'17" EAST, 50.48 FEET; COURSE NO. 9: SOUTH 25°52'22" EAST, 51.13 FEET; COURSE NO. 10: SOUTH 09°20'00" WEST, 55.12 FEET; COURSE NO. 11: SOUTH 25°50'13" EAST, 21.40 FEET; COURSE NO. 12: SOUTH 21°13'24" EAST, 54.88 FEET; COURSE NO. 13: SOUTH 41°15'02" EAST, 70.64 FEET; COURSE NO. 14: SOUTH 11°13'24" WEST, 49.00 FEET; COURSE NO. 15: SOUTH 10°16'42" EAST, 51.40 FEET; COURSE NO. 16: SOUTH 03°26'02" WEST, 49.83 FEET; COURSE NO. 17: SOUTH 29°06'14" EAST, 59.23 FEET; COURSE NO. 18: SOUTH 05°12'32" EAST, 50.79 FEET; COURSE NO. 19: SOUTH 04°32'08" EAST, 50.65 FEET; COURSE NO. 20: SOUTH 13°37'57" WEST, 52.21 FEET; COURSE NO. 21: SOUTH 89°00'08" WEST, 230.82 FEET; COURSE NO. 22: SOUTH 09°02'32" WEST, 80.80 FEET; COURSE NO. 23: SOUTH 39°36'41" EAST, 105.50 FEET TO A POINT ON THE SOUTH LINE OF GOVERNMENT LOT 1, SECTION 7, TOWNSHIP 47 SOUTH, RANGE 25 EAST, SAID LEE COUNTY, FLORIDA; THENCE NORTH 89°06'42" EAST, ALONG LAST SAID LINE, A DISTANCE OF 188.36 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN CITY OF BONITA SPRINGS, FLORIDA ORDINANCE NUMBER 14-10 (ANNEXATION AREA); THENCE RUN THE FOLLOWING THIRTY (30) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: NORTH 13°37'57" EAST, 214.95 FEET; COURSE NO. 2: NORTH 04°32'08" WEST, 58.94 FEET; COURSE NO. 3:

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Lee County
8/5/2024

NORTH 05°12'32" WEST, 61.67 FEET; COURSE NO. 4: NORTH 29°06'14" WEST, 55.22 FEET; COURSE NO. 5: NORTH 03°26'02" EAST, 41.25 FEET; COURSE NO. 6: NORTH 10°16'42" WEST, 47.92 FEET; COURSE NO. 7: NORTH 11°13'24" EAST, 64.15 FEET; COURSE NO. 8: NORTH 41°15'02" WEST, 86.46 FEET; COURSE NO. 9: NORTH 21°13'24" WEST 48.07 FEET; COURSE NO. 10: NORTH 25°50'13" WEST, 7.57 FEET; COURSE NO. 11: NORTH 09°20'00" EAST, 55.14 FEET; COURSE NO. 12: NORTH 25°52'22" WEST, 66.56 FEET; COURSE NO. 13: NORTH 24°52'17" WEST, 40.99 FEET; COURSE NO. 14: NORTH 04°21'29" WEST, 34.66 FEET; COURSE NO. 15: NORTH 11°27'49" EAST, 58.90 FEET; COURSE NO. 16: NORTH 10°24'54" WEST, 67.98 FEET; COURSE NO. 17: NORTH 28°04'28" WEST, 55.04 FEET; COURSE NO. 18: NORTH 18°52'38" WEST, 43.64 FEET; COURSE NO. 19: NORTH 13°36'38" WEST, 42.86 FEET; COURSE NO. 20: NORTH 02°48'29" WEST, 263.13 FEET; COURSE NO. 21: NORTH 46°11'03" WEST, 68.47 FEET; COURSE NO. 22: NORTH 17°54'30" WEST, 45.26 FEET; COURSE NO. 23: NORTH 20°31'47" WEST, 57.29 FEET; COURSE NO. 24: NORTH 15°30'26" EAST, 73.32 FEET; COURSE NO. 25: NORTH 02°32'45" EAST, 63.41 FEET; COURSE NO. 26: NORTH 12°16'28" WEST, 66.88 FEET; COURSE NO. 27: NORTH 35°06'58" WEST, 62.53 FEET; COURSE NO. 28: NORTH 19°11'46" WEST, 42.97 FEET; COURSE NO. 29: NORTH 14°29'27" WEST, 81.14 FEET; COURSE NO. 30: NORTH 74°05'31" EAST, 710.32 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED AS INSTRUMENT NUMBER 2023000146467 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TWENTY-SIX (26) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 36°08'20" EAST, 37.55 FEET; COURSE NO. 2: SOUTH 05°57'36" WEST, 410.85 FEET; COURSE NO. 3: SOUTH 31°41'08" EAST, 104.97 FEET; COURSE NO. 4: NORTH 58°57'13" EAST, 194.96 FEET; COURSE NO. 5: NORTH 31°02'46" WEST, 44.76 FEET; COURSE NO. 6: NORTH 00°03'41" EAST, 125.64 FEET; COURSE NO. 7: NORTH 13°25'09" WEST, 70.59 FEET; COURSE NO. 8: NORTH 56°53'27" EAST, 107.37 FEET TO A POINT ON A NON-TANGENTIAL CURVE; COURSE NO. 9: NORTHERLY, 63.69 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 182.00 FEET, THROUGH A CENTRAL ANGLE OF 20°03'07" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 14°13'59" WEST, 63.37 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 10: NORTHERLY, 96.67 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 20°49'18" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 14°37'05" WEST, 96.14 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 11: NORTHWESTERLY, 178.78 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 966.00 FEET, THROUGH A CENTRAL ANGLE OF 10°36'14" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 30°19'51" WEST, 178.53 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 12: NORTHERLY, 152.00 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 214.00 FEET, THROUGH A CENTRAL ANGLE OF 40°41'44" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 15°17'06" WEST, 148.82 FEET; COURSE NO. 13: NORTH 05°03'46" EAST, 277.10 FEET TO A POINT OF CURVATURE; COURSE NO. 14: NORTHERLY, 121.63 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 26°11'54" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 08°02'11" WEST, 120.57 FEET; COURSE NO. 15: NORTH 21°08'08" WEST, 101.90 FEET TO A POINT OF CURVATURE; COURSE NO. 16: NORTHERLY, 194.40 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 204.00 FEET, THROUGH A CENTRAL ANGLE OF 54°36'02" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 06°09'53" EAST, 187.13 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 17: NORTHEASTERLY, 38.44 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 134.00 FEET, THROUGH A CENTRAL ANGLE OF 16°26'18" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 41°41'03" EAST, 38.31 FEET TO A POINT OF COMPOUND CURVATURE;

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COURSE NO. 18: NORTHEASTERLY, 158.22 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 393.00 FEET, THROUGH A CENTRAL ANGLE OF 23°04'02" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 61°26'13" EAST, 157.15 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 19: EASTERLY, 181.01 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 184.00 FEET, THROUGH A CENTRAL ANGLE OF 56°21'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 78°50'52" EAST, 173.79 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 20: SOUTHEASTERLY, 130.68 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 434.00 FEET, THROUGH A CENTRAL ANGLE OF 17°15'08" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 42°02'24" EAST, 130.19 FEET; COURSE NO. 21: SOUTH 33°24'51" EAST, 27.61 FEET; COURSE NO. 22: NORTH 56°35'09" EAST, 14.26 FEET; COURSE NO. 23: SOUTH 66°02'09" EAST, 78.97 FEET; COURSE NO. 24: NORTH 64°31'27" EAST, 128.50 FEET; COURSE NO. 25: NORTH 22°32'45" WEST, 125.49 FEET; COURSE NO. 26: NORTH 67°27'15" EAST, 13.12 FEET TO A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TEN (10) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 20°50'26" EAST, 152.26 FEET; COURSE NO. 2: SOUTH 25°28'33" EAST, 245.21 FEET; COURSE NO. 3: SOUTH 18°20'32" EAST, 130.83 FEET; COURSE NO. 4: SOUTH 27°46'07" WEST, 205.73 FEET; COURSE NO. 5: SOUTH 16°30'00" EAST, 265.70 FEET; COURSE NO. 6: SOUTH 54°23'52" EAST, 190.76 FEET; COURSE NO. 7: SOUTH 22°38'40" EAST, 87.71 FEET; COURSE NO. 8: SOUTH 71°46'53" WEST, 131.17 FEET; COURSE NO. 9: SOUTH 68°44'48" WEST, 363.26 FEET; COURSE NO. 10: SOUTH 21°12'13" EAST, 161.13 FEET TO A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN CITY OF BONITA SPRINGS, FLORIDA ORDINANCE NUMBER 14-10 (ANNEXATION AREA); THENCE RUN THE FOLLOWING NINETEEN (19) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 21°12'13" EAST, 4.51 FEET TO A POINT OF CURVATURE; COURSE NO. 2: SOUTHEASTERLY, 60.98 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 258.00 FEET, THROUGH A CENTRAL ANGLE OF 13°32'33" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 27°58'29" EAST, 60.84 FEET; COURSE NO. 3: SOUTH 34°44'46" EAST, 155.79 FEET TO A POINT OF CURVATURE; COURSE NO. 4: SOUTHERLY, 186.50 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 330.00 FEET, THROUGH A CENTRAL ANGLE OF 32°22'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 18°33'22" EAST, 184.02 FEET; COURSE NO. 5: NORTH 89°47'40" EAST, 11.43 FEET TO A POINT ON A NON-TANGENTIAL CURVE; COURSE NO. 6: SOUTHERLY, 169.80 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, THROUGH A CENTRAL ANGLE OF 35°22'36" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 17°28'14" WEST, 167.11 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 7: SOUTHWESTERLY, 110.74 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 375.00 FEET, THROUGH A CENTRAL ANGLE OF 16°55'14" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 26°41'55" WEST, 110.34 FEET; COURSE NO. 8: SOUTH 18°14'18" WEST, 248.83 FEET TO A POINT OF CURVATURE; COURSE NO. 9: SOUTHEASTERLY, 879.51 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 610.00 FEET, THROUGH A CENTRAL ANGLE OF 82°36'37" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 23°04'00" EAST, 805.28 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 10: SOUTHEASTERLY, 68.09 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 675.00 FEET, THROUGH A CENTRAL ANGLE OF 05°46'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 61°28'55" EAST, 68.07 FEET TO A POINT OF COMPOUND CURVATURE;

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Lee County
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COURSE NO. 11: SOUTHEASTERLY, 273.04 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 260.00 FEET, THROUGH A CENTRAL ANGLE OF 60°10'09" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 28°30'26" EAST, 260.66 FEET; COURSE NO. 12: SOUTH 01°34'37" WEST, 129.72 FEET TO A POINT OF CURVATURE; COURSE NO. 13: SOUTHERLY, 147.14 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 225.00 FEET, THROUGH A CENTRAL ANGLE OF 37°28'04" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 20°18'39" WEST, 144.53 FEET; COURSE NO. 14: SOUTH 39°02'41" WEST, 55.64 FEET TO A POINT OF CURVATURE; COURSE NO. 15: SOUTHERLY, 225.28 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 190.00 FEET, THROUGH A CENTRAL ANGLE OF 67°56'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 05°04'40" WEST, 212.31 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 16: SOUTHWESTERLY, 294.51 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 155.00 FEET, THROUGH A CENTRAL ANGLE OF 108°52'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 25°32'40" WEST, 252.17 FEET; COURSE NO. 17: SOUTH 79°58'40" WEST, 20.35 FEET; COURSE NO. 18: SOUTH 01°34'59" EAST, 30.27 FEET; COURSE NO. 19: SOUTH 88°25'01" WEST, 26.60 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF COCONUT ROAD, AS RECORDED IN OFFICIAL RECORDS BOOK 3421, PAGES 1095 THROUGH 1097 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE SOUTH 01°34'59" EAST, ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 339.91 FEET TO THE POINT OF BEGINNING.

CONTAINING 430.934 ACRES, MORE OR LESS.

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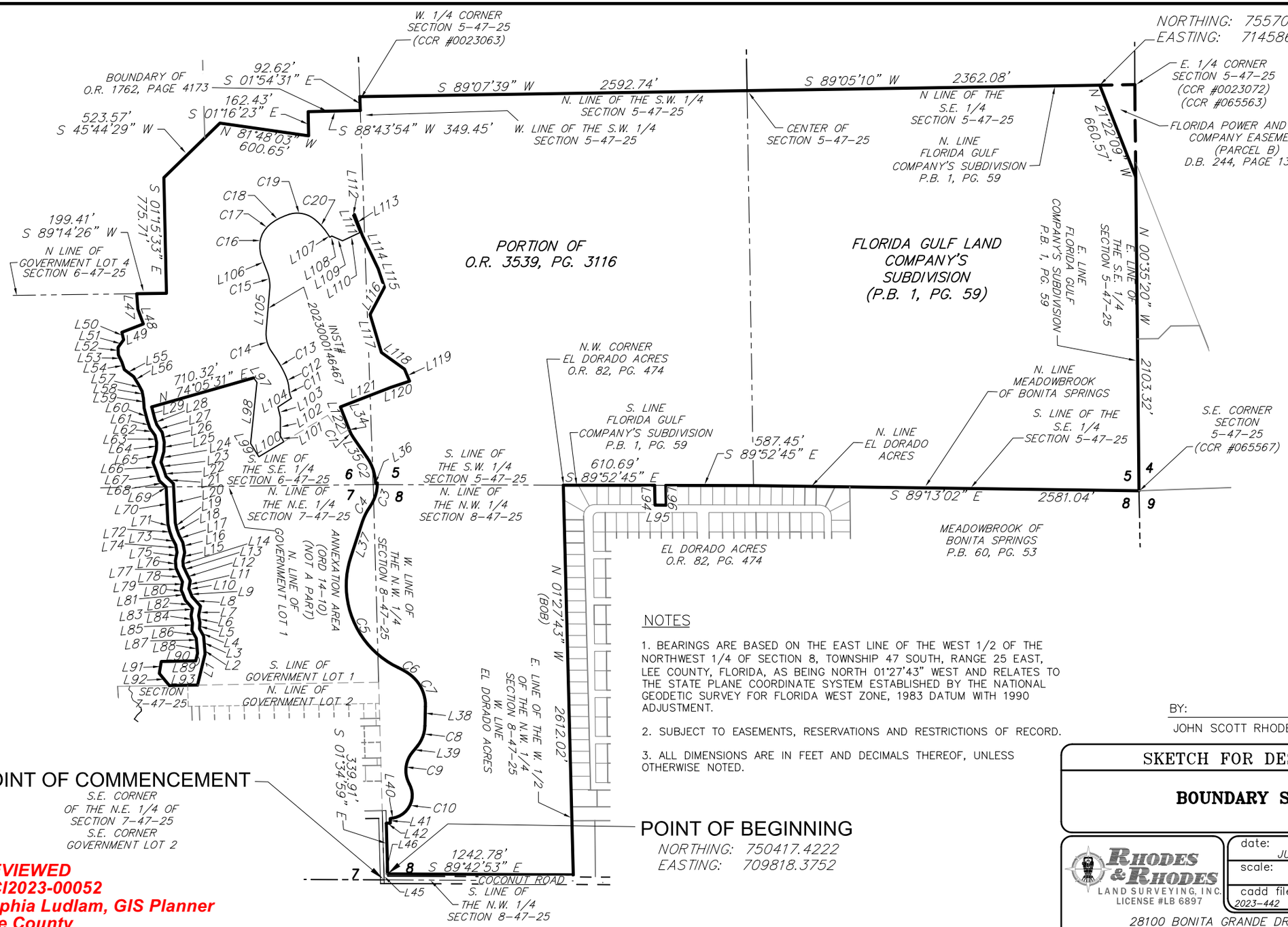
Lee County
8/5/2024



ABBREVIATIONS

B.O.B. = BASIS OF BEARING
P.S.M. = PROFESSIONAL SURVEYOR & MAPPER
L.B.# = LICENSED BUSINESS NUMBER
L1 = LINE NUMBER
C1 = CURVE NUMBER
INST.# = INSTRUMENT NUMBER
PGS. = PAGES
O.R. = OFFICIAL RECORD
P.B. = PLAT BOOK
D.B. = DEED BOOK

NOTES

1. BEARINGS ARE BASED ON THE EAST LINE OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, AS BEING NORTH 01°27'43" WEST AND RELATES TO THE STATE PLANE COORDINATE SYSTEM ESTABLISHED BY THE NATIONAL GEODETIC SURVEY FOR FLORIDA WEST ZONE, 1983 DATUM WITH 1990 ADJUSTMENT.

2. SUBJECT TO EASEMENTS, RESERVATIONS AND RESTRICTIONS OF RECORD.

3. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.

BY:

JOHN SCOTT RHODES PSM #5739

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Lee County
8/5/2024

SKETCH FOR DESCRIPTION

BOUNDARY SKETCH

RHODES & RHODES
LAND SURVEYING, INC.
LICENSE #LB 6897

28100 BONITA GRANDE DRIVE SUITE 107
BONITA SPRINGS, FL 34135
(239) 405-8166 (239) 405-8163 FAX

PSM:	JSR
drawn:	RWC
checked:	RWC
view:	SKETCH
project#:	2022-442
sheet #:	6 of 7
date:	JULY 14, 2023
scale:	1" = 800'
cadd file:	2023-442

Z:\Bayview on Estero Bay\Raptor Bay Portion\Parcel 2 and Hyatt Timeshare combined\2023-442.dwg, SKETCH, 7/14/2023 3:12:14 PM, 1:1

LINE TABLE		
LINE	LENGTH	BEARING
L1	214.95'	N 13°37'57" E
L2	58.94'	N 04°32'08" W
L3	61.67'	N 05°12'32" W
L4	55.22'	N 29°06'14" W
L5	41.25'	N 03°26'02" E
L6	47.92'	N 10°16'42" W
L7	64.15'	N 11°13'24" E
L8	86.46'	N 41°15'02" W
L9	48.07'	N 21°13'24" W
L10	7.57'	N 25°50'13" W
L11	55.14'	N 09°20'00" E
L12	66.56'	N 25°52'22" W
L13	40.99'	N 24°52'17" W
L14	34.66'	N 04°21'29" W
L15	58.90'	N 11°27'49" E
L16	67.98'	N 10°24'54" W
L17	55.04'	N 28°04'28" W
L18	43.64'	N 18°52'38" W
L19	42.86'	N 13°36'38" W
L20	263.13'	N 02°48'29" W
L21	68.47'	N 46°11'03" W
L22	45.26'	N 17°54'30" W
L23	57.29'	N 20°31'47" W
L24	73.32'	N 15°30'26" E
L25	63.41'	N 02°32'45" E
L26	66.88'	N 12°16'28" W
L27	62.53'	N 35°06'58" W
L28	42.97'	N 19°11'46" W
L29	81.14'	N 14°29'27" W
L34	4.51'	S 21°12'13" E
L35	155.79'	S 34°44'46" E
L36	11.43'	N 89°47'40" E
L37	248.83'	S 18°14'18" W
L38	129.72'	S 01°34'37" W
L39	55.64'	S 39°02'41" W
L40	20.35'	S 79°58'40" W
L41	30.27'	S 01°34'59" E
L42	26.60'	S 88°25'01" W
L45	40.03'	N 01°34'59" W

LINE TABLE		
LINE	LENGTH	BEARING
L46	25.01'	S 89°42'53" E
L47	104.21'	S 04°39'14" E
L48	105.00'	S 20°14'29" E
L49	154.32'	S 68°35'55" W
L50	50.99'	S 13°48'24" E
L51	64.03'	S 36°09'47" W
L52	50.00'	S 02°29'49" E
L53	54.63'	S 26°14'47" E
L54	51.92'	S 18°08'21" E
L55	78.10'	S 52°41'29" E
L56	57.31'	S 31°44'44" E
L57	55.46'	S 28°08'16" E
L58	50.49'	S 10°27'59" E
L59	63.86'	S 04°01'02" E
L60	88.09'	S 14°29'27" E
L61	52.20'	S 19°11'46" E
L62	59.36'	S 35°06'58" E
L63	49.94'	S 12°16'28" E
L64	50.98'	S 02°32'45" W
L65	84.12'	S 15°30'26" W
L66	72.71'	S 20°31'47" E
L67	56.94'	S 17°54'30" E
L68	61.03'	S 46°11'03" E
L69	1.00'	N 89°20'35" E
L70	247.54'	S 02°48'29" E
L71	49.89'	S 13°36'38" E
L72	49.96'	S 18°52'38" E
L73	51.29'	S 28°04'28" E
L74	50.55'	S 10°24'54" E
L75	56.18'	S 11°27'49" W
L76	50.65'	S 04°21'29" E
L77	50.48'	S 24°52'17" E
L78	51.13'	S 25°52'22" E
L79	55.12'	S 09°20'00" W
L80	21.40'	S 25°50'13" E
L81	54.88'	S 21°13'24" E
L82	70.64'	S 41°15'02" E
L83	49.00'	S 11°13'24" W
L84	51.40'	S 10°16'42" E

LINE TABLE		
LINE	LENGTH	BEARING
L85	49.83'	S 03°26'02" W
L86	59.23'	S 29°06'14" E
L87	50.79'	S 05°12'32" E
L88	50.65'	S 04°32'08" E
L89	52.21'	S 13°37'57" W
L90	230.82'	S 89°00'08" W
L91	80.80'	S 09°02'32" W
L92	105.50'	S 39°36'41" E
L93	188.36'	N 89°06'42" E
L94	132.29'	S 01°17'58" E
L95	75.00'	S 89°39'36" E
L96	132.58'	N 01°17'58" W
L97	37.55'	S 36°08'20" E
L98	410.85'	S 05°57'36" W
L99	104.97'	S 31°41'08" E
L100	194.96'	N 58°57'13" E
L101	44.76'	N 31°02'46" W
L102	125.64'	N 00°03'41" E
L103	70.59'	N 13°25'09" W
L104	107.37'	N 56°53'27" E
L105	277.10'	N 05°03'46" E
L106	101.90'	N 21°08'08" W
L107	27.61'	S 33°24'51" E
L108	14.26'	N 56°35'09" E
L109	78.97'	S 66°02'09" E
L110	128.50'	N 64°31'27" E
L111	125.49'	N 22°32'45" W
L112	13.12'	N 67°27'15" E
L113	152.26'	S 20°50'26" E
L114	245.21'	S 25°28'33" E
L115	130.83'	S 18°20'32" E
L116	205.73'	S 27°46'07" W
L117	265.70'	S 16°30'00" E
L118	190.76'	S 54°23'52" E
L119	87.71'	S 22°38'40" E
L120	131.17'	S 71°46'53" W
L121	363.26'	S 68°44'48" W
L122	161.13'	S 21°12'13" E

CURVE TABLE					
CURVE	RADIUS	DELTA	LENGTH	CHORD	CHORD BEARING
C1	258.00'	13°32'33"	60.98'	60.84'	S 27°58'29" E
C2	330.00'	32°22'48"	186.50'	184.02'	S 18°33'22" E
C3	275.00'	35°22'36"	169.80'	167.11'	S 17°28'14" W
C4	375.00'	16°55'14"	110.74'	110.34'	S 26°41'55" W
C5	610.00'	82°36'37"	879.51'	805.28'	S 23°04'00" E
C6	675.00'	5°46'48"	68.09'	68.07'	S 61°28'55" E
C7	260.00'	60°10'09"	273.04'	260.66'	S 28°30'26" E
C8	225.00'	37°28'04"	147.14'	144.53'	S 20°18'39" W
C9	190.00'	67°56'02"	225.28'	212.31'	S 05°04'40" W
C10	155.00'	108°52'02"	294.51'	252.17'	S 25°32'40" W
C11	182.00'	20°03'07"	63.69'	63.37'	N 14°13'59" W
C12	266.00'	20°49'18"	96.67'	96.14'	N 14°37'05" W
C13	966.00'	10°36'14"	178.78'	178.53'	N 30°19'51" W
C14	214.00'	40°41'44"	152.00'	148.82'	N 15°17'06" W
C15	266.00'	26°11'54"	121.63'	120.57'	N 08°02'11" W
C16	204.00'	54°36'02"	194.40'	187.13'	N 06°09'53" E
C17	134.00'	16°26'18"	38.44'	38.31'	N 41°41'03" E
C18	393.00'	23°04'02"	158.22'	157.15'	N 61°26'13" E
C19	184.00'	56°21'48"	181.01'	173.79'	S 78°50'52" E
C20	434.00'	17°15'08"	130.68'	130.19'	S 42°02'24" E

REVIEWED
DCI2023-00052
Sophia Ludlam, GIS Planner
Lee County
8/5/2024

NOT A SURVEY

SKETCH FOR DESCRIPTION

BOUNDARY SKETCH

RHODES & RHODES
LAND SURVEYING, INC.
LICENSE #LB 6897
28100 BONITA GRANDE DRIVE SUITE 107
BONITA SPRINGS, FL 34135
(239) 405-8166 (239) 405-8163 FAX

date: JULY 14, 2023
scale: N/A
cadd file: 2023-442

PSM: JSR
drawn: RWC
checked: RWC
view: TABLES
project#: 2023-442
sheet #: 7 of 7

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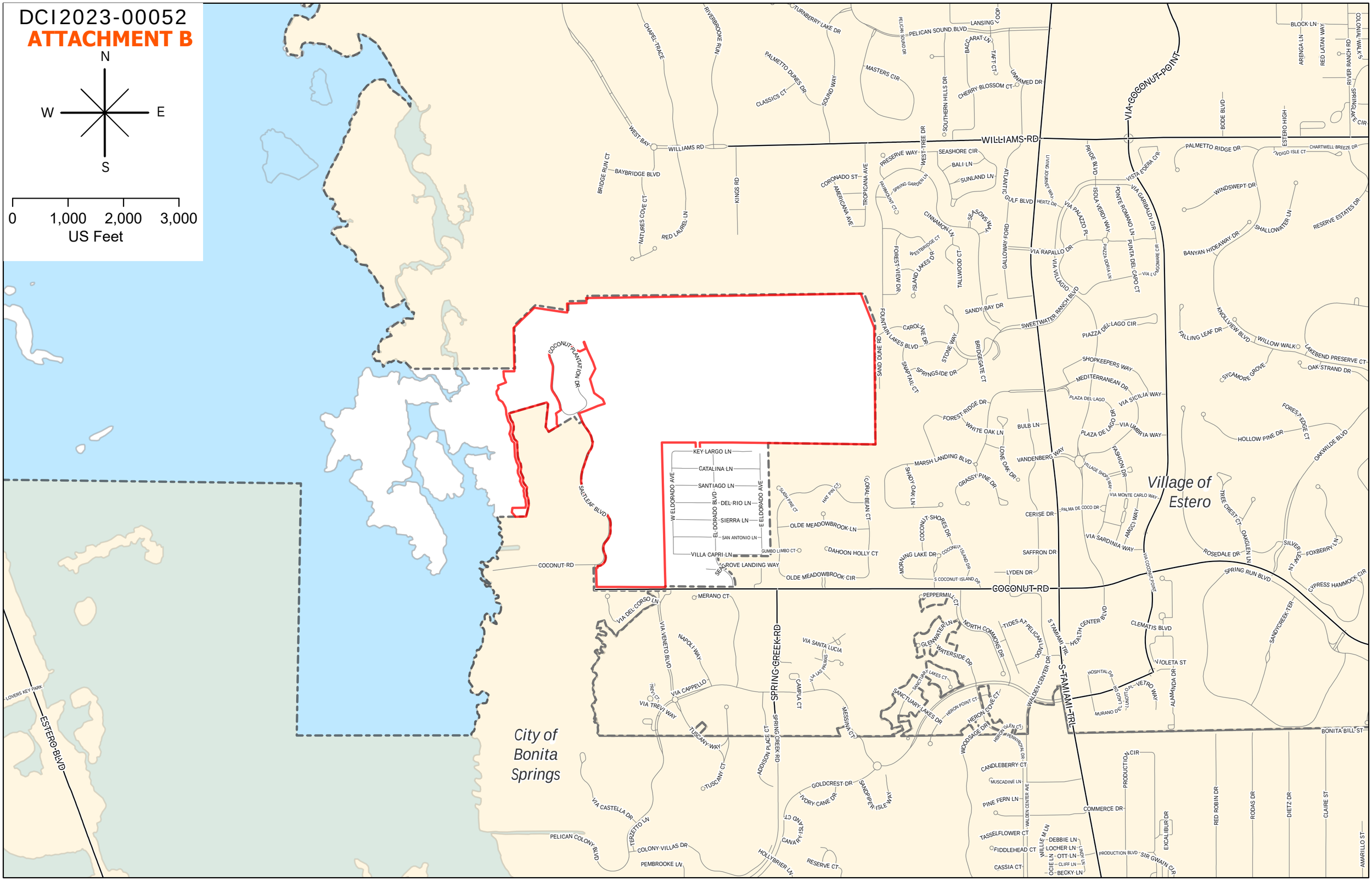
DCI2023-00052
ATTACHMENT B



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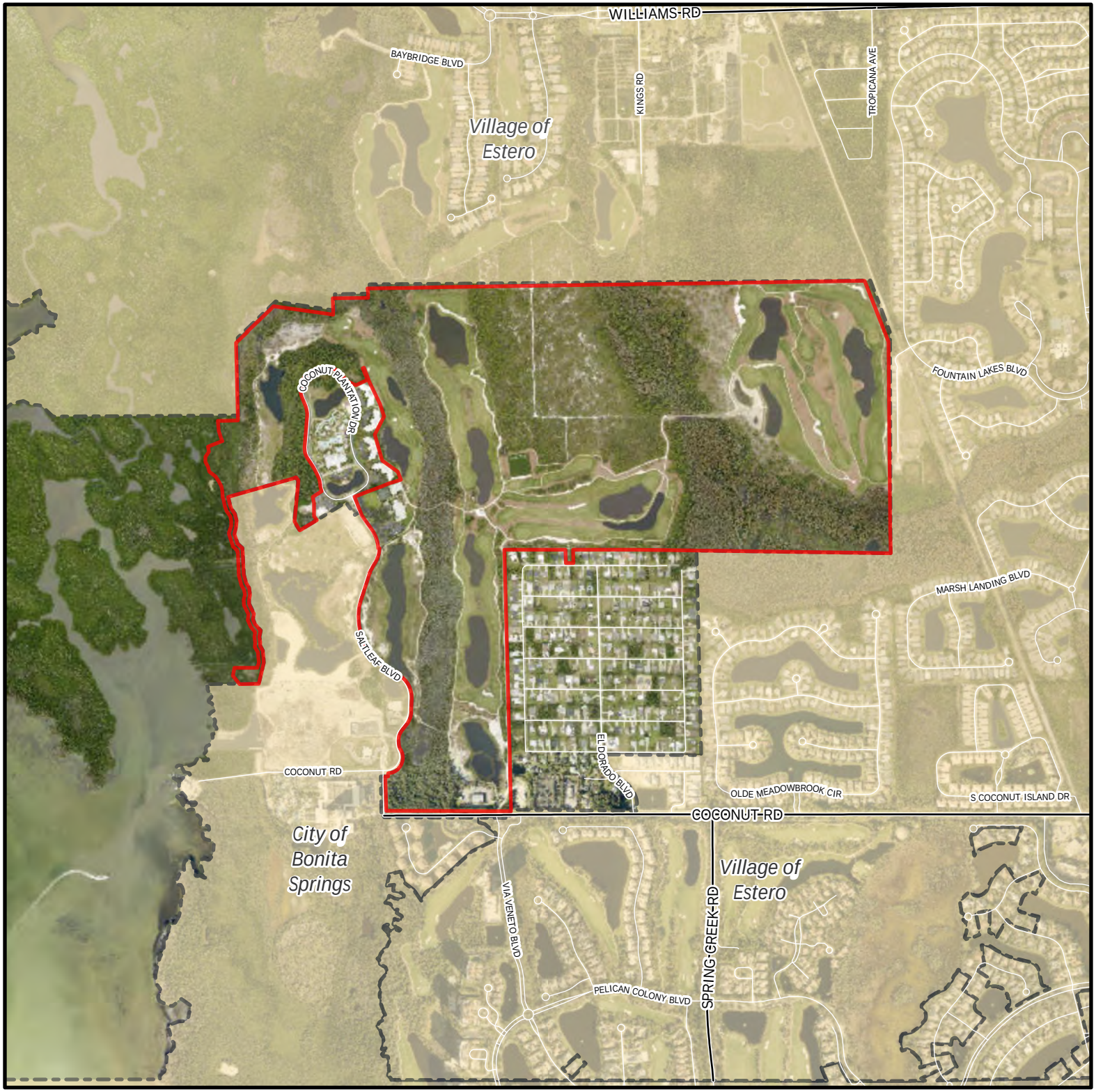
Aerial



City Limits

Subject Property

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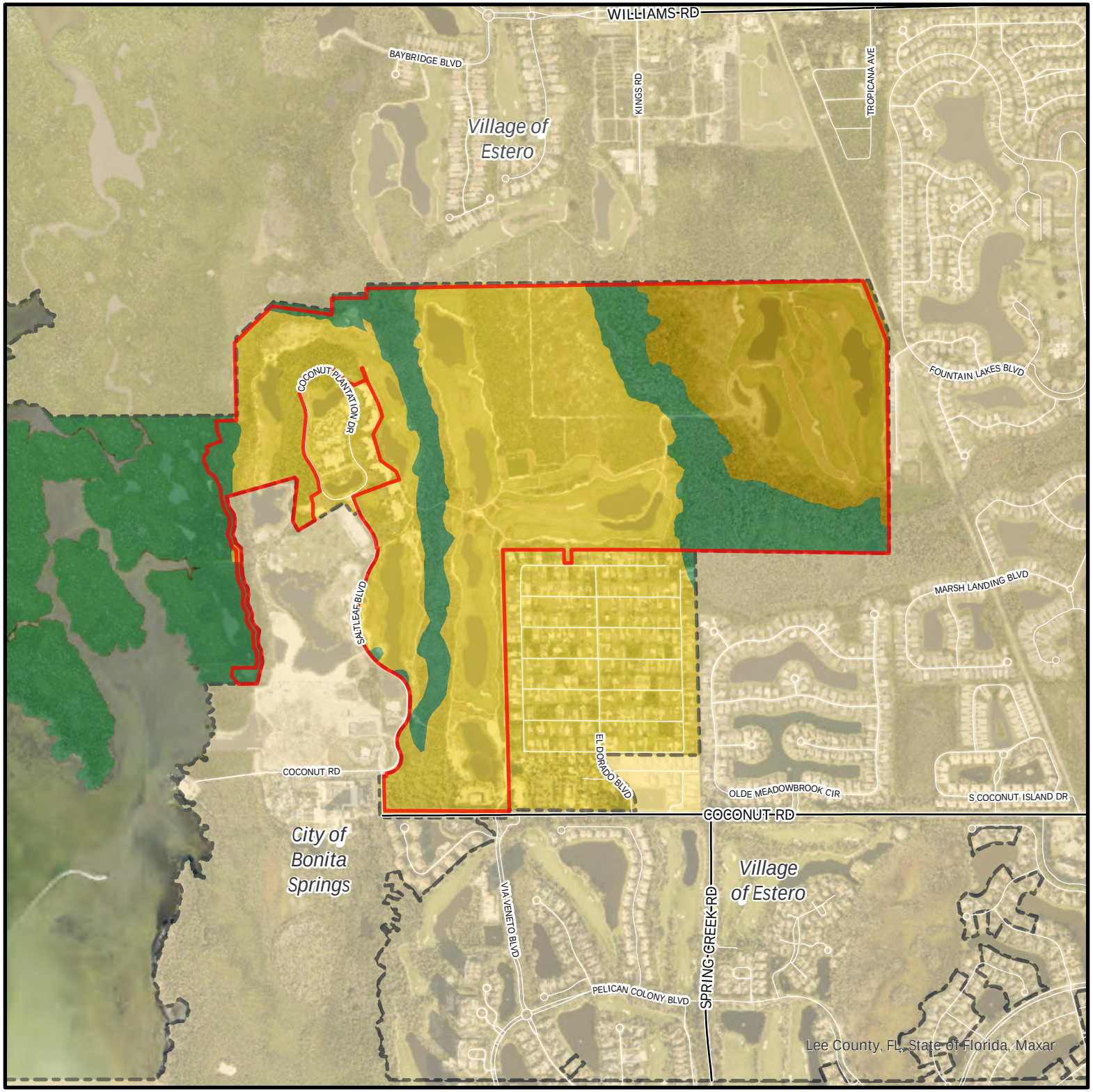
Feet

Lee County
Southwest Florida



DCI2023-00052

Future Land Use

- Suburban
- Outlying Suburban
- Wetlands
- City Limits
- Subject Property

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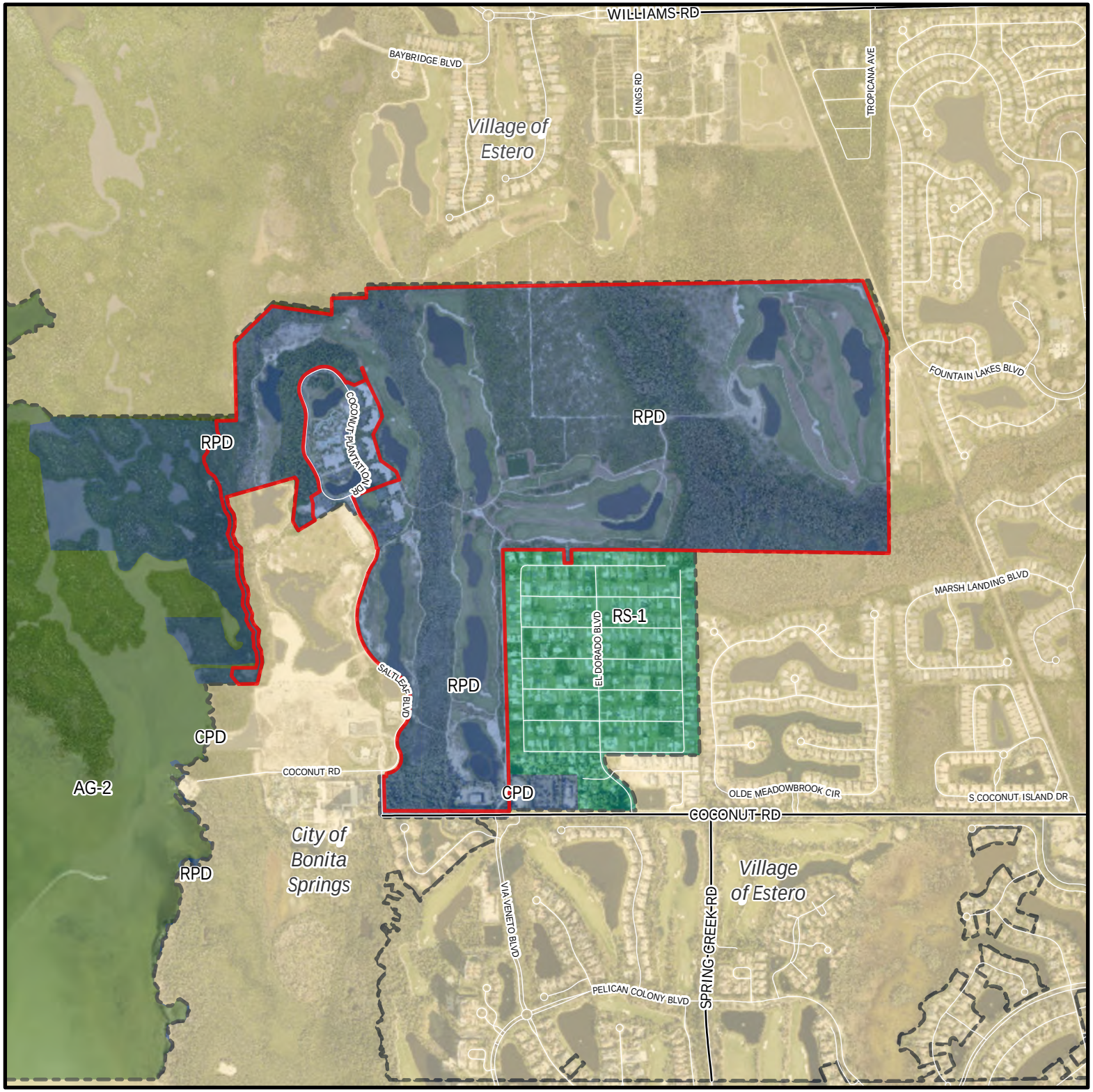
Feet

Lee County
Southwest Florida



DCI2023-00052

Zoning

City Limits

Subject Property

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Lee County
Southwest Florida

ATTACHMENT C
PELICAN LANDING MPD CONDITIONS AND DEVIATIONS

A. Conditions:

1. Master Concept Plan/Development Parameters

The development of this project must be consistent with the three-page Master Concept Plan (MCP) entitled "Pelican Landing MPD," stamped received September 6, 2024, and attached hereto as Attachment C, except as modified by the conditions below.

Development must comply with all requirements of the LDC at time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the Master Concept Plan are subsequently pursuant, appropriate approvals will be necessary.

Approved development parameters:
100 residential single-family dwelling units
629 residential multi-family dwelling units
318 hotel rooms
Private on-site recreation and accessory uses
27-hole golf course
25,000 square feet of commercial office floor area

2. Uses and Site Development Regulations

The following Limits apply to the project and uses:

a. Schedule of Uses

MU Tract:

Accessory uses, buildings and structures
    Limited to Warehouse, Hybrid, Public, and Mini
Accessory apartment and Accessory dwelling unit
Administrative offices
Automatic Teller Machine
Banks and Financial Establishments
Business Services, Group I
Cleaning and Maintenance Services
Dwelling Units:
    Single-family
    Zero lot line
    Two-family attached
    Townhouse
    Multiple-family buildings
Clubs: Private limited to residents and guest only
Consumption on Premises, associated with the Private on-site club
Emergency Operations Center
EMS, Fire or Sheriff's Station
Entrance Gates and Gatehouses

Essential Services
Essential Services Facilities – Group I Only
Excavation:
    Water Retention
Excess Spoil Removal
Fences, Walls
Golf Course Maintenance Facility
Health Care Facilities
Home Occupation, No Outside Help
Insurance Companies
Maintenance Facility (Government)
Mass Transit Depot or Maintenance Facility (government-operated)
Medical Office
Models:
    Display Center/Sales Center
    Model Home
    Model Unit
Parking Lot, Accessory, Park-and-Ride, Temporary
Place of worship
Post Office
Recreation Facilities
    Personal
    Private – On-Site
Religious Facilities
Research and Development Laboratories, Group II
Residential Accessory Uses
Schools, Commercial, Noncommercial
Signs
Social Services, Group I
Storage, Indoor

RES Tract:

Accessory uses, buildings and structures
Accessory Apartment and Accessory Dwelling Unit
Administrative offices
Clubs:
    Private, Country, including sale of wine, beer, and liquor for on premises consumption
Consumption on Premises, in conjunction with Club, private, club, country, and food and beverage service, limited
Dwelling Units:
    Single-family
    Zero lot line
    Two-family attached
    Townhouse
    Multiple-family buildings
Entrance Gates and Gatehouses
Essential Services
Essential Services Facilities – Group I Only
Excavation:
    Water Retention
Excess Spoil Removal
Fences, Walls
Food and Beverage Service, Limited

Models:
- Display Center/Sales Center
- Model Home
- Model Unit

Parking Lot, Accessory
Real Estate Sales Office
Recreation Facilities
- Personal
- Private – On-Site

Residential Accessory Uses
Signs
Temporary Uses
- Including Temporary Sales Office, Temporary Construction Office, Temporary Construction-Related Storage, Temporary Amenity Structures

MF Tract:

Accessory uses, buildings and structures
Accessory Apartment and Accessory Dwelling Unit
Administrative offices
Assisted Living Facility
Care Facilities and Centers
Clubs:
- Private, Country, including sale of wine, beer, and liquor for on premises consumption

Consumption on Premises, including sale of wine, beer, and liquor for on premises consumption and for off premises sales in conjunction with a hotel/convention center, care facility center, and club, private, club, country, or continuing care facility
Continuing Care Facilities, including sale of wine, beer, and liquor for on premises consumption
Dwelling Units:
- Single-family
- Zero lot line
- Two-family attached
- Townhouse
- Multiple-family buildings

Entrance Gates and Gatehouses
Excavation:
- Water Retention

Excess Spoil Removal
Fences, Walls
Health Care Facilities (accessory only to ALF & CCF uses)
Hotel/Convention Center
Independent Living Facilities
Models:
- Display Center/Sales Center
- Model Home
- Model Unit

Parking Lot, Accessory
Recreation Facilities
- Personal
- Private – On-Site

Residential Accessory Uses
Signs
Temporary Uses

Including Temporary Sales Office, Temporary Construction Office, Temporary Construction-Related Storage, Temporary Amenity Structures

GC Tract:

Golf Courses, Golf Course Accessory and Ancillary Uses, including but not limited to:

Club, private, club, country
Maintenance facility
Pro shop
Snack bar at the ninth hole or other appropriate location
Ball washers
Restrooms and other uses which are normal and accessory to the golf course
Consumption on Premises, in conjunction with Club, private, club, country, snack bar, and golf driving range including sale of wine, beer, and liquor for on premises consumption and for off premises sales as permitted by state law

Golf Driving Range

Preserves:

Uses permitted in the preserve areas are limited to activities which make this area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, and on-going maintenance and removal of exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022 (Attachment X).

Interface Area:

Uses permitted in the Interface area are limited to golf courses, developed in accordance with the "Pelican Landing Golf Course Management Plan," and any related appurtenances or uses, stormwater management; and created wetland marsh and any other created vegetative system or lake system which will promote wildlife diversity, activities which make this area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, and on-going maintenance and removal of invasive exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022 (Attachment X).

b. Property Development Regulations

Minimum Lot Area and Dimensions

	Minimum Lot Size	Width	Depth	Lot Coverage
Single-Family Detached	4,000 SF	40'	100'	60%
Zero Lot Line Units	4,000 SF	40'	100'	65%
Multi-Family	N/A	N/A	N/A	50%
Two-Family Attached and Townhouses	3,000 SF	18'	100'	65%
Non-Residential	10,000 SF	100'	100'	50%

Minimum Setbacks

	Street[1]	Side	Rear[3]	Waterbody	Building Separation[5]	
Single-Family Detached	20’	5’	10’	20’	10’	
Zero Lot Line Units	20’	5/0’	10’	20’	10’	
Multi-Family	20’	10’[2]/0’[4]	10’/0’[4]	20’	Buildings 35 feet or less	10’
					Buildings greater than 35 feet	35% of the sum of the building heights (see Deviation 12)
Two-Family Attached and Townhouses	20’	5/0’	10’	20’	10’	
Nonresidential	20’[6]	10’	10’	20’	10’ or ½ the building height for buildings over 35’	

[1]15-foot front setback for a dwelling with side entry garage and 10-foot front setback for secondary front yards on corner lots.
[2]Zero-foot side setback when the property line is adjacent to other tracts within the Pelican Landing MPD, **except for Estero Bay** (see Deviation 11).
[3]5-foot rear yard setback for accessory structures
[4] 0-foot side or rear setbacks when adjacent to GC Tract and associated GC uses.
[5] When buildings relate to roofed structures, including but not limited to breezeway, parking structure/garage area, foundation/podium, minimum building separations will not apply, and buildings will be treated as one structure.
[6] Minimum 50-foot setback from Coconut Road for warehouse (hybrid, public, mini) uses in the MU tract.

Building Height

Tract	Maximum Height
MU Tract	50 FT
RES Tract	110 FT
GC Tract	50 FT
MF Tract	290 FT

3. ECO-PARK

a. The development order plans for the golf course phase that includes the golf cart path/bridge crossing Eco-Park must include a typical cross-section for the path and bridge indicating the

width of the area to be impacted by structures. The width of the cleared area may not exceed 22 feet. The width of the golf cart path/bridge may not exceed 15 feet.

i. A temporary construction access road ("access road") may be constructed crossing the Eco-Park in the approximate location of the golf cart path/bridge crossing as shown in MCP Exhibit C-1: Deviation Location Map. The combined width of the cleared area for the golf cart path and access road may not exceed 50 feet. The width of the access road may not exceed 23 feet. Temporary impacts to preserve vegetation associated with the construction access must be restored consistent with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan (Attachment X) and MCP Exhibit C-2: Access Road Cross-Section. The construction access road will cease usage and all restoration must be complete prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137). The temporary construction access road must be consistent with the typical cross-section for the access road as shown in MCP Exhibit C-2: Access Road Cross-Section.

b. Permitted Uses in Eco-Park:

   Uses permitted in the Eco-Park District are limited to activities which make this area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

   Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, and on-going maintenance and removal of invasive exotic vegetation and compliance with management plan required per Florida Fish and Wildlife Conservation Commission (FFWCC).

c. The developer must locate the golf cart path/bridge so as to avoid existing large native trees and preserve existing native vegetation to the greatest extent possible. Accordingly, prior to the county issuing a vegetation removal permit to clear for the installation of the golf cart path/bridge, the developer must field locate the proposed path/bridge and identify the limits of the clearing for field verification purposes.

d. The "Proposed Reconfiguration of the Pelican Landing DRI Eco-Park," prepared by Wilson Miller, Inc., dated September 30,1999, revised March 6,2000, and as further supplemented by the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022, attached hereto as Attachment X, is hereby adopted with the following condition:

   Invasive exotic removal methods other than hand clearing are subject to the Department of Community Development review and approval.

e. The developer must submit a recorded Conservation Easement, complete with Official Records Book and Page numbers, to the Department of Community Development and the County Attorney's Office, prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137).

f. Bald Eagle Management Plan: The document entitled "Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Nest LE-28A," prepared by Passarella & Associates, Inc. dated July 2022, is hereby incorporated as a condition of this zoning approval and attached hereto as Attachment X.

g. Prior to the development order plans for the golf course phase that includes the golf cart path/bridge crossing, the developer must demonstrate with a HEC-2 model (HEC - Hydrologic

Engineering Center), that the proposed Halfway Creek bridge crossing creates no rise to the base flood.

4. INTERFACE AREA

a. Uses permitted in the Interface Area are limited to golf courses, developed to the guidelines similar to the New York Audubon Society Standards and any related appurtenances or uses, stormwater management; and created wetland marsh and any other created vegetative system or lake system which will promote wildlife diversity, activities which make this area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

    Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, on-going maintenance and removal of invasive exotic vegetation in compliance with the wildlife diversity monitoring plan prepared in conjunction with the Lee County School Board Development of Environmental Education.

b. The western boundary of the Interface Area is the jurisdictional mangrove wetland line. The interface area is 100 feet in width at the north and south ends of the property. The Interface Area will serve two purposes. First it allows for a buffer area or interface between the residential high-rise development areas and the jurisdictional mangrove wetlands to the west. The buffering function will also extend to some of the interior wetland and upland systems. No golf course uses shall be located any closer to the jurisdictional mangrove system than 100 feet. Secondly, the Interface Area will provide habitat and a vegetative corridor which will enable wildlife to safely access the onsite interior wetland systems.

c. All invasive exotic vegetation shall be removed from the Interface Area. The invasive exotic removal process shall coincide with the construction of a surface water management system within the Interface Area.

d. Where necessary, a vegetation restoration program shall commence after the removal of the invasive exotics. The program should commence after the removal of the invasive exotics. The program should facilitate diversity in wildlife. The revegetation shall commence within six months of invasive exotic removal. Vegetation to facilitate wildlife diversity shall be used in the restorative planting.

e. Where appropriate, and subject to permitting approval, the developer will construct “kidney filter” marshes for additional water quality treatment prior to final outfall. These marshes will most likely be in areas currently infested with invasive exotic vegetation and will be replanted with plant species such as juncus and spartina grass, cabbage palms and slash pines.

f. The developer has volunteered to monitor the Interface Area to assess its effectiveness in facilitating wildlife diversity. Information on flora and fauna produced for the DRI shall be the baseline data for the monitoring. The database shall be updated through a program of Winter/Summer monitoring. The monitoring shall generally consist of looking for, and reporting on, evidence of foraging, nesting, scat, and other territorial markings. This monitoring program shall be for a period of five years from the commencement of development activity in the Interface Area. The information gathered through the monitoring program shall be provided to the Lee County Division of Natural Resources and the Lee County Schools, Department of Environmental Education.

g. Subject to permitting approval, the treated stormwater from the Residential, Multi-Family and Mixed-Use Development Areas will be conveyed across the Interface Area via a series of excavated lakes and created marsh areas that will emphasize both the water management function and the improvement of wildlife diversity within the Interface Area. The lakes will be designed and located to mimic natural flows and to enhance wildlife values.

5. BUFFERS

a. A 30-foot Type-F buffer must be depicted on the development order plans along the north property line abutting West Bay Club RPD. Where the preserve abuts the north property line, the existing indigenous vegetation may be utilized to meet the Type-F buffer plantings.

b. A 30-foot Type-F buffer must be depicted on the development order plans between the Golf Course and MU Tracts and El Dorado Acres and Bayview II Commercial Planned Development.

6. ENVIRONMENTAL

a. Open Space - Multi-family Tract (MF) and Residential Tract (RES) must provide 40 percent open space, the Mixed-Use Tract (MU) must provide 30 percent open space, Non-Residential (GC) must provide 30 percent open space and Lakes must provide 5.46 acres of open space.

b. Indigenous Open Space - Development order plans must depict 204.19 acre of indigenous open space.

c. If a proposed bald eagle management plan includes development within 750 feet of an eagle's nest, the plan must be submitted to the Lee Conty Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FFWCC and USFWS.

d. As a condition of approval, the County and FFWCC shall review and approve the results of all studies and surveys required for implementation of a Final Management Plan required by the preliminary management plan approved as part of Local Development Order 90-10-003.00D. These approvals shall be obtained prior to Certificate of Compliance for Local Development Order #90-10-003.00D, or new/amended Local Development Orders on the beach park.

e. The area identified as the Pelican Landing Eco-Park on the Master Concept Plan will be set aside as a 78+ acre Preserve area of xeric scrub and pine flatwoods to mitigate the impacts to gopher tortoise habitat.

f. The developer shall obtain an Incidental Take Permit prior to development within any gopher tortoise habitat areas. The gopher tortoises addressed by the Incidental Take Permit must be relocated as identified in the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan, attached hereto as Attachment X.

g. Should any orchids, wild pine air plants, Florida Coontie, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, then best efforts must be used to relocate these plants to open space and landscaped areas.

h. All areas designated as Preserve on the adopted Master Concept Plan and the DRI Map H must remain undeveloped and be owned, maintained, and managed by a Uniform Community Improvement District or other similar legal entity. No lot lines shall be allowed within any Preserve area. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks. Trimming of mangroves for visual access to Estero Bay shall be prohibited.

i. Boardwalk location and alignment within “Preserve Areas” shall be submitted to and approved by the Division of Natural Resources prior to construction. The maximum width must be limited to that which is adequate for pedestrian and handicap access. Except for wheelchairs, motorized vehicle use is prohibited.

j. Prior to local development order approval, an invasive exotic removal plan must be submitted for the Development Services staff review and approval. The plan must identify the species to be removed, the method of removal, and delineate sections of the development with completion dates for the exotic removal by section. The developer may submit the exotic removal plan prior to local development order review to expedite the removal process, if desired.

k. The developer must survey the areas within the GC and Preserve Tracts where nest-like structures were observed for the presence of Big Cypress fox squirrels, in accordance with LDC § 10-473 prior to local development order approval on that tract. The developer must observe the nest-like areas for five days during the early morning and evening hours to confirm whether there is any squirrel activity. If active nests or utilization of the site is confirmed, the developer must submit a protected species management plan meeting the requirements of LDC § 10-474 for review and approval by County Staff prior to issuance of the local development order.

l. The golf course must be designed to incorporate:

   i. the preservation of native vegetation between fairways where possible. However, this condition will not be interpreted in a manner that will hinder good golf course design; and

   ii. filter marshes within the surface water management system.

m. The developer must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

n. The Developer must employ management practices to prevent pesticide/chemical pollution of groundwater and surface water receiving areas, including, but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development, use and operation of a golf course and water management areas.

o. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and the pollution is caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, then the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.

p. The design for the golf course and residential areas must incorporate the retention of large slash pines for utilization as perch trees for bald eagles. This requirement will not be interpreted in a manner that will impair good golf course and residential design.

q. No more than five acres of wetlands may be filled in conjunction with this project. These five acres is part of the total 19.23± acres of wetland impacts allowed for the entire Pelican landing DRI

project. Mitigation for the wetland impacts will be determined at the time of final permitting, but the mitigation should include the removal of invasive exotic vegetation, the restoration of historic hydroperiods, and a total of not more than 10 acres of littoral zone plantings.

r. The mangrove line is off set 50 feet to over 250 feet west of the wetland jurisdictional line delineated along the entire western (Estero Bay) side of the property. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the property. This includes both saltwater and freshwater wetlands contained within the boundary of this wetland jurisdictional line. The proposed golf course fairways, tees, and greens must be set back a minimum of 25 feet from the wetland jurisdictional line on the subject parcel, except where wetland impacts are permitted by the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE). Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the subject parcel.

7. <u>GOLF COURSE</u>

The management practices that the Developer must follow are as follows:

a The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water run-off or leaching to the groundwater.

b The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad-spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS (United States Department of Agriculture-Soil Conservation Service) Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to run-off depending on the site-specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce run-off and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer run-off into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

9. <u>SIGNS</u>

The applicant or successor must demonstrate clear line of sight distances for all signs setback zero feet from the right-of-way within the Multi-Family (MF), Residential (RES), and Mixed Use (MU) Tracts.

10. <u>Kersey-Smoot RPD</u>

Prior to the issuance of any development order for Tract MF, Kersey-Smoot RPD and Pelican Landing RPD must be revised through administrative amendments to amend the density and the

Master Concept Plans of each zoning resolution to remove the property subject to the zoning approval.

B. Deviations:

1. Deviation #1 is being requested from LDC Section 10-296, which requires local private roadways to provide a minimum bike lane width of five feet, and a minimum sidewalk width of six feet on both sides of the right-of-way, to allow for five-foot sidewalks along one side of internal roadways in all tracts.

   This deviation is **APPROVED.**

2. Deviation #2 is being requested from LDC Section 34-2013(a), which requires the parking lot design to permit vehicles exiting the parking lot to enter the street right-of-way or easement in a forward motion, to allow for individual parking spaces to back onto right-of-way easements in the RES, MF and MU Tracts.

   This deviation was previously **APPROVED** per Resolutions Z-94-014, Deviation 2 and Z-98-066, Deviation 1.

3. Deviation #3 is being requested from LDC Section 34-935(c)(2) which requires internal roads and drives to be no closer than 25 feet to the development perimeter, to allow a zero-foot minimum separation for internal development parcels, and a 15-foot separation for external parcels within the MF, RES, and MU Tracts.

   This deviation was previously **APPROVED** per Resolution Z-98-066.

4. Deviation #4 is being requested from LDC Section 30-152, which requires identification signs to be setback a minimum of 15 feet from any right-of-way easement, to allow for a setback of zero feet within the MF, RES, and MU Tracts. This deviation was previously approved per Resolution Z-98-066, Deviation 5 with a condition stating that the applicant must demonstrate that sight distance requirements are met and consistent with the LDC.

   This deviation is APPROVED, subject to Condition 9.

5. Deviation #5 is being requested from LDC Section 34-2474(b)(6) which requires that recreation centers and ancillary facilities be located at least 40 feet from residential dwelling units, to allow for a minimum of 20 feet for the internal development parcels in which they are located, but not for parcels adjacent to or external to the property.

   This deviation was previously **APPROVED** per Resolution Z-98-066.

6. Deviation #6 is being requested from LDC Section 10-329(d)(4), which requires lake bank slopes to be sloped at a 6:1 ratio from the top of bank to a water depth of two feet below the dry season water table, to allow a minimum ratio of 4:1 slope on all lake banks in all tracts.

   The deviation was previously **APPROVED** by ADD2021-00190A.

7. Deviation #7 is being requested from LDC Section 34-2020(b) which requires six parking spaces per hole for golf courses, to allow a five percent reduction of required parking spaces at the golf clubhouse only.

   This deviation was previously **APPROVED** per ADD2021-00191.

8. Deviation #8 is being requested from LDC Section 34-935(f)(1)(e) which limits the height of buildings in the Planned Development zoning category within the outlying suburban land use category to 45 feet, to allow for a maximum height of 290 feet over above the minimum flood elevation in the MF tract, 110 feet within the RES tract, and 50 feet within the MU and GC tracts.

   This deviation is **APPROVED**.
9. Deviation #9 is being requested from LDC Section 10-416(d) which requires a Type C/F buffer where multi-family residential uses and commercial uses abut, to allow for no internal buffers in all tracts.

   This deviation is **APPROVED**.

10. Deviation #10 is being requested from LDC Section 34-2020, which requires parking spaces to be provided for Recreation Facilities, Indoor at four spaces per 1,000 square feet of floor area, to allow for parking spaces related to Recreation Facilities, Indoor to be calculated at one space per 1,000 square feet of floor area where such facilities are private for residents only and integrated within mid- and high-rise buildings only within the MF, MU, and RES tracts.

    This deviation is **APPROVED**.

11. Deviation #11 is being requested from LDC Section 34-935(b)(1), which requires all buildings and structures to be set back from the development perimeter a distance equal to the greater than one-half the height of the building or structure, to allow setbacks from the development perimeter within all development tracts to be a minimum of 0 feet for buildings adjacent to property in other tracts within the Pelican Landing MPD, outside the Pelican Landing MPD if within the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs, and to Estero Bay, and a minimum of 50 feet from the north property boundary.

    This deviation is **APPROVED** for a 0-foot building setback adjacent to property in other tracts within the Pelican Landing MPD, outside the Pelican Landing MPD, to include the Pelican Landing RPD/CPD, Bayview CPD in the City of Bonita Springs and a minimum of 50 feet from the north property boundary.

    This deviation is **DENIED** for a 0-foot building setback from Estero Bay.

12. Deviation #12 is being requested from LDC Section 34-935(e)(4), which requires a minimum separation of buildings of one-half of the sum of their heights where there are two or more principal buildings on a development tract, to allow a minimum building separation of 35 percent of the sum of the building heights for buildings greater than 35 feet in height within the MU, MF, and RES tracts.

    This deviation is **APPROVED**, subject to the following condition

    Staff is recommending **APPROVAL of this deviation subject to a letter of no objection from the Estero Fire District.**

13. Deviation #13 is being requested from LDC Section 10-416(d)(1), which requires a buffer area along the entire perimeter of the proposed development whenever the proposed development abuts a different use, to allow no perimeter buffers where onsite preserve areas abut the MPD perimeter or where adjacent to property that is either owned by the Applicant or adjacent to the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs.

    This deviation is **APPROVED**, subject to condition 5.

14. Deviation #14 is being requested from LDC Section 10-285, which requires a connection separation of 330 feet on major collector roads in Future Non-Urban Areas, to allow a connection separation of 215 feet on Coconut Road.

    This deviation is **APPROVED**.

Additional info dated 09-06-2024

ATTACHMENT c

Land Use Summary		
Land Use	Project Total (AC)	% of Total
Preserve	204.19	47.39%
Upland	*62.94*	*30.82%*
Wetland	*141.25*	*69.18%*
Residential	42.00	9.75%
Mixed Use	13.38	3.11%
Golf Course & Amenity	149.5	34.69%
Lake	21.84	5.07%
Total	**430.9**	**100%**

Open Space Summary			
Area	Required (AC)	Provided (AC)	% of Total
Residential	16.8 (40%)	--	--
MU & Non-Residential Tracts	48.86 (30%)	--	--
Preserve	--	204.19	97.40%
Lakes (25% Max Required)	--	5.46	2.60%
Total	**65.66**	**209.65**	**100.00%**

LEGEND

- LITTORAL PLANTING SHELF
- LAKE
- WETLAND CONSERVATION
- UPLAND CONSERVATION
- AREA OUTSIDE OF PD BOUNDARY
- RESTORATION AREA
- # DEVIATION
- GC GOLF COURSE
- INGRESS/EGRESS
- FLOW ARROW

NOTE: INTERNAL ACCESS POINTS SHOWN FOR CONCEPTUAL PURPOSES ONLY AND SUBJECT TO REFINEMENT AT THE TIME OF LOCAL DEVELOPMENT ORDER PERMITTING, INCLUDING THE ADDITION OF ACCESS POINTS, SUBJECT TO COMPLIANCE WITH THE LDC

ATWELL
866.850.4200 www.atwell-group.com
28100 BONITA GRANDE DR., SUITE 305
BONITA SPRINGS, FL 34135
239.405.7777

MASTER CONCEPT PLAN

PELICAN LANDING MPD

CLIENT: LONDON BAY

PLAN REVISIONS

REV00 <<SUBMITTED / BID SET>> XX/XX/XX

0 150 300 600
SCALE IN FEET

FLORIDA CERTIFICATE OF AUTHORIZATION #8636

SET NUMBER: 704-203

SHEET : 1

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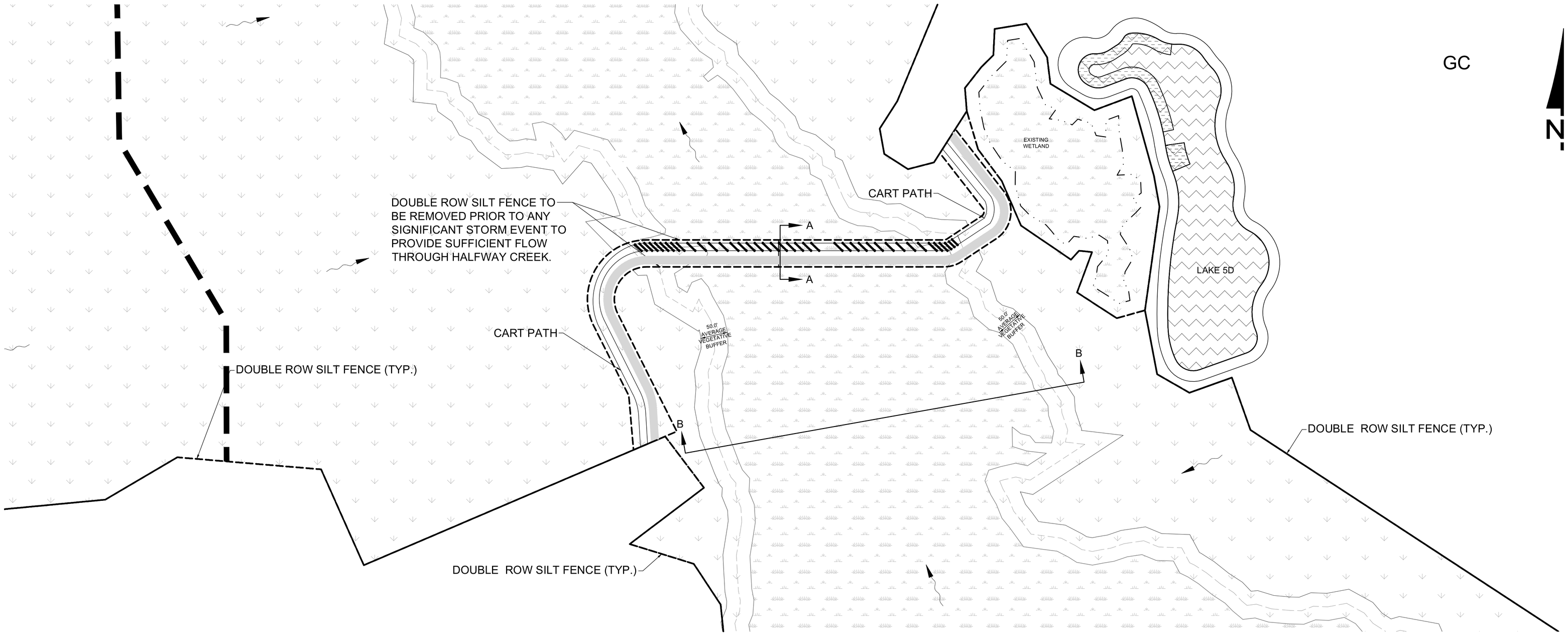
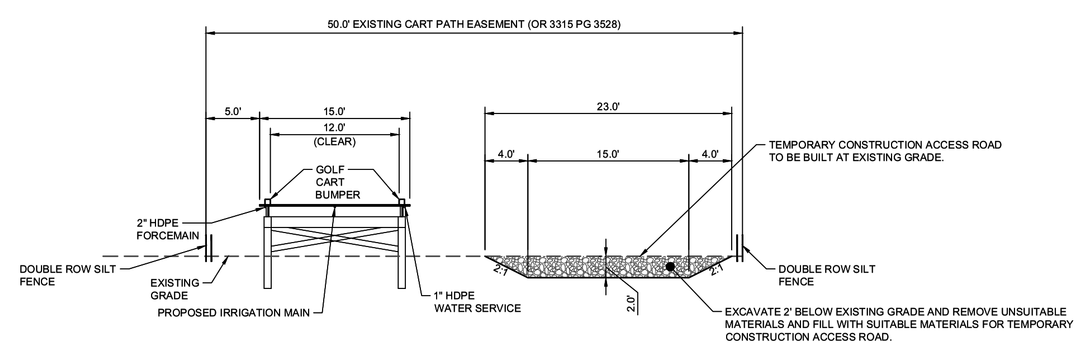
Additional info dated 09-06-2024

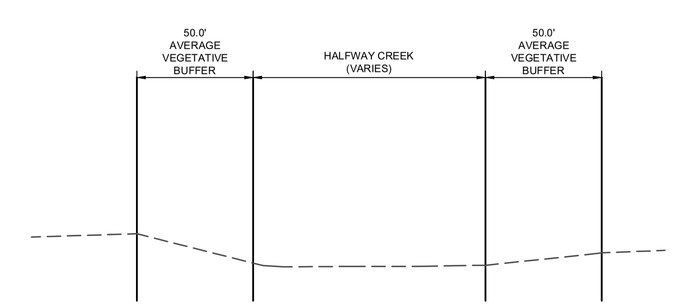


NOTES:

1. BRIDGE DETAIL SHOWN IS FOR PERMITTING PURPOSES ONLY, BRIDGE DESIGN BY OTHERS.
2. TEMPORARY CONSTRUCTION ACCESS ROAD TO BE CONSTRUCTED OF COMPACTED LIMEROCK BASE MATERIAL OR SIMILAR CRUSHED ROCK.
3. ALL MATERIAL USED IN THE CONSTRUCTION OF THE GOLF CART BRIDGE AND TEMPORARY ACCESS ROAD SHALL BE REMOVED UPON CONSTRUCTION COMPLETION AND RETURNED TO EXISTING GRADE.
4. ANY MUCKY SOILS REMOVED FROM HALFWAY CREEK FLOWWAY SHALL BE STOCKPILED IN GOLF COURSE AREA FOR REPLACEMENT AFTER REMOVAL OF CONSTRUCTION ACCESS ROAD.
5. TEMPORARY CONSTRUCTION ACCESS ROAD SHALL BE REMOVED AND RESTORED WITH IN-SITU LIKE SOIL MATERIAL PRIOR TO THE GOLF COURSE RECEIVING FINAL CERTIFICATE OF COMPLIANCE WITH LEE COUNTY.
6. EXISTING SPOIL WITHIN HALFWAY CREEK SHALL BE REMOVED PER ACOE AND SFWMD PERMITS.



SECTION A-A
NTS



SECTION B-B
NTS

ATWELL
866.850.4200 www.atwell-group.com
28100 BONITA GRANDE DR., SUITE 305
BONITA SPRINGS, FL 34135
239.405.7777

HALFWAY CREEK GOLF CART BRIDGE CROSS-SECTION

PELICAN LANDING MPD

CLIENT: LONDON BAY

PLAN REVISIONS

REV00 <<SUBMITTED / BID SET>> XXXXXXX

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SCALE IN FEET

FLORIDA CERTIFICATE OF AUTHORIZATION #8636

SET NUMBER: 704-203

SHEET : 2

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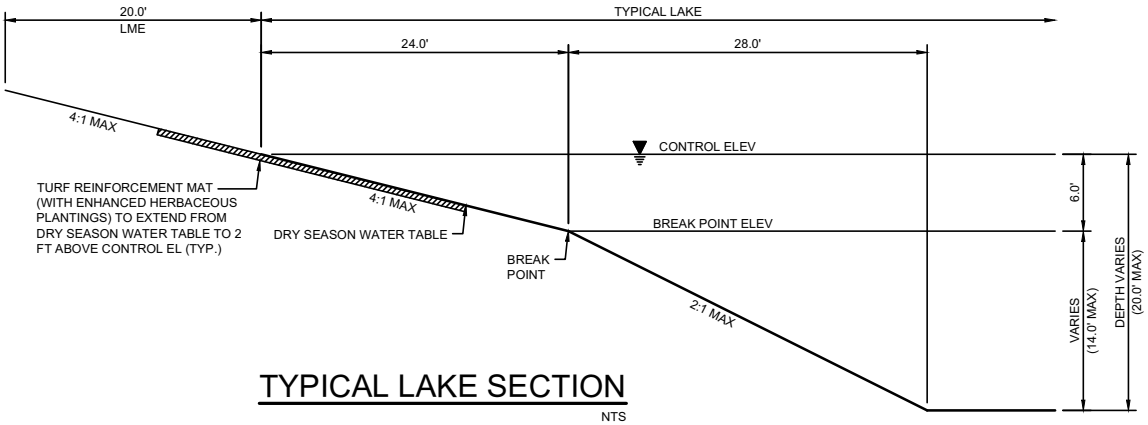
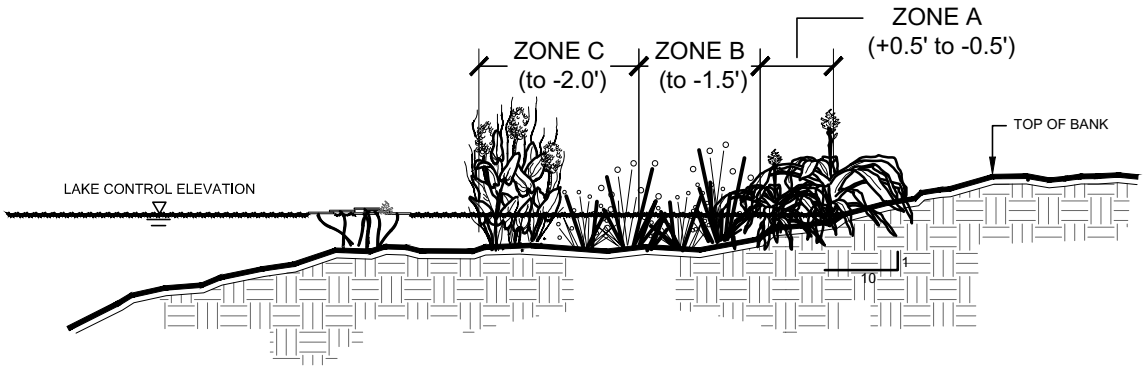


TYPICAL LAKE SECTION

NTS



LITTORAL PLANTING AREA MATERIALS LIST
(MAX PLANTING DEPTH)

CONTROL - 0.9' DEPTH	1.7' DEPTH	2.0' DEPTH	4' DEPTH
LEATHER FERN GOLDEN CANNA SAND CORDGRASS	JOINTED SPIKE RUSH PICKERELWEED	ALLIGATOR FLAG THALIA	NA

PLANT MATERIALS LISTED DO NOT CONSTITUTE A COMPLETE LIST OF ACCEPTABLE LITTORAL SPECIES. CONTRACTOR MAY SUBMIT ALTERNATES FOR APPROVAL PRIOR TO INSTALLATION.

PLAN REVISIONS	REV00 <<SUBMITTED>> XX/XX/XX

PELICAN LANDING MPD

PREPARED FOR:
LB RAPTOR BAY INVESTMENTS, LLC
2210 VANDERBILT BEACH ROAD
NAPLES, FLORIDA 34109
PHONE: (239) 449-1500

SECTION: 5,6,7,8 TOWNSHIP: 47S RANGE: 25E
COUNTY, FLORIDA

FILE NAME: 704203E1111.dwg
SHEET: 1 OF 1

FLORIDA CERTIFICATE OF AUTHORIZATION #8636

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BONITA SPRINGS, FL 34135
239.405.7777

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PELICAN LANDING MPD
Request Statement

I. REQUEST

Kersey Smoot Investments, LLC, ("Applicant") requests to rezone 430+/- acres of land from Pelican Landing CPD/RPD and Kersey-Smoot RPD to a unified Mixed Use Planned Development (MPD) zoning district to allow for the development of a residential and resort community on the Estero Bay. All lands proposed for rezoning are within the Pelican Landing Development of Regional Impact (DRI), and a companion DRI Development Order (DO) will be submitted concurrent with this zoning request.

The proposed MPD will consolidate the remaining development entitlements associated with lands owned by the Applicant within the Pelican Landing DRI, to allow for development under a unified site plan. The Applicant proposes to eliminate unused non-residential entitlements associated with their property, including 147,000 SF of commercial retail uses and 100,389 SF of office uses to allow for increased residential and resort-oriented uses. The proposed mix of uses is appropriate considering the Property's waterfront locale and surrounding residential and recreational land uses and will also address compatibility with adjacent residential uses. The proposal has been carefully crafted to ensure the proposed MPD does not increase external vehicular trips beyond those vested by the Pelican Landing DRI approval.

The lands owned by the Applicant are currently entitled for the following densities and intensities per the underlying Planned Developments and DRI:

- 241 multi-family/timeshare units
- 147,000 SF of commercial retail uses
- 125,389 SF of office uses
- 86 hotel rooms
- 28 golf course holes

The Applicant is requesting approval to develop the following entitlements within the newly established MPD zoning district:

- 729 dwelling units
- 25,000 square feet of office uses
- 318 hotel rooms
- 27 golf course holes

The maximum building height requested is 290 feet for multi-family uses in the MU tract on the far western side of the MPD overlooking Estero Bay. This height is commensurate with existing and approved building heights in the immediate vicinity within the Village of Estero and the City of Bonita Springs.

All other residential buildings throughout the Residential and Mixed Use tracts will range in height from 50 to 110 feet with a mix of mid-rise multi-family buildings and conventional residential dwelling types. The development will include a variety of private recreational uses and amenities such as the Saltleaf Golf Preserve, a 27-hole golf course, along with associated sports courts, clubhouse and other amenities.

The project will continue to be accessed from a main ingress/egress point on Coconut Road. The project will also be served by points along Saltleaf Blvd. (FKA Coconut Point Resort Dr.) and Coconut Plantation Drive.

The development will connect to central water and sewer provided by Bonita Springs Utilities. The proposed development limits development areas to maintain existing preserve areas and protect onsite wetlands, including the “Eco-Park” and “Interface Areas”.

This request will include a Master Concept Plan (MCP), Schedule Uses and Deviations to accommodate the development of the site, as well as a companion DRI amendment. The following request statement and attached exhibits demonstrate the proposed development is consistent with the Lee Plan, the Lee County LDC, and provides for compatibility with the surrounding neighborhoods through buffers, setbacks, limited access points, and significant preserves and open spaces located adjacent to existing residential communities. Additionally, the reduction of non-residential entitlements ensures the MPD will not increase the PM peak hour trips previously approved/vested.

III. EXISTING CONDITIONS

The 430± acre subject property is located north of Coconut Road and West of US 41 adjacent to the City of Bonita Springs and the Village of Estero.

Access to the Property is currently provided by Saltleaf Blvd. (FKA Coconut Point Resort Dr.), a two-lane privately maintained local roadway owned by Applicant. This roadway connects to the public roadway network via Coconut Road. Coconut Road is classified as a major collector and is maintained by Lee County to the west of Via Veneto Boulevard, including the portion that provides access to the Property. The Village of Estero maintains the roadway east of Via Veneto Boulevard to Three Oaks Parkway.

The Property has unobstructed views of Estero Bay to the west. Those lands in between the western property line and the Estero Bay are saltwater wetlands, proposed for preservation per the enclosed MCP.

The portion of the Property in the Pelican Landing CPD/RPD is currently developed with golf course and related accessory uses formerly known as Raptor Bay

The portion of the Property in the Kersey-Smoot RPD is vacant and adjacent to the Hyatt Coconut Plantation Timeshare Resort and golf course (also within the Kersey-Smoot RPD). The existing timeshare resort contains recreational amenities and 96 timeshare units in four (4) buildings, containing four (4) stories (3 habitable floors over parking) and a maximum permitted building height of 75 feet.

Lands to the south of the proposed MPD are owned by the Applicant and are within the City of Bonita Springs. These lands are zoned Planned Development, as part of the 36+/-acre Saltleaf on Estero Bay RPD/CPD and the 51± acre Raptor Bay PD. These lands are permitted for multi-family and single-family dwellings, as well as Continuing Care Retirement Facilities (CCRC), along with public and private recreational amenities. Construction of a 286-foot-tall multi-family building and associated public marina and private amenities has commenced on the Saltleaf on Estero Bay property and will be Ritz-Carlton branded residences. El Dorado Estates in a single-family community

further east of the proposed MPD, which is substantially separated from the project via existing buffering and open space.

The surrounding future land uses, zoning districts, land use pattern is inventoried in the below table.

Table 1: Inventory of Surrounding Lands

	FUTURE LAND USE	ZONING	EXISTING LAND USE
NORTH	Village of Estero: Village Neighborhood 1; Wetlands	West Bay Club RPD; AG	Residential; Golf Course; Vacant Lots
SOUTH	City of Bonita Springs: Mod. Density MU/PD	Pelican Landing CPD/RPD	Residential
EAST	Village Neighborhood 1; Village Neighborhood 2; Wetlands; Outlying Suburban	AG; RPD; RS-1; CPD	Single Family Residential (El Dorado Estates); Outdoor Storage; Vacant CPD
WEST	City of Bonita Springs: Mod. Density MU/PD	Raptor Bay CPD/RPD; Bayview RPD; Pelican Landing CPD/RPD	Ritz-Carlton Residences (Under Construction); Hyatt Regency Coconut Point Resort

It is important to note as detailed below, that building heights on adjacent properties, as well as in the immediate area, are approved, built or under construction for building heights from 286-290 feet in height. Please see detailed analysis and the Surrounding Building Heights exhibit enclosed.

II. PROPERTY HISTORY

- **Pelican Landing DRI**

The parcels under ownership by the Applicant are a part of the much larger Pelican Landing DRI, which encompasses 2,100± acres of land between Estero Bay to the west and U.S. 41 to the east.

The Pelican Landing CPD/RPD and DRI was originally approved in 1994 and has been amended numerous times and portions of the original PD/DRI boundary were annexed into the City of Bonita Springs. The Pelican Landing DRI has been amended by Lee County a total of 16 times since the initial adoption. Modifications of a project of this size are anticipated to accommodate changes in market demand through decades of build out spanning multiple real estate cycles. From a DRI DO standpoint, the Pelican Landing DRI is permitted the following maximum entitlements (inclusive of lands in both Lee County and the City of Bonita Springs):

- 3,912 dwelling units (comprised of 930 single-family detached and 2,982 multi-family units)
- 475,000 SF office
- 300,000 SF commercial retail
- 5,000 SF restaurant
- 77 golf course holes
- 750 hotel rooms

- 65 wet slips
- 150 dry slips

The Lee County Zoning Ordinances applicable to the Property do not encompass all lands in the DRI. Numerous parcels within the DRI have been annexed into the City of Bonita Springs over the years. Many of those parcels are built out, including single-family lots and the Hyatt Regency Coconut Point Resort. The most significant unbuilt portions of the DRI that are not within Lee County are within the Raptor Bay Planned Development, approved for 503 multi-family units per Bonita Springs Zoning Ordinance 20-04. Additionally, the 150 dry slips in the DRI were assigned to the Bayview on Estero Bay RPD/CPD. This information is provided to clarify why the maximum permitted entitlements per the Lee County Zoning Ordinances do not match the entitlements under the DRI.

It is also important to note the maximum residential density under the original DRI was 4,400 dwelling units (until modified in DRI 12th DO Amendment per Lee County Case No. 2005-0001). This density is consistent with the total maximum density that will be developed in the DRI upon approval of this MPD rezone request.

- **Lee County Zoning History**

The DRI is comprised of several Planned Developments (PDs), including the Pelican Landing CPD/RPD and Kersey Smoot RPD within Lee County, and the Raptor Bay RPD within the City of Bonita Springs.

The Pelican Landing CPD/RPD was originally approved pursuant to Lee County Zoning Resolution Z-94-041. The CPD/RPD has been amended numerous times and allows for the development of the same entitlements contained in the companion DRI/DO per the latest Zoning Resolution. However, due to annexations and allocations, the Lee County lands currently within the Pelican Landing CPD/RPD excludes the 503 units allocated to the Bonita Springs Raptor Bay PD and the 362 units allocated to the Kersey-Smoot RPD.

Thus, the Lee County Pelican Landing CPD/RPD residential entitlement is technically limited to 3,047 units (3,912 total units in the DRI, less 503 units in Bonita Springs “Raptor Bay” parcel, and less 362 units in the Kersey Smoot RPD). All of these residential entitlements, except for the 503 Raptor Bay DUs and 241 of the Kersey Smoot DUs, have been constructed, or are under construction, within existing neighborhoods in the DRI.

The Kersey Smoot property consists of 204+/- acres and was acquired in 1998 by WCI. The Kersey Smoot property was added to the Pelican Landing DRI pursuant to Lee County Zoning Resolution Z-98-066, which added the acreage but did not increase the allowable density in the overall DRI. The RPD has been amended several times, most recently per Z-07-031, and currently allows for the development of a maximum of 362 dwelling units, 150 dry boat storage slips and a golf course.

To date, part of the lands in Kersey Smoot have been developed with four (4) buildings containing 96 timeshare units (all 2-bedroom units) and a portion of the Raptor Bay Golf Club and golf course, now being redeveloped as Saltleaf Golf Preserve.

The timeshare units have been treated as multi-family dwellings and counted towards the total allocation of 2,982 multi-family units allowed in the DRI. The RPD allows for ten (10) additional buildings which have not been constructed. Of the remaining 266 units, 241 units have been assigned to Applicant and 25 units are assigned to the timeshare/condominium property.

IV. PUBLIC INFRASTRUCTURE

- **Roads**

The MPD will have direct access to Coconut Road, a two-lane major collector roadway that is partially maintained by Lee County and partially maintained by the Village of Estero. The property also has direct access to Saltleaf Blvd. (FKA Coconut Point Resort Dr.) and Coconut Plantation Drive, both of which are privately maintained two-lane local roadways. As outlined in the Traffic Impact Statement submitted with this application, the surrounding roadways will continue to operate at an acceptable Level of Service considering the trips associated with this development. The reduction of non-residential entitlements ensures the maximum trip generation for the DRI will not be exceeded upon approval of this amendment.

It is understood the developer will provide a transportation analysis and a transportation mitigation plan in accordance with Chapter 10 of the Land Development Code as part of the development order application to determine off-site improvements such as turn lanes.

- **Utilities**

The Property is within the Bonita Springs Utilities (BSU) service area and utilities will be extended to the site. The proposed development makes efficient use of existing infrastructure and will provide significant private investment in this area by extending BSU infrastructure to the site.

- **Public Facilities**

The attached Public Infrastructure Map demonstrates additional public facilities and services in the immediate vicinity of the project to serve the proposed development in terms of fire, EMS, schools, and Sheriff's protection.

V. PROPOSED MPD DEVELOPMENT PROGRAM

The Pelican Landing CPD/RPD still allows for non-residential development, but includes few areas planned for such uses. The proposed MPD rezoning request allows the Property to consolidate and adjust these remaining entitlements to achieve a mix of uses better supported by the current market and location of undeveloped land in the project. The MPD will maximize available waterfront land for clustered residential and resort uses to meet market demand for waterfront living in Southwest Florida.

The proposed MCP provides for significant preservation of wetlands, rare and unique uplands, and open space while also providing for infill residential and non-residential development on the Property. The proposed site design also provides significant setbacks from Estero Bay.

The community will be developed in three clusters and accessed from Coconut Road, Saltleaf Blvd. (FKA Coconut Point Resort Dr.), and Coconut Plantation Drive. Some of the entries are intended to be gated with the internal roadway network to be privately maintained in those areas. Portions of the internal roadways will be accessible to the public and will be owned and maintained by an established Community Development District (CDD). Internal roadways will provide sidewalks as required in the LDC to accommodate pedestrian interconnectivity within the project, except where deviations are requested to minimize impervious areas on the site and allow for a compact and clustered

development footprint. The proposed roadways will meet the design standards set forth in Chapter 10 of the LDC.

A maximum of 729 dwelling units are proposed, 241 of which are already existing/approved on the Kersey Smoot RPD. The dwelling units are planned around open space and preserve areas to accommodate preservation and the redevelopment of the existing golf course. Allowable uses include residential, office, hotel, and recreational uses.

The proposed uses also include private hybrid warehouse uses (as an accessory use only) to the residential community. Sale and rental of these units will be limited to residents of the Saltleaf on Estero Bay Community as described in the Community Declaration for Saltleaf on Estero Bay recorded in Instrument #2024000108872. The accessory storage uses are limited to the MU tract by the proposed schedule of uses and will include a 50-foot setback from Coconut Rd. for the accessory hybrid warehouse use.

The Saltleaf Golf Preserve is undergoing redevelopment per the current zoning and development order approvals. The course is being redesigned to enhance the quality of the facility, with no reduction to the recreational component of the project.

Based on the above, this request adds 488 “new” dwelling units to the properties within the Pelican Landing London Bay MPD, supported by a proportionate reduction of commercial square footage to ensure that there are no impacts to transportation facilities that were not already contemplated and approved in the DRI. Specifically, to off-set the traffic impacts of the additional density and hotel rooms, the Applicant is proposing to eliminate all remaining retail square footage and reduce the office uses by over 100,000 square feet.

The proposed uses comply with the MPD zoning district minimum criteria. The Applicant proposes 729 dwelling units (241 of which are already existing/approved on the Kersey Smoot RPD), 25,000 square feet of office uses, 318 hotel rooms, and 27 golf holes. Since the golf course is public and the area does not generate residential density, the clubhouse (14,400 square feet) also applies to the commercial square footage requirement for MPD zoning. Additionally, the schedule of uses allows for hotels, continuing care facilities and centers, and assisted living facilities. While the floor area of the hotel rooms is undefined, based on the “industry standard” average hotel room size of 425 square feet which could result in over 135,000 square feet of non-residential uses within the hotel rooms. Therefore, the project will meet or exceed the minimum 30,000 square feet of commercial development to achieve the MPD zoning district minimum criteria. The MCP incorporates the land areas used to meet the qualifying thresholds for mixed-use developments as required by LDC Section 34-940.

Open space will exceed the required 40% for residential development and 30% for non-residential development. Indigenous vegetation retention will exceed at least 50 percent of the required open space area. Indigenous preserve areas are made up of wetland and upland preservation. The project will far exceed the minimum preservation requirements in the LDC and required preserve setbacks will be provided in accordance with the LDC. Development areas have been designed so that wetlands impacts, beyond those approved in the Pelican Landing DRI, are not required and there are no new impacts to wetlands within the Coastal High Hazard Area. The wetland impacts are limited to the portion of the existing Kersey Smoot RPD, for wetlands not included in the established wetland areas or preserves per the DRI.

The Property is located in the Estero Planning Community, which does not include any unique development standards or public meeting requirements. Minimum lot sizes and development

standards are consistent with other planned developments in Lee County and are identified in the attached Schedule of Uses and Development Regulations Exhibit.

Adjacent properties to the south and within the City of Bonita Springs are also under common ownership and will include similar development intensities. The Raptor Bay CPD/RPD allows for 503 dwelling units and a maximum height of 20 floors over two floors of parking, with no height limitation in terms of feet per a settlement agreement. The Raptor Bay CPD/RPD is also within the Pelican Landing DRI.

The Bayview RPD/CPD to the west/southwest of the site allows for 300 units and a maximum height of 286 feet. The Bayview PD is not a part of the Pelican Landing DRI and is currently being developed with residential multi-family, marina, and restaurant parcels.

The adjacent existing development to the southeast is zoned RS-1 (El Dorado Estates), which allows for single-family dwellings with a maximum building height of 35 feet. The proposed development standards ensure that building heights are related to existing surrounding development and buffering is provided where appropriate. Specifically, building heights are limited on those tracts abutting El Dorado, and the 290' buildings are proposed several hundred feet from the shared property line in the far western portion of the site.

As proposed the residential uses will be well-screened and separated from surrounding land uses, and the community will be complimentary to the existing and planned surrounding neighborhoods.

In terms of building heights, the majority of surrounding lands in the generally area are developed with mid- and high-rise development including a 290' tall building approved by the Village of Estero in West Bay Club; the adjacent Saltleaf at Estero Bay and Raptor Bay developments noted above approved for 286'/20 stories over parking; the Hyatt Coconut Point Resort (213'/18 stories), Navona at The Colony Golf & Bay Club (maximum of 254'/20 stories over parking), and Altaira at the Colony Golf & Bay Club (maximum of 249', 20 stories over parking). Thus, the varying building heights proposed in MPD are compatible with the heights and intensities of surrounding development and do not introduce building heights that are out of scale with the neighborhoods. Viewsheds from surrounding properties will be further improved via external perimeter buffers, setbacks from PD boundaries, building perimeter plantings, and a high level of architectural design and articulation on the buildings.

The amendment will provide for highly demanded public access to Estero Bay, including public boat ramp, public parking, and public park area. The amendment carefully limits the size and scope of these public facilities to protect the surrounding neighborhoods along Coconut Road from external impacts.

Deviations are requested and described in further detail in the attached Schedule of Deviations and Justifications Exhibit. These deviations are intended to provide flexibility in the design of compact pods of development, a community in that minimizes impacts to wetlands and floodplain areas and that accommodates.

As an infill development, this proposal ensures that development is directed to the urbanized area of Lee County where significant public and private investment have already provided for adequate public facilities. Furthermore, the proposed rezoning ensures that the remaining development capabilities on these properties are coordinated in a unified plan of development.

Finally, the proposed MPD is consistent with the Lee Plan and Land Development Code as described in the remaining sections of this Project Narrative

VI. PROPOSED USES/DESIGN STANDARDS

The proposed Schedule of Uses allows for a wide range of residential uses, including single-family, townhome, and multi-family dwelling types as well as office, hotel, and recreational uses accessory to the residential development. The existing golf course will remain, with the golf holes reoriented and the existing golf clubhouse is planned to remain to the south of the Hyatt Timeshare buildings. Other optional amenities may be located in any of the development tracts. Except where deviations are requested, the design standards will meet or exceed the requirements in the LDC and mirror those of typical RPD zoning districts throughout the County.

The proposed development carries forward several deviations previously approved for the Pelican Landing CPD/RPD and Kersey Smoot RPD and limited new deviations as outlined in the Deviation & Justification Narrative.

VII. DECISION-MAKING COMPLIANCE

In accordance with LDC Section 34-145(d)(4), the data and analysis provided in the enclosed application demonstrate that the request meets or exceeds the following:

a) **The request will meet or exceed all performance and locational standards set forth for the proposed residential planned development, except where a deviation has been approved.**

The Property has been deemed an appropriate location for the development of residential, golf course, and resort-oriented recreational uses based upon prior approvals.

Traffic impacts of the project are discussed in the attached Traffic Impact Statement (TIS) which demonstrates all impacted roadways will function at an acceptable Level of Service. Any off-site improvements required by the project will be addressed at the time of local development order review.

Utilities and other required infrastructure are available to serve the proposed uses, densities and intensities.

The request for the development of a total of 729 residential dwelling units (241 of which are already existing/approved on the Kersey Smoot RPD) is consistent with the maximum allowable densities in the Suburban and Outlying Suburban Future Land Use Categories (FLUC) and will result in a compact form of development compatible with the surrounding existing and planned development pattern. The request is consistent with the goals, objectives and policies of the Lee Plan, as outlined in this application.

Requested deviations include those previously approved in the Pelican Landing CPD and Kersey Smoot RPD where needed are requested to facilitate the redevelopment of the site and accommodate the existing site development characteristics plan. The deviations are described in more detail in the attached Schedule of Deviations and Justifications.

These deviations are still necessary to maximize the preservation areas on the property, ensure compact development tracts, and address certain site constraints. More details regarding each justification are provided in the attached Deviations and Justifications exhibit.

b) Complies with the Lee Plan.

The request will allow for mixed use development in accordance with the Outlying Suburban and Suburban FLUCs and other relevant Goals, Objectives, and Policies. Densities account for the limited wetland impact areas and comply with Table 1(a) outlining Residential Densities and Table 1(b), which allocates a maximum of 454 acres of residential development in the Outlying Suburban FLUC and within the Estero Planning District. According to the Planning Department, 360 acres have been allocated and 94 acres remain for residential acreage. Moreover, the density proposed was previously approved in the original DRI, which is evidence the density of this MPD is consistent with the Lee Plan.

The only non-residential uses proposed are hotel/resort and golf uses, as well as 25,000 SF of office space. Portions of the proposed development have already extinguished residential development acreage so only Tract R-1, and portions of Tracts R-2 and MF include new residential acreage within the Estero Planning District. The MCP demonstrates 57.31 acres of residential development acres required to accommodate the proposed development. Therefore, sufficient acreage is allocated for the proposed development.

Additional information regarding compliance with Lee Plan policies is included in the remaining sections of this Project Narrative.

A companion DRI amendment is also submitted to modify the maximum residential dwelling units and commercial/office square footage.

c) Meets this Code and other applicable County regulations or qualifies for deviations.

The request includes proposed development standards, and deviations in compliance with the Lee Plan and LDC regulations as described in the remaining sections of this Project Narrative. As outlined in the Deviation Justification Narrative, requested deviations will fully meet the intent of the LDC.

d) Is compatible with existing and planned uses in the surrounding area.

The request will ensure that the property is developed with uses similar to neighboring properties. The proposed MPD includes development standards which comply with the LDC. Buffers and setbacks will be provided to adjacent properties, where required. In particular, a Type “F” buffer is proposed in the following locations:

- Along the southeastern property lines, adjacent to the El Dorado Estates subdivision, and
- Along the northern property line where the golf course is adjacent to the West Bay Club RPD.

Impacts to surrounding land uses are minimal due to the similarity of intent and intensity of uses and the reduction of commercial square footage. The proposed development standards and LDC requirements have adequately addressed any potential impacts on adjacent uses.

As detailed above, there are several buildings in the immediate vicinity approved for similar building heights, including the West Bay Club also approved for 290'. Viewsheds from surrounding properties will be further improved via external perimeter buffers, setbacks from PD boundaries, building perimeter plantings, and a high level of architectural design and articulation on the buildings.

e) Will provide access sufficient to support the proposed development intensity.

A Traffic Impact Statement (TIS) is attached which demonstrates that the proposed access points are sufficient to support the proposed development activity. The project will be accessed from Coconut Road, as well as from Saltleaf Blvd. (FKA Coconut Point Resort Dr.). These access points meet the requirement in LDC section 10-291 that residential development of more than five acres must provide more than one means of ingress or egress for the development areas with access to Saltleaf Blvd. (FKA Coconut Point Resort Dr.) Due to the unique location at the terminus of Coconut Road, this is only viable access and will be supplemented by appropriate mitigation via the entry designs and internal emergency turnaround features and limitations on the disbursement of units in each development tract.

f) The expected impacts on transportation facilities will be addressed by existing County regulations and conditions of approval.

The attached TIS has demonstrated that all analyzed roadways are projected to operate at acceptable Levels of Service with the increase of residential units and corresponding decrease in commercial entitlements. Sidewalk and bikeway facilities will comply with the minimum requirements and options set forth in Chapter 10 of the LDC. The reduction in commercial/retail entitlements ensure the MPD will not increase the number of trips approved by the current DRI.
The project will require development order approvals prior to site development activities. The project's impacts and the need for turn lane improvements at the site access drive intersections will be evaluated at that time in accordance with the LDC.

g) Will not adversely affect environmentally critical or sensitive areas and natural resources.

The proposal ensures environmentally critical areas and natural resources are protected while allowing for development consistent with the Suburban, Outlying Suburban and Wetlands FLUCs.

The Project provides 209.64 acres of open space, or 49 percent of the total acreage, which significantly exceeds the minimum requirements of the LDC of 40% open space.

Preserve areas have been designed to retain native vegetation areas to the maximum extent possible. The Project site includes 81.24± acres of wetlands and 25.34± acres of "Other Surface Waters" (OSW), not including the 60-acre SFWMD conservation area, which are located within preserve areas on the proposed MCP. This exceeds the LDC requirement that 50% of open space areas be in the form of indigenous vegetation.

An Indigenous Preserve Management Plan and Protected Species Management Plans will be provided at the time of DO.

h) Will be served by urban services, defined in the Lee Plan, if located in a Future Urban area category.

Public infrastructure and services will be available to service the proposed development. The Property is located within the Suburban, Outlying Suburban, and Wetlands FLUC, which are Future Urban Areas per the Lee Plan. These areas are permitted for residential and commercial office uses as proposed.

The Property is within the Bonita Springs Utilities Service Area and extending water and sewer service throughout the property will require developer funded infrastructure improvements.

The property is served by the Estero Fire District with Fire Station #42 located on Sweetwater Ranch Boulevard and US 41 and Lee County EMS Station Medic 21 located on Three Oaks Parkway. The Lee County Sheriff provides service in South District - Zone S3.

The data and analysis provided in the enclosed application also demonstrates that the request meets or exceeds the following Planned Development Rezoning review criteria.

i) The proposed use or mix of uses is appropriate at the proposed location;

The Suburban and Outlying Suburban FLUCs allow for medium and low density residential, non-residential land uses. The mix of uses have been historically approved and partially developed on the site dating back to prior approvals.

This request includes elimination of previously approved commercial retail land uses assigned to the Applicant, as well as significant reduction in unused office square footage. Moreover, the development of residential dwellings on the 430± acre property is appropriate for this location which includes significant buffers, open space and preserves to provide compatibility with the variety of neighboring uses which include single-family residential subdivisions, high-rise residential towers, and preserve areas. The proposed unified MPD maintains the extensive environmental protections on the property via preserved natural flowways, on-site wetlands, and preservation of upland habitats.

j) The recommended conditions provide sufficient safeguards to the public interest and are reasonably related to the impacts on the public's interest expected from the proposed development.

The proposed development standards address all development characteristics, environmental protection and infrastructure needs to sufficient to ensure the protection of the public health, safety and welfare and are sufficient and reasonably related to the impacts on the public interest.

k) If the application includes deviations pursuant to section 34-373(a)(9), that each requested deviation:

1) Enhances the achievement of the objectives of the planned development; and

2) Preserves and promotes the general intent of this Code to protect the public health, safety and welfare.

Please refer to the enclosed Schedule of Deviations and Justifications, which addresses these criteria. The requested deviations preserve and promote the general intent of the LDC and will not negatively impact public health, safety, or welfare.

VIII. LEE PLAN COMPLIANCE

The following is an analysis of the RPD's consistency with goals, objectives and policies of the Lee County Comprehensive Plan (Lee Plan).

POLICY 1.1.5: The Suburban future land use category will consist of predominantly residential areas that are either on the fringe of the Central Urban or Urban Community future land use categories or in areas where it is appropriate to protect existing or emerging residential neighborhoods. This category provides housing near the more urban areas but does not provide the full mix of land uses typical of urban areas. Industrial land uses are not permitted. This category has a standard density range from one dwelling unit per acre (1 du/acre) to six dwelling units per acre (6 du/acre). The maximum total density may only be increased to eight dwelling units per acre (8 du/acre) utilizing Greater Pine Island Transfer of Development Units except in areas that specifically prohibit bonus density. Other forms of bonus densities are not allowed.

POLICY 1.1.6: The Outlying Suburban future land use category is characterized by its peripheral location in relation to established urban areas. In general, this category is rural in nature or contains existing low-density development. Some of the requisite infrastructure needed for higher density development is planned or in place. Industrial land uses are not permitted. The standard density range is from one dwelling unit per acre (1 du/acre) to three dwelling units per acre (3 du/acre). Bonus densities are not allowed.

The proposed PD includes the redevelopment of the existing Raptor Bay Golf Course (now known as Saltleaf Golf Preserve) as well as infill development within the Kersey Smoot RPD. Portions of the Property are located in the Suburban and Outlying Suburban FLUCs, as shown in the attached Future Land Use Map. The attached Preliminary Density Calculation utilizes densities in these FLUCs of 6 du/acre and 3 du/acre consistent with these policies. The proposed schedule of uses is consistent with the FLUCs on site and includes single-family and multifamily residential uses, as well non-residential uses like office and recreational uses. These uses are consistent with the Suburban and Outlying Suburban FLUCs and were previously approved in the existing Pelican Landing and Kersey Smoot PDs. Therefore, the proposed uses and density are entirely consistent with the above policy and other related Rural FLUC policies governing use of these lands.

POLICY 1.5.1: Permitted land uses in Wetlands consist of very low density residential uses and recreational uses that will not adversely affect the ecological functions of wetlands. All development in Wetlands must be consistent with Goal 124 of this plan. The maximum density is one dwelling unit per twenty acres (1 du/20 acre) except as otherwise provided in Table 1(a) and Chapter XIII of this plan.

The attached proposed density calculation for the Pelican Landing London Bay RPD utilizes a density calculation for impacted freshwater and preserved/impacted saltwater wetlands of 1 du/20 acres. Preserved freshwater wetlands utilize a density calculation of 6 du/acre adjacent to the Suburban FLUC and 3 du/acre adjacent to the Outlying Suburban FLUC consistent with the allowed density in Outlying Suburban, as allowed in Table 1(a) Note 8. Therefore, the proposed RPD is consistent with this policy.

POLICY 1.6.5: The Planning Districts Map and Acreage Allocation Table (Map 1-B and Table 1(b)) depict the proposed distribution, extent, and location of generalized land uses through the Plan's horizon. Acreage totals are provided for land in each Planning District in unincorporated Lee County. No development orders or extensions to development orders will be issued or approved by Lee County that would allow the acreage totals for residential, commercial or industrial uses contained in Table 1(b) to be exceeded. This policy will be implemented as follows:

1. For each Planning District the County will maintain a parcel based database of existing land use.
2. Project reviews for development orders must include a review of the capacity, in acres, that will be consumed by buildout of the development order. No development order, or extension of a development order, will be issued or approved if the acreage for a land use, when added to the acreage contained in the updated existing land use database, exceeds the limitation established by Table 1(b) regardless of other project approvals in that Planning District.
3. When updating the Lee Plan's planning horizon, a comprehensive evaluation of the Planning Districts Map and Acreage Allocation Table will be conducted.

Table 1(b) currently allocates a maximum of 454 acres of residential development in the Outlying Suburban FLUC and within the Estero Planning District. According to the Planning Department, 360 acres have been allocated and 94 acres remain for residential acreage. The MCP demonstrates 57.31 acres of residential development association with the proposed RPD. Therefore, sufficient acreage is allocated for the proposed development.

OBJECTIVE 2.1: DEVELOPMENT LOCATION. Contiguous and compact growth patterns will be promoted through the rezoning process to contain urban sprawl, minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, prevent development patterns where large tracts of land are by-passed in favor of development more distant from services and existing communities.

The proposed rezoning will facilitate infill and redevelopment within urban FLUCs. The project does not include new impacts to areas previously identified wetlands. The development location ensures the efficient use of land in suburban and outlying suburban areas in direct compliance with this and other policies in the Lee Plan. As outlined in detail within the application, the project provides for compatibility with the surrounding low-density residential development preserves and non-residential uses. Development within the project is clustered primarily within existing uplands and provides 49 percent open space, representing a compact development footprint. The project is within the Bonita Springs Utilities service area and does not require a significant expansion of services. Redeveloping the golf course area and continuing the build out of the Kersey Smoot RPD represents efficient use of lands contiguous to growth areas in compliance with this policy.

OBJECTIVE 2.2: DEVELOPMENT TIMING. Direct new growth to those portions of the Future Urban Areas where adequate public facilities exist or are assured and where compact and contiguous development patterns can be created. Development orders and permits (as defined in F.S. 163.3164(7)) will be granted only when consistent with the provisions of Sections 163.3202(2)(g) and 163.3180, Florida Statutes and the county's Concurrency Management Ordinance.

The Property is contiguous to developed or developing properties in Bonita Springs and Estero, representing logical and efficient growth within the Suburban and Outlying Suburban FLUCs. The attached letters of availability demonstrate there is sufficient capacity to provide potable water and sanitary sewer services to support the proposed density. Additionally, the attached Public Infrastructure Map demonstrates the Property is in the vicinity of adequate public facilities and public investment. Therefore, the proposed amendment and rezoning fully complies with this policy's intent to direct new growth to appropriate Future Urban Areas of the county.

POLICY 2.2.1: Rezonings and Development of Regional Impact proposals will be evaluated as to the availability and proximity of the road network; central sewer and water lines; community facilities and services such as schools, EMS, fire and police protection, and other public facilities; compatibility with surrounding land uses; and any other relevant facts affecting the public health, safety, and welfare.

The road network in the region has been constructed to support the urban character of the area. The property is near existing networks, utility services and compatible, similar land uses. The Property is within the Bonita Springs Utilities service area. There are adequate public facilities and services in the immediate vicinity of the project to serve the proposed development in terms of schools, fire, EMS and Sheriff's protection.

The proposed Master Concept plan provides compatibility with surrounding areas through the provision of expansive preserve areas and compact residential development areas. Finally, buffering, maximum building heights, and development standards are similar to other planned developments approved in the surrounding community.

OBJECTIVE 4.1: WATER, SEWER, AND ENVIRONMENTAL STANDARDS. Consider water, sewer, and environmental standards during the rezoning process. Ensure the standards are met prior to issuing a local development order.

STANDARD 4.1.1: WATER.

3. The developer must provide proof that the prior commitments of the water utility, plus the projected need of the developer, do not exceed the supply and facility capacity of the utility.

A letter of availability dated July 26, 2022, was provided by Bonita Springs Utilities identifying the facility's capacity for the development of projected water and sewer demand.

4. All waterline extensions to new development will be designed to provide minimum fire flows, as well as adequate domestic services as required by Fla. Admin. Code R. 62-555.

The proposed waterline extensions shall be designed to meet minimum fire flows and provide adequate domestic service water flows as required by the Florida Administrative Code.

STANDARD 4.1.2: SEWER

1. Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development that generates

more than 5,000 gallons of sewage per day, must connect to a sanitary sewer system.

2. If the proposed development exceeds the thresholds listed above and lies within the boundaries of a sewer utility's certificated or franchised service area, or Lee County Utilities' future sanitary sewer service area (see Map 4-B), and that utility has sufficient capacity to provide minimum service to the development, then the development must connect to that sewer utility if there is existing infrastructure adequate to accept the effluents of the development within l/4 mile from any part of the development.

The Property is within the Bonita Springs Utilities Service Area. A letter of availability dated July 26, 2022, was provided by Bonita Springs Utilities identifying the facility's capacity for the development of projected water and sewer demand. Any required improvements needed to provide connection to BSU infrastructure will be developer funded.

STANDARD 4.1.3: REUSE

1. Any development that requires a development order, on a property that is adjacent to public reuse infrastructure with sufficient capacity, must connect to the reuse system for irrigation needs.

2. Any new development that, at build-out, has an anticipated irrigation demand of 50,000 gallons per day, or more, using the Blaney-Criddle method, must connect to a public reuse system for irrigation needs when sufficient capacity and adequate infrastructure is within 1/4 mile from any part of the development.

3. If there is not sufficient capacity or adequate infrastructure within 1/4 mile of the development, the developer must provide proof in the form of a clearly stated rejection of service.

4. If a development has been rejected for reuse service, the proposed source of irrigation water must be identified consistent with Policy 61.1.6.

The Property is not adjacent to any public reuse infrastructure and no such infrastructure exists within ¼ mile from the development. The attached letter of availability from Bonita Springs Utilities demonstrates that reuse service was rejected, as required by this Policy. Previously permitted irrigation wells will continue to serve the irrigation demands for the golf course.

POLICY 5.1.1: Residential developments requiring rezoning and meeting Development of County Impact (DCI) thresholds must be developed as planned developments except if located within the Mixed Use Overlay.

The Application is to rezone several properties to a unified Mixed Use Planned Development in accordance with this policy.

POLICY 5.1.2: Prohibit residential development where physical constraints or hazards exist, or require the density and design to be adjusted accordingly. Such constraints or hazards include but are not limited to flood, storm, or hurricane hazards; unstable soil or geologic

conditions; environmental limitations; aircraft noise; or other characteristics that may endanger the residential community.

While portions of the Property are located in the Coastal High Hazard Area (CHHA), the proposed MPD preserves the wetlands and uplands surrounding the natural floodway of Halfway Creek. The proposed MPD protects against impacts from coastal flooding by providing storage within the surface water management system and the protection of 204± acres of wetland and uplands on site. The MPD does not propose to exceed allowable maximum density permitted by the underlying FLUCs. Additionally, impacts to hurricane shelters will be addressed through the impact mitigation requirements in LDC Section 2-485 at the time of local development order.

POLICY 5.1.5: Protect existing and future residential areas from any encroachment of uses that are potentially destructive to the character and integrity of the residential environment. Requests for conventional rezonings will be denied in the event that the buffers provided in Chapter 10 of the Land Development Code are not adequate to address potentially incompatible uses in a satisfactory manner. If such uses are proposed in the form of a planned development or special exception and generally applicable development regulations are deemed to be inadequate, conditions will be attached to minimize or eliminate the potential impacts or, where no adequate conditions can be devised, the application will be denied altogether. The Land Development Code will continue to require appropriate buffers for new developments.

The request is intended to allow for the development of a range of residential dwellings on the 430± acre property in the form of a Mixed Use Planned Development subject to conditions, performance/design standards, limited schedule of uses, and a binding Master Concept Plan. The request will ensure that the property is developed with uses similar neighboring properties, thereby protecting the character and integrity of the existing communities.

The Applicant has proposed development standards including buffers, lakes, and setbacks to the adjacent properties, consistent with the LDC. The preservation of existing native vegetation and buffering to provide visual screening to surrounding development consistent with LDC requirements. Minimum setbacks to the PD perimeter boundary are 25 feet. The Applicant has limited the previously disturbed areas or previously identified development tracts. The proposed density is consistent with the allowable density in the Suburban and Outlying Suburban FLUCs.

The project will not negatively impact surrounding land uses due to the similarity of uses, density and open space provisions. The development standards and LDC requirements have adequately addressed any potential impacts on adjacent uses.

POLICY 5.1.7: Maintain development regulations that require that community facilities (such as park, recreational, and open space areas) in residential developments are functionally related to all dwelling units and easily accessible via pedestrian and bicycle pathways. These pathways must be interconnected with adjoining developments and public pathways whenever possible. Townhouses, condominiums, apartments, and other types of multi-family residential development must have directly accessible common open space.

The proposed MCP incorporates 49% open space and includes 27 golf holes, an existing clubhouse and other recreation facilities in addition to community amenity centers with

recreational facilities. Existing pedestrian and bicycle pathways are located throughout the golf course and along Saltleaf Blvd (FKA Coconut Point Resort Dr.). All open space and amenities will be directly accessible to all residents within the RPD.

POLICY 5.1.10: In those instances where contiguous land is within two or more land use categories, the allowable number of dwelling units will be the sum of the allowable dwelling units for each land use category. This dwelling units may be allocated across the property provided that the resultant development affords further protection to environmentally sensitive lands, if they exist on the property, and the number of dwelling units within any Future Non-Urban Area land use category does not exceed the density allowed in that future land use category.

Dwelling units have been allocated across the property, as allowed by this Policy. The resultant development ensures that significant preservation is provided on the property. The attached preliminary density calculations demonstrate that proposed densities do not exceed the density allowed in each future land use category. The MPD is in the Future Urban Area, is under single ownership, and protects environmentally sensitive lands.

OBJECTIVE 6.1: Development approvals for commercial land uses must be consistent with the following policies, the general standards under Goal 4, and other provisions of this plan.

POLICY 6.1.1: All applications for commercial development will be reviewed and evaluated as to:

1. Traffic and access impacts (rezoning and development orders);

The attached Traffic Impact Statement (TIS) demonstrates no impacts to the surrounding transportation system. The request includes access points along Coconut Rd., Saltleaf Blvd. (FKA Coconut Point Resort Dr.), and Coconut Plantation Dr.

2. Screening and buffering (Planned Development rezoning and development orders);

The attached MCP identifies required buffers in compliance with the LDC, except where a deviation is requested for internal development tracts, including a 30-foot Type “F” buffer where golf or redevelopment tracts abut adjacent residential uses as required by LDC section 10-416(C)(6).

4. Availability and adequacy of services and facilities (rezoning and development orders);

The attached letter of availability from BSU demonstrates water and sewer facilities are available to serve the property.

5. Impact on adjacent land uses and surrounding neighborhoods (rezoning);

The request ensures there are no impacts on adjacent land uses and surrounding neighborhoods through development standards that are comparable to surrounding development. The request maintains large preserve tracts and development tracts that are closer to existing neighborhoods are limited to golf courses, or residential and mixed-use development that is compatible with the surrounding neighborhoods. Maximum

building heights are comparable to surrounding approved and developed structures. All development

6. Proximity to other similar centers (rezoning); and

The request locates all redevelopment in proximity to the abutting properties to the west, which will be developed as a unified mixed-use development. The attached Approved Building Heights Map demonstrates approved building heights within one mile which are comparable to the heights proposed on the subject property. Office uses are located adjacent to other commercially zoned properties along Coconut Rd.

7. Environmental considerations (rezoning and development orders).

The environmental analysis provided by Passarella and Associates, demonstrates the preservation of 61.54 acres wetlands and 57.74 acres of uplands in addition to 60 acres of wetlands preserved under an existing SWFMD Conservation Area. All proposed development is located within previously cleared golf course areas or areas identified for development in the Kersey-Smoot RPD.

POLICY 6.1.2: Commercial development in non-urban future land use categories is limited to Minor Commercial except that:

- **Neighborhood Commercial uses serving the Lee County Civic Center are permitted within one quarter mile of SR31 between North River Road and the Caloosahatchee River in the North Olga Community Planning Area and may be expanded to Community Commercial when approved as part of a Planned Development that is located at the intersection of two arterial roadways and has direct access to, or the ability to extend, existing water and sanitary sewer utilities.**
- **Neighborhood Commercial uses are permitted in the Southeast Lee County Planning District as provided for in Objectives 13.3 and 33.2.5.**

Minor Commercial development may include limited commercial uses serving rural areas and agricultural needs, and commercial marinas. Minor Commercial development must be located so that the retail use, including buildings and outdoor sales area, is located at the intersection (within 330 feet of the adjoining rights-of-way of the intersecting roads) of arterial and collector roads or two collector roads with direct access to both intersecting roads. Direct access may be achieved with an internal access road to either intersecting roads. On islands, without an intersecting network of collector and arterial roads, commercial development may be located at the intersection of local and collector, or local and arterial, or collector and collector roads.

This request is limited to a maximum of 25,000 square feet of office uses only. The portion of Coconut Rd. west of US 41 does not have an intersecting network of collector and arterial roads. Therefore, the office uses are located as close as possible to the intersection of Coconut Rd and Coconut Plantation Rd. The location of the planned office uses is consistent with the intent of this provision, while also ensuring that the existing preserves located between the commercial development and Coconut Plantation Rd. are not impacted.

POLICY 6.1.3: Commercial developments requiring rezoning and meeting DCI thresholds must be developed as Planned Developments except if located within the Mixed Use Overlay. The Planned Development must be designed to arrange uses in an integrated and cohesive unit in order to: provide visual harmony and screening; reduce dependence on the

automobile; promote pedestrian movement within the development; utilize joint parking, access and loading facilities; avoid negative impacts on surrounding land uses and traffic circulation; protect natural resources; and, provide necessary services and facilities where they are inadequate to serve the proposed use.

The application is for a Planned Development, as required by this Policy, and is not located within the Mixed-Use Overlay. The proposed development includes a mix residential and non-residential uses which will reduce the need for residents to travel outside of the development for office uses. The proposed development will comply with development standards in the LDC, except where a deviation is requested. Additionally, the TIS demonstrates no negative impacts on traffic circulation.

POLICY 6.1.4: Commercial development will be approved only when compatible with adjacent existing and proposed land uses and with existing and programmed public services and facilities.

Adjacent land uses include multi-family residential development, single-family residential lots, vacant properties, and commercially zoned properties on Coconut Rd. The Master Concept Plan concentrates development within previously cleared golf course areas, or within areas identified for development in the Kersey-Smoot RPD. The MCP provides buffering and setbacks in compliance with the Land Development Code, except where deviations are requested.

POLICY 6.1.5: The land development regulations will require that commercial development be designed to protect the traffic-carrying capacity of roads and streets. Methods to achieve this include, but are not limited to: frontage roads; clustering of activities; limiting access; sharing access; setbacks from existing rights-of-way; acceleration, deceleration and right-turn-only lanes; and, signalization and intersection improvements.

The application proposes to reduce the available commercial and industrial square footage within the Pelican Landing DRI in order to ensure traffic-carrying capacity of roads and streets is protected. Commercial uses are clustered within the MU tract. The MPD proposes one access location directly on Coconut Rd which will be used to access all uses within the MU tract. Proposed setbacks for the MU tract are consistent with the requirements in the LDC. All off-site transportation improvements will be addressed at the time of Local Development Order.

POLICY 6.1.6: The land development regulations will require that commercial development provide adequate and appropriate landscaping, open space, and buffering. Such development is encouraged to be architecturally designed so as to enhance the appearance of structures and parking areas and blend with the character of existing or planned surrounding land uses.

All non-residential areas will be buffered and include landscaping and open space consistent with the LDC. The proposed project will be unified throughout the MPD and include high-quality design characteristics. Specific structures and parking areas will be identified at the time of Local Development Order.

POLICY 6.1.7: Prohibit commercial developments from locating in such a way as to open new areas to premature, scattered, or strip development; but permit commercial development to

infill on small parcels in areas where existing commercial development would make a residential use clearly unreasonable.

The Pelican Landing DRI has previously permitted commercial development and commercial zoning is located directly adjacent to the proposed project, therefore this application does not open new areas to premature, scattered, or strip development. Moreover, the application represents infill development as it will allow for the redevelopment of portions of an existing golf course and is surrounded by existing development.

POLICY 6.1.11: Encourage the upgrading or revitalization of deteriorating commercial areas, but prohibit the expansion or replacement of commercial uses which are inappropriately located or that have an adverse impact on surrounding residential and non-residential uses. Such revitalization includes, but is not limited to: store-front renewal, sign control, and the provision of common parking areas and consolidated access.

Non-residential areas within the Pelican Landing MPD are located to complement surrounding land uses and limited to office uses only. Proposed development standards, including setbacks and buffers, will ensure that office buildings are compatible with surrounding residential and non-residential uses.

OBJECTIVE 11.1: MIXED USE DEVELOPMENT. Allow and encourage mixed use development within certain future land use categories and at appropriate locations where sufficient infrastructure exists to support development.

POLICY 11.1.2: Residential densities may be calculated from the entire project area when the development is consistent with the following:

- **At least three uses are proposed and must include residential, commercial (including office) and light industrial (including research and development use).**
- **The development is located in the Intensive Development, Central Urban, or Urban Community future land use categories.**

Since this request does not meet the criteria for three uses or future land use categories, residential densities are calculated without using acreage from commercial areas. Public infrastructure in the area is sufficient to support the proposed development as demonstrated through the TIS and utilities availability letter. Including non-residential uses in this area relieves pressure on Coconut Rd. since nearby commercial uses are primarily located along US 41.

POLICY 59.1.3: Maintain floodplain regulations in accordance with the most recently adopted Flood Insurance Rate Map (FIRM) and other available sources.

The proposed project is located within designed FEMA flood zones AE-11and X. The Halfway Creek Floodway within the AE-10.5 flood zone and is depicted on the proposed MCP as a preserve area. No development is proposed within the Floodway.

OBJECTIVE 60.1: SURFACE WATER. Develop a surface water management program that is multi-objective in scope, geographically based on basin boundaries, and incorporates the requirements of applicable adopted Basin Management Action Plans.

POLICY 60.1.1: Require design of surface water management systems to protect or enhance the groundwater.

A surface water management system is proposed which will provide water quality treatment before discharging into onsite wetlands.

POLICY 60.1.2: Incorporate, utilize, and where practicable restore natural surface water flowways and associated habitats.

The proposed MPD includes wetland preservation areas which will maintain existing flow-ways and associated habitats to the maximum extent practicable.

OBJECTIVE 60.4: INCORPORATION OF NATURAL SYSTEMS INTO THE SURFACE WATER MANAGEMENT SYSTEM. Incorporate natural systems into surface water management systems to improve water quality, air quality, water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief.

POLICY 60.4.1: Encourage new developments to design surface water management systems with Best Management Practices including, but not limited to, filtration marshes, grassed swales planted with native or Florida Friendly Landscaping vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flow-ways.

The proposed MPD includes a surface water management plan that complies with all LDC design standards.

POLICY 60.4.2: The County encourages new developments to design their surface water management system to incorporate existing wetland systems.

The MPD provides 81.24± acres of wetland preservation in the Eco-Park area, in addition to a 60-ac SFWMD Conservation Area. The surface water management system was designed to protect and maintain the function of the on-site wetland areas.

POLICY 60.4.3: The County encourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways.

The existing wetland preserves, including the Halfway Creek Flow-way, are proposed to remain in preservation. Wetland preservation areas will not be disconnected from the surrounding wetland system.

POLICY 61.1.1: Lee County recognizes that all fresh waters are a resource to be managed and allocated wisely, and will support allocations of the resource on the basis 1) of ensuring that sufficient water is available to maintain or restore valued natural systems, and 2) of assigning to any specified use or user the lowest quality freshwater compatible with that use, consistent with financial and technical constraints.

The Applicant will obtain an Environmental Resource Permit from the South Florida Water Management District. The master drainage system and established conservation areas proposed in this amendment request, and which will be established through the ERP and subsequent development orders, are designed in compliance with this policy.

POLICY 61.1.6: When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be utilized for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development. New developments will coordinate with County staff regarding the source of irrigation water.

Surface water will be used for all irrigation of landscaping within the community. The proposed community will not use potable water provided as a result of this amendment for irrigation purposes.

POLICY 61.3.3: Keep floodways as unobstructed as possible.

The Property includes a portion of the Halfway Creek floodway, which is demonstrated on the proposed MCP. No development is proposed within this area.

GOAL 101: COASTAL AREAS. Protect human life along with current and future development from the impacts of coastal flooding. Coastal flooding includes, but is not limited to, high tide events, storm surge, flash floods, stormwater runoff, and impacts of sea level rise.

POLICY 101.1.1: Require that development within the Coastal High Hazard Area be compatible with natural systems, such as, water retention and purification, wildlife habitat, primary productivity, and defense against coastal flooding.

The site plan, in conjunction with the activities proposed within the Indigenous Preserve and Protected Species Management Plan, was designed to be compatible with surrounding natural systems and will protect and continue to provide functions including water retention and purification. Defense against flooding is provided through the proposed stormwater management system and through the preservation of 204± acres of on-site preserve areas.

The site plan includes the construction of a permitted stormwater management system and will provide long-term protection of wildlife habitat. The site plan was designed to protect and maintain the function of the on-site wetland areas and adjacent upland habitat and to provide on-site preservation adjacent to proposed off-site preservation areas located to the north.

POLICY 101.1.2: Protect and conserve the following environmentally sensitive coastal areas: wetlands, estuaries, mangrove stands, undeveloped barrier islands, beach and dune systems, aquatic preserves, wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, and marine grass beds.

As required by Lee Plan Policy 101.1.2, the site plan protects environmentally sensitive areas through the preservation of 204± acres of preserve areas The wetland areas, in combination with adjacent upland areas, are protected in perpetuity through a conservation easement. All mangrove wetlands on the western portion of the property will remain in preservation. The Project does not contain estuaries, undeveloped barrier islands, beach and dune systems, aquatic preserves, wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, or marine grass beds.

OBJECTIVE 101.3: DEVELOPMENT IN COASTAL AREAS. Protect human life and property from natural and man-made disasters.

POLICY 101.3.2: Restrict development in the Coastal High Hazard Area to uplands except as needed for the provision of public facilities.

A portion of the Property is located within the Coastal High Hazard Area (CHHA). The proposed project does not include any wetland impacts within the CHHA. Wetland limits were previously reviewed and approved on a portion of the Property by SFWMD as part of permit number 36-03813-P.

POLICY 101.3.4: Encourage new residential development, as required by the Land Development Code, to provide continuing information to residents concerning hurricane evacuation and shelters.

A homeowners' or residents' association will be established to provide continuing information concerning hurricane evacuation and shelters. Additionally, the developer will mitigate impacts to shelter space through the payment schedule outlined in Chapter 2 of the LDC.

POLICY 123.1.5: Encourage private restoration of natural habitats to support connectivity between public and private conservation and preservation efforts.

The proposed MPD includes significant preservation areas which have were previously permitted. The proposed preserve area is intended to preserve habitat on site, as well as to support connectivity with adjacent public conservation lands in compliance with this policy.

OBJECTIVE 123.2: PLANT COMMUNITIES. Maintain and enhance the biodiversity of the natural plant communities within Lee County to create a more resilient and sustainable ecosystem.

POLICY 123.2.4: Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.
POLICY 123.2.6: Avoid destruction of upland vegetation communities including coastal and interior hammocks through consideration of alternative site design layouts.

POLICY 123.2.8: Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, public acquisition, and appropriate other means.

POLICY 123.2.13: Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning.

POLICY 123.2.15: Protect Rare and Unique upland habitats from development impacts to the maximum extent possible, through conservation and/or site design.

The proposed preserve areas exceed the minimum requirements of the LDC per the enclosed MCP. Preservation areas are designed to maintain previous approvals, provide large contiguous preserve areas, and increase viability of the plant communities and provide significant buffers to surrounding natural areas.

OBJECTIVE 123.3: WILDLIFE. Maintain and enhance the fish and wildlife diversity and distribution within Lee County for the benefit of a balanced ecological system. (Ord. No. 94-30, 18-28)

In compliance with Objective 123.3 of the Lee Plan, the protection and enhancement of the on-site preserve will maintain the function of the on-site wetland and upland preservation areas. It will also provide perpetual protection of wildlife habitat, which will be available for utilization by various common and protected wildlife species including, but not limited to, amphibians species, reptiles species, small mammal species, and avian species, including wading birds. The enhancement and long-term protection of the 204± acre on-site preserve area will help to maintain wildlife diversity in Lee County, in compliance with Objective 123.3 of the Lee Plan.

POLICY 123.3.3: Protect wildlife from impacts of new non-agricultural development in nonurban areas through the creation and implementation of a human-wildlife coexistence plan for each new development requiring a development order.

A human-wildlife coexistence plan is attached in compliance with this policy. See the Protected Species Management and Human-Wildlife Coexistence Plan enclosed.

OBJECTIVE 123.8: GOPHER TORTOISES. Restore and maintain secure, viable populations of Gopher Tortoises in Lee County.

POLICY 123.8.1: Protect Gopher Tortoise burrows wherever they are found. If unavoidable conflicts make on-site protection infeasible, off-site mitigation may be provided in accordance with FWC requirements.

Please see the attached Indigenous Preserve and Protected Species Management Plan that was prepared for the Project. Gopher tortoise (*Gopherus polyphemus*) burrows that will be impacted by construction activities will be relocated on-site where feasible, or off-site in accordance with the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines.

OBJECTIVE 123.10: WOOD STORK. Lee County will maintain regulatory measures to protect the wood stork's feeding and roosting areas and habitat.

No wood stork (Mycteria americana) rookeries or roosting areas were documented on the Project site. Compensation for impacts to wood stork foraging habitat will be provided through the enhancement and preservation of on-site wetland areas, or through the purchase of credits from a wetland mitigation bank. Additionally, the enhancement and preservation of wetland areas within the onsite preserve will provide and protect potential foraging habitat for woods storks and other wading birds. The proposed stormwater system will comply with all design requirements in the LDC, including the littoral planting requirements, which provides potential forage areas.

OBJECTIVE 124.1: Protect and conserve the natural functions of wetlands and wetland systems by maintaining wetland protection regulations.

POLICY 124.1.1: Ensure that development in wetlands is limited to very low density residential uses and uses of a recreational, open space, or conservation nature that

are compatible with wetland functions. The maximum density in the Wetlands category is one unit per 20 acres, except that one single family residence will be permitted on lots meeting the standards in Chapter XIII. Owners of wetlands adjacent to Intensive Development, General Interchange, Central Urban, Urban Community, Suburban, New Community, Outlying Suburban, Sub-Outlying Suburban, and Rural future land use categories may transfer dwelling units from preserved freshwater wetlands to developable contiguous uplands under common ownership at the same underlying density as permitted for those uplands.

The proposed development is limited to previously impacted or planned residential areas. Density is calculated at 1 du/20 acres in all wetlands proposed to be impacted in accordance with table 1(a). Densities from preserved wetlands are transferred to developable contiguous uplands under common ownership at consistent with the maximum allowable density for the adjacent Suburban and Outlying Suburban Future Land Use Categories as identified in this policy and Table 1(a).

POLICY 124.1.2: The County's wetlands protection regulations will be consistent with the following:

2. No development in wetlands regulated by the State of Florida may be commenced without the appropriate state agency permit or authorization. Development orders and development permits authorizing development within wetlands or lands located within the Wetlands future land use category may be issued subject to a condition that construction may not commence until issuance of the required state permits.

A condition is proposed which requires that construction may not commence until an ERP is obtained to authorize any impacts to wetlands proposed by the MCP.

6. The density on wetlands that have been impacted, or will be impacted, in accordance with a state agency permit will be calculated at a density of one dwelling unit per 20 acres. Nonresidential uses on wetlands that have been impacted, or will be impacted, in accordance with a state agency permit must be consistent with the non-residential uses permitted in the immediately adjacent, least intense, upland future land use category.

The proposed development calculates allowable density for uplands based and preserved wetlands based on the maximum of 6 dwelling units per acre for Suburban areas and 3 dwelling units per acre for Outlying Suburban areas, and as mentioned above, a calculation of 1 du/20 acres in all wetlands proposed to be impacted in accordance with table 1(a). The application and preliminary density calculation demonstrate available density if all wetlands were impacted as a worst case scenario only and currently preserved wetlands will not be impacted.

POLICY 125.1.2: New development and additions to existing development must not degrade surface and ground water quality.

POLICY 125.1.3: The design, construction, and maintenance of artificial drainage systems must provide for retention or detention areas and vegetated swale systems that minimize nutrient loading and pollution of freshwater and estuarine systems.

POLICY 125.1.4: Developments which have the potential of lowering existing water quality below state and federal water quality standards will provide standardized appropriate monitoring data.

The proposed MPD will include stormwater lakes within the development tracts to address water quality. The surface water system will also be required to obtain an ERP from the South Florida Water Management District at the time of DO. The proposed RPD will not impact existing infrastructure in the area, and roadways, schools, EMS, potable water and sanitary sewer service are available to serve the property.

POLICY 126.1.1: Natural water system features which are essential for retention, detention, purification, runoff, recharge, and maintenance of stream flows and groundwater levels shall be identified, protected, and managed.

The Property includes a portion of the Halfway Creek floodplain, the limits of which are shown on the proposed MCP. No development is proposed within this area, and it is included within the proposed preserve areas on the MCP. The Surface Water Management System will be designed to maintain existing off-site flows.

POLICY 126.1.3: Freshwater resources will be managed in order to maintain adequate freshwater supplies during dry periods and to conserve water.

Irrigation for the proposed development will be provided via onsite lakes and resupplied by groundwater.

POLICY 126.1.4: Development designs must provide for maintaining or improving surface water flows, groundwater levels, and lake levels at or above existing conditions.

The development of the proposed stormwater management system will provide water quality and water quantity improvements. The system will be designed so that sufficient flow of water to retain the existing hydroperiods will be maintained. The attached Surface Water Management Plan provides additional details regarding the surface water management system.

POLICY 135.1.9: The County will ensure a mix of residential types and designs on a County-wide basis by providing for a wide variety of allowable housing densities and types through the planned development process and a sufficiently flexible Future Land Use Map.

The proposed development allows for a mix of residential types, including Single-family, Zero lot line, Two-family attached, Townhouse , and Multiple-family buildings in the form of high-rise and mid-rise multi-family dwellings. The proposed density is consistent with the Lee Plan.

IX. CONCLUSION

The proposed Pelican Landing London Bay MPD will allow for buildout of an approved DRI with the intended mix of residential, non-residential and resort-oriented recreational amenities originally envisioned for this property. Due to the pattern of development in the area, internal to the site, as well as the roadway access, the Applicant is seeking to reduce unused commercial entitlements permitted by the DRI and correspondingly increase the allowable unit count. The result is no net

increase to trips and project that meets market demand for a master-planned waterfront community.

Previous zoning approvals for the Pelican Landing CPD/RPD and Kersey Smoot RPD anticipated development and comparable densities and intensities on the Property. The proposed infill/redevelopment of these areas through the Pelican Landing London Bay MPD makes efficient use of land available for development and responds to housing needs and public investment in infrastructure in the surrounding areas.

The proposed building height and relatively low, highly clustered density will be compatible with the densities and building heights in the immediate area. Viewsheds from surrounding properties will be further improved via the proposed design standards.

The project is well-planned in relation to the environmentally sensitive areas, both on- and off-site. The MCP demonstrates preserve and open space far exceeding the LDC requirements.

The MPD provides for compatibility with the surrounding neighborhoods through buffers, setbacks, limited access points, and significant preserves and open spaces located adjacent to existing residential communities.

For these reasons, the Applicant respectfully requests approval of the MPD rezoning as proposed.

ATTACHMENT E

Pelican Landing MPD

Schedule of Deviations and Justifications

Deviation (1) requests relief from LDC Section 10-296, which requires local private roadways to provide a minimum bike lane width of 5 feet, and a minimum sidewalk width of 6 feet on both sides of the right-of-way, TO ALLOW FOR 5-foot sidewalks along one side of internal roadways in all tracts.

JUSTIFICATION: This deviation is requested to allow flexibility in sight design and reflect existing conditions on the surrounding roadways.

The proposed deviation will allow for a reduction of additional impervious areas within an infill redevelopment project that is already limited in space and further limited by the significant onsite preserves and recreational uses. Additionally, due to the compact nature of the proposed development, the requirement for sidewalks on both sides of the road is unnecessary in encouraging pedestrian activity as the layout of buildings, internal roads and multimodal infrastructure is well integrated.

The Applicant proposes a 5-foot-wide proposed sidewalk on one side of internal roadways instead of two 6-foot sidewalks to more comfortably accommodate pedestrians walking in groups as well as slow traveling bicycles, when compared to a narrower 5-foot-wide sidewalk.

The compact type of development being proposed within the redevelopment tracts makes the need for additional sidewalks unnecessary on both sides of the road as well. The proposed 5-foot-wide sidewalk on one side of the road would be sufficient in addressing pedestrian walkability and security for this particular development.

The deviation is limited to internal roadways and will not impact external roadways.

Therefore, approval of this deviation request will not negatively impact the public health, safety and welfare as the proposed deviation was previously approved and will be limited in applicability.

Deviation (2) Requests relief from LDC Section 34-2013 (a) requirement that all parking lots be designed to permit vehicles exiting the parking lot to enter the street right-of-way or easement in a forward motion, TO ALLOW FOR individual parking spaces to back onto right-of-way easements in the RES, MF and MU tracts.

JUSTIFICATION: This deviation is approved for the MPD per Resolution Z-94-014 as Deviation (2) and conditions added per Resolution Z-98-066 Deviation (1). The previous approval remains applicable to the project to allow for on-street parking for residential uses only.

On-street parking spaces will be designed in compliance with LDC section 10-296(d)(9) and no on-street parking is proposed on Saltleaf Blvd. (FKA Coconut Point Resort Dr.) or Coconut Rd. Therefore, this deviation remains valid and approval of this deviation request will not negatively impact the public health, safety and welfare as the proposed deviation was previously approved and will be limited in applicability.

Deviation (3) Requests relief from the LDC Section 34-935(c)(2) requirement that internal roads and drives be no closer than 25 feet to the development perimeter, TO ALLOW FOR a zero-foot minimum separation for internal development parcels, and a 15-foot separation for external parcels within the MF, RES, and MU tracts.

JUSTIFICATION: This deviation is approved for the MPD per Resolution Z-98-066 as Deviation (2). The previous approval remains applicable to the project, applies to existing roads and drives. The deviation is required for future roads and drives due to the limitation of development to redevelopment areas and the preservation of wetlands and uplands on site and the layout of parcels within and surrounding the property. This deviation remains valid to the project and approval of the request will not negatively impact the public health, safety and welfare as the proposed deviation was previously approved.

Deviation (4) Requests relief from LDC section 30-152 requirement that identification signs must be set back a minimum of 15 feet from any right-of-way easement, TO ALLOW FOR a setback of zero feet within the MF, RES, and MU tracts.

JUSTIFICATION: This deviation is approved for the MPD per Resolution Z-98-066 as Deviation (5) with the condition that, "at the time of Final Zoning Plan submittal, the Applicant demonstrates that sight distance requirements are met, consistent with the LDC." This deviation and condition remain valid to the project and the proposed deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (5) Requests relief from the LDC Section 34-2474 (b)(6) which requires that recreation centers and ancillary facilities be located at least 40 feet from residential dwellings, TO ALLOW FOR a minimum of 20 feet for the internal development parcels in which they are located, but not for parcels adjacent to or external to the property.

JUSTIFICATION: This deviation was previously approved by Z-98-066 as Deviation (11) and the previous approval remains applicable to the project. This deviation remains limited to internal parcels and will not impact properties external to the project.

The subject property is a redevelopment project constrained by on-site wetland preserves, recreation areas, and existing development. The applicant is requesting the approval of the expansion of this deviation in order to accommodate a compact development form. The deviation facilitates compact redevelopment without impacting the significant preserves and recreation areas on site. This deviation remains valid to the project and the proposed deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (6) Requests relief from LDC Section 10-329(d)(4), which requires lake banks to be sloped at a 6:1 ratio from the top of bank to a water depth of two feet below the dry season water table; TO ALLOW FOR a minimum ratio of 4:1 slope on all lake banks in all tracts.

JUSTIFICATION: This deviation is approved as "Deviation 13" for the Pelican Landing RPD by ADD2021-00190A and is still applicable to the proposed project. Additionally, this request would allow for application of the deviation throughout the entirety of the Pelican Landing MPD.

The subject property is a redevelopment project that is constrained by on-site wetland preserve areas and existing development. The Applicant is requesting approval of the expansion of this deviation in order to accommodate the planned stormwater management lake areas within

redevelopment areas of the property. All units will be located within former golf course areas and the remaining area from the Kersey Smoot RPD that will be incorporated into the MPD. As a result, the 4:1 lake bank slope is necessary to accommodate the appropriate lake depth specified in the LDC within the spatial constraints of the subject property. The proposed 4:1 lake bank slope will allow the project to provide for stormwater management lakes on the property in the most efficient manner possible.

A 4:1 lake bank slope has been proven to function as intended by the LDC through appropriate construction standards and lake maintenance measures. As shown on the enclosed cross section, turf reinforcement mats and enhanced herbaceous plantings are proposed to mitigate lake bank erosion in accordance with the slope protection measures set forth in LDC Section 10-329(d)(4).

This design standard has been successfully implemented throughout Lee County and is accepted by the South Florida Water Management District. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (7) Requests relief from LDC Section 34-2020(b), which requires 6 parking spaces per hole for golf courses, TO ALLOW FOR a five percent reduction of required parking spaces at the golf clubhouse only.

JUSTIFICATION: This deviation is approved as "Deviation 13" for the Kersey Smoot RPD by ADD2021-00191 and is still applicable to the proposed project. All conditions imposed by ADD2021-00191 are incorporated into the request and there are no changes to the golf course proposed in this request. Therefore, the requested deviation remains valid and will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (8) requests relief from LDC Section 34-935(f)(1)(e) which limits the height of buildings in the Planned Development zoning category within the outlying suburban land use category to 45 feet, TO ALLOW FOR a maximum building height of 290 feet over above the minimum flood elevation in the MF tract, 110 feet within the RES tract, and 50 feet within the MU and GC tracts.

JUSTIFICATION: This deviation is approved for the MPD per Resolution Z-94-014 as Deviation (12). The previous approval was based on a maximum height of 20 stories over parking and remains applicable to the current request. This is incorporated into the attached schedule of uses which identifies maximum building heights in the MPD.

Through this amendment, the deviation is expanded to allow the proposed maximum height of 290 feet throughout the MPD. The maximum proposed height of 290 feet is consistent with the previous approval of 20 stories over parking and will be compatible with other approved building heights in the surrounding area. The attached Approved Building Heights Map demonstrates similar building heights on adjacent properties. Proposed setbacks and building separations are consistent with the LDC and will ensure building heights do not impact surrounding properties.

The maximum height of 290 feet is limited to the MF tract only. This deviation is limited within the RES tract to a maximum height of 110 feet and within the MU and GC tracts to 50 feet.

Therefore, the requested deviation remains valid and will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (9) requests relief from LDC Section 10-416(d), which requires Type C/F buffers where multi-family residential uses and commercial uses abut TO ALLOW for no internal buffers in all tracts.

Justification: The proposed deviation will allow for an integrated development pattern within the mixed-use development areas and enhance walkability. It has been accepted that true mixed-use developments should not be segregated by landscape barriers that preclude multi-modal movement through a given development. This is evidenced through Lee County's Compact Communities Planned Development regulations and the Mixed Use Overlay, both of which do not require internal buffers.

Approval of this deviation will allow for enhanced connectivity between different uses and contribute to improved walkability. This design standard has been successfully implemented throughout Lee County. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (10) requests relief from LDC Section 34-2020, which requires parking spaces to be provided for Recreation Facilities, Indoor at four (4) spaces per 1,000 square feet of floor area, TO ALLOW for parking spaces related to Recreation Facilities, Indoor to be calculated at one (1) space per 1,000 square feet of floor area where such facilities are private for residents only and integrated within mid- and high-rise buildings only within the MF, MU, and RES tracts.

Justification: The redevelopment of the Raptor Bay Golf Course will result in a walkable, mixed-use community, with compact pods of development. Amenities for the residential development will be vertically integrated within mid-rise (buildings over 45 feet) and high-rise buildings. Amenities in these buildings will be private for residents only. This will result in reduced parking requirements for the development since the development will be walkable and most users will be internal to the development. Throughout the development, the use of golf carts and shuttle service within the project will be encouraged.

Given the facilities will be private, the LDC required parking would be excessive. This deviation ensures that excessive parking is not required throughout the MPD which would be contrary to the purpose of creating a compact, walkable development. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (11) requests relief from LDC Section 34-935(b)(1) which requires all buildings and structures to be setback from the development perimeter a distance equal to the greater than one-half the height of the building or structure, TO ALLOW setbacks from the development perimeter within all development tracts to be a minimum of 0 feet for buildings adjacent to property in other tracts within the Pelican Landing MPD, outside the Pelican Landing MPD if within the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs, and to Estero Bay, and a minimum of 50 feet from the northern property boundary.

Justification: This deviation will allow for flexible design within redeveloped golf course areas and allow for taller structures that are compatible with the surrounding development pattern. This LDC requirement for vast perimeter setbacks is appropriate for suburban style, single-use projects. The multi-use concept with building heights to maximize desirable views of Estero Bay requires relief from this requirement. The attached exhibit demonstrating approved building heights on surrounding properties demonstrates the deviation will allow for an attractive development that is of a consistent height and development form when

compared to surrounding properties. The Applicant also owns adjacent properties in the City of Bonita Springs. As a result, this deviation facilitates coordinated development between properties under common ownership.

Lands to the north and west of the MF tract are buffered by established preserve areas and golf course areas. As a result, while the MF tract is located a minimum of 50 feet from the northern property line, the nearest single-family home is 1,430 feet from MF tract. Additionally, the lands to the south of the MF tract are under common ownership by the Applicant and will be developed in a compatible and complimentary manner. Consequently, the deviation will not impact any external property owners and will allow the Applicant to maximize development with no new impacts to preserve areas. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (12) requests relief from LDC Section 34-935(e)(4), which requires a minimum separation of buildings of one-half of the sum of their heights where there are two or more principal buildings on a development tract, TO ALLOW a minimum building separation of 35 percent of the sum of buildings feet for buildings greater than 35 feet in height within the MU, MF and RES tracts.

Justification: This deviation will allow for flexible design within redeveloped golf course areas and allow for taller structures to be designed and located to address compatibility with the surrounding development pattern. This LDC requirement for internal building separation is appropriate for suburban-style, single-use projects. The multi-use concept will include building heights and separations which maximize desirable views of Estero Bay requires relief from this requirement. Building heights and separations surrounding properties demonstrate that this deviation will allow for attractive development that is of a consistent height and development form when compared to mid- and high-rise buildings immediately adjacent to the property.

Through this amendment, the deviation is revised to allow a reduction in building separations for buildings greater than 35 feet in height. The reduced separation facilitates a clustered development footprint with no impacts to preserve areas and which preserves views of Estero Bay to the maximum extent possible. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (13) requests relief from LDC Section 10-416(d)(1), which requires a buffer area along the entire perimeter of the proposed development whenever the proposed development abuts a different use; to allow for no perimeter buffers where onsite preserve areas abut the MPD perimeter or where adjacent to property that is either owned by the Applicant or adjacent to the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs.

Justification: This deviation allows for onsite preserves that have been established within the Pelican Landing PD for many years to remain in place and function as a natural buffer for adjacent properties. The requested deviation will allow for development without the need to disturb existing preserves.

The vegetation within these preserve areas are already protected by a conservation easement and cannot be developed.

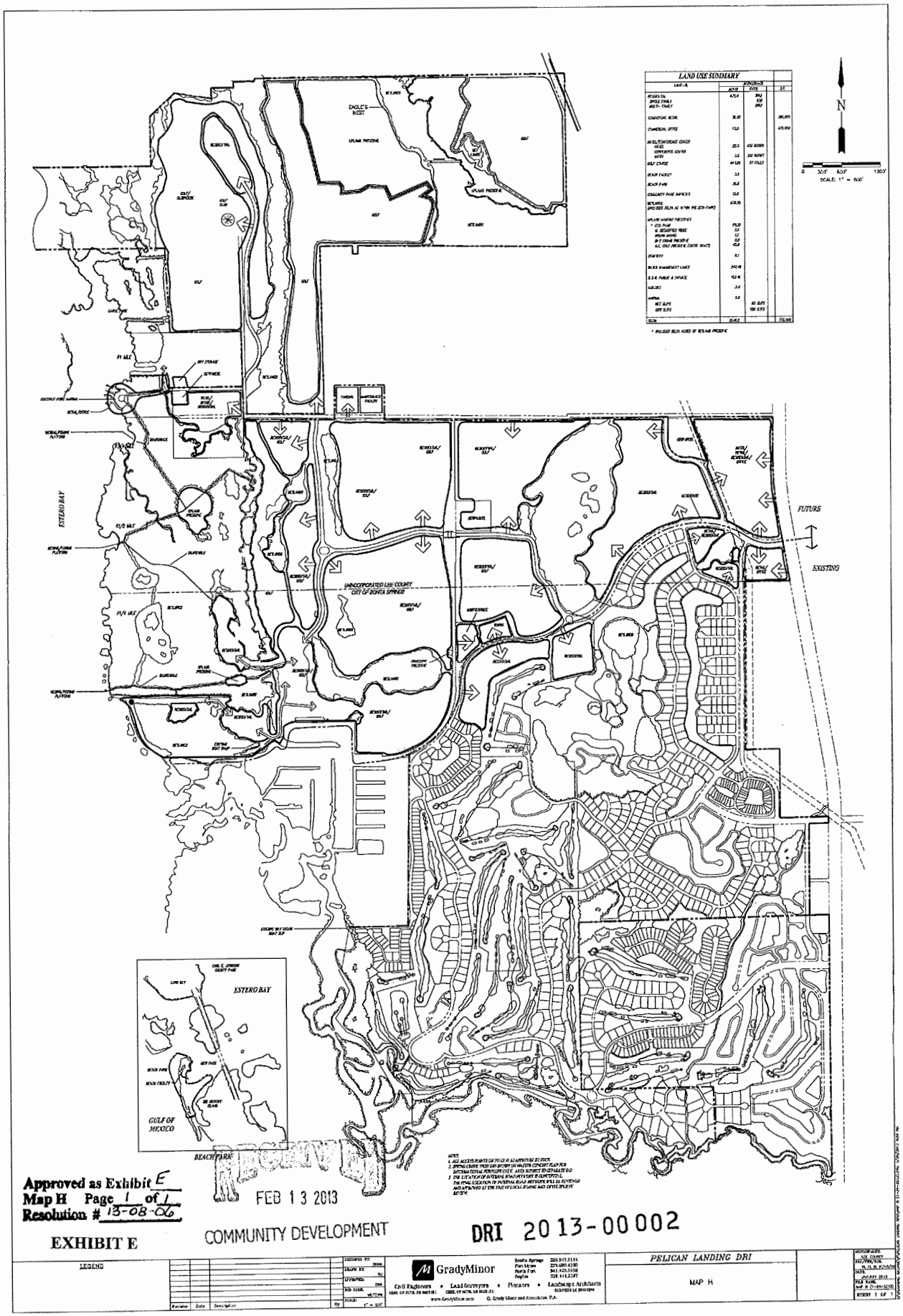
Additionally, properties to the south and within the City of Bonita Springs are under common ownership by the Applicant and intended to be developed as a unified site plan. This deviation only applies to the northern boundary of the MPD and where adjacent to property owned by the Applicant. All other perimeter buffers will meet or exceed the LDC standards. Therefore, the requested deviation will not negatively impact public health, safety, or welfare, and will uphold the intent of the LDC.

Deviation (14) requests relief from LDC Section 10-285, which requires a connection separation of 330 feet on major collector roads in Future Non-Urban Areas, to allow a connection separation of 215 feet on Coconut Rd.

Justification: The proposed access to the MU tract on Coconut Rd. is located 170 feet west of an existing access location on the south side of Coconut Rd. The location is intended to prioritize existing access locations and minimize impacts to established preserve areas.

The access point for the MU Tract is currently aligned with an access point on Via Veneto and this deviation will allow that alignment to remain.

Approval of this deviation request will not negatively impact the public health, safety, or welfare as the access locations along Coconut Rd. have been in place and the proposed location maintains those expected locations.


LAND USE SUMMARY
N
SCALE: 1" = 600'
EAGLE'S NEST
ESTERO BAY
FUTURE
EXISTING
UNINCORPORATED LEE COUNTY
CITY OF BONITA SPRINGS
ESTERO BAY
GULF OF MEXICO
BEACH PARK
Approved as Exhibit E
Map H Page 1 of 1
Resolution # 13-08-06
EXHIBIT E
RECEIVED
FEB 13 2013
COMMUNITY DEVELOPMENT
DRI 2013-00002
LEGEND
GradyMinor
Civil Engineers • Land Surveyors • Planners • Landscape Architects
PELICAN LANDING DRI
MAP H

RESOLUTION NUMBER Z-94-014

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, Pelican Landing Communities, Inc., formerly Westinghouse Bayside Communities, Inc., in reference to Pelican Landing DRI and Pelican Landing CPD/RPD, has properly filed an application for:

a) Consideration of the Application for Development Approval (ADA) for a Development of Regional Impact (DRI) on 2,100± acres known as Pelican Landing, State DRI #1-9293-121; and

b) A rezoning of a portion of the DRI from AG-2, RPD, TFC-2 and IM to Residential Planned Development and Commercial Planned Development districts, to permit 2,616 dwelling units, 520,000 square feet of office commercial and a 450 unit convention hotel on a total of 1,121.5± acres. Building heights are proposed to range from 35 feet above average grade to 200 feet above flood elevation; and

WHEREAS, the subject property is located between US 41 and Estero Bay, north of Spring Creek to north and south of Coconut Road, described more particularly as:

LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

DRI Parcel 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20, run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE1/4) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW1/4) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW1/4) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;

continued...

THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE1/4) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE1/4) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE1/4) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE1/4) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW1/4) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a POINT OF CURVATURE;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a POINT OF TANGENCY;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE1/4) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE1/4) of Section 16;

continued...

THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE1/4) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE1/4) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a POINT OF TANGENCY;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE1/4) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW1/4) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW1/4) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

<u>DRI Parcel 2</u>
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW1/4) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW1/4) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE1/4) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S1/2) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.

continued ...

LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO:

DRI Parcel 3

A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County;

ALSO the East Three-quarters (E-3/4) of the Northwest Quarter (NW1/4) of the Southwest Quarter (SW1/4) of said Section 05;
ALSO the East Two-thirds (E-2/3) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of said Section 05;
ALSO the East Two-thirds (E-2/3) of the Western Half (W1/2) of the Northwest Quarter (NW1/4) of said Section 08; being more particularly described by metes and bounds as follows:

From the Northwest corner of the Southwest Quarter (SW1/4) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW1/4) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

DRI Parcel 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.

Containing 2,409 acres, more or less.
Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

AND

continued...

DRI Beach Parcel

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet,
N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet,
N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet,
N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet,
N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet,
N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet,
N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet,
N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

RPD Parcel 1

Tracts or parcels lying in Section 05 and Section 08, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows and all consisting of 203.85 acres, more or less.

continued...

Lots 8B, 9B, 10B, 11B, 12B, and Lots 21B, 22B, 23B, 24B, and 25B of Florida Gulf Land Company's Subdivision, all in Section 05, Lee County, Florida (recorded in Plat Book 1 at Page 59), consisting of 100 acres more or less.

ALSO:

The East Three-Quarters (E-3/4) of the Northwest Quarter (NW1/4) of the Southwest Quarter (SW1/4), of said Section 05, consisting of 30 acres, more or less.

ALSO:

The East Two-Thirds (E-2/3) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4), of said Section 05, consisting of 26.67 acres, more or less.

The East Two-Thirds (E-2/3) of the West Half (W1/2) of the Northwest Quarter (NW1/4) of said Section 08, consisting of approximately 53.55 acres, more or less, less the Southerly 40.00 feet for the right-of-way of Coconut Road.

RPD Parcel 2
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07 run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot 1 for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet, more or less to the POINT OF BEGINNING.

Containing 60 acres, more or less.

RPD Parcel 3
A tract or parcel of land lying in Sections 07, 08, 17 and 18, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW1/4) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,478.58 feet to the POINT OF BEGINNING;
THENCE continue S89°16'14"E along said South line for 1,774.42 feet to an intersection with the West line of Spring Creek Road as described in County Commissioners Minute Book 6 at Page 210, Public Records, Lee County, Florida;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 1,612.27 feet;
THENCE run N89°52'02"W for 5.00 feet to a point on a curve;
THENCE along the arc of a non-tangent curve to the right of radius 1,070.00 feet (delta 91°03'07") (chord bearing S45°39'32"W) (chord 1,527.04 feet) for 1,700.40 feet;
THENCE run N01°31'36"E for 33.48 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE continue N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE1/4) of said Section 18;

continued...

THENCE continue N89°59'08"W for 1,840 feet, more or less, to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 6,490 feet, more or less, to an intersection with the South line of Government Lot 2, of said Section 07;
THENCE run N89°40'05"E along said South line for 745 feet, more or less;
THENCE run S00°19'55"E for 650.00 feet;
THENCE run N89°40'05"E for 1,107.21 feet to an intersection with the West line of said Section 08;
THENCE run S00°23'24"E along the West line of said Section for 375.11 feet;
THENCE run S89°15'18"E for 1,458.78 feet;
THENCE run N00°44'42"E for 1,000.00 feet to an intersection with the South line of said Coconut Road and said POINT OF BEGINNING.

Containing 513.7 acres, more or less.

RPD Parcel 4
A tract or parcel of land lying in Sections 08, 09, 16 and 17, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a concrete monument marking the Northwest corner of the Southwest Quarter (SW1/4) of said Section 09 run N00°41'48"W along the West line of said Section 09 for 5.00 feet to an intersection with the South line of Coconut Road (50 feet wide) as described in Official Record Book 1738 at Page 2538, Public Records, Lee County, Florida;
THENCE run S89°35'50"E along said South line for 1,549.14 feet to a POINT OF CUSP;
THENCE run along the arc of a curve to the left of radius 30.00 feet (delta 90°00'00") (chord bearing S45°24'10"W) (chord 42.43 feet) for 47.12 feet to a POINT OF TANGENCY;
THENCE run S00°24'10"W for 336.31 feet to a POINT OF CURVATURE;
THENCE run along the arc of the curve to the left of radius 270.00 feet (delta 90°00'00") (chord bearing S44°35'50"E) (chord 381.84 feet) for 424.12 feet to a POINT OF TANGENCY;
THENCE run S89°35'50"E for 99.41 feet to a POINT OF CURVATURE;
THENCE run along the arc of a curve to the right of radius 530.00 feet (delta 27°42'00") (chord bearing S75°44'50"E) (chord 253.74 feet) for 256.23 feet;
THENCE run S20°53'52"E for 1,008.12 feet to a point on a non-tangent curve;
THENCE run along the arc of a curve to the left of radius 840.00 feet (delta 34°20'28") (chord bearing N66°42'56"W) (chord 495.96 feet) for 503.47 feet to a POINT OF COMPOUND CURVATURE;
THENCE along the arc of a curve to the left of radius 1,652.50 feet (delta 21°34'22") (chord bearing S85°19'39"W) (chord 618.53 feet) for 622.20 feet;
THENCE S15°27'32"E along a radial line for 10.00 feet to a point on a non-tangent curve;
THENCE along the arc of a curve to the left of radius 1,642.50 feet (delta 34°59'45") (chord bearing S57°02'36"W) (chord 987.70 feet) for 1,003.22 feet to a POINT OF COMPOUND CURVATURE;
THENCE along the arc of a curve to the left of radius 1,120.00 feet (delta 21°31'30") (chord bearing S28°55'59"W) (chord 412.53 feet) for 414.90 feet to a POINT OF REVERSE CURVATURE;
THENCE along the arc of a curve to the right of radius 935.00 feet (delta 43°04'19") (chord bearing S39°51'23"W) (chord 686.45 feet) for 702.88 feet to a POINT OF COMPOUND CURVATURE;
THENCE along the arc of a curve to the right of radius 2,760.00 feet (delta 24°20'33") (chord bearing S73°33'49"W) (chord 1,163.81 feet) for 1,172.61 feet;
THENCE N20°00'00"W for 580.12 feet;
THENCE N89°52'02"W for 657.66 feet to an intersection with the East line of Spring Creek Road as described in County Commissioners Minute Book 6 at Page 210, Public Records, Lee County, Florida;

continued...

THENCE run N00°07'58"E along said East line for 240.32 feet to an intersection with the South line of the Southeast Quarter (SE1/4) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.49 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 499.94 feet to the Southwest corner of lands described in Official Record Book 428 at Page 349, said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 536.00 feet;
THENCE run N00°07'17"E along the East line of said lands for 474.33 feet;
THENCE run N89°21'02"W along the North line of said lands for 546.00 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of said Coconut Road;
THENCE run S89°16'14"E along the South line of said Coconut Road 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°41'48"W along said West line for 25.00 feet to the POINT OF BEGINNING.

Containing 222.36 acres, more or less.

<u>CPD Parcel 1</u>
A tract or parcel of land lying in Sections 07 and 08, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW1/4) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.

From said POINT OF BEGINNING run S89°16'14"E along said South line for 1,478.58 feet;
THENCE run S00°44'42"W for 1,000.00 feet;
THENCE run N89°15'18"W for 1,458.78 feet to an intersection with the West line of said Section 08;
THENCE run N00°23'24"W along said West Section line for 375.11 feet;
THENCE run S89°40'05"W for 1,107.21 feet;
THENCE run N00°19'55"W for 650.00 feet to an intersection with the South line of Government Lot 2 of said Section 07;
THENCE run S89°40'05"W along said South line for 745 feet, more or less, to an intersection with the waters of Estero Bay;
THENCE run along the waters of Estero Bay for 1,810 feet, more or less, to a point which intercepts the North line of the South Half (S1/2) of said Government Lot 2;
THENCE run N89°32'15"E along said North line of the South Half (S1/2) of said Government Lot 2 for 545 feet, more or less, to the Northwest corner of lands described in Official Record Book 1895 at Page 3817, Public Records, Lee County, Florida;
THENCE S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet to an intersection with the South line of said Coconut Road;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.55 feet to the POINT OF BEGINNING.

LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516, Public Records, Lee County, Florida.

Containing 72.8 acres, more or less.

continued...

CPD Parcel 2

A tract or parcel of land lying in the South Half (S1/2) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
From the Northwest corner of the Southwest Quarter (SW1/4) of said Section 09 run N00°41'48"W for 5.00 feet to the South right-of-way line of Coconut Road (50 foot right-of-way);
THENCE run S89°35'50"E for 1,863.14 feet to the POINT OF BEGINNING.

From said POINT OF BEGINNING continue S89°35'50"E along said South right-of-way line for 1,301.22 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a POINT OF CURVATURE;
THENCE run Southerly and Southeasterly along the arc of a curve to the left of radius 5,797.58 feet (delta 10°17'00") (chord bearing S04°57'34"E) (chord 1,039.14 feet) for 1,040.54 feet to a POINT OF TANGENCY;
THENCE run S10°06'04"E along said Westerly line for 230.98 feet;
THENCE run S79°53'56"W for 70.57 feet to a POINT OF CURVATURE;
THENCE run along the arc of a curve to the right of radius 650.00 feet (delta 49°49'26") (chord bearing N75°11'21"W) (chord 547.59 feet) for 565.23 feet to a POINT OF REVERSE CURVATURE;
THENCE along the arc of a curve to the left of radius 840.00 feet (delta 16°23'49") (chord bearing N58°28'33"W) (chord 239.57 feet) for 240.39 feet;
THENCE run N20°53'52"W for 1,756.27 feet to an intersection with the South line of said Coconut Road and the POINT OF BEGINNING.

Containing 41.09 acres, more or less.

CPD Parcel 3

A tract or parcel of land lying in the Southeast Quarter (SE1/4) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at the Southwest corner of the Southeast Quarter (SE1/4) of said Section 09 run N01°00'24"W along the West line of said Southeast Quarter (SE1/4) for 587.77 feet to a point on a non-tangent curve;
THENCE along the arc of a curve to the left of radius 850.00 feet (delta 39°04'25") (chord bearing S80°33'52"E) (chord 568.50 feet) for 579.67 feet to a POINT OF TANGENCY;
THENCE run N79°53'56"E for 70.57 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S10°06'04"E along said West line for 507.09 feet to an intersection with the South line of said Section 09;
THENCE run S89°23'00"W along said South line for 708.94 feet to the POINT OF BEGINNING.

Containing 7.73 acres, more or less.

WHEREAS, a public hearing was legally and properly advertised and held before the Lee County Hearing Examiner, with full consideration of all the evidence available; and the Lee County Hearing Examiner fully reviewed the matter in a public hearing held on May 31, 1994, and subsequently continued to June 1, 2, 3, 1994; and

WHEREAS, a public hearing was legally and properly advertised and held before the Lee County Board of County Commissioners on August 29, 1994; and the Lee County Board of County Commissioners gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on file with the county, and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, that the Board of County Commissioners does hereby APPROVE the rezoning of AG-2, RPD, TFC-2, and IM to RPD and CPD districts with the following conditions and deviations:

1. The development of the subject property shall be in accordance with the three-page Master Concept Plan for Pelican Landing RPD/CPD, stamped received on May 16, 1994, except as modified by the conditions herein. Unless specifically approved as part of this rezoning, development shall be in accordance with all applicable local development regulations, including the Pelican Landing Development of Regional Impact Development Order. No deviations from the Land Development Code are granted unless specifically identified herein.

   As a prerequisite to approval of any local Development Order for property located within the Commercial Planned Development and Residential Planned Development, approval of a Final Zoning Plan must be received which specifies the type, intensity and configuration of development for the particular site. The objective of the process is to ensure compliance with the DRI Development Order, Zoning Resolution, and Land Development Code, to allow detailed review of deviations conceptually approved herein, while allowing the development flexibility to respond to changing conditions. Application materials shall be the same as for an Administrative Amendment supplemented per Condition 18.b. Any substantial change in the type, intensity, or configuration of development within the RPD/CPD will require further review through a public hearing. The necessity of said review shall be determined by the Director of Community Development.

Commercial Planned Development

2. Permitted uses in CPD land development Area A: Marina

   Administrative Offices
   Bait and Tackle Shop
   Boat Parts Store
   Cocktail Lounge, only in conjunction with a restaurant
   Club, Private
   Consumption on Premises, only in conjunction with a restaurant
   Food Store, Group I
   Fishhouse
   Specialty Retail, Group I
   Marina (df) including those uses defined with a maximum 150 space dry boat storage building and 48 wet slips
   Rental and Charter Facilities for Boats, limited to residents and guests in Pelican Landing
   Restaurants, Standard
   Sale of Fuel and Lubricants
   School, Commercial limited to sailing, water safety and other marine oriented schools
   Shower and Restroom Facilities

   The following property development regulations shall apply to CPD land development Area A: Marina

   a. Minimum building setbacks for all Marina/Commercial District uses:

Street	-	1/2 right-of-way plus 20 feet
Side	-	10 feet
Water Body	-	0 feet
Wetlands	-	20 feet

   b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

   c. Maximum building height - 45 feet above minimum flood elevation

   d. Dry boat storage shall be limited to a height of 45 feet.

e. Prior to any local Development Order for the marina, a parking plan shall be submitted which demonstrates location and adequacy of parking and methods of vehicular and pedestrian movement. County staff shall ensure protection of public safety and compliance with applicable standards. Should vacation of a portion of Coconut Road not occur, developer shall be restricted accordingly.

f. Live-aboards (defined by Ordinance 85-21, as amended) and personal watercraft (defined by Ordinance 90-15, as amended) are prohibited.

g. Marina sanitation facilities are required.

3. Permitted uses in CPD land development Area B:

Hotel/Convention Center (per Ord.):

Hotel or Motel, Convention
Hotel or Motel Accessory Uses - including, but not limited to:
- Tennis Courts
- Swimming Pools
- Bar or Cocktail Lounge
- ATM within the Hotel or Other Building
- Consumption on Premises and
- Package Store within the Hotel or Motel
- Conference Meeting Rooms

Club, Private
Resort
Restaurant, Standard - Groups I, II and III with Consumption on Premises
Specialty Retail Shops - Groups I and II
Business Services - Group I (excluding blood banks, blood donor stations, bail bonding, check exchange, detective agencies)
Studios
Dwelling Units, including but not limited to:
- Two Family Attached
- Townhouse
- Duplex
- Multiple Family Building

Residential Accessory Uses, including but not limited to:
- private garages, carports and parking areas
- private swimming pools and enclosures
- private tennis courts

Model Homes, Model Units and Model Display Center - limited to residential uses within Pelican Landing
Home Occupation
Entrance Gates and Gatehouses

The following property development regulations shall apply to CPD land development Area B: Hotel and Conference Center:

a. Minimum building setbacks:

Street	-	1/2 right-of-way plus 20 feet
Side	-	0 feet or 10 feet for an interior lot and 15 feet for a corner lot
Water Body	-	20 feet
Wetlands	-	20 feet

b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

c. Maximum building height - no more than 20 habitable floors

d. Development of CPD Area B for Hotel and Conference Center shall comply with Condition 12 (High Rise Development Regulations).

4. Permitted Uses in CPD land development Area C: Office

Administrative Offices
Bank and Financial Establishments - Group I and II
Day Care (child/adult)
Food and Beverage Service
Insurance Companies
Library
Medical Office
Business Services - Group I (excluding blood banks, blood donor stations, bail bonding, check exchange, detective agencies)
Pharmacy
Post Office
Restaurants
Business Services - Group II (no outdoor storage of vehicles or equipment is permitted)
Contractors and Builders - Group I (no storage facilities permitted)
Cultural Facilities, limited to Art Gallery or Museum
Health Care Facilities - Group III
Personal Services - Group II (health club or beauty spa only)
Commercial School, limited to:
- Art School
- Business School
- Clerical
- Computer Drafting
- Law
- Real Estate
- Aerobics

Social Services - Group I (limited to family and marriage counseling or nutritionists counseling)

The following property development regulations shall apply to CPD land development Area C: Office

a. Minimum building setbacks:

Street	-	1/2 right-of-way plus 20 feet
Side	-	0 feet or 10 feet for an interior lot and 15 feet for a corner lot
Water Body	-	25 feet
Wetlands	-	20 feet

b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

c. Maximum building height - 95 feet above minimum flood elevation, with no more than 8 habitable floors

5. Permitted Uses in CPD land development Area D: Mixed Use Commercial

Administrative Offices
Business Services - Group I (excluding blood banks, blood donor stations, bail bonding, check exchange, detective agencies)
Business Services - Group II (no outdoor storage of vehicles or equipment)
Banks and Financial Establishments - Groups I and II with drive-thru
Broadcasting Studio
Commercial Radio and Television
Place of Worship
Religious Facilities
Private Club
Food Store - Group I
Repair Shops - Groups I and II
Restaurant, Standard - Groups I, II and III with consumption on premises
Specialty Retail Shops - Groups I, II and III

Used Merchandise Shops - Group I
Pharmacy and Drug Stores
Commercial School
Social Services - Group I (excluding Public Welfare Centers)
Studios
Health Care Facilities - Group III
Adult Congregate Living Facilities
Insurance Companies
Medical Office
Standard Offices
Cocktail Lounge
Consumption on Premises
Package Store
Automobile Service Station
Self-Service Fuel Pumps
Convenience Food and Beverage Store
Residential Uses, including but not limited to:
- Two family attached
- Townhouse
- Duplex
- Multi-family building

Residential Accessory Uses, including
- Private garages, carports, parking areas
- Swimming pools, tennis courts
- Model Homes, Model Units and Model Display Centers
- Home Occupation

Clothing Stores, General
Contractors and Builders - Group I (no outdoor storage of heavy equipment)
Cultural Facilities (limited to Art Galleries, Museums)
Hobby, Toy, Game Shops
Household/Office Furnishings - Groups I and II
Personal Services - Group I
(excluding coin operated laundries Laundromat)
Personal Services - Group II (limited to hearing aids, optical supplies and other similar health related devices (excluding massage establishments, massage parlors, steam or Turkish baths)
Personal Services - Group IV (limited to debt counseling, portrait copying, and tax return service)
Recreation, Commercial (limited to Health Club)
Theatres

The following property development regulations shall apply to CPD Area D: Mixed Use Commercial

a. Minimum building setbacks:

Street	-	1/2 right-of-way plus 20 feet
Side	-	0 feet or 10 feet for an interior lot and 15 feet for a corner lot
Water Body	-	20 feet (0 feet for seawalled/bulkheaded, manmade water bodies)
Wetlands	-	20 feet

b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

c. Maximum building height - 95 feet above minimum flood elevation with no more than 8 habitable floors

6. Permitted uses in CPD land development Area E: Retail

Administrative Offices
Club, Private
Food Store - Group I

Personal Services - Groups I (limited to ATM,beauty shop only) and II (limited to Health Club only)
Restaurant, Standard - Groups I, II and III with consumption on premises
Specialty Retail Shops - Groups I, II and III
Studios
Cocktail Lounge, only in conjunction with a restaurant
Multiple Family Residential Uses, including but not limited to:
- Two family attached
- Townhouse
- Duplex
- Multiple family building

Residential Accessory Uses, including but not limited to:
- Private garages, carports and parking areas
- Private swimming pools and enclosures
- Private tennis courts

Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing
Home Occupation
Entrance Gates and Gatehouses
Used Merchandise, Group I, excluding Pawn Shops

The following property development regulations shall apply to CPD Area E:

a. Minimum building setbacks:

Internal Streets	-	1/2 right-of-way plus 20 feet
Side and	-	0 feet or 10 feet for an interior lot 15 feet for a corner lot
Water Body	-	20 feet (0 feet for seawalled/bulkheaded, manmade water bodies)
Wetlands	-	20 feet

b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

c. Maximum building height - 75 feet above minimum flood elevation

7. The following property development regulations apply to residential uses permitted in CPD Areas B, D, and E:

The residential uses in the CPD land development areas shall be permitted only when in conjunction with at least 50,000 square feet or more of commercial uses.

a. Minimum building setbacks:

Street	-	1/2 right-of-way plus 20 feet
Side	-	0 feet or 10 feet for an interior lot and 15 feet for a corner lot
Water Body	-	20 feet
Wetlands	-	20 feet

b. Minimum distance between buildings:

Single story buildings	-	10 feet
Multiple story buildings	-	20 feet
Multiple story buildings with sprinkler systems	-	15 feet

c. Maximum building height - 75 feet above minimum flood elevation in CPD Areas B & E; 95 feet above minimum flood elevation in CPD Area D

Residential Planned Development

8. Permitted uses in RPD land development Area A:

Zero lot line, Single-Family, Two-Family Attached
Residential Accessory Uses, including but not limited to:
- Private garages, carports and parking areas
- Private swimming pools and enclosures
- Private tennis courts

Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing
Speculative Home
Temporary Sales and/or Construction Office
Administrative Offices
Home Occupation
Entrance Gates and Gatehouses
Public and Private Parks, Playgrounds, Tot Lots, Community Swimming Pools, Tennis Courts or other community recreational amenity, Playfields and Commonly Owned Open Space
Essential Services
Signs

9. Permitted Uses in RPD land development Areas B, C, D and F:

Residential Uses, including but not limited to:
- Zero lot line
- Two family attached
- Townhouse
- Duplex
- Single family
- Multiple family buildings

Residential Accessory Uses, including but not limited to:
- Private garages, carports and parking areas
- Private swimming pools and enclosures
- Private tennis courts
- Private boat docks (where permitted by DRI Development Order)

Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing
Temporary Sales and/or Construction Office
Administrative Offices
Golf Courses, Golf Course Accessory and Associate Uses, including but not limited to:
- Club house
- Maintenance facility
- Pro shop
- Alcoholic beverage consumption in the club house
- Snack bar at the ninth hole or other appropriate location
- Ball washers
- Restrooms and other uses which are normal and accessory to the golf course

Club, country
Club, private
Home Occupation
Entrance Gates and Gatehouse
Public and Private Parks
Playground, Tot Lots
Community Swimming Pools
Tennis Courts or other community recreational amenity
Playfields
Essential Services
Essential Service Facilities
Signs
Excavation-water retention

10. Permitted uses in RPD land development Area E:

Residential uses, including but not limited to:
- Zero Lot Line
- Two Family
- Town House

- Duplex
- Single Family
- Multiple Family Buildings

Residential Accessory Uses, including but not limited to:
- Private garages, carports and parking areas
- Private swimming pools and enclosures
- Private tennis courts

Private Parks, Playgrounds, Tot Lots
Community Swimming Pools
Tennis Courts or other community recreational amenity
Playfields
Essential Services
Signs

11. The following property development regulations shall apply to RPD Areas A, B, C, D and E:

a. <u>Minimum Lot Area and Dimensions:</u>

Zero Lot Line Units		Single Family Units	
Area	= 5,000 square feet	Area	= 5,000 square feet
Width	= 40 feet	Width	= 40 feet
Depth	= 100 feet	Depth	= 100 feet

Multi-Family
Area = 2,000 square feet per dwelling unit,
minimum lot size - 10,000 square feet
Width = 100 feet
Depth = 100 feet

Two-Family Attached and Townhouse
Area = 4,000 square feet per dwelling unit
Width = 32 feet
Depth = 100 feet

Duplex
Area = 14,000 square feet
Width = 90 feet
Depth = 100 feet

b. <u>Minimum Setbacks</u>

Zero Lot Line Units
Street = 20 feet or 15 feet for side entry garages
Side = 10 feet on one side, 0 feet on opposite site
Rear = 15 feet for building, 3 feet for pool, deck and enclosure
Waterbody = 20 feet

Single-Family Units
Street = 15 feet
Side = 5 feet
Rear = 15 feet for building,
0 feet for pool, deck and enclosure
Waterbody = 20 feet

Multi-Family
Street = 20 feet
Side Yard = 20 feet
Rear Yard = 20 feet
Waterbody = 20 feet

Two-Family Attached and Townhouse
Street = 20 feet
Side Yard = 5 feet (no side setback required from common side lot line)
Rear = 15 feet
Waterbody = 20 feet

Duplex

Street	=	1/2 ROW + 20 feet (except for cul-de-sac 1/2 ROW + 15)
Side	=	7 feet (no side setback required from common side lot line)
Rear	=	20 feet
Waterbody	=	20 feet

c. Building heights:

RPD Areas B and D located in the Outlying Suburban land use category shall have a maximum building height of 75 feet above minimum flood elevation with no more than 6 habitable stories.

RPD Areas A, C and D located in the Urban Community land use category shall have maximum building height of 95 feet above minimum flood elevation with no more than 8 habitable stories.

RPD Area E located in the Outlying Suburban land use category shall have a maximum building height of 75 feet above minimum flood elevation with no more than 6 habitable floors.

12. Deviation (12) is approved for RPD Area F, and CPD Area B. These areas may be developed with a maximum building height exceeding 75 feet above minimum flood elevation only if in compliance with the following development regulations. All buildings 45 feet in height or less shall comply with normal setbacks required of conventional multi-family zoning districts. All buildings over 45 feet shall provide one foot of setback from the Pelican Landing perimeter property line for every foot of elevation. In recognition of the wetlands north of Coconut Road, the setback for structures in excess of 75 feet in CPD Area B and the RPD Area F that is adjacent to Coconut Road may be per LDC Section 34-2174.

The regulations set forth below in 12.a through 12.e apply to the development of buildings greater than 75 feet above minimum flood elevation:

a. <u>Minimum Lot Area and Dimensions:</u>

Lot Size	10,000 square feet
Lot Area per Unit	1,000 square feet
Width	100 feet
Depth	100 feet

b. <u>Minimum Setbacks</u>

Private Road	25 feet
Side Yard	50 feet
Rear Yard	10 feet
Waterbody	20 feet

c. A minimum building separation of 125 feet shall be provided between those buildings above 75 feet.

d. A maximum of 8 residential buildings and one hotel building with a height of greater than 75 feet, above minimum flood elevation may be permitted. Such buildings may be located within RPD Area F (residential) and CPD Area B (Hotel).

e. A minimum of 15% open space shall be provided for each multi-family building site that is or exceeds 75 feet in height.

<u>ECO-PARK</u>

13. Permitted Uses in Eco-Park (RPD AREA G):

Uses permitted in the Eco-Park District are limited to activities which make this area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with management plan required per FGFWFC.

INTERFACE AREA

14.a. Permitted Uses in the Interface Area:

Uses permitted in the Interface Area are limited to golf courses, developed to the guidelines similar to the New York Audubon Society Standards and any related appurtenances or uses, stormwater management; and created wetland marsh and any other created vegetative system or lake system which will promote wildlife diversity, activities which make this area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, on-going maintenance and removal of invasive exotic vegetation and compliance with the wildlife diversity monitoring plan prepared in conjunction with the Lee County School Board Department of Environmental Education.

b. The Zoning Master Concept Plan shall be adjusted, including revisions to the legal description. The changes shall reflect the terms of this condition and be consistent with the exhibit entitled "Pelican Landing Interface Area Illustration", stamped received August 26, 1994. The shifts in the zoning Master Concept Plan will allow for the Interface Area described above. The western boundary of the Interface Area is the jurisdictional mangrove wetland line. The Interface area is 100 feet in width at the north and south ends of the property, and it is approximately 500 feet in width elsewhere. The creation of the Interface Area will cause Residential Development Area F to shift to the east. RPD Area F will begin at the eastern boundary line of the Interface Area. The CPD Area B (the hotel use) will shift to the west to the present location of CPD Area E/RPD Area E and RPD Area B on the May 16, 1994, Zoning Master Concept Plan, and shall be a third alternative development scenario for that property. RPD Area D, located west of Spring Creek Drive, will be reduced in size due to the relocation of RPD Area F. That portion of the former CPD Area B that does not become the Interface Area will become an RPD Area F. The internal traffic circulation will be adjusted to accommodate the revised design. The southern upland area (proposed RPD Area E) bounded by the south property line, with estuarine wetlands and upland buffers to the west, and the oak hammock to the east shall be redesignated Residential Development Area E. No development can occur within CPD Areas E or B, or RPD Areas E, F, or D until a final zoning plan approval is obtained through the final administrative review process which properly reflects the Interface Area as described herein.

c. The Interface Area will serve two purposes. First, it allows for a buffer area or interface between the residential high-rise development areas and the jurisdictional mangrove wetlands to the west. The buffering function will also extend to some of the interior wetland and upland systems. Residential units within Residential Development Area F shall be located a minimum of 500 feet from the jurisdictional mangrove area, except for the RPD Area F located at the site of the former CPD Area B (hotel site). No golf course uses shall be located any closer to the jurisdictional mangrove system than 100 feet. Secondly, the Interface Area will provide habitat and a vegetative corridor which will enable wildlife to safely access the onsite interior wetland systems.

d. All invasive exotic vegetation shall be removed from the Interface Area. The invasive exotic removal process shall coincide with the construction of a surface water management system within the Interface Area.

e. Where necessary, a vegetation restoration program shall commence subsequent to the removal of the invasive exotics. The program should facilitate diversity in wildlife. The revegetation shall commence within six months of invasive exotic removal. Vegetation to facilitate wildlife diversity shall be used in the restorative planting.

f. Where appropriate, and subject to permitting approval, the developer will construct "kidney filter" marshes for additional water quality treatment prior to final outfall. These marshes will most likely be located in areas currently infested with invasive exotic vegetation, and will be replanted with plant species such as juncus and spartina grass, cabbage palms and slash pines.

g. The developer has volunteered to monitor the Interface Area to assess its effectiveness in facilitating wildlife diversity. Information on flora and fauna produced for the DRI shall be the baseline data for the monitoring. The database shall be updated through a program of Winter/ Summer monitoring. The monitoring shall generally consist of looking for, and reporting on, evidence of foraging, nesting, scat, and other territorial markings. This monitoring program shall be for a period of five years from the commencement of development activity in the Interface Area. The information gathered through the monitoring program shall be provided to the Lee County Division of Natural Resources Management and the Lee County Schools, Department of Environmental Education.

h. Subject to permitting approval, the treated stormwater from the Residential and Commercial Development Areas will be conveyed across the Interface Area via a series of excavated lakes and created marsh areas that will emphasize both the water management function and the improvement of wildlife diversity within the Interface Area. The lakes will be designed and located to mimic natural flows and to enhance wildlife values.

i. The access to the southern segmented ridge has been shifted to the south to the location previously approved by the BOCC in Resolution #Z-88-193. There are less wetland impacts with the southerly access.

GENERAL/ADMINISTRATION

15. All conditions relating to the Development of Regional Impact Development Order are hereby incorporated by this action. If conflicting conditions exist between this approval and the DRI Development Order, the more restrictive shall apply.

16. Transportation mitigation shall be provided as outlined in the Development of Regional Impact Development Order. However, site related improvements may be required at the time of local Development Order in accordance with the provisions of the Land Development Code. Also, a Traffic Impact Statement (TIS) shall be submitted with each application for a local Development Order. The TIS must include:

    a. The trip generation data for the type of development being proposed, using the trip generation rates in the latest edition of ITE, Trip Generation or those of the Lee County FSUTMS.

    b. The distribution of traffic at the entrance(s) to that specific area to be developed.

    c. An analysis of the need for turn lanes or other site related improvements at the entrance(s) to that specific area to be developed based upon the projected future volume of traffic on the street being accessed. Projected future volume represents volumes at buildout of the DRI.

    d. An analysis of each intersection of a minor collector with the same or higher functionally classified road internally to Pelican Landing that is influenced by traffic from that proposed development. Influence is measured as project traffic as 5% or more of Level of Service D service volume. That analysis to be based on existing traffic counts, plus traffic from the specific development.

e. A table showing each segment of minor collectors and higher classified roads influenced by the proposed development, traffic volumes with specific development, and the capacity of the road segment at LOS E.

f. A table showing the cumulative development parameters for the entire Pelican Landing DRI. Development parameters to be categorized consistent with the categories identified in the original DRI.

17. The development shall comply with the Lee Plan's 2010 Overlay as it may be amended, and pursuant to DRI Development Order Condition III.14.

18.a. Prior to any development within that area legally described as Pelican Landing RPD/CPD (that property rezoned as a result of this action) the applicant must revise the MCP to reflect the final decision by the Lee County Board of County Commissioners regarding this rezoning and DRI approval.

b. Prior to any local Development Order approval within the land development areas delineated on the MCP as revised, pursuant to the final decision by the Lee County Board of County Commissioners, the developer must receive approval of a Final Zoning Plan.

The following information shall be provided:

- Uses: type and amount, i.e. number of dwelling units or square feet of commercial use
- access
- location and dimensions of internal roadways
- location and dimensions of buildings/structures
- boundary of development tract
- adjacent zoning and land uses
- Master Concept Plan
- A cumulative analysis of the total number of dwelling units, hotel units, commercial square footage and marina development that have received local Development Order approval (to be compared to the amount of development approved pursuant to the DRI and this rezoning).

19. The density of the residential units within both the RPD and CPD districts approved by this rezoning shall be flexible regarding the distribution of the residential dwelling units as long as they do not exceed the following parameters:

a. Those lands located within the Urban Community land use category per the Lee Plan shall be permitted a maximum of 350 residential units.

b. Those lands located within the Outlying Suburban land use category per the Lee Plan shall be permitted a maximum of 2,266 residential units.

20. The maximum amount of commercial square footage within the RPD and CPD districts approved by this rezoning shall be as stated below:

a. Those lands located within the Urban Community land use category per the Lee Plan shall be permitted a maximum of 390,000 square feet of floor area of retail use and 125,000 square feet of office use.

b. Those lands located within the Outlying Suburban land use category per the Lee Plan shall be permitted a maximum of 110,000 square feet of floor area of retail use and 45,000 square feet of office use. Of the retail uses, up to 20,000 square feet may be permitted if ancillary to the marina and up to 30,000 square feet may be permitted if ancillary to the hotel. Up to 60,000 square feet may be developed within CPD Areas E. Prior to approval of any Administrative Amendment for commercial use ancillary to the marina or hotel, the developer shall demonstrate that the retail is in fact ancillary to the principal use.

ENVIRONMENTAL

21. Open space commitments shall be consistent with the open space table on the Master Concept Plan as restated below:

Indigenous Open Space in Preserve:
Upland Preserve 106.13± acres
(Eco-Park, Indian Mound, Northern & Southern Upland "Islands" and Historical Cemetery)
Wetland Preserve 371.19± acres
(Freshwater and Saltwater)

Golf Course Open Space:
Golf Course 100.00± acres minimum
(To include extra indigenous preservation where possible)

Commercial Open Space to be Provided by Percentage:

All Commercial (except Marina Parcel)	20% minimum on each lot, tract or outparcel
Marina Parcel	10% of tract

Residential Private Open Space to be Provided by Percentage:

All Single-Family lots	10% minimum
Multi-Family Parcels	15% minimum

22. If a proposed bald eagle management plan includes development within 750 feet of an eagle's nest, the plan must be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

23. As a condition of approval, the County and FGFWFC shall review and approve the results of all studies and surveys required for implementation of a Final Management Plan required by the preliminary management plan approved as part of local Development Order 90-10-003.00D. These approvals shall be obtained prior to Certificate of Compliance for local Development Order #90-10-003.00D, or new/amended local Development Orders on the beach park.

24. The area identified as the Pelican Landing Eco-Park on the Master Concept Plan will be set aside as a 78± acre preserve area of xeric scrub and pine flatwoods to mitigate the impacts to gopher tortoise habitat.

25. The developer shall obtain an Incidental Take Permit prior to development within any gopher tortoise habitat areas. The gopher tortoises addressed by the Incidental Take Permit must be relocated to the Eco-Park, or other appropriate open space areas within Pelican Landing.

26. Should any orchids, wild pine air plants, Florida Coontie, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, then best efforts must be used to relocate these plants to open space and landscaped areas.

27. All areas designated as Preserve on the adopted Master Concept Plan and the DRI Map H must remain undeveloped and be owned, maintained, and managed by a Uniform Community Improvement District or other similar legal entity. No lot lines shall be allowed within any Preserve area. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks. Trimming of mangroves for visual access shall be prohibited in wetland areas #14 and 21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek).

28. Boardwalk location and alignment within "Preserve Areas" shall be submitted to and approved by the Division of Natural Resources Management prior to construction. The maximum width must be limited to that which

is adequate for pedestrian and handicap access. With the exception of wheelchairs, motorized vehicle use is prohibited. Nothing herein prohibits the developer from seeking permits in the future to establish a tramway via an alignment which proceeds as directly as feasible from the hotel to Coconut Point.

29. As part of local Development Order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local Development Orders are obtained.

30. The developer must incorporate native vegetation into the design of future golf holes, open space and landscaped areas, where feasible.

31. The developer must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

32. Areas identified as saltern (FLUCCS Designation 720) must be preserved and protected from human activity through the installation of signage or other measures. Areas identified as Cabbage Palm Hammock (FLUCCS 428, also included in areas identified as 433) may be developed using techniques designed to avoid impacts and retain the native vegetative community as much as possible.

33. Deviation (9) - Withdrawn. Deviations (3) and (7) are hereby approved. Deviations (1), (2), (4), (5), (6), (8), (10), (11), (12) and (13) are hereby approved, with conditions.

    Deviation (1) is a request to deviate from the requirement that properties which exhibit soils, hydrology and vegetation characteristic of saltwater inundation or freshwater ponding be subject to certain additional regulations and ordinances, Zoning Ordinance Section 202.11.B.1. b.1 [LDC Section 34-1574], Development Standards Ordinance Section 7.C.4. [LDC Section 10-253] and Ordinance 86-31 Section 6.03 [LDC Section 14-298], to allow access road crossings. Deviation (1) is hereby APPROVED with the following conditions:

    a. A maximum of 1.74± acres of Lee County jurisdictional wetlands may be impacted within the entire Pelican Landing DRI. A mitigation plan, subject to Division of Natural Resources Management approval, must be submitted prior to local Development Order approval for each wetland impact. Each mitigation plan must include the following minimum criteria:

        1) The designated mitigation ratio of 5:1, 5:1 acres of mitigation for each acre of impact.

        2) Replacement plants of like species as those removed.

        3) The number of replacement plants. Ratios shall be determined by the proposed size of the replacement plants (the closer the size of the replacement plant to that of the removed plant, the smaller the replacement ratio).

        4) An exotic removal maintenance plan.

        5) A monitoring plan.

    Deviation (2) is a request to deviate from the requirement that all parking lots shall be designed so as to permit vehicles exiting the

parking lot to enter the street right-of-way or easement in a forward motion, Zoning Ordinance Section 202.16.C.1. [LDC Section 34-2013(a)], to allow individual parking spaces to back onto right-of-way easement. Deviation (2) is hereby APPROVED with the following condition:

> This deviation shall apply to guest parking internal to the residential development areas.

Deviation (3) is a request to deviate from the minimum setback from a structure to a water body of 25 feet, Zoning Ordinance Section 202.18.B. 4.b. [LDC Section 34-2194(b)] to allow 20 feet. Deviation (3) is hereby APPROVED.

Deviation (4) is a request to deviate from the minimum setback from a structure to a seawalled natural body of water of 25 feet, Zoning Ordinance Section 202.18.B.4.b. [LDC 34-2194(b)], to 0 feet. Deviation (4) is hereby APPROVED with the following condition:

> This deviation shall apply to the marina site only.

Deviation (5) is a request to deviate from the requirement that internal roads with drives shall not be closer to the development perimeters than 25 feet, Zoning Ordinance Section 480.04.B.1. [LDC Section 34-935(b)(1)], to 15-foot minimum. Deviation (5) is hereby APPROVED with the following condition:

> This deviation shall only apply to development perimeters internal to the Pelican Landing DRI.

Deviation (6) is a request to deviate from the requirement that all buildings shall set back from the development perimeter at a distance of 25 feet, Zoning Ordinance Section 480.04.B.1. [LDC Section 34-935(b)(1)], to 15 feet. Deviation (6) is hereby APPROVED with the following condition:

> This deviation shall only apply to development perimeters internal to the Pelican Landing DRI.

Deviation (7) is a request to deviate from the requirement that recreation centers and ancillary facilities shall be located at least 40 feet away from any residential dwelling, Zoning Ordinance Section 526.C.2.c. 6. [LDC Section 34-2474 (b)(6)], to allow a minimum of 20 feet. Deviation (7) is hereby APPROVED.

Deviation (8) is a request to deviate from the requirement that a roadway width of 35 feet for two-way closed drainage, rear lot drainage, or inverted crown, Development Standards Ordinance Table 9-3 [LDC Section 10-296(b) Table 3.], to allow roadway width to coincide with back of curb. Deviation (8) is hereby APPROVED with the following condition:

> This deviation shall only apply to roads classified as local streets within each of the RPD development areas.

DEVIATION (9) IS WITHDRAWN.

Deviation (10) is a request to deviate from the requirement that no portion of a buffer area that consists of trees and shrubs shall be located in any easement, Development Standards Ordinance Section 13.D.1. [LDC Section 10-414], to allow planted buffers in easements. (The maintenance and replacement responsibility shall rest with the developer or homeowner's association or the improvement district). Deviation (10) is hereby APPROVED with the following condition:

> Should any required buffer plantings, which have been planted within an easement, have to be removed, then the property owner shall replace these plantings, at no cost to Lee County, with like size and species of plants.

Deviation (11) is a request to deviate from the Lee County Sign Ordinance 85-26, as amended, Section IV.B.2. [LDC Section 30-152], which requires identification signs to be set back a minimum of 15 feet from any right-of-way or easement, to 0 feet. Deviation (11) is hereby APPROVED with the following conditions:

A minimum sight distance of 200 feet shall be maintained, and this shall only be permitted on a right-of-way internal to the overall Pelican Landing development.

Deviation (12) is a request to deviate from the requirement limiting the height of buildings in the Residential Planned Development zoning category within the Outlying Suburban land use category of 45 feet, Zoning Ordinance Section 480.04.F.3.e. [LDC Section 34-935(f)(3)(e)], to allow 20 stories over parking. Deviation (12) is hereby APPROVED subject to condition 12.

Deviation (13) is a request to deviate from the minimum setback from a non-roofed structure to a seawalled artificial body of water, Zoning Ordinance Section 202.18.B.4. [LDC Section 34-2194], to allow a 0-foot setback. Deviation (13) is hereby APPROVED with the following condition:

The required lake maintenance easement shall be provided.

Site Plan 94-014 is attached hereto and incorporated herein by reference, as a reduced copy of the Master Concept Plan.

The following findings and conclusions were made in conjunction with this approval of RPD and CPD zoning:

A. That Estero Bay is an aquatic preserve and an Outstanding Florida Water.

B. That the mangrove wetlands on the western edge of Applicant's property are not contained with the aquatic preserve, but are part of the estuarine ecosystem that supplies waters to Estero Bay.

C. That the proposed development constitutes a Development of Regional Impact (DRI) under the provisions of Section 380.06, Florida Statutes, and that all adverse impacts are appropriately conditioned in the DRI Development Order.

D. That the eastern portion of the DRI has been developing pursuant to a Preliminary Development Agreement with the Florida Department of Community Affairs.

E. That the westernmost uplands portion of the DRI site lies in a FEMA Zone A Flood Zone, and is susceptible to being flooded in a minimal tropical storm or severe coastal storm event.

F. That there is no error or ambiguity which must be corrected by the approval of the DRI or the CPD/RPD rezoning.

G. That the area surrounding the DRI site is being developed with several large mixed residential/commercial developments, which make approval of this DRI and RPD/CPD appropriate.

H. That the RPD/CPD zoning, as conditioned herein, will not have an adverse effect on the intent of the Zoning chapter of the Land Development Code.

I. That the RPD/CPD zoning, as conditioned herein, is consistent with the Goals, Objectives, Policies and intent of the Lee Plan, and with the densities, intensities, and general uses set forth in the Lee Plan.

J. That the RPD/CPD zoning, as conditioned herein, meets or exceeds all performance and locational standards set forth for the proposed uses.

K. That the RPD/CPD zoning, as conditioned herein, will protect, conserve or preserve environmentally critical areas and natural resources.

L. That the RPD/CPD zoning, as conditioned herein, will be compatible with existing or planned uses, and will not cause damage, hazard, nuisance or other detriment to persons or property.

M. That the RPD/CPD zoning, as conditioned herein, will not place an undue burden upon the transportation or other services and facilities, and will be served by streets having the capacity to carry traffic generated by the development.

N. That the RPD/CPD zoning, as conditioned herein, will comply with all other applicable general zoning provisions and supplemental regulations pertaining to the uses, as set forth in the Land Development Code.

O. That the proposed mix of uses, as conditioned herein, is appropriate at the subject location.

P. That the recommended conditions in the DRI Development Order and the RPD/CPD zoning and other applicable Lee County regulations provide sufficient safeguards to the public interests.

Q. That all recommended conditions in the DRI Development Order and the RPD/CPD zoning are reasonably related to the impacts on the public's interest created by or expected from the proposed development.

R. That each approved deviation enhances the achievement of the objectives of the planned development.

S. That each approved deviation preserves and promotes the general intent of the Zoning chapter of the Land Development Code to protect the public health, safety and welfare.

T. That the Lee Plan Amendment of the 2010 Overlay reallocating residential and commercial acreages from the subdistricts containing the Westinghouse/Gateway DRI must be approved prior to the approval of this DRI and CPD/RPD zoning.

The foregoing Resolution was adopted by the Lee County Board of County Commissioners upon a motion by Commissioner John E. Manning, and seconded by Commissioner Douglas R. St. Cerny and, upon being put to a vote, the result was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Nay
Franklin B. Mann	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 29th day of August, A.D., 1994.

ATTEST:
CHARLIE GREEN, CLERK

BY: Ruth Trymier
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: Ray Judah
Chairman

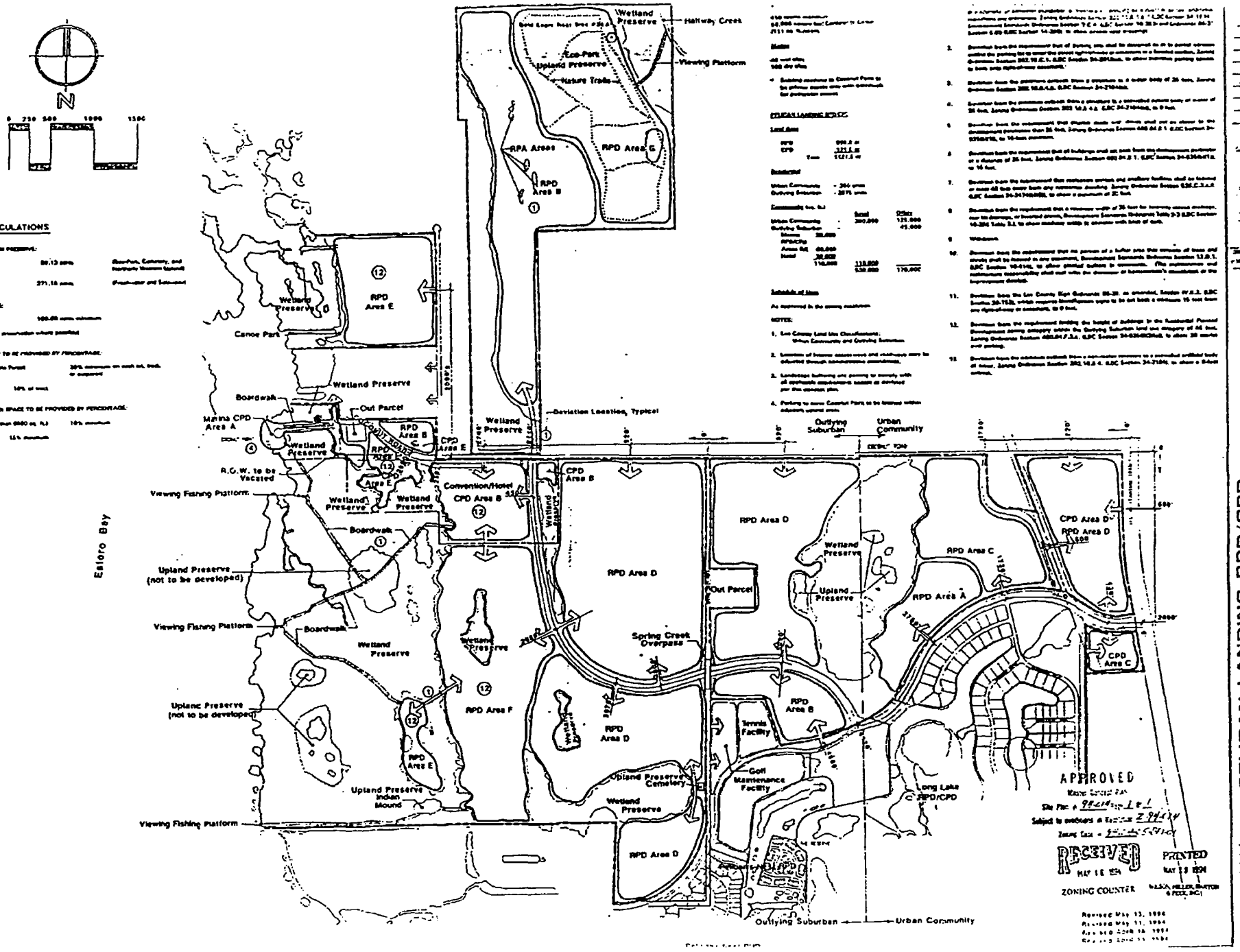
FILED

SEP 28 1994

CLERK CIRCUIT COURT
BY Ruth Trymier D.C.

Approved as to form by:

Donna Marie Collins
County Attorney's Office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0 250 500 1000 1500
OPEN SPACE CALCULATIONS
Wetland Preserve
Halfway Creek
Eco-Park
Upland Preserve
Nature Trails
Viewing Platform
RPA Areas
RPD Area G
RPD Area B
RPD Area E
Canoe Park
Boardwalk
Out Parcel
Marina CPD Area A
RPD Area B
CPD Area E
Deviation Location, Typical
R.O.W. to be Vacated
Viewing Fishing Platform
Convention/Hotel
CPD Area B
Estero Bay
Upland Preserve (not to be developed)
RPD Area D
Outlying Suburban
Urban Community
RPD Area C
CPD Area D
RPD Area A
CPD Area C
Spring Creek Overpass
RPD Area F
Tennis Facility
Golf Maintenance Facility
Upland Preserve Cemetery
Upland Preserve Indian Mound
Long Lake RPD/CPD
APPROVED
RECEIVED
ZONING COUNTER
PRINTED
PELICAN LANDING RPD/CPD
Master Concept Plan
prepared for: Pelican Landing Communities, Inc.
WILSON MILLER BARTON & PEEK INC

DEVELOPMENT ORDER

FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121

LET IT BE KNOWN, THAT PURSUANT TO SECTION 380.06 OF THE FLORIDA STATUTES, THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, HAS HEARD AT A PUBLIC HEARING CONVENED ON THE 29th DAY OF AUGUST, 1994, THE APPLICATION FOR DEVELOPMENT APPROVAL FOR PELICAN LANDING DRI, A RESIDENTIAL, COMMERCIAL AND MARINA DEVELOPMENT IN LEE COUNTY WHICH INCLUDES APPROXIMATELY 2,100 ACRES TO BE DEVELOPED IN ACCORDANCE WITH THE APPLICATION SUBMITTED TO LEE COUNTY ON OCTOBER 26, 1992, BY THE OWNER/APPLICANT, PELICAN LANDING COMMUNITIES, INC., FORMERLY KNOWN AS WESTINGHOUSE BAYSIDE COMMUNITIES, INC.

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and, after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on 2,100± acres located approximately three miles north of the Lee/Collier County line. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct 4,050 residential units, of which 665 are single-family and 3,385 multi-family, 600,000 square feet of gross floor area of retail commercial, and 210,000 square feet of gross floor area of office commercial. The retail uses will provide up to 2,400 parking spaces and the office uses will provide up to 700 parking spaces. The project will also include 450 hotel rooms, 50,000 square foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, and a beach park for the benefit of the owners in Pelican Landing. There are 87 acres of

upland habitat preserve, 507 acres of salt and freshwater wetlands, 208 acres of water management lakes, 140 acres of public and private rights-of-way, 6 acres of utilities and a .11 acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout is the year 2002.

B. LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

BEGINNING at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;

continued...

THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;

continued...

THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a POINT OF CURVATURE;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a POINT OF TANGENCY;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a POINT OF TANGENCY;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

continued...

ALSO

PARCEL 2

A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

continued...

PARCEL 3

A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LANDCOMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-3/4) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-2/3) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-2/3) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

BEGINNING at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the

continued...

Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;

THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.

CONTAINING 2,409 acres, more or less.

Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

AND

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:
From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet, N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet, N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet, N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet, N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet, N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet, N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet, N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;

continued...

THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

C. The subject parcel is currently zoned AG-2, RS-1, TFC-2, PUD, RPD, CPD, and IM; the property is partially developed.

D. This Application for Development Approval is consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Section 380.05, Florida Statutes.

F. The development does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed with the conditions set forth herein.

G. The development has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body on January 20, 1994, and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes; the development, as proposed in the Application for Development Approval (ADA) and modified by this Development Order, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06(15)(d), Florida Statutes.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, be it resolved by the Board of County Commissioners of Lee County, Florida, in a public meeting which was duly advertised, constituted and assembled the 29th day of August, 1994, that the Development of Regional Impact Application for Development Approval submitted by Westinghouse Bayside Communities, Inc., now known as Pelican Landing Communities, Inc., hereinafter referred to as "Developer" or "Applicant", is hereby ordered Approved subject to the conditions, restrictions, and limitations which follow. For the purposes of this Development Order, the term "developer" shall include his/her successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for the Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer shall immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

B. Housing

1. No mitigation for affordable housing is required as a result of this development. Based on available supply, there is no unmet affordable housing need for either very low or low income households resulting from this development in Planning Horizon I (through December 1997). Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January 1998 through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data

adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. This number of needed units for Planning Horizon II, using either the unadjusted or adjusted housing supply data, is below the level of regionally significant impact as determined by DCA and SWFRPC.

These findings are in accordance with applicable DCA and SWFRPC policy. The basis of analysis for determining unmet need is the 1991 DCA agreed upon draft methodology for determining affordable housing demand study, and need. The level of regionally significant impact is SWFRPC policy, based upon DCA rules and guidelines. The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

C. Hurricane Preparedness

1. Within six months, after the effective date of this DRI Development Order, the developer shall provide and connect a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure which advises all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for the Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Services staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan shall address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan shall be developed in coordination with the Lee County Emergency Management officials and must be found sufficient by those officials within six months after the effective date of the DRI DO.

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

D. <u>Marina Facilities</u>

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000 foot conservation easement already required in Spring Creek. The location and

extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator shall host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator shall provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices, and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise.

1. There were three bald eagles' nests of concern prior to development order adoption. One nest is on the Pelican Landing property. The other nests are within 1,500 to 1,600 feet of Pelican Landing. The buffers that will affect Pelican Landing property will be established in an eagle habitat management plan.

Prior to development within 2,500 feet of any eagle nest, the Developer shall prepare an eagle management plan which shall be reviewed by DCA, SWFRPC, FGFWFC, Lee County, and USFWS. Said groups shall have a thirty day review period and shall provide all comments to Lee County in writing, which shall have the final approval authority. If a proposed management plan includes development within 750 feet of an eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

The 2,500 foot limitation is intended to be a temporary restriction to insure the submission and approval of a management plan on a timely basis. The final primary and secondary buffer

zones may be less than 2,500 feet. An eagle management plan will be included as part of an upland habitat protection area management plan.

2. A local development order for the Hickory Island beach park has been issued that permits construction of beach park infrastructure. This development order included a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP requires the developer to provide the county with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permits a refinement of the conservation easement boundaries after completion of a one year utilization study, the final conservation easement shall be consistent with the provisions of Section 704.06, Florida Statutes.

The objectives of this one year study were: 1) determine shorebird utilization based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI DO.

As a condition of DRI approval the County and FGFWFC shall review and approve the results of all studies and surveys required for implementation of a Final Management Plan required by the PMP approved as part of local development order 90-10-003.00D. These approvals shall be obtained prior to Certificate of Compliance for local development order #90-10-003.00D, or new/amended local development orders on the beach park. The developer shall utilize best efforts to obtain the approval of the final management plan within 18 months of the effective date of this Development Order.

3. The projected gopher tortoise burrow count is 439, based on an estimate of FGFWFC habitat coverages. Using this figure and the FGFWFC habitat protection guidelines, 75 acres of gopher tortoise habitat must be protected.

The developer will set aside a 78± acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat. This area will be known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish

Commission on or about December 22, 1993. The Developer shall submit a copy of the management plan to the DCA, SWFRPC, and Lee County for review. The agencies shall have a thirty day review period. The agencies shall provide all comments regarding the management plan to Lee County in writing which shall have the final approval authority. The Developer has submitted for an Incidental Take Permit for the gopher tortoises located outside of the Eco-Park in the undeveloped portion of Pelican Landing. The Developer shall obtain an Incidental Take Permit prior to proceeding with development within gopher tortoise habitat areas.

The gopher tortoises addressed by the Incidental Take Permit shall be relocated to the Eco-Park, or other appropriate open space areas within Pelican Landing. The Eco-Park mitigates for regional impacts to the gopher tortoise population and xeric scrub within the Pelican Landing DRI.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines shall be allowed within any Preserve area. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek shall be prohibited in wetland areas #14 and #21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek).

5. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced in the above, the approved management practices shall then be considered a part of this development order for enforcement purposes, and shall be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling of not more than 8 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasives, the restoration of historic hydroperiods, and a total of not more than ten acres of littoral zone plantings.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and/or hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator shall be responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, shall notify the

Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, shall contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, use, and storage of hazardous materials which will be located on the premises.

10. If required by federal, state and/or local regulations:

a. The developer/property owner shall prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner shall establish an emergency notification system to be used in the event of a hazardous material release.

G. Stormwater Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit

(construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or stormwater retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site stormwater wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD shall establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Attachment B, "Pelican Landing DRI Development Parameters". The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2002). Each annual monitoring report, described in Paragraph H.4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code AC-13-16, dated August 8, 1991, see Attachment C) the following roadways and intersections:

Planning Horizon I (1997)	Needed Improvement
US 41/Corkscrew Road	- Signal retiming
US 41/Williams Road	- Signalization, if warranted
US 41/Coconut Road	- Signalization, if warranted
US 41/Pelican Commercial Entrance	- Northbound left turn lane - Southbound right turn lane - Eastbound right turn lane
US 41/North Pelican Entrance	- Northbound left turn lane - Southbound right turn lane - Eastbound left and right turn lanes - Signalization, if warranted
US 41/Pelican Landing Parkway/ Old 41	- Southbound dual left turns - Signal retiming
US 41/Pelican's Nest Drive	- Northbound left and right turn lanes - Southbound left and right turn lanes - Eastbound left and thru/right lanes - Westbound left and thru/right lanes - Signalization, if warranted
US 41/Terry Street	- Signal retiming
US 41/Bonita Beach Road	- Signal retiming
Coconut Road/Spring Creek Road	- Separate NB left & right turn lanes - Separate EB thru and right turn lanes - Separate WB thru and left turn lanes

Buildout (2002)	
Corkscrew Road - Three Oaks Parkway to I-75	- Widen to 4 lanes
Old 41 - Bonita Beach Road to Terry St.	- Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41 - Immokalee Road to Old 41 (Collier County)	- Widen to 6 lanes

- Bonita Beach Road to West Terry Street	- Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	- Widen to 6 lanes
- Coconut Road to Williams Rd.	- Widen to 6 lanes
- Constitution Boulevard to Alico Road	- Widen to 6 lanes
US 41/Corkscrew Road	- Separate EB left and thru/right lanes - Westbound dual left turn lanes - Signal retiming
US 41/Williams Road	- Signalization, if warranted
US 41/Coconut Road	- Separate EB left and right turn lanes - Signalization, if warranted
US 41/Pelican Commercial Entrance	- Northbound left turn lanes - Southbound right turn lane - Eastbound right turn lane
US 41/North Pelican Entrance	- Northbound left turn lane - Southbound right turn lane - Eastbound left and right turn lanes - Signalization, if warranted
US 41/Pelican Landing Parkway/ Old 41	- Southbound dual left turn lanes - Northbound dual left turn lanes - Eastbound thru/right turn lane - Westbound two thru lanes - Signal retiming
US 41/Pelican's Nest Drive	- Northbound left and right turn lanes - Southbound left and right turn lanes - Eastbound left and thru/right lanes - Westbound left and thru/right lanes - Signalization, if warranted
US 41/Terry Street	- Northbound dual left turn lanes - Separate WB thru and right turn lanes - Signal retiming
US 41/Bonita Beach Road	- Signal retiming
Coconut Road/Spring Creek Road	- Separate NB left and right turn lanes - Separate EB thru and right turn lanes - Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees are estimated to be $8,783,000 for the land uses identified in Attachment B. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b, those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane

access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by

the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until buildout of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and turning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season turning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b as impacted by this project through buildout.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	I-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the

year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultra-low volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of non-potable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities shall be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied

through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the Development of Regional Impact Application for Development Approval filed for the Pelican Landing DRI.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents which are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, stamped received September 19, 1994, is attached hereto as Attachment A and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order which clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality which may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner

affect the remaining portions or sections of the Development Order which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans which create a reasonable likelihood of adverse regional impacts or other regional impacts which were not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of 2002, and a termination date of 2005. This term is based on a ten year buildout and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005 as long as the Lee Plan amendment proposed in association with this DRI to upwardly adjust the 2010 Overlay allocations for Subdistricts 801 and 806 is adopted and effective.

If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

If the companion plan amendment is adopted, Lee County will reserve to this DRI, the appropriate uses from the allocations established for subdistricts (subdistricts 806/801) of the Lee Plan 2010 Overlay until 2005. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until buildout. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. Within six months of the effective date of this Development Order, the Developer will apply for an amendment to this Development Order which incorporates the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. The amendment will contain a description of that portion of the Spring Creek DRI and the conditions of the Spring Creek Development Order which are applicable to the Spring Creek West property. The amendment will not be deemed a substantial deviation under Chapter 380, Florida Statutes. The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation which would require further analysis of Spring Creek West. This amendment is to be adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order Development Order and none of Spring Creek West's vested rights will be lost because of this amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes.

THE MOTION TO ADOPT this Resolution approving and adopting this Development Order was offered by Commissioner John Manning, and seconded by Commissioner Douglas St. Cerny and upon poll of the members present, the vote was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Nay
Franklin B. Mann	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 29th day of August, 1994.

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

By: Ray Judah
(Chairman)

ATTEST:
Charlie Green, Ex - Officio Clerk
Board of County Commissioners
_____, Clerk

By: Ruth Frymire
Deputy Clerk

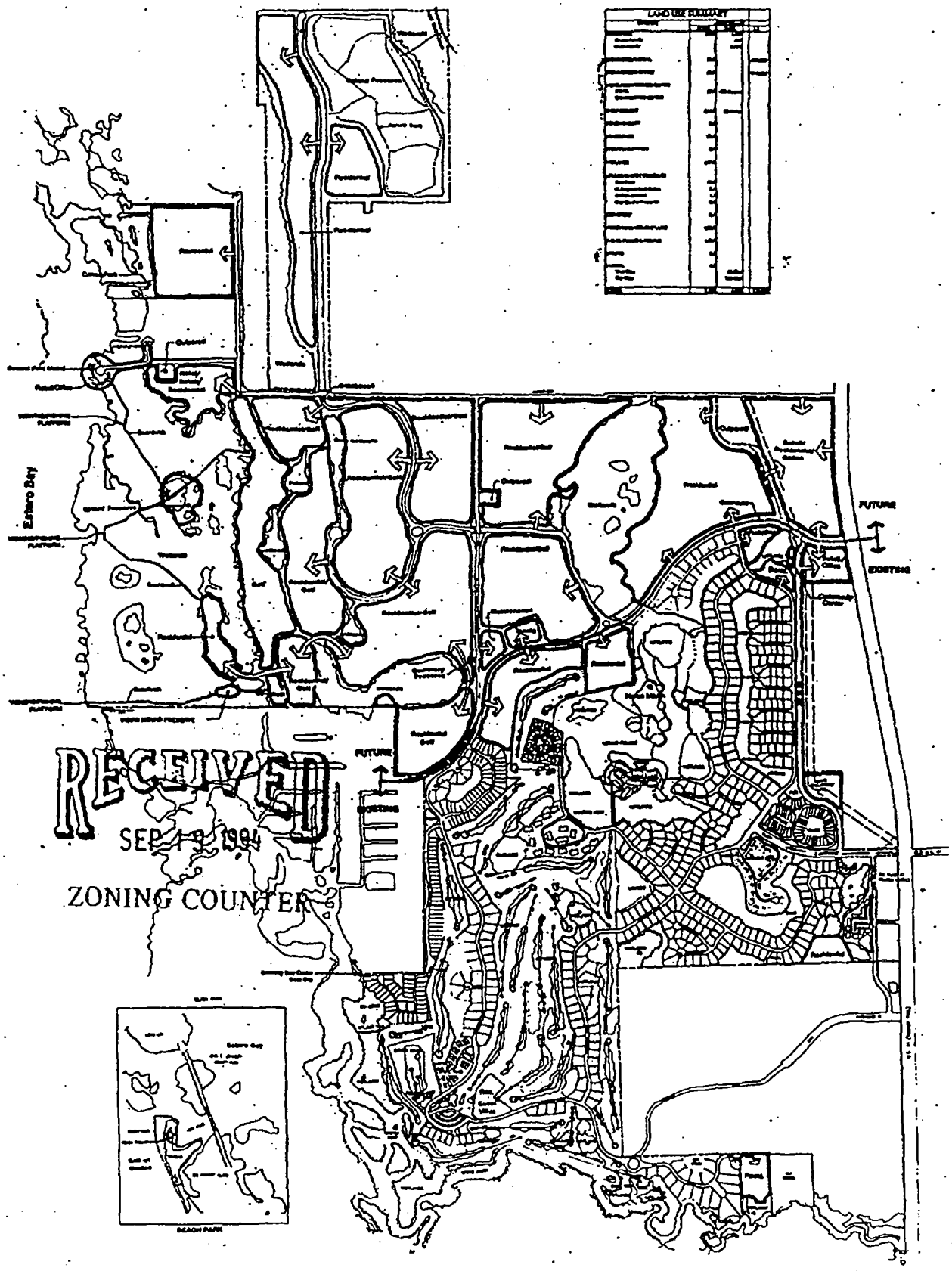
APPROVED AS TO FORM

By: Donna Marie Collins
County Attorney's Office

FILED

SEP 26 1994

CLERK CIRCUIT COURT
BY Ruth Frymire D.C.



RECEIVED
SEP 13 1994
ZONING COUNTER

MAP H

Master Development Plan

ATTACHMENT 'A'

NOTE: The location of the Planned road network is conceptual. The final location of the planned road network will be determined and approved at the time of land zoning and

ATTACHMENT "B"

PELICAN LANDING DRI
DEVELOPMENT PARAMETERS

Land Use	Units[1]	Existing (1992	Planning Horizon I (1997)	Buildout Total (2002)
Residential	DU	969	2,433	4,050
Single Family	DU	373	625	665
Multi Family	DU	596	1,808	3,385
Retail[2]	GFA	11,000	291,000	600,000
Office[3]	GFA	40,000	150,000	210,000
Hotel	Rooms	0	450	450
Recreation Uses				
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	29	38	38
Range Club Golf Course	Holes	0	9	9
Tennis Center	Courts	0	6	12
Coconut Marina	Boat Slips			
	Wet	24	48	48
	Dry	0	150	150
Redfish Point	GFA	5,000	5,000	5,000
	Boat Slips			
	Wet	15	15	15
Other[4]	Boat Slips			
	Wet	2	2	2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

ZON4796/20-Sep-1994

ADMINISTRATIVE CODE
BOARD OF COUNTY COMMISSIONERS

CATEGORY:	CODE NUMBER:
DEVELOPMENT/PLANNING/ZONING	AC-13-16
TITLE:	ADOPTED:
PROPORTIONATE SHARE CALCULATIONS FOR TRANSPORTATION FACILITY NEEDS RESULTING FROM NEW DEVELOPMENT	AUGUST 21,1991 ORIGINATOR: BILL SPIKOWSKI DEPT. OF GROWTH MANAGEMENT
COUNTY ADMIN:	BOARD CHAIRPERSON:
ROBERT GRAY, ACTING COUNTY ADMINISTRATOR	DOUGLAS ST. CERNY

I. PURPOSE:

This document describes procedures to calculate proportionate share costs for proposed developments. All new development is required to pay road impact fees under the terms of Lee County's Roads Impact Fee Ordinance (No. 85-23, as amended). Some developers/applicants may be required to pay a proportionate share of roadway improvement costs under certain conditions as outlined below. These conditions result from the larger size, use, character, or location of the proposed development. Mitigation of impacts on the county's road system is mandated by the Lee County Comprehensive Plan.

II. SCOPE:

The policies and procedures contained in this code have been prepared to aid the development community and Lee County Commissioners and staff in assessing the impacts of larger new developments on the surrounding road network. This code is supplemental in nature:

A. As to Developments of Regional Impact (DRIs), this code supplements the provisions of Chapter 380, Florida Statutes, and Rule 9J-2.0255, Florida Administrative Code.

B. As to Development Agreements, this code supplements Ordinance No. 90-29.

Traffic analysis methodologies deviating from these procedures must be approved by the Lee County Department of Transportation & Engineering.

III. POLICY/PROCEDURE:

A. Pre-application Meeting
A pre-application meeting between the county and the applicant is encouraged. The purpose of this meeting is to review the methodology and procedures and to determine the study period. This will usually be a PM peak hour analysis; however, other time periods may require analysis. This discussion can be held at the same time as the pre-application meeting for the project's Traffic Impact Statement.

B. Projecting Future Year Total and Development Trips
Two separate methodologies are outlined under this section. The first methodology applies to large projects or developments with build-out periods of longer than five years. For purposes of this analysis, projects generating more than 750 peak hour external trip ends and having build-out periods of 5 years or more are generally considered large, all others are small. This first methodology requires use of the latest Lee County FSUTMS computer model for projecting total and development trips. The second methodology applies to smaller projects and projects with build-out periods of five years or less. For these smaller short-range developments, manual traffic analysis methods should be used in place of the FSUTMS computer model.

ATTACHMENT C

1. Larger or Long-Term Developments

   a. The FSUTMS computer model should be used to develop traffic volumes for build-out and interim phase years.

      (1) The latest zonal data should be gathered from the Lee County Department of Transportation & Engineering.

      (2) The model's base and future year zonal data can be used for data interpolation of extrapolation to the appropriate project years (in the absence of existing zonal data).

   b. Future year traffic assignments should be developed for development trips and total trips using the FSUTMS model. The following methods are the recommended DRI traffic impact analysis methodologies as listed in Florida Department of Transportation FSUTMS training course materials:

      (1) Development trips can be determined by using a two-purpose trip table with the second purpose representing all trips with at least one end in the development zone or zones.

      (2) Development trips can also be isolated with the selected links analysis method.

   c. The "net impact methodology" is an unacceptable method for determining development trips. Under this method, volumes from a traffic assignment with the development land use in place are subtracted from assignment volumes with zero land use assumed on the development site. The net impact methodology significantly underestimates development trips on each link. On links further from the site, this methodology often results in an illogical negative number of development trips; thus the methodology is not appropriate as the basis for proportionate share calculations.

2. Smaller or Short-Term Developments

   a. For these developments, it is acceptable to use historic growth rates for traffic projection and manual distribution techniques to determine project trip loadings.

      (1) Appropriate traffic growth rates should be determined based on an examination of historical counts available for the impact area.

      (2) Current traffic counts must be collected for all arterial segments in the impact area.

      (3) Current traffic volumes should be projected to the build-out year and the end of each development phase.

   b. Trip generation for the project under study should be estimated using the latest edition of the ITE Trip Generation manual or other figures acceptable to the Department of Transportation & Engineering. It may be appropriate to apply internal capture assumptions for mixed-use developments and pass-by capture factors for commercial uses on arterial roadways. These factors may be based on the ITE Trip Generation manual or other sources acceptable to the Department of Transportation and Engineering.

   c. Development trips should be assigned to surrounding roadways based on the relative trip activity and location of surrounding land uses.

      (1) The potential origins and destinations for development trips and turning patterns at key intersections should form the basis for these manual distributions.

      (2) Trip attenuation along assigned roadways can be accomplished through an analysis of average trip length and consideration of intervening opportunities for "intercepting" trips along designated paths.

      (3) Thorough documentation of distribution procedures and justifications of all assumptions must be presented.

   d. The total traffic projection on each roadway segment in the study area is calculated generally by adding the assigned development traffic to the projected future year volume.

Mitigation Due to "Significance" and "Adversity"

1. If a roadway link is projected to carry a significant number of development trips and total traffic adversely affects the roadway by exceeding the service volume (capacity), a proportionate share of the improvement cost for that link shall be calculated.

2. For roadway links in the impact area, service volumes must be determined.

   a. Each roadway has a specific service volume based on its unique characteristics.

   b. These service volumes must be determined using procedures based on 1985 Highway Capacity Manual.

   c. The FDOT statewide Generalized Level of Service Tables are applicable only to the broadest planning applications; a more detailed LOS analysis must be used for mitigation purposes. Generalized service volumes have been developed for Lee County, and may be used. They are contained in Chapter IX of the 1990 Amendments to the Lee Plan (see Volume 1 of the supporting documentation).

   d. The ARTPLAN program developed by FDOT is another acceptable method of replicating the 1985 HCM arterial analysis.

3. Each roadway link must be analyzed to determine if development traffic has a significant impact on the roadway.

   a. A significant impact is said to occur when development traffic exceeds 5% of the LOS D service volume for that link.

   b. This significance analysis will determine which roadways fall within the impact area and must then be tested for adversity.

4. A roadway link is determined to be adversely affected if total traffic exceeds the LOS D service volume for that link.

D. Roadway Improvement Costs

1. A proportionate share shall be calculated for design, right-of-way, and construction costs for all links where traffic levels are both significant and adverse.

   a. Roadway improvement cost calculations should be based on cost figures developed specifically for the roadway being analyzed. These cost figures are often available for roadway projects under design by state or local agencies.

   b. If specific costs are unavailable, average cost per mile figures for the required type of roadway improvement should be used. Statewide average cost per mile values have been developed by FDOT for each type of roadway improvement; often local average cost per mile figures are also available.

E. Proportionate Share Calculations for DRIs

1. Proportionate shares shall be calculated using the formula developed by the Southwest Florida Regional Planning Council. This formula is similar to the DRI proportionate share formula adopted by the Department of Community Affairs as contained in Rule 9J-2.0255, F.A.C. The formula is as follows:

$$\text{Proportionate Share Percentage} = \frac{(\text{Development Trips} - \text{Reserve Capacity on Link})}{\text{Added Capacity with Improvement}}$$

   a. "Reserve Capacity" is determined by subtracting future year non-development traffic from the road's service volume. A reserve capacity of zero is used if this calculation results in a negative number.

b. "Added Capacity With Improvement" is the difference between the service volume after the improvement and the service volume before the improvement.

2. The proportionate share percentage is multiplied by the total cost of the roadway improvement for each road link to determine the developer's proportionate share of that improvement.

3. This proportionate share formula is applied to each link on which the development traffic is significant and levels of service are adverse. The sum of these computations is the development's "proportionate share." If this sum is less than the development would pay in road impact fees, it shall not form the basis for an assessment against the development in the DRI or DCI process. If the sum is greater than the development would pay in road impact fees, it will be used in a DRI development order as the figure required to mitigate the development's long-run impact on transportation facilities.

F. Voluntary Proportionate Share Payments in Development Agreements

1. In order to induce Lee County into entering a Development Agreement pursuant to Ordinance No. 90-29, a prospective developer should use this section as the basis for his/her offer to voluntarily construct road improvements or to pay the cost of such improvements.

2. Sections B, C, and D above shall be used to project future travel patterns, to determine "significance" and "adversity," and to estimate roadway improvement costs.

3. Proportionate share payments in Development Agreements shall be calculated by summing the costs of improving each road segment that meets the previously stated tests for "significance" and "adversity," up to a cap of double the road impact fees at current rates for the entire development. The Development Agreement shall be based on the greater of the total costs of needed improvements (as just described) up to the cap of double impact fees, or the proportionate share as calculated under Section E above, whichever is greater.

State of Florida
County of Lee

I Charlie Green, Clerk of the Circuit Court for Lee County, hereby certify that the [illegible] of the Minutes Book [illegible]

Given under my hand and seal of office this 26th day of September 1991

By [illegible]
Deputy Clerk

RESOLUTION NUMBER Z-96-055

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, WCI Communities, L.P. in reference to Pelican Landing RPD/CPD DRI Amendment filed an application for:

a) An Amendment to the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, as amended, to acknowledge the conversion of commercial retail floor area to residential and commercial office uses and to eliminate Condition II.B.2 pertaining to affordable housing and add a new Condition II.B.2 pertaining to affordable housing;

b) A Finding of No Substantial Deviation under the provisions of Section 380.06(19), Florida Statutes; and

c) An Amendment to the Pelican Landing CPD/RPD Resolution Z-94-014 (as amended), and the corresponding Master Concept Plan, to:

1) Add 350 dwelling units in the Urban Community category CPD/RPD Area D;

2) Decrease the amount of commercial retail floor area from 390,000 square feet, to 330,000 square feet;

3) Increase the amount of commercial office space from 125,000 square feet, to 160,000 square feet; and

4) Add an Assisted Living Facility (ALF) as a permitted use in RPD Area D.

WHEREAS, the subject property is located between US 41 and Estero Bay, north of Spring Creek to the north and south of Coconut Road, Bonita Springs, and is described more particularly as:

LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

DRI PARCEL 1
A tract or parcel of land lying in Sections 08, 09, 16, 17, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20, run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼ of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;

THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;

THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

<u>DRI PARCEL 2</u>
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;

THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS AND EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO:

<u>DRI PARCEL 3</u>
A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County;
ALSO the East Three-quarters (E-3/4) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05;
ALSO the East Two-thirds (E-2/3) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05;

ALSO the East Two-thirds (E-2/3) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:

From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

<u>DRI PARCEL 4</u>
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.

Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

AND

DRI BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet,
N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet,
N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet,
N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet,
N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet,
N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet,
N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet,
N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;

THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

PELICAN LANDING RPD PARCEL 1
Tracts or parcels lying in Section 05 and Section 08, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows and all consisting of 203.85 acres, more or less.

Parcels in Section 5:
Lots 8B, 9B, 10B, 11B, 12B, and Lots 21B, 22B, 23B, 24B, and 25B of Florida Gulf Land Company's Subdivision, all in Section 05, Lee County, Florida (recorded in Plat Book 1 at Page 59).
Consisting of 100 acres more or less.

ALSO

The East Three-Quarters (E-3/4) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼), of said Section 05.
Consisting of 30 acres, more or less.

ALSO

The East Two-Thirds (E-2/3) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼), of said Section 05.
Consisting of 26.67 acres, more or less.

Parcels in Section 8:
The East Two-Thirds (E-2/3) of the West Half (W½) of the Northwest Quarter (NW¼) of said Section 08.
Consisting of approximately 53.55 acres, more or less, less the Southerly 40.00 feet for the right-of-way of Coconut Road.

ALSO

Lot 8, Block 14 of El Dorado Acres, an unrecorded subdivision shown in Deed Book 310 at page 183 of the Public Records of Lee County, Florida.

PELICAN LANDING RPD PARCEL 2
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07 run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot 1 for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet, more or less to the POINT OF BEGINNING.
Containing 60 acres, more or less.

PELICAN LANDING RPD PARCEL 3
A tract or parcel of land lying in Sections 07, 08, 17 and 18, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) to the POINT OF BEGINNING;
THENCE run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road as described in County Commissioners Minute Book 6 at Page 210, Public Records, Lee County, Florida;

THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 1,612.27 feet;
THENCE run N89°52'02"W for 5.00 feet to a Point on a curve;
THENCE along the arc of a non-tangent curve to the right of radius 1,070.00 feet (delta 91°03'07") (chord bearing S45°39'32"W) (chord 1,527.04 feet) for 1,700.40 feet;
THENCE run N01°31'36"E for 33.48 feet to the Southeast corner of lands described in Official Record Book 411 at page 759 of said Public Records;
THENCE continue N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet, more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 6,490 feet, more or less to an intersection with the South line of Government Lot 2 of said Section 07;
THENCE run N89°40'05"E along said South line for 745 feet, more or less;
THENCE run S00°19'55"E for 650.00 feet;
THENCE run N89°40'05"E for 1,107.21 feet to an intersection with the West line of said Section 08;
THENCE run N00°23'24"W along the West line of said Section for 625.00 feet to an intersection with the South line of said Coconut road and said POINT OF BEGINNING.
Containing 547.4 acres, more or less.

PELICAN LANDING RPD PARCEL 4
A tract or parcel of land lying in Sections 08 and 17, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, run S00°41'48"E along the West line of said Section 09 for 5.00 feet to an intersection with the South line of Coconut Road (50 feet wide) as described in Official Record Book 1738 at Page 2538, Public Records, Lee County, Florida, and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S00°39'58"E continuing along said West line for 2,606.06 feet to the Southwest corner of said Section 09;
THENCE run S00°41'04"E along the West line of Section 16, Township 47 South, Range 25 East, Lee County, Florida, for 504.83 feet to a point on a curve;

THENCE run along the arc of a curve to the right of radius 2,760.00 feet (delta 21°21'52") (chord bearing S75°03'10"W) (chord 1,023.20 feet) for 1,029.15 feet;
THENCE N20°00'00"W for 580.12 feet;
THENCE N89°52'02"W for 657.66 feet to an intersection with the East line of Spring Creek Road as described in County Commissioners Minute Book 6 at Page 210, Public Records, Lee County, Florida;
THENCE run N00°07'58"E along said East line for 240.32 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.49 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 499.94 feet to the Southwest corner of lands described in Official Record Book 428 at Page 349, said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 536.00 feet;
THENCE run N00°07'17"E along the East line of said lands for 474.33 feet;
THENCE run N89°21'02"W along the North line of said lands for 546.00 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of said Coconut Road;
THENCE run S89°16'14"E along the South line of said Coconut Road 1,802.38 feet to an intersection with the West line of said Section 09 and the POINT OF BEGINNING.
Containing 124.18 acres, more or less.

PELICAN LANDING RPD/CPD PARCEL 1
A tract or parcel of land lying in Section 08, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

From a railroad spike marking the Northeast corner of the Southeast Quarter (SE¼) of said Section 07 run S00°23'24"E along the East line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet
wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S00°23'24"E along the East line of Section 07 for 625.00 feet;
THENCE run S89°40'05"W for 1,107.21 feet;
THENCE run N00°19'55"W for 650.00 feet to an intersection with the South line of Government Lot 2 of said Section 07;
THENCE run S89°40'05"W along said South line for 745 feet, more or less to an intersection with the waters of Estero Bay;
THENCE run along the waters of Estero Bay for 1,810 feet, more or less to a Point which intersects the North line of the South Half (S½) of said Government Lot 2;

THENCE run N89°32'15"E along said North line of the South Half (S½) of said Government Lot 2 for 545 feet, more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817, Public Records, Lee County, Florida;
THENCE S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet to an intersection with the South line of said Coconut Road;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.55 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516, Public Records, Lee County, Florida.
Containing 39.1 acres, more or less.

PELICAN LANDING RPD/CPD PARCEL 2
A tract or parcel of land lying in the South Half (S½) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 09 run N00°41'48"W for 5.00 feet to the South right-of-way line of Coconut Road (50 foot right-of-way);
THENCE run S89°35'50"E for 1,863.14 feet to the centerline of a certain Florida Power and Light transmission line easement (100 feet wide) as described in Deed Book 229 at Page 48, Public Records, Lee County, Florida, and the POINT OF BEGINNING.
From said POINT OF BEGINNING continue S89°35'50"E along said South right-of-way line for 1,301.22 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run along the arc of a curve to the left of radius 5,797.58 feet (delta 10°17'00") (chord bearing S04°57'34"E) (chord 1,039.14 feet) for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 230.98 feet;
THENCE run S79°53'56"W for 70.57 feet to a Point of Curvature;
THENCE run along the arc of a curve to the right of radius 650.00 feet (delta 49°49'26") (chord bearing N75°11'21"W) (chord 547.59 feet) for 565.23 feet to a Point of Reverse Curvature;
THENCE along the arc of a curve to the left of radius 840.00 feet (delta 22°49'21") (chord bearing N61°41'18"W) (chord 332.39 feet) for 334.60 feet to a point on a non-tangent curve;

THENCE along the arc of a curve to the left of radius 180.00 feet (delta 27°59'03") (chord bearing N06°54'21"W) (chord 87.04 feet) for 87.91 feet to a Point of Tangency on the Western line of said Florida Power and Light easement;
THENCE run N20°53'52"W along said Western easement line for 721.03 feet to a Point of Curvature;
THENCE along the arc of a curve to the left of radius 330.00 feet (delta 68°41'58") (chord bearing N55°14'51"W) (chord 372.40 feet) for 395.68 feet to a Point of Cusp;
THENCE run S89°35'50"E for 56.51 feet to a Point of Curvature;
THENCE run along the arc of a curve to the right of radius 530.00 feet (delta 27°42'00") (chord bearing S75°44'50"E) (chord 253.74 feet) for 256.23 feet to an intersection with said centerline of said easement;
THENCE run N20°53'52"W along said centerline for 748.16 feet to an intersection with the South line of said Coconut Road and the POINT OF BEGINNING.
Containing 42.44 acres, more or less.

PELICAN LANDING CPD PARCEL 3
A tract or parcel of land lying in the Southeast Quarter (SE¼) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at the Southwest corner of the Southeast Quarter (SE¼) of said Section 09 run N010°0'24"W along the West line of said Southeast Quarter (SE¼) for 587.77 feet to a point on a non-tangent curve;
THENCE along the arc of a curve to the left of radius 850.00 feet (delta 39°04'25") (chord bearing S80°33'52"E) (chord 568.50 feet) for 579.67 feet to a Point of Tangency;
THENCE run N79°53'56"E for 70.57 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S10°06'04"E along said West line for 507.09 feet to an intersection with the South line of said Section 09;
THENCE run S89°23'00"W along said South line for 708.94 feet to the POINT OF BEGINNING.
Containing 7.73 acres, more or less.

WHEREAS, WCI Communities, L.P., the owner of the subject parcel, authorized Pavese, Garner, Haverfield, Dalton, Harrison & Jensen to act as agent to pursue this zoning application; and

WHEREAS, a public hearing was advertised and held on September 3, 1996 and subsequently continued on September 13, 1996 before the Lee County Hearing Examiner who gave full consideration of the evidence available; and

WHEREAS, a public hearing was advertised and held on November 4, 1996 before the Lee County Board of County Commissioners who gave full and complete consideration to the recommendations of staff, the Hearing Examiner, the documents on file with the county, and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, that the Board:

a) APPROVES an Amendment to the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, as amended;

b) MAKES a finding of No Substantial Deviation under the provisions of Section 380.06(19), Florida Statutes; and

c) APPROVES with conditions an Amendment to the Pelican Landing CPD/RPD Resolution Z-94-014, as amended, and the corresponding Master Concept Plan.

SECTION A. CONDITIONS:

The Amendment and the Pelican Landing RPD/CPD Master Concept Plan are subject to the following conditions:

1. The development of this project must be in compliance with the one page Master Concept Plan entitled "Pelican Landing RPD/CPD," last revised May 2, 1996, and stamped received by the Zoning Counter on May 22, 1996; the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, last revised April 2, 1996, and stamped received by the Zoning Counter on April 15, 1996.

2. All deviations and conditions approved by Resolutions Z-94-094 and Z-95-061, except as specifically modified herein and by the amended Master Concept Plan, will remain in full force and effect.

3. The addition of an Assisted Living Facility (ALF) as a permitted use in RPD Area D is limited to the parcel located at the southeast corner of Spring Creek Road and Coconut Road.

4. In accordance with DRI Development Order Condition II.c.10, the Developer must notify the local Emergency Management personnel when it submits an application for local Development Order approval for construction that includes any dwelling unit over the initial 4,050. The purpose of this notification is to alert local Emergency Management personnel to coordinate with the Impact Fee Coordinator for the collection of the $18.50 per dwelling unit hurricane mitigation fee. This fee will be paid only on units 4,051 through 4,400. It will be the responsibility of the Developer to notify the individual contract purchaser of the required hurricane mitigation fee. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of

building permits 4,051 through 4,400, then the Developer may pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above.

SECTION B. Master Concept Plan:

A one page reduced copy of the Pelican Landing RPD/CPD Master Concept Plan is attached and incorporated into this resolution by reference.

SECTION C. FINDINGS AND CONCLUSIONS:

The following findings and conclusions were made in conjunction with the approval of the requested Amendment:

1. The Applicant has proved entitlement to the amendment by demonstrating compliance with the Lee Plan, the Land Development Code, and other applicable codes and regulations.

2. The requested amendment:

   a) meets or exceeds all performance and locational standards set forth for the potential uses allowed by the request;

   b) is consistent with the densities, intensities and general uses set forth in the Lee Plan;

   c) is compatible with existing or planned uses in the surrounding area; and

   d) will not adversely affect environmentally critical areas and natural resources.

3. Approval of the request will not unduly burden existing transportation or planned infrastructure facilities and the site will be served by streets with the capacity to carry traffic generated by the development.

4. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

5. The proposed use or mix of uses is appropriate at the subject location.

6. The recommended conditions to the concept plan and other applicable regulations provide sufficient safeguards to the public interest.

7. The recommended conditions are reasonably related to the impacts on the public's interest created by or expected from the proposed development.

The foregoing resolution was adopted by the Lee County Board of County Commissioners upon a motion by Commissioner Ray Judah, and seconded by Commissioner John E. Albion and, upon being put to a vote, the result was as follows:

John E. Manning	AYE
Douglas R. St. Cerny	ABSENT
Ray Judah	AYE
Andrew W. Coy	AYE
John E. Albion	AYE

DULY PASSED AND ADOPTED this 4th day of November, A.D., 1996.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Chairman

Approved as to form by:

_____
County Attorney's Office

FILED

NOV 8 1996

CLERK CIRCUIT COURT
BY _____ D.C.

APPROVED

Amendment to
Master Concept Plan
Subject to conditions in Resolution Z-96-055
Zoning Case # 95-01-050.002 02-01
Date 11-4-96

THIRD ~~SECOND~~ DEVELOPMENT ORDER
AMENDMENT
FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE ~~#95-01-050.04Z-04.01~~ 95-01-050.04Z.05.01

WHEREAS, on ~~June 6, 1995~~ January 5, 1996, ~~Pelican Landing Communities, Inc.~~ WCI Communities, L.P., the owner of the Pelican Landing Development of Regional Impact (DRI) requested an amendment to the original Development Order adopted August 29, 1994, as amended; and

WHEREAS, Section III. Condition 16 of the Development Order requires the Developer to incorporate Spring Creek West DRI into the Pelican Landing DRI by adding the land describes as Spring Creek West in Section I.B. and adding a new Findings of Fact/Conclusion of Law Section I.J.; and

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995; 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) and the conditions proposed for the third amendment to the Pelican Landing DRI DO; and

WHEREAS, the amendments proposed to the development order are ~~in the purview of~~ not a substantial deviation, as that term is defined and identified in subsection 380.06(19)(e)2, Florida Statutes, ~~thereby eliminating the~~ and as such there is no need for further DRI review. The amendments would change the mix of uses while maintaining the same level of external traffic impacts. This development order amendment would approve a reduction in the amount of retail square footage, increase the total number of residential units and increase the amount of office square footage; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order described in this document are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local Land Development regulations; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order will not unreasonably interfere with the achievement of the objectives of the adopted State Land Development Plan applicable to the area; and

WHEREAS, the proposed changes are consistent with the State Comprehensive Plan.

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and, after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on 2,100± acres located approximately three miles north of the Lee/Collier County Line. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construction 4,400 ~~4,050~~ residential units, of which 665 are single-family and 3,735 ~~3,385~~ multi-family, 540,000 ~~600,000~~ square feet of gross floor area of retail commercial, and 245,000 ~~210,000~~ square feet of gross floor area of office commercial. The retail uses will provide up to 2,699 ~~2,400~~ parking spaces and the office uses will provide up to 820 ~~700~~ parking spaces. The project will also include 450 hotel rooms, 50,000 square foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, and a beach park for the benefit of the owners in Pelican Landing. There are 87 acres of upland habitat preserve, 507 acres of salt and freshwater wetlands, 208 acres of water management lakes, 140 acres of public and private rights-of-way, 6 acres of utilities and a .11 acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout is the year 2002.

B. LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;

THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;

THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;

THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a POINT OF CURVATURE;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;

THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:

From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;

THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

PARCEL 3
A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:

Lots 8B, 9B, 10B, I1B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-2/3) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;

THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.
Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO

BEACH PARCEL
A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,

N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

ALSO

Spring Creek West DRI Parcel
All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:

ALSO INCLUDED THERETO:

All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;

ALSO INCLUDED THERETO:

All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS THE EAST 600 FEET THEREOF, Section 21, Township 47 South, Range 25 East, Lee County, Florida.

ALSO INCLUDED THERETO:

All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;
Subject to easements and restrictions of record.
Containing 273.1 acres more or less.

AND

The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.
Parcel contains 9.7 acres more or less.

TOGETHER WITH the right for ingress and egress over the following described parcel:

A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).
Subject to any easements, restrictions, reservations and rights-of-way to record.

C. The subject parcel is currently zoned AG-2, RS-1, RM-6, ~~TFC-2~~, PUD, RPD, CPD, and ~~IM~~ RM-2; the property is partially developed.

D. This Application for Development Approval is consistent with the requirements of Section 380.06, Florida Statutes..

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Section 380.06, Florida Statutes.

F. The proposed development order amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed ~~with~~ pursuant to the conditions set forth herein.

G. The proposed development order amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body on ~~January 20, 1994~~ June 20, 1996, and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida

Statutes~~; the~~. The development, as proposed in the Application for Development Approval (ADA) and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06 (15) (d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI ~~are~~ were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in Attachment D which is the Eighth ~~conditions of that~~ Development Order Amendment. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that one annual monitoring report that includes both Pelican Landing and Spring Creek West DRI's must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the development order for the Pelican Landing DRI adopted on August 29, 1994, and amended on March 22, 1995, and August 16, 1995, are further amended as follows, with new language underlined and deletions struck through. All other portions of the original development order will remain in full force and effect.

~~NOW THEREFORE, be it resolved by the Board of County Commissioners of Lee County, Florida, in a public meeting which was duly advertised, constituted and assembled the 16th day of August, 1995, that the Development of Regional Impact Application for Development Approval submitted by Westinghouse Bayside Communities, Inc., now known as Pelican Landing Communities, Inc., hereinafter referred to as "Developer" or "Applicant", is hereby ordered Approved subject to the conditions, restrictions, and limitations which follow.~~ For the purposes of this Development Order, the term "developer" or "Applicant" shall

include his/her/its successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer shall immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation ion and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI DO, which ends on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

~~2. Prior to the commencement of any development in Planning Horizon II, the developer will conduct a reanalysis of adequate housing demand, supply and need, consistent with the requirements of Rule 9J-2.048, F.A.C. The findings of the reanalysis is subject to DCA approval. If the reanalysis indicates that the development proposed for Planning Horizon II, considered cumulatively with Planning Horizon I, will create a regionally significant housing need (i.e. 100 or more very low income dwelling units), then the Developer will prepare and implement a mitigation plan consistent with Rule 9J-2048, F.A.C. The mitigation plan must be approved by DCA. This commitment does not preclude the Developer from adjusting the timing and amount of commercial development. In addition, it does not preclude the developer from developing only as much commercial for which there is adequate housing, and then conducting subsequent reanalysis.~~

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time homebuyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying homebuyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. Within six months, after the effective date of this DRI Development Order, the developer shall provide and connect a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure which advises all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the

marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for the Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan shall address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan shall be developed in coordination with the Lee County Emergency Management officials and must be found sufficient by those officials within six months after the effective date of the DRI DO.

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost

Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000 foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator shall host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator shall provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise.

1. There were three bald eagle's nests of concern prior to development order adoption. One nest is on the Pelican Landing property. The other nests are within 1500 to 1600 feet of Pelican Landing. The buffers that will affect Pelican Landing property

will be established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to development within 2500 feet of any eagle nest, the Developer shall prepare an on-site eagle management plan addressing the Pelican Landing DRI property only which shall be reviewed by DCA, SWFRPC, FGFWFC Lee County, and USFWS. Said groups shall have a fifteen working day review period and must provide all comments to Lee County and the Developer in writing. The agencies must provide specific written objections or concerns if any, regarding the management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to the lawful and timely objections. The agencies will review and respond to the management plan resubmittal, and any successive resubmittals, within fifteen working days of submittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or which outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. The management plan will be deemed approved by the County and DCA if the respective agency fails to provide a written response within fifteen working days. The approval of the management plan will not be unreasonably withheld. If a proposed management plan includes development within 750 feet of an eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

The 2,500 foot limitation is intended to be a temporary restriction to insure the submission and approval for a management plan on a timely basis. The final primary and secondary buffer zones may be less than 2,500 feet. An eagle management plan will be included as part of an upland habitat protection area management plan.

2. A local development order for the Hickory Island Beach Park has been issued which permits construction of beach park infrastructure. This local development order included a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP requires the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permits a refinement of the conservation easement boundaries after completion of a one year utilization study, the final conservation easement shall be consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI D.O., Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI DO.

The Developer must submit a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI DO, which was November 14, 1994. Lee County, FGFWFC, and DCA will review the management plan within fifteen working days of submittal. The DCA, and Lee County must provide a written response to the proposed final management plan which reflects that there is no objection or outlines the specific objections and concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. The FGFWFC must provide all lawful objections within the same fifteen working day time frame.

If there are valid legal objections to the management plan, the Developer will revise and resubmit the plan to DCA, FGFWFC, and Lee County. DCA, Lee County, and FGFWFC will review the resubmittal, and any successive resubmittals, within fifteen working days. The agencies will provide a written response which reflects either the approval of the management plan or which outlines the specific objections and concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold approval of the management plan. If the agencies do not provide a written response within the prescribed time frames, the management plan will be deemed approved. The Final Management Plan Approval from Lee County must be obtained prior to the issuance of the Certificate of Compliance for local development order #90-10-003.00D.

3. The projected gopher tortoise burrow count is 439, based on an estimate of FGFWFC habitat guidelines, 75 acres to gopher tortoise habitat must be protected.

The Developer will set aside a 78± acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat. This area will be known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993. The Developer shall submit a copy for the management plan to the DCA, SWFRPC, and Lee County for review prior to the commencement of development in any area containing gopher tortoise habitat, beyond that approved in the Preliminary Development Agreement. The agencies shall have a fifteen working day review period. The agencies shall provide all lawful objections and concerns regarding the management plan to Lee County and the Developer in writing. The Developer will submit a revised management plan to DCA and Lee County that responds to the lawful objections. DCA and Lee County will review the

management plan resubmittal, and any successive resubmittals, within fifteen working days of submittal. The agencies will provide a written response which approves the management plan or which outlines specific objections or concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold the approval of the management plan. Should DCA and Lee County not provide a written response within the prescribed time frames, the management plan will be deemed approved by the agency that failed to provide timely written comments. The Developer has submitted for an Incidental Take Permit for the gopher tortoises located outside of the Eco-Park in the undeveloped portion of Pelican Landing. The Developer shall obtain an Incidental Take Permit prior to proceeding with development within gopher tortoise habitat areas.

The gopher tortoises addressed by the Incidental Take Permit shall be relocated to the Eco-park, or other appropriate open space areas within Pelican landing. The Eco-Park mitigates for regional impacts to the gopher tortoise population and xeric scrub within the Pelican Landing DRI.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines shall be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek shall be prohibited in wetland areas #14 and #21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek).

The Developer will grant a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to an entity approved by DCA. The Developer must submit a draft of the proposed conservation easement to DCA for review and comment. DCA must provide comments on the draft easement within 15 days so as not to unduly delay development. Once approved by DCA, the Developer will record the conservation easement in the Lee County Public Records prior to the issuance of a local Development Order or "Early Work" approval for any area containing gopher tortoise habitat other than areas approved in the PDA. The conservation easement may be drafted so as to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/ jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage will be permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes which prohibit the destruction of trees.

5. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced in the above, the approved management practices shall then be considered a part of this development order for reinforcement purposes, and shall be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling onto more than 8 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasives, the restoration of historic hydroperiods, and a total of not more than ten acres of littoral zone plantings.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and/or hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator shall be responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, shall notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, shall contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials which will be located on the premises.

10. If required by federal, state and/or local regulations:

a. The developer/property owner shall prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b The developer/property owner shall establish an emergency notification system to be used in the event of a hazardous material release.

G. Stormwater Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or stormwater retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site stormwater wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD shall establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Attachment B, "Pelican Landing DRI Development Parameters". The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2002). Each annual monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code AC-13-16, dated August 8, 1991, see Attachment C) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes
Buildout (2002)		
Corkscrew Road		

- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
-West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Northbound dual left turn lanes
	-	Separate WB thru and right turn lanes
	-	Signal retiming

US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.I.b. above. Road Impact Fees are estimated to be $8,783,000 for the land uses identified in Attachment B. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.I.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.I.b, those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance

of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until buildout of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and tuning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through buildout.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultralow volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities shall be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through i. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay which may result from the development of a golf course and water management areas within five hundred feet of the mangrove fringe of Estero Bay.

3. The management practices which the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications which are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of

pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the proposed golf course adjacent to the mangrove fringe of Estero Bay. The plan will be prepared prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The management plan will include a groundwater and surface water monitoring plan. The plan will provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe. The plan will identify the locations for the groundwater monitoring and testing on a map(s). The plan will set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written surface and groundwater quality management plan to Lee County and DCA. The plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100' undisturbed naturally vegetated corridor, except for water management facilities permitted by the South Florida Water Management District and except for the removal of exotic plants as required by Lee County. The 100' buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, F.S., the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI DO do not preempt the authority of the South Florida Water Management District and the Department of Environmental Protection. Section 373.016, F.S. provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI DO are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given pre-emptive authority, the requirements of the SFWMD and the DEP will control.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed

by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact ~~Application for Development Approval filed for the Pelican Landing DRI.~~ Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents which are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, last revised ~~September 16, 1994~~ April 2, 1996 and stamped received ~~March 3, 1995~~ April 15, 1996, is attached hereto as Attachment A and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order which clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality which may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans which create a reasonable likelihood of adverse regional impacts or other regional impacts which were not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of 2002, and a termination date of 2005. This term is based on a ten year buildout and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as

Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005 as long as the Lee Plan amendment proposed in association with this DRI to upwardly adjust the 2010 Overlay allocations for Subdistricts 801 and 806 is adopted and effective. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

If the companion plan amendment is adopted, Lee County will reserve to this DRI, the appropriate uses from the allocations established for subdistricts (subdistricts 806/801) of the Lee Plan 2010 Overlay until 2005. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until buildout. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. The Developer applied for an amendment to the DRI DO within six months of the effective date of this Development Order~~, the Developer will apply for an~~. The amendment to this Development Order ~~which incorporates~~ incorporated the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. The amendment ~~will~~ contained a description of that portion of the Spring Creek DRI (and the conditions of the Spring Creek Development Order which are applicable to the Spring Creek West property). ~~The amendment will not be deemed a substantial deviation under Chapter~~

~~380, Florida Statutes.~~ The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation which would require further analysis of Spring Creek West. ~~This~~ The amendment ~~is to be~~ was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of ~~this~~ the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes.

THE MOTION TO ADOPT this Amendment was offered by Commissioner Ray Judah and seconded by Commissioner John E. Albion and upon poll of the members present, the vote was as follows:

John E. Manning	AYE
Douglas R. St. Cerny	ABSENT
Ray Judah	AYE
Andrew W. Coy	AYE
John E. Albion	AYE

DULY PASSED AND ADOPTED this 4th day of November, 1996.

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY:_____
(Chairman)

ATTEST:

CHARLIE GREEN, Clerk

By: Lisa J. Pierce
Deputy Clerk

APPROVED AS TO FORM

By: Donna Marie Collins
County Attorney's Office

State of Florida
County of Lee

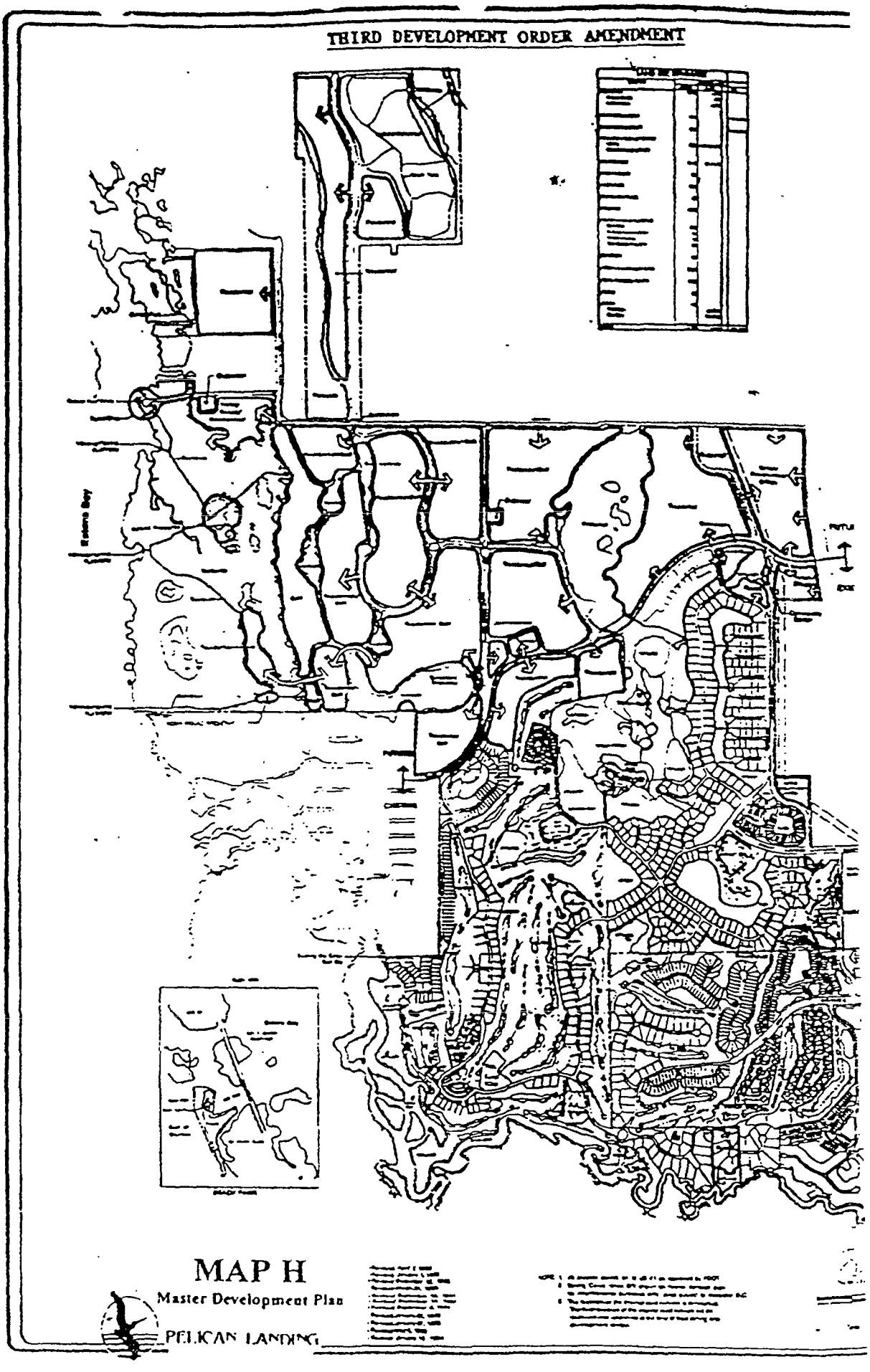
I Charlie Green, Clerk of the Circuit Court for Lee County, Florida, do hereby certify this document to be a true and correct copy of the original document filed in the Minutes Department.

Given under my hand and official seal at Fort Myers, Florida, this 8th day of November, A.D. 1996

CHARLIE GREEN, CLERK

By Lisa J. Pierce
Deputy Clerk

THIRD DEVELOPMENT ORDER AMENDMENT



ATTACHMENT A

ATTACHMENT "B"
THIRD AMENDMENT
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS

Land Use	Units[1]	Existing (1992)	Planning Horizon I (1997)		Buildout Total (2002)
Residential	DU	969	2,433	4,400	~~4,050~~
Single Family	DU	373	625		665
Multi Family	DU	596	1,808	3,735	~~3,385~~
Retail[2]	GFA	11,000	291,000	540,000	~~600,000~~
Office[3]	GFA	40,000	150,000	245,000	~~210,000~~
Hotel	Rooms	0	450		450
Recreation Uses					
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	29	38		38
Range Club Golf Course	Holes	0	9		9
Tennis Center	Courts	0	6		12
Coconut Marina	Boat Slips				
	Wet	24	48		48
	Dry	0	150		150
Redfish Point	GFA	5,000	5,000		5,000
	Boat Slips				
	Wet	15	15		15
Other[4]	Boat Slips				
	Wet	2	2		2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

RESOLUTION NUMBER Z-97-073

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, WCI Communities, L.P. in reference to Pelican Landing, filed an application for:

a) An amendment to the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, as amended, to acknowledge the conversion of commercial retail floor area to hotel units and a reduction in the total number of parking spaces; and

b) A finding of no substantial deviation under the provisions of Section 380.06(19), Florida Statutes; and

c) An amendment to the Pelican Landing RPD/CPD approval, and the corresponding Master Concept Plan, to add hotel/motel as a permitted use in RPD/CPD Area D; and

WHEREAS, the subject property is located at 28300 S Tamiami Trail, Bonita Springs, and is described more particularly as:

LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:
Beginning at a concrete monument marking the Northeast corner of said Section 20, run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet;
N34°24'12"W for 230.22 feet;
N30°59'12"W for 174.93 feet;
N24°25'16"E for 120.83 feet;
S65°47'43"E for 219.32 feet;

N18°24'43"E for 158.11 feet;
N75°11'47"W for 351.71 feet;
N65°09'33"W for 451.88 feet;
N84°18'44"W for 351.75 feet;
N66°54'31"W for 445.79 feet;
S63°24'43"W for 134.16 feet;
S03°23'22"E for 170.29 feet;
S50°30'17"W for 220.23 feet;
N84°49'43"W for 331.36 feet;
S62°13'07"W for 214.71 feet;
S22°08'36"W for 291.55 feet;
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet;
N29°08'22"W for 590.59 feet;
N38°31'58"W for 278.03 feet;
N65°16'43"W for 254.95 feet;
N37°18'28"W for 286.01 feet;
N32°51'05"E for 252.39 feet;
N20°11'00"E for 236.69 feet;
N27°23'47"W for 369.25 feet;
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;

THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;

THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING;
ALSO PARCEL 2:
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;

THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS AND EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida;

ALSO PARCEL 3:

A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County;

ALSO the East Three-quarters (E¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05;

ALSO the East Two-thirds (E⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05;

ALSO the East Two-thirds (E⅔) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:

From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING;
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING;

ALSO PARCEL 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING;
Containing 2,409 acres, more or less.
Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:
From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet;
N23°09'50"W for 100.14 feet;
N14°51'19"W for 73.01 feet;
N27°40'10"W for 88.01 feet;
N29°33'57"W for 46.01 feet;
N22°14'53"W for 47.27 feet;
N20°39'23"W for 46.98 feet;
N11°15'38"W for 29.80 feet;
N26°10'46"W for 46.87 feet;
N09°09'45"W for 48.26 feet;
N17°35'56"W for 46.04 feet;
N12°49'07"W for 50.04 feet;
N29°20'48"W for 69.12 feet;
N20°48'58"W for 63.82 feet;

THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING;
AND
From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone;
ALSO Spring Creek West DRI Parcel
All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;
ALSO included thereto: All of the Northeast Quarter (NE¼) lying West of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;
ALSO included thereto: All of the East Half (E½) of the Southwest Quarter (SW¼) lying North of Spring Creek, LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida;
ALSO included thereto: All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;

Containing 273.1 acres, more or less;
AND: The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;
Parcel contains 9.7 acres, more or less.

RPD/CPD AREA "D"

A tract or parcel of land lying in the South Half (S½) of Section 09, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 09 run N00°41'48"W for 5.00 feet to the South right-of-way line of Coconut Road (50 foot right-of-way);
THENCE run S89°35'50"E for 1,863.14 feet to the centerline of a certain Florida Power and Light transmission line easement (100 feet wide) as described in Deed Book 229 at Page 48, Public Records, Lee County, Florida, and the POINT OF BEGINNING.
From said POINT OF BEGINNING continue S89°35'50"E along said South right-of-way line for 1,301.22 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run along the arc of a curve to the left of radius 5,797.58 feet (delta 10°17'00") (chord bearing S04°57'34"E) (chord 1,039.14 feet) for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 230.98 feet;
THENCE run S79°53'56"W for 70.57 feet to a Point of Curvature;
THENCE run along the arc of a curve to the right of radius 650.00 feet (delta 49°49'26") (chord bearing N75°11'21"W) (chord 547.59 feet) for 565.23 feet to a Point of Reverse Curvature;
THENCE along the arc of a curve to the left of radius 840.00 feet (delta 22°49'21") (chord bearing N61°41'18"W) (chord 332.39 feet) for 334.60 feet to a point on a non-tangent curve;
THENCE along the arc of a curve to the left of radius 180.00 feet (delta 27°59'03") (chord bearing N06°54'21"W) (chord 87.04 feet) for 87.91 feet to a Point of Tangency on the Western line of said Florida Power and Light easement;
THENCE run N20°53'52"W along said Western easement line for 721.03 feet to a Point of Curvature;
THENCE along the arc of a curve to the left of radius 330.00 feet (delta 68°41'58") (chord bearing N55°14'51"W) (chord 372.40 feet) for 395.68 feet to a Point of Cusp;
THENCE run S89°35'50"E for 56.51 feet to a Point of Curvature;
THENCE run along the arc of a curve to the right of radius 530.00 feet (delta 27°42'00") (chord bearing S75°44'50"E) (chord 253.74 feet) for 256.23 feet to an intersection with said centerline of said easement;

THENCE run N20°53'52"W along said centerline for 748.16 feet to an intersection with the South line of said Coconut Road and the POINT OF BEGINNING.
Containing 42.44 acres, more or less; and

WHEREAS, WCI Communities, L.P., the owner of the subject parcel, authorized Pavese, Garner, Haverfield, Dalton, Harrison and Jensen to act as agent to pursue this zoning application; and

WHEREAS, a public hearing was advertised and held on October 22, 1997 before the Lee County Hearing Examiner in Case Nos. 95-01-050.03Z 01.01 and 95-01-050.04Z 06.01, who gave full consideration to the evidence available; and

WHEREAS, a public hearing was advertised and held on November 17, 1997 before the Lee County Board of County Commissioners who gave full and complete consideration to the recommendations of staff, the Hearing Examiner, the documents on file with the county, and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE LEE COUNTY BOARD OF COUNTY COMMISSIONERS, that the Board:

a) **APPROVES** an amendment to the Pelican Landing DRI Development Order #1-9293-121;
b) makes a finding of NO SUBSTANTIAL DEVIATION; and
c) **APPROVES with conditions** the amendment to RPD/CPD Area D of the Pelican Landing RPD/CPD, as follows:

SECTION A. CONDITIONS:

The amendment to RPD/CPD Area D of the Pelican Landing RPD/CPD and Master Concept Plan are subject to the following conditions:

1. The development of this project must be in compliance with the one-page Master Concept Plan entitled "Pelican Landing RPD/CPD," as prepared by Wilson, Miller, Barton & Peek Inc., dated March 1994, last revised May 27, 1997, and stamped received at the permit counter on October 7, 1997; the Pelican Landing DRI Development Order #1-9293-121, as amended; and DRI Map H, last revised May 27, 1997, and stamped received at the permit counter on June 13, 1997.

2. All deviations and conditions approved by Resolutions Z-94-094, Z-95-061, and Z-96-055, except as specifically modified herein and by the amended Master Concept Plan, will remain in full force and effect.

3. The addition of a hotel as a permitted use is limited to RPD/CPD Area D only.

SECTION B. Master Concept Plan:

A one page reduced copy of the Master Concept Plan is attached and incorporated into this resolution by reference, as modified herein.

SECTION C. FINDINGS AND CONCLUSIONS:

The following findings and conclusions were made in conjunction with the approval of the planned development amendment:

1. The RPD/CPD Area D is a portion of the mixed use, 2100-acre Pelican Landing Development of Regional Impact, which was originally approved in 1994.

2. The Applicant has proven entitlement to the additional hotel/motel use in RPD/CPD Area D by demonstrating compliance with the Lee Plan, the Land Development Code, and Section 380.06, Florida Statutes, and other applicable codes or regulations.

3. The proposed hotel/motel use, as conditioned, will meet or exceed all performance and locational standards set forth for the potential use in the Land Development Code.

4. The proposed hotel/motel use, as conditioned, is consistent with the densities, intensities and general uses set forth in the Lee Plan.

5. The proposed hotel/motel use, as conditioned, is compatible with existing or planned uses in the surrounding area.

6. Approval of the proposed hotel/motel, as conditioned, and the decrease of 78,950 square feet of retail commercial uses, will result in the addition of only 20 peak hour trips to the number of trips anticipated and approved for the overall DRI, which will not place an undue burden upon existing transportation or planned infrastructure facilities.

7. The development will be served by streets with the capacity to carry the traffic it generates, and will not result in an unacceptable level of service on those streets.

8. The Applicant will pay approximately $106,000 to $166,000 in road additional impact fees for the additional 20 peak hour trips resulting from the increase in hotel rooms. This amount will be added to the DRI's estimated road impact mitigation amount of $8,783,000, as calculated in the DRI Development Order.

9. The proposed hotel/motel use, as conditioned, will not adversely affect environmentally critical areas or natural resources.

10. The additional hotel/motel rooms, as conditioned, will not generate any additional mitigation for hurricane evacuation or shelter demand impacts, as the provisions of the

Hurricane Preparedness section of the DRI Development Order will adequately address any of those potential impacts.

11. The proposed use, as conditioned, is appropriate at the subject location.

12. The recommended conditions are reasonably related to the impacts on the public interest created by or expected from the proposed development, and will provide sufficient safeguard to the public interest.

13. That the proposed changes, as conditioned, will comply with the intent and provisions of the Concurrency Management Plan, as urban services, as defined in the Lee Plan, will be available and adequate to serve the proposed land use, or the development permits will not be issued.

14. Amendment of the DRI Development Order, specifically Map H and the Land Use Table/Summary, are necessitated by the provisions of Section 380.06, Florida Statutes, to reflect the changes in the development plan and any potential impacts resulting therefrom.

15. The proposed changes, as conditioned, do not constitute a Substantial Deviation under the provisions of Section 380.06(19), Florida Statutes, and do not warrant additional DRI review.

The foregoing resolution was adopted by the Lee County Board of County Commissioners upon a motion by Commissioner John E. Manning, and seconded by Commissioner Ray Judah and, upon being put to a vote, the result was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 17th day of November, 1997.

ATTEST:
CHARLIE GREEN, CLERK

BY: Lisa L. Pierce
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: John E. Albion
Vice-Chairman

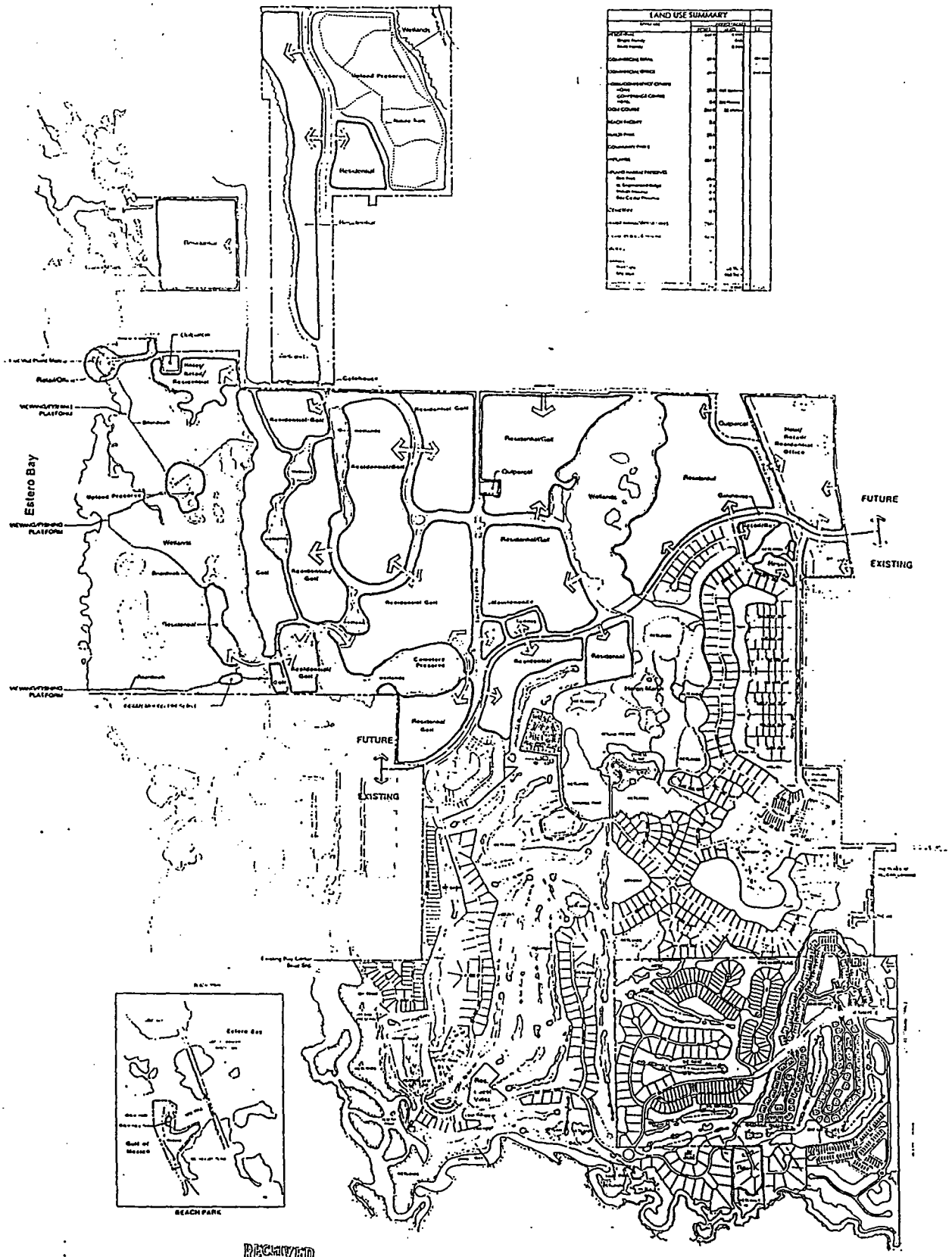
FILED

Approved as to form by:

NOV 21 1997

County Attorney's Office

CLERK, CIRCUIT COURT
BY Lisa L. Pierce D.C.



RECEIVED
JUN 13 1997
PERMIT COUNTER

PROJECT # 95-1-LESTERO-DRI
PROJECT TYPE II

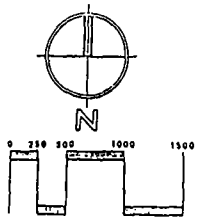
MAP H

Master Development Plan

PELICAN LANDING

- Revised May 27, 1997
- Revised April 2, 1996
- Revised January 5, 1995
- Revised December 12, 1995
- Revised March 24, 1995
- Revised September 19, 1994
- Revised September 19, 1994
- Revised September 6, 1994
- Revised January 20, 1993
- Revised January 21, 1993
- Revised May 5, 1993
- Revised January 10, 1994

NOTE: 1. All access points on to US 41 as approved by FDOT.
2. Spring Creek West DRI shown on master concept plan for informational purposes only. Area subject to separate D.O.
3. The location of the proposed road network is conceptual. The final location of the proposed road network will be reviewed and approved at the time of local zoning and development review.



OPEN SPACE CALCULATIONS

INDIGENOUS OPEN SPACE IN PRESERVE:

Upland Preserve	96.43 acres	(Eco-Park, Cemetery, and Northwest Western Upland)
Wetland Preserve	242.89 acres	(Freshwater and Saltwater)

GOLF COURSE OPEN SPACE:

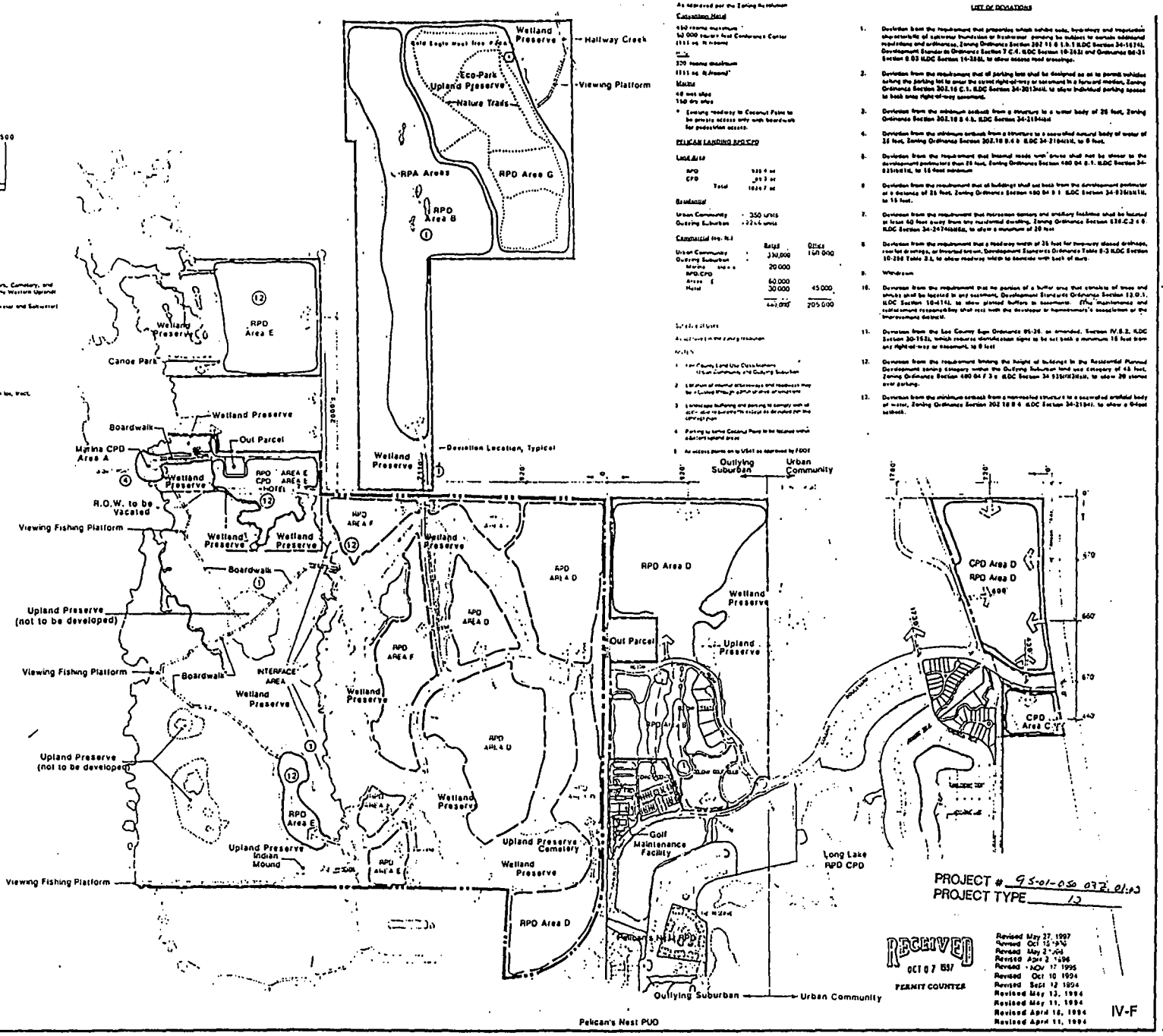
Golf Course	100.00 acres minimum

OPEN SPACE TO BE PROVIDED BY PERCENTAGE:

(Except Marina Parcel)	20% minimum on each lot, tract, or subparcel
Marina Parcel	10% of tract.

RESIDENTIAL PRIVATE OPEN SPACE TO BE PROVIDED BY PERCENTAGE:

All Single Family Lots (Less than 6500 sq. ft.)	10% minimum
Multi-family Parcels*	15% minimum



As approved per the Zoning Resolution

Commercial Hotel

450 rooms maximum
50,000 square feet Conference Center
(111 sq. ft. minimum)

Marina

320 rooms maximum
(111 sq. ft./room)*

Marina

48 wet slips
160 dry slips

* Existing roadway to Coconut Point to be private access only with boardwalk for pedestrian access.

PELICAN LANDING RPD/CPD

Land Area

RPD	933.4 ac
CPD	93.3 ac
Total	1026.7 ac

Residential

Urban Community	350 units
Outlying Suburban	221.6 units

Commercial (sq. ft.)

	Retail	Office
Urban Community	330,000	160,000
Outlying Suburban		
Marina	20,000	
RPD/CPD Area E	60,000	
Hotel	30,000	45,000
	440,000	205,000

Schools, Churches

As outlined in the zoning resolution

NOTES:

1. See Zoning Land Use Classifications Urban Community and Outlying Suburban
2. Location of internal driveways and roadways may be altered without an approval of site development plan
3. Landscape buffering and parking to comply with all ECC ordinances unless as detailed for the zoning plan
4. Parking to serve Coconut Point to be located within adjacent upland area
5. All access points on to US41 as approved by FDOT

LIST OF DEVIATIONS

1. Deviation from the requirement that properties which exhibit soils, hydrology and vegetation characteristics of submerged foundation or freshwater ponding be subject to certain additional regulations and ordinances, Zoning Ordinance Section 202.11.6.1.b.1 ILDC Section 34-1574L, Development Standards Ordinance Section 7.C.4. ILDC Section 10-253L and Ordinance 84-31 Section 8.03 ILDC Section 14-258L, to allow excess road crossings.
2. Deviation from the requirement that all parking lots shall be designed so as to permit vehicles exiting the parking lot to enter the correct right-of-way or turnabout in a forward motion, Zoning Ordinance Section 202.16.C.1. ILDC Section 34-2013mM, to allow individual parking spaces to back onto right-of-way concurrent.
3. Deviation from the minimum setback from a structure to a water body of 25 feet, Zoning Ordinance Section 202.18.8.4.b. ILDC Section 34-2194mM
4. Deviation from the minimum setback from a structure to a secondary natural body of water of 25 feet, Zoning Ordinance Section 202.18.8.4.b ILDC 34-2194mM, to 0 feet.
5. Deviation from the requirement that internal roads with curves shall not be closer to the development perimeter than 25 feet, Zoning Ordinance Section 480.04.8.1. ILDC Section 34-935mM, to 15 feet minimum
6. Deviation from the requirement that all buildings shall set back from the development perimeter at a distance of 25 feet, Zoning Ordinance Section 480.04.8.1 ILDC Section 34-935mM, to 15 feet.
7. Deviation from the requirement that recreation century and ancillary facilities shall be located at least 40 feet away from any residential dwelling, Zoning Ordinance Section 530.C.2.4.6 ILDC Section 34-2474mM6b, to allow a minimum of 20 feet
8. Deviation from the requirement that a roadway width of 25 feet for temporary closed drainage, rear lot drainage, or inverted crown, Development Standards Ordinance Table 6-3 ILDC Section 10-296 Table 3.1, to allow roadway width to coincide with back of curb.
9. Withdrawn
10. Deviation from the requirement that no portion of a buffer area that consists of trees and shrubs shall be located in any easement, Development Standards Ordinance Section 13.D.3. ILDC Section 10-414L, to allow planted buffers in easements. The maintenance and replacement responsibility shall rest with the developer or homeowner's association or the improvements district.
11. Deviation from the Lee County Sign Ordinance 86-26, as amended, Section IV.B.2. ILDC Section 30-152L, which requires identification signs to be set back a minimum 15 feet from any right-of-way or easement, to 0 feet
12. Deviation from the requirement limiting the height of buildings in the Residential Planned Development zoning category within the Outlying Suburban land use category of 45 feet, Zoning Ordinance Section 480.04.F.3.c ILDC Section 34-935mM3bbM, to allow 20 stories over parking.
13. Deviation from the minimum setback from a manmadeted structure to a manmadeted artificial body of water, Zoning Ordinance Section 202.18.8.4 ILDC Section 34-2194L, to allow a 0-foot setback.

WILSON MILLER BARTON & PEEK INC.

PELICAN LANDING RPD/CPD

Master Concept Plan

prepared for: Pelican Landing Communities, Inc.

PROJECT # 95-01-050 072.01.03
PROJECT TYPE 13

RECEIVED
OCT 07 1997
PERMIT CENTER

Revised May 27, 1997
Revised Oct 15 1996
Revised May 3 1994
Revised April 2 1996
Revised NOV 17 1995
Revised Oct 10 1994
Revised Sept 12 1994
Revised May 13, 1994
Revised May 11, 1994
Revised April 18, 1994
Revised April 11, 1994

IV-F

~~THIRD~~ FOURTH DEVELOPMENT ORDER
AMENDMENT
FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE ~~#95-01-050.04Z 05.01~~ 95-01-050.04Z 06.01

WHEREAS, on ~~January 5, 1996~~ June 13, 1997, WCI Communities, L.P., the owner of the Pelican Landing Development of Regional Impact (DRI) requested an amendment to the original Development Order adopted August 29, 1994, as amended; and

~~WHEREAS, Section III. Condition 16 of the Development Order requires the Developer to incorporate Spring Creek West DRI into the Pelican Landing DRI by adding the land describes as Spring Creek West in Section I.B. and adding a new Findings of Fact/Conclusion of Law Section I.J.; and~~

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995; 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) November 4, 1996; 4) and the conditions proposed for the ~~third~~ fourth amendment to the Pelican Landing DRI DO; and

WHEREAS, the amendments proposed to the Development Order are not a substantial deviation, as that term is defined and identified in Subsection 380.06(19)(e)2, Florida Statutes, and as such there is no need for further DRI review. The amendments ~~would~~ change the mix of uses while maintaining the same level of external traffic impacts. This Development Order Amendment ~~would~~ approves a reduction in the amount of retail square footage and total parking spaces~~,~~ and increases the total number of ~~residential units~~ hotel/motel units from 450 to 750 ~~and increase the amount of office square footage~~; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order described in this document are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local Land Development regulations; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order will not unreasonably interfere with the achievement of the objectives of the adopted State Land Development Plan applicable to the area; and

WHEREAS, the proposed changes are consistent with the State Comprehensive Plan~~.~~ ; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning

Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and, after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on ~~2,100±~~ 2,373± acres located approximately three miles north of the Lee/Collier County Line. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct~~ion~~ 4,400 residential units, of which 665 are single-family and 3,735 multi-family, ~~540,000~~ 461,050 square feet of gross floor area of retail commercial, and 245,000 square feet of gross floor area of office commercial. The retail uses will provide up to ~~2,699~~ 2,310 parking spaces and the office uses will provide up to 820 parking spaces. The project will also include ~~450~~ 750 hotel/motel rooms, a 50,000 square foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, and a beach park for the benefit of the owners in Pelican Landing. There are 87 acres of upland habitat preserve, 507 acres of salt and freshwater wetlands, 208 acres of water management lakes, 140 acres of public and private rights- of-way, 6 acres of utilities and a .11 acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout is the year 2002.

B. LEGAL DESCRIPTION: In Sections 05, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,

N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast comer of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;

THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797..58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;

THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;

THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

PARCEL 3
A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:
Lots 8B, 9B, 10B, I1B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-2/3) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.
Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO

BEACH PARCEL
A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;

THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

ALSO

Spring Creek West DRI Parcel
All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:

ALSO INCLUDED THERETO:

All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;

ALSO INCLUDED THERETO:

All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida.

ALSO INCLUDED THERETO:

All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;
Subject to easements and restrictions of record.
Containing 273.1 acres more or less.

AND

The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.
Parcel contains 9.7 acres more or less.
TOGETHER WITH the right for ingress and egress over the following described parcel:

A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).
Subject to any easements, restrictions, reservations and rights-of-way to record.

C. The subject parcel is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, and RM-2; the property is partially developed.

D. This Application for Development Approval is consistent with the requirements of Section 380.06, Florida Statutes..

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Section 380.05 and 380.06 (14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The proposed Development Order Amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body ~~on June 20, 1996~~, and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes. The development, as proposed in the Application for Development Approval (ADA) and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06 (15) (d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in ~~Attachment D which is~~ the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that one annual monitoring report that includes both Pelican Landing and Spring Creek West DRI's must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for the Pelican Landing DRI adopted on August 29, 1994, and amended on March 22, 1995, ~~and~~ August 16, 1995 and November 4, 1996, are further amended as follows, with new language underlined and deletions struck through. All other portions of the original Development Order will remain in full force and effect.

For the purposes of this Development Order, the term "developer" or "Applicant" shall include his/her/its successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer shall immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation~~ion~~ and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI DO, which ends on December 31, 1997. Utilizing supply data not adjusted

to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time home buyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying home buyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. Within six months, after the effective date of this DRI Development Order, the developer shall provide and connect a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements

thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure which advises all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for ~~the~~ any Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan shall address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan shall be developed in coordination with the Lee County Emergency Management officials and must be found sufficient by those officials within six months after the effective date of the DRI DO.

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee

Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000 foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator shall host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator shall provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American

oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise.

1. There were three bald eagle's nests of concern prior to development order adoption. One nest is on the Pelican Landing property. The other nests are within 1500 to 1600 feet of Pelican Landing. The buffers that will affect Pelican Landing property will be established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to development within 2500 feet of any eagle nest, the Developer shall prepare an on-site eagle management plan addressing the Pelican Landing DRI property only which shall be reviewed by DCA, SWFRPC, FGFWFC Lee County, and USFWS. Said groups shall have a fifteen working day review period and must provide all comments to Lee County and the Developer in writing. The agencies must provide specific written objections or concerns if any, regarding the management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to the lawful and timely objections. The agencies will review and respond to the management plan resubmittal, and any successive resubmittals, within fifteen working days of submittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or which outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. The management plan will be deemed approved by the County and DCA if the respective agency fails to provide a written response within fifteen working days. The approval of the management plan will not be unreasonably withheld. If a proposed management plan includes development within 750 feet of an eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

The 2,500 foot limitation is intended to be a temporary restriction to insure the submission and approval for a management plan on a timely basis. The final primary and secondary buffer zones may be less than 2,500 feet. An eagle management plan will be included as part of an upland habitat protection area management plan.

2. A local development order for the Hickory Island Beach Park has been issued which permits construction of beach park infrastructure. This local development order included a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP requires the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permits a refinement of the conservation easement boundaries after completion of a one year utilization study, the final conservation

easement shall be consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI D.O., Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI DO.

The Developer must submit a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI DO, which was November 14, 1994. Lee County, FGFWFC, and DCA will review the management plan within fifteen working days of submittal. The DCA, and Lee County must provide a written response to the proposed final management plan which reflects that there is no objection or outlines the specific objections and concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. The FGFWFC must provide all lawful objections within the same fifteen working day time frame.

If there are valid legal objections to the management plan, the Developer will revise and resubmit the plan to DCA, FGFWFC, and Lee County. DCA, Lee County, and FGFWFC will review the resubmittal, and any successive resubmittals, within fifteen working days. The agencies will provide a written response which reflects either the approval of the management plan or which outlines the specific objections and concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold approval of the management plan. If the agencies do not provide a written response within the prescribed time frames, the management plan will be deemed approved. The Final Management Plan Approval from Lee County must be obtained prior to the issuance of the Certificate of Compliance for local development order #90-10-003.00D.

3. The projected gopher tortoise burrow count is 439, based on an estimate of FGFWFC habitat guidelines, 75 acres to gopher tortoise habitat must be protected.

The Developer will set aside a 78± acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat. This area will be known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993. The Developer shall submit a copy for the management plan to the DCA, SWFRPC, and Lee County for review prior to the commencement of development in any area containing gopher tortoise habitat, beyond that approved in the Preliminary Development Agreement.

The agencies shall have a fifteen working day review period. The agencies shall provide all lawful objections and concerns regarding the management plan to Lee County and the Developer in writing. The Developer will submit a revised management plan to DCA and Lee County that responds to the lawful objections. DCA and Lee County will review the management plan resubmittal, and any successive resubmittals, within fifteen working days of submittal. The agencies will provide a written response which approves the management plan or which outlines specific objections or concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold the approval of the management plan. Should DCA and Lee County not provide a written response within the prescribed time frames, the management plan will be deemed approved by the agency that failed to provide timely written comments. The Developer has submitted for an Incidental Take Permit for the gopher tortoises located outside of the Eco-Park in the undeveloped portion of Pelican Landing. The Developer shall obtain an Incidental Take Permit prior to proceeding with development within gopher tortoise habitat areas.

The gopher tortoises addressed by the Incidental Take Permit shall be relocated to the Eco-park, or other appropriate open space areas within Pelican landing. The Eco-Park mitigates for regional impacts to the gopher tortoise population and xeric scrub within the Pelican Landing DRI.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines shall be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek shall be prohibited in wetland areas #14 and #21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek).

The Developer will grant a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to an entity approved by DCA. The Developer must submit a draft of the proposed conservation easement to DCA for review and comment. DCA must provide comments on the draft easement within 15 days so as not to unduly delay development. Once approved by DCA, the Developer will record the conservation easement in the Lee County Public Records prior to the issuance of a local Development Order or "Early Work" approval for any area containing gopher tortoise habitat other than areas approved in the PDA. The conservation easement may be drafted so as to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage will be permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance

with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes which prohibit the destruction of trees.

5. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced in the above, the approved management practices shall then be considered a part of this development order for reinforcement purposes, and shall be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling onto more than 8 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasives, the restoration of historic hydroperiods, and a total of not more than ten acres of littoral zone plantings.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and/or hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting,

emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator shall be responsible for compliance with this requirement and notice of this responsibility/ obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, shall notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, shall contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials which will be located on the premises.

10. If required by federal, state and/or local regulations:

a. The developer/property owner shall prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS

chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner shall establish an emergency notification system to be used in the event of a hazardous material release.

G. Stormwater Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or stormwater retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site stormwater wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD shall establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas

must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Attachment B, "Pelican Landing DRI Development Parameters". The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2002). Each annual monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code AC-13-16, dated August 8, 1991, see Attachment C) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

Buildout (2002)

Corkscrew Road		
- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted.
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Northbound dual left turn lanes
	-	Separate WB thru and right turn lanes
	-	Signal retiming

US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section ~~H.1.b.~~ H.1.b. above. Road Impact Fees are estimated to be ~~$8,783,000~~ $8,900,000 for the land uses identified in Attachment B. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition ~~H.1.b.~~ H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph ~~H.1.b~~ H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive

North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until buildout of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and tuning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through buildout.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local

development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultralow volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities shall be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through i. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay which may result from the development of a golf course and water management areas within five hundred feet of the mangrove fringe of Estero Bay.

3. The management practices which the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications which are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only

at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the proposed golf course adjacent to the mangrove fringe of Estero Bay. The plan will be prepared prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The management plan will include a groundwater and surface water monitoring plan. The plan will provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe. The plan will identify the locations for the groundwater monitoring and testing on a map(s). The plan will set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written surface and groundwater quality management plan to Lee County and DCA. The plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100' undisturbed naturally vegetated corridor, except for water management facilities permitted by the South Florida Water Management District and except for the removal of exotic plants as required by Lee County. The 100' buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, ~~F.S.~~ Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI DO do not preempt the authority of the South Florida Water Management District and the Department of Environmental Protection. Section 373.016, ~~F.S.~~ Florida Statutes provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI DO are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given preemptive authority, the requirements of the SFWMD and the DEP will control.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents which are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, last revised ~~April 2, 1996~~ May 27, 1997 and stamped received ~~April 15, 1996~~ June 13, 1997, is attached hereto as Attachment A and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order which clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality which may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans which create a reasonable likelihood of adverse regional impacts or other regional impacts which were not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of 2002, and a termination date of 2005. This term is based on a ten year buildout and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005 as long as the Lee Plan amendment proposed in association with this DRI to upwardly adjust the 2010 Overlay allocations for Subdistricts 801 and 806 is adopted and effective. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

If the companion plan amendment is adopted, Lee County will reserve to this DRI, the appropriate uses from the allocations established for subdistricts (subdistricts 806/801) of the Lee Plan 2010 Overlay until 2005. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until buildout. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. The Developer applied for an amendment to the DRI DO within six months of the effective date of this Development Order. The amendment to this Development Order incorporated the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. The amendment contained a description of that portion of the Spring Creek DRI (and the conditions of the Spring Creek Development Order which are applicable to the Spring Creek West property). The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation which would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and

Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes.

THE MOTION TO ADOPT this Amendment was offered by Commissioner Judah and seconded by Commissioner Manning and upon poll of the members present, the vote was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 17th day of November, 1997 .

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: John E. Albion
Vice - (Chairman)

ATTEST:

CHARLIE GREEN, Clerk

By: Lisa L. Pierce
Deputy Clerk

APPROVED AS TO FORM

By: Dawn E. Lehman
County Attorney's Office

FILED

NOV 21 1997

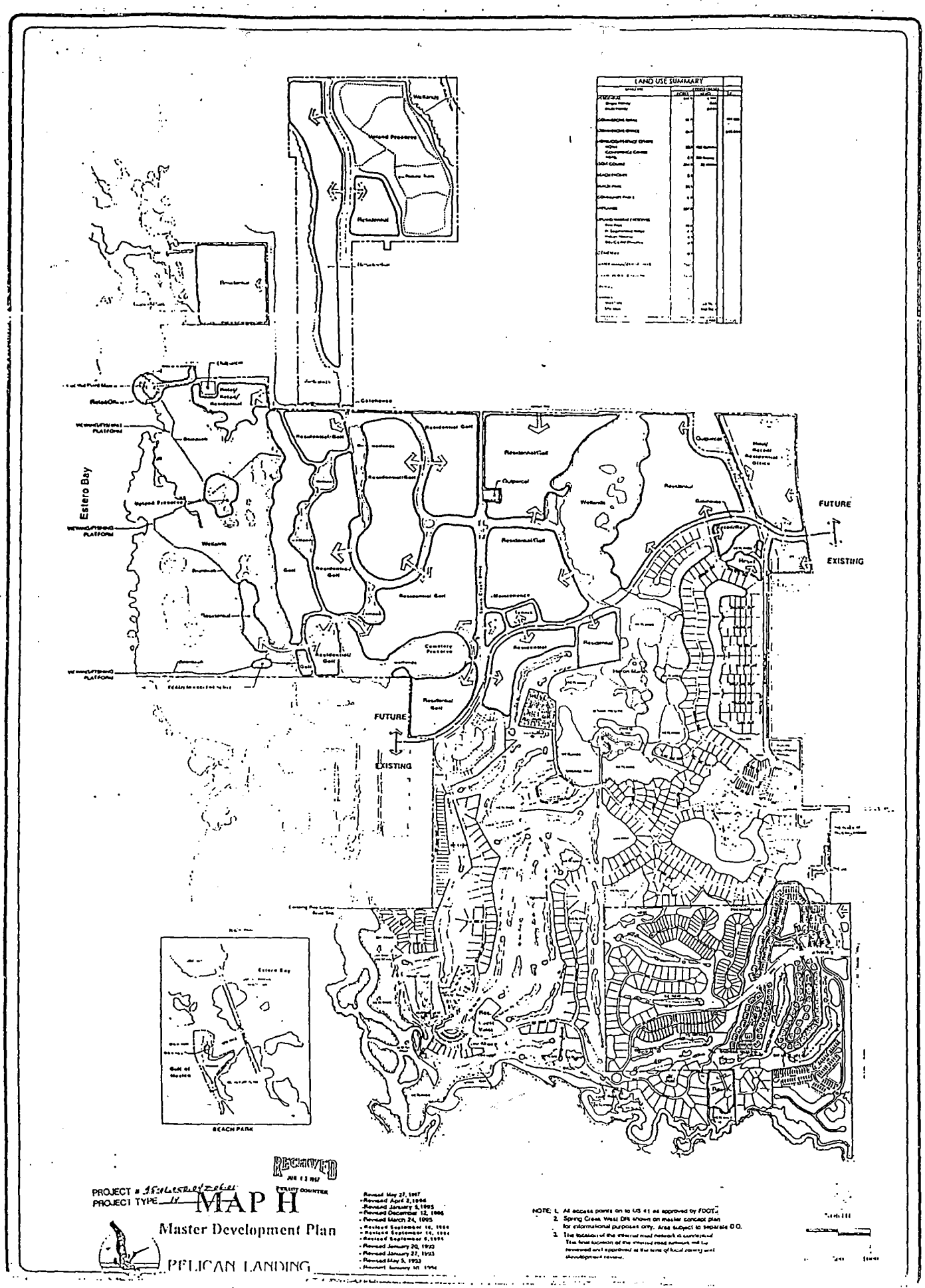
CLERK CIRCUIT COURT
BY Lisa L. Pierce D.C.

State of Florida
County of Lee

I Charlie Green, Clerk of the Circuit Court for Lee County, Florida, do hereby certify this document to be a true and correct copy of the original document filed in the Minutes Department.

Given under my hand and official seal at Fort Myers, Florida, this 24th day of November, A.D. 1997

CHARLIE GREEN, CLERK
By Lisa L. Pierce
Deputy Clerk



ATTACHMENT "A"

ATTACHMENT "B"
~~THIRD~~ FOURTH AMENDMENT
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS

Land Use	Units[1]	Existing (1992)	Planning Horizon I (1997)	Buildout Total (2002)
Residential	DU	969	2,433	4,400
Single Family	DU	373	625	665
Multi Family	DU	596	1,808	3,735
Retail[2]	GFA	11,000	291,000	461,050 ~~540,000~~
Office[3]	GFA	40,000	150,000	245,000
Hotel/Motel	Rooms	0	750 ~~450~~	750 ~~450~~
Recreation Uses				
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	29	38	38
Range Club Golf Course	Holes	0	9	9
Tennis Center	Courts	0	6	12
Coconut Marina	Boat Slips Wet	24	48	48
	Dry	0	150	150
Redfish Point	GFA	5,000	5,000	5,000
	Boat Slips Wet	15	15	15
Other[4]	Boat Slips Wet	2	2	2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

RESOLUTION NUMBER Z-98-066

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, WCI Communities, L.P., filed an application, in reference to Pelican Landing and Kersey-Smoot RPD, for an Amendment to a Development of Regional Impact (DRI) and a Rezoning to Residential Planned Development (RPD); in accordance with the Lee County Land Development Code (LDC); and

WHEREAS, a public hearing was advertised and held on August 19, 1998 before the Lee County Zoning Hearing Examiner, who gave full consideration to the evidence in the record for Case # 95-01-050.04Z 07.01 and 98-03-262.02Z 01.01; and

WHEREAS, a second public hearing was advertised and held on September 21, 1998 before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents in the record, and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A - REQUESTS

The applicant made the following requests with respect to the property described in Exhibit A:

1. Amend the Pelican Landing Development of Regional Impact (DRI) Development Order (State DRI #1-9293-121), including Map H (the Master Concept Plan (MCP)) to add 204± acres contiguous to the Pelican Landing DRI, without increasing the overall DRI dwelling units beyond the approved 4,400 units or the dry boat slips beyond 150 slips; and to adjust the land use tabulations and Map H, attached to the DRI Development order, to reflect the proposed changes.

2. Find No Substantial Deviation under the provisions of Section 380.06(19), Florida Statutes; and

3. Rezone a 204 acre parcel located in the Outlying Suburban and Wetlands Land Use Category from Agricultural (AG-2) and Two Family Conservation (TFC-2) to Residential Planned Development (RPD) to permit a maximum of 362 dwelling units, not to exceed 45 feet in height with a maximum of three habitable floors, 150 dry boat storage slips not to exceed 45 feet in height, and a golf course. (The dwelling units and dry boat storage slips are already a part of the approved Pelican Landing DRI.)

The Lee County Board of County Commissioners APPROVES the Applicant's requests, in accordance with the conditions and deviations specified in Sections B and C.

SECTION B - CONDITIONS:

1. Deleted by Hearing Examiner.

2. Deleted by Hearing Examiner.

3. The following conditions apply to Request 3., the Kersey-Smoot RPD rezoning:

a. The development of this project must comply with the one-page MCP entitled "Kersey-Smoot RPD," as prepared by WCI Communities, dated May 25, 1998, last revised July 29, 1998 and stamped received at the Permit Counter on July 31, 1998, the Pelican Landing DRI D.O. #1-9293-121, as amended, and DRI Map H last revised March 1, 1998 and stamped received at the Permit Counter on June 17, 1998.

b. The approved Schedule of Uses for the Kersey-Smoot RPD is limited to the following:

Residential Dwelling Units, (limited to 362 units) including
- Single-family
- Zero lot line units
- Multiple-family buildings
- Two-family attached
- Townhouses
- Duplexes
- Timeshare Units

Residential Accessory Uses, including but not limited to:
- Private garages, carports, and parking areas
- Private swimming pools, spas and enclosures
- Private tennis courts

7-hole Golf Course, Golf Course Accessory Uses, including but not limited to:
- Maintenance facility
- Snack bar with alcoholic beverage consumption
- Restrooms and other uses which are normal and accessory to the golf course

Accessory Uses, Buildings and Structures
Administrative Offices
Club, Private, with Consumption on Premises
Club, Country
Dry storage - maximum of 150 units, as approved in the Pelican Landing RPD/CPD
Entrance Gates and Gatehouses
Essential Services
Essential Service Facilities, Group I
Excavation, water retention
Food and Beverage services, limited
Home Occupation
Model Homes, Model Units, and Model Display Center
Parking lot, accessory and temporary
Private Parks
Recreation Center
Recreational Facilities, including but not limited to:
- Boardwalks
- Community swimming pools
- Playground, tot lots
- Play fields
- Tennis Courts and community recreational amenities
- Parking

Restaurant, Group I, II, III (in association with golf facilities)

Temporary Sales and/or Construction Office

c. The following Property Development Regulations will apply to the development of the subject property:

1) Minimum Lot Area and Dimensions:

Single-Family Units

Area:	5,000 square feet
Width:	40 feet
Depth:	100 feet
Lot Coverage:	50 percent

Zero Lot Line Units

Area:	5,000 square feet
Width:	40 feet
Depth:	100 feet
Lot Coverage:	50 percent

Multiple-Family

Area:	2,000 square feet per dwelling unit
Minimum lot size:	10,000 square feet
Width:	100 feet
Depth:	100 feet
Lot Coverage:	50 percent

Two-Family Attached and Townhouses

Area:	4,000 square feet per dwelling unit
Width:	32 feet
Depth:	100 feet
Lot Coverage:	50 percent

Duplex

Area:	14,000 square feet
Width:	90 feet
Depth:	100 feet
Lot Coverage:	50 percent

Golf Club and Dry Storage Facility

Area:	10,000 square feet
Width:	100 feet
Depth:	100 feet
Lot Coverage:	50 percent (golf club) 80 percent (dry storage)

2) Minimum Setbacks

Single-Family

Street:	20 feet or 15 feet for a side entry garage
Side:	5 feet

Rear:	15 feet for building 0 feet for pool, deck and enclosure
Waterbody:	20 feet

Zero-Lot Line Units

Street:	20 feet or 15 feet for side entry garages
Side:	10 feet on one side, 0 feet on opposite side
Rear:	15 feet for building 0 feet for pool, deck and enclosure
Waterbody:	20 feet

Multiple-Family

Street:	20 feet
Side:	20 feet
Rear:	20 feet for building 0 feet for pool, deck and enclosure
Waterbody:	20 feet
Building Separation:	20 feet or one-half the sum of building height, whichever is greater

Two-Family Attached and Townhouse

Street:	20 feet
Side:	5 feet (no side setback required from common side lot line)
Rear:	15 feet for building 0 feet for pool, deck and enclosure
Waterbody:	20 feet

Duplex

Street:	20 feet or 15 feet for a side entry garage
Side:	7 feet
Rear:	20 feet 0 feet for pool, deck and enclosure
Waterbody:	20 feet

Golf Club and Dry Storage Facility

Street:	20 feet
Side:	15 feet
Rear:	10 feet for building 0 feet for pool, deck and enclosures- golf facility only
Waterbody:	20 feet

3) Building Height

Single-Family, Zero Lot Line Two-Family Attached, Town House and Duplex	Maximum of 45 feet, above flood elevation, or 3 stories (whichever is less)
Multiple-Family	Maximum of 45 feet, above flood elevation, or 3 stories

	(whichever is less)
Golf Club and Dry Storage Facility	Maximum of 45 feet, above flood elevation, or 3 stories (whichever is less)

4) Timeshare Units

Timeshare units are defined and regulated by Florida Statute Chapter 721. Timeshare units are subject to the property development regulations set forth in Conditions c.1) and c.2). Timeshare units must be sold for a period of time of no less than one week, in accordance with the requirements of Chapter 721, Florida Statutes. Timeshare locations must be grouped and designated on the final zoning plan as conditioned in B.3.h., below.

d. This development must comply with all requirements of the LDC at the time of local development order approval, except as may be granted by deviation as part of this planned development.

e. An administrative approval will be required to determine the number and location of the model homes, model units, and model display center.

f. An administrative approval will be required to determine the number and location of the temporary sales and/or construction office.

g. The temporary sales and/or construction office will be limited to sales for the Pelican Landing Development.

h. As a prerequisite to approval of any local development order for vertical construction on property located within the Planned Development, approval of a Final Zoning Plan must be received which specifies the type, intensity and configuration of development for the particular tract. The objective of the process is to ensure compliance with the DRI development order, Zoning Resolution, and LDC; to allow detailed review of deviations conceptually approved herein; while allowing the development flexibility to respond to changing conditions. Application materials will be the same as for an Administrative Amendment supplemented as outlined below. Any substantial change in the type, intensity, or configuration of development within the RPD will require further review through a public hearing. The necessity of said review will be determined by the Director of Community Development.

The following information must be provided with the submittal for Final Zoning Plan Approval:

-Uses: types and amount, i.e., number of dwelling units or square feet of commercial use.
-Access: location and dimension
-Location and dimension of internal roadways
-Location and dimension of buildings/structures
-Boundary of development tract
-Adjacent zoning and land uses

-Master Concept Plan
- A cumulative analysis of the total number of dwelling units, hotel units, commercial square footage, dry storage slips and marina development that have received local development order approval (to be compared to the amount of development approved pursuant to the DRI and this rezoning)

i. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, reasonable efforts will be used to relocate these plants to open space and landscaped areas.

j. The "Kersey/Smoot Property Environmental Management Plan", counter stamped June 15, 1998, must be implemented. Immediately prior to the commencement of construction activities, all occupied gopher tortoise burrows must be excavated and any resident gopher tortoises and commensal species must be relocated into appropriate open space areas (excluding golf holes) within Pelican Landing DRI. These areas must be fenced with gopher tortoise fencing prior to relocation to help prevent tortoises from entering construction areas.

k. The design for the golf course and residential areas must incorporate the retention of large slash pines for utilization as perch trees for bald eagles. This requirement will not be interpreted in a manner that will impair good golf course and residential design.

l. No more than five acres of wetlands may be filled in conjunction with this project. This five acres is part of the total 13 acres of wetland impacts allowed for the entire Pelican landing DRI project. Mitigation for the wetlands impacts will be determined at the time of final permitting, but the mitigation should include the removal of invasive exotic vegetation, the restoration of historic hydroperiods, and a total of not more than 10 acres of littoral zone plantings.

m. The Developer must employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management areas within 500 feet of the mangrove fringe of Estero Bay.

n. The management practices that the Developer must follow are:

1) The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

2) The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select

pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

3) The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

4) The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

5) The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

o. The Developer must amend the existing Pelican Landing DRI management plan to include the Kersey-Smoot parcel for the application of herbicides, pesticides, and fertilizers on the proposed golf course adjacent to the mangrove fringe of Estero Bay. This plan must be amended to include the Kersey-Smoot parcel prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended plan must continue to include: guidelines for the application of any herbicides, pesticides and fertilizers to the proposed golf course; an amended groundwater and surface water monitoring plan; to provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; to identify the locations for the groundwater monitoring and testing on a map(s); and set forth the testing and reporting requirements. The Developer must continue to submit the test reports with the annual monitoring report. The monitoring program must continue to be operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This amended plan must continue to be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

p. The Developer must amend the existing surface and groundwater quality management plan as approved by Lee County and Florida Department of Community Affairs (FDCA). The amended plan must be approved by FDCA prior to the application of chemicals to the proposed golf course.

q. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and the pollution is caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, then the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDCA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.

r. The mangrove line for the Kersey-Smoot parcel is off set 50 feet to over 250 feet west of the wetland jurisdictional line delineated along the entire western (Estero Bay) side of the Kersey-Smoot parcel. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcel. This includes both saltwater and freshwater wetlands contained within the boundary of this wetland jurisdictional line. The proposed golf course fairways, tees, and greens must be set back a minimum of 25 feet from the wetland jurisdictional line on the Kersey-Smoot parcel, except where wetland impacts are permitted by the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE). Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot parcel.

s. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot parcels.

t. A minimum of 99 acres of wetland preservation must be provided within the added 204 acres. A minimum of 10 percent open space must be provided within the individual development parcels.

u. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The Applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the Applicant will continue to incorporate native vegetation into the open space and landscaped areas.

v. Transportation mitigation will be provided as outlined in the DRI development order. However, site related improvements may be required at the time of local development order in accordance with the provisions of the LDC. Also, a Traffic Impact Statement (TIS) must be submitted with each application for a development order. The TIS must include:

1) The trip generation data for the type of development being proposed, using the trip generation rates in the latest edition of ITE, Trip Generation Manual or those of the Lee County Florida Standard Urban Transportation Model Structure (FSUTMS).

2) The distribution of traffic at the entrance(s) to that specific area to be developed.

3) An analysis of the need for turn lanes or other site related improvements at

the entrance(s) to that specific area to be developed based upon the projected future volume of traffic on the street being accessed. Projected future volume represents volumes at build out of the DRI.

4) An analysis of each intersection of a minor collector with the same or higher functionally classified road, internal to Pelican Landing, that is influenced by traffic from that proposed development. Influence is measured as project traffic that is five percent or more of Level of Services D (LOS D) service volume. The analysis to be based on existing traffic counts, plus traffic from the specific development.

5) A table showing each segment of minor collectors and higher classification roads influenced by the proposed development, traffic volumes with specific development, and the capacity of the road segment at LOS E.

6) A table showing the cumulative development parameters for the entire Pelican Landing DRI. Development parameters to be categorized consistent with the categories identified in the original DRI.

w. All conditions relating to the DRI development order are hereby incorporated by this action. If conflicting conditions exist between this approval and the DRI development order, the more restrictive will apply.

x. Prior to any development within the area legally described as Kersey-Smoot RPD, the Applicant must revise the MCP to reflect the final decision by the Lee County Board of County Commissioners (BOCC) regarding this rezoning and DRI approval.

y. Approval of this rezoning does not give the developer the undeniable right to receive local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocations Table, Map 16 and Table 1(b).

SECTION C - DEVIATIONS:

Deviation (1) requests relief from the LDC Section 34-2013(a) requirement that all parking lots be designed to permit vehicles exiting the parking lot to enter the street right-of-way or easement in a forward motion, to allow individual parking spaces to back onto right-of-way easements. This deviation is APPROVED with the following conditions:

a. The deviation applies only to units with individual driveways and garages;

b. The minimum dimension from the garage entrance to the street must be 25 feet, unless the garage is constructed with a side-facing entrance rather than a street-facing entrance; and

c. The posted speed of the adjacent roadway must be 20 mph or less.

Deviation (2) requests relief from the LDC Section 34-935(c)(2) requirement that internal roads and drives be no closer than 25 feet to the development perimeter; to allow a zero-foot minimum. This deviation is APPROVED for a zero-foot separation for internal development parcels, and a 15-foot

separation for external parcels.

Deviation (3) requests relief from the LDC Section 10-291(3) requirement that residential developments larger than five acres provide two or more means of ingress or egress, to allow one entrance. This deviation is APPROVED with the following conditions:

a. An emergency turnaround of adequate dimension is provided for emergency service providers within each development pod;

b. Each multi-family pod with one means of ingress and egress will not exceed 362 dwelling units; and

c. The local Fire and Emergency Service District must provide a letter of approval prior to local development order approval.

Deviation (4) requests relief from the LDC Section 10-417(b)(2)(f) requirement that no portion of a buffer area that consists of trees or shrubs may be located in an easement, to allow planted buffers in easements. This deviation is APPROVED provided that, if any required buffer or landscape strip plantings installed within easements must be removed, then the Developer or homeowners' association must replace these plantings with like size and species at no expense to Lee County. The replanting requirement must be clearly stated in the homeowners' documents.

Deviation (5) requests relief from the LDC Section 30-152 requirement that identification signs must be set back a minimum of 15 feet from any right-of-way easement, to allow a setback of zero feet. This deviation is APPROVED with the condition that, at the time of Final Zoning Plan submittal, the Applicant demonstrates that sight distance requirements are met, consistent with the LDC.

Deviation (6) requests relief from the minimum cul-de-sac diameter requirements of LDC Section 10-296(k)(1), to allow a 60-foot diameter (to edge of pavement). This deviation is APPROVED, with the condition that any reduction in the size of a cul-de-sac will require written approval from the local fire district at the time of Final Zoning Plan submittal.

Deviation (7) requests relief from the requirements in LDC Section 10-296(k)(3) and 10-714 establishing the transition radius for cul-de-sacs, to allow a transition radius of 50 feet. This deviation is APPROVED, with the condition that any reduction in the size of a cul-de-sac will require written approval from the local fire district at the time of Final Zoning Plan submittal.

Deviation (8) requests relief from LDC Section 10-296 Table 3, which requires a roadway width of 35 feet for two-way closed drainage, rear lot drainage, or inverted crown, to allow roadway width to coincide with the back of the curb. This deviation is APPROVED, provided the required drainage and utility easements are located outside of the right-of-way and adequate provisions are made for road drainage and utilities.

Deviation (9) requests relief from the LDC Sections 10-296 Table 4(7)(c)(2) requirements setting minimum specifications for street wearing surfaces, to allow paver brick surfaces. This deviation is APPROVED, to allow paver bricks as an alternative surface PROVIDED that the minimum specifications of a "standard" LDC Section 10-296(7) Class C local road flexible pavement cross-section will be demonstrated prior to local development order approval.

Deviation (10) requests relief from the LDC Section 34-1176(b)(1)(a) setback requirement for a non-

roofed structure to a seawalled artificial body of water, to allow a zero-foot setback. The applicant will utilize vertical bulkheads along artificial bodies of water and will provide the minimum littoral zone slopes consistent with LDC Section 10-418(a)(2). This deviation is APPROVED for the community recreational pool facility only, with the CONDITION that adequate safety features are shown in the Final Zoning Plan to protect the public health, safety and welfare.

Deviation (11) requests relief from the LDC Section 34-2474(b)(6) requirement that recreation centers and ancillary facilities be located at least 40 feet from residential dwellings, to allow a minimum of 20 feet. This deviation is APPROVED for the internal development parcels in which they are located, but not for parcels adjacent to or external to the property.

SECTION D - EXHIBITS:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: The legal description and STRAP number of the property.
Exhibit B: Master Concept Plan - Kersey-Smoot RPD
Exhibit C: Zoning Map
Exhibit D: Fifth Development Order Amendment For Pelican Landing DRI

SECTION E - FINDINGS AND CONCLUSIONS:

1. The applicant has proven entitlement to the rezoning by demonstrating compliance with the Lee Plan, the Land Development Code, and any other applicable code or regulation.

2. The requested zoning, as conditioned:

   a. meets or exceeds all performance and locational standards set forth for the potential uses allowed by the request;

   b. is consistent with the densities, intensities and general uses set forth in the Lee Plan;

   c. is compatible with existing or planned uses in the surrounding area; and

   d. will not adversely affect environmentally critical areas or natural resources.

3. Approval of the request will not place an undue burden upon existing transportation or planned infrastructure facilities and the development will be served by streets with the capacity to carry the traffic the development generates.

4. The proposed use or mix of uses is appropriate at the subject location.

5. The recommended conditions to the concept plan and other applicable regulations provide sufficient safeguard to the public interest.

6. The recommended conditions are reasonably related to the impacts on the public interest created by or expected from the proposed development.

7. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

The foregoing resolution was adopted by the Lee County Board of Commissioners by a motion by Commissioner Andrew Coy, and seconded by Commissioner Douglas St. Cerny and, upon being put to a vote, the result was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Nay
Andrew Coy	Aye
John E. Albion	Absent

DULY PASSED AND ADOPTED this 21st day of September, 1998.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Chairman

Approved as to form by:

_____
County Attorney's Office

MINUTES DEPARTMENT
FILED SEP 28 1998

EXHIBIT "A"

LEGAL DESCRIPTION

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 800 feet, more or less, to the waters of Spring Creek;
THENCE run along said waters for 5,765 feet, more or less to an intersection of the East line of the Southeast Quarter (SE¼) of said Section 20;
THENCE run S00°38'52"E along said East line for 91.00 feet to the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,

N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,280 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 982 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,674.38 feet to the Northwest corner of said Southeast Quarter (SE¼);
THENCE run N00°31'29"E along the West line of the Northwest Quarter (NW¼) of said Section 17 for 3.40 feet to an intersection with the curved Southerly line of Spring Creek Road;
THENCE run Northeasterly and Northerly along the arc of a curve to the left of radius 1,130.00 feet (chord bearing N35°09'06"E) (chord 1,296.89 feet) (delta 70°02'16") for 1,381.30 feet;
THENCE run N89°52'02"W for 5.00 feet;
THENCE run N00°07'58"E along the Easterly line of Spring Creek Road (50 feet wide) for 1,611.94 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE run N00°07'17"E along said East line for 343.49 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE run along said West line N00°40'07"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538 of said Public Records;
THENCE run S89°35'50"E along said South line for 1,549.14 feet;
THENCE run Southwesterly along a non-tangent curve to the left of radius 30.00 feet (chord bearing S45°24'10"W) (chord 42.43 feet) (delta 90°00'00") for 47.12 feet to a Point of Tangency;
THENCE run S00°24'10"W for 336.31 feet to a Point of Curvature;
THENCE run along the arc of a curve to the left of radius 270.00 feet (chord bearing S44°35'50"E) (chord 381.84 feet) (delta 90°00'00") for 424.12 feet to a Point of Tangency;
THENCE run S89°35'50"E for 99.41 feet to a Point of Curvature;
THENCE run along the arc of a curve to the right of radius 530.00 feet (chord bearing S75°44'50"E) (chord 253.74 feet) (delta 27°42'00") for 256.23 feet;
THENCE run N20°53'52"W for 748.16 feet to an intersection with the aforementioned South line of Coconut Road;

THENCE run along said South line S89°35'50"E for 1,301.22 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.84 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2

A tract or parcel of land lying in Sections 07, 08, 17 and 18, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 817.15 feet;
THENCE run N89°52'43"W for 14.27 feet to an intersection with a non-tangent curve;
THENCE run Southerly and Southwesterly along the arc of a curve to the right of radius 1,725.00 feet (chord bearing S05°52'51"W) (chord 346.22 feet) (delta 11°31'09") for 346.81 feet to a Point of Tangency;
THENCE run S11°38'26"W for 178.50 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along the arc of a curve to the left of radius 2,400.00 feet (chord bearing S00°28'49"W) (chord 929.06 feet) (delta 22°19'14") for 934.96 feet to a Point of Tangency;
THENCE run S10°40'48"E for 231.66 feet to a Point of Curvature;
THENCE run Southeasterly and Southerly along the arc of a curve to the right of radius

1,725.00 feet (chord bearing S05°16'46"E) (chord 324.72 feet) (delta 10°48'05") for 325.20 feet;
THENCE run S89°52'02"E for 16.47 feet;
THENCE run S00°07'58"W for 1,406.64 feet;
THENCE run N89°52'02"W for 5.00 feet;
THENCE run Southerly and Southwesterly along the arc of a curve to the right of radius 1,070.00 feet (chord bearing S37°51'54"W) (chord 1,309.62 feet) (delta 75°27'53") for 1,409.31 feet;
THENCE run N89°59'08"W along said North line for 287.38 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said public records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,816 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 793 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said public records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.

LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the public records of Lee County, Florida.

ALSO

PARCEL 3

A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:
Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County; also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County; also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05; also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05; also the East Two-thirds (E-2/3) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;

THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.

ALSO

PARCEL 5 (Kersey-Smoot RPD)

Parcels lying in Sections 05, 06 and 08, Township 47 South, Range 25 East, Lee County, Florida, more particularly described as follows:

Parcels in Section 05

The West Quarter (W¼) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼); and

The West Third (W⅓) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼).

Parcels in Section 06

Government Lot 4 of said Section 06 and the Southeast Quarter (SE¼) of the

Southeast Quarter (SE¼) of said Section 06; and

Parcel as shown in Official Record Book 1762 at Page 4173, Public Records of Lee County, Florida:

A tract or parcel of land situated in the State of Florida, County of Lee, being a part of the Southeast Quarter (SE¼) of Section 06, Township 47 South, Range 25 East, further bounded and described as follows:

Starting at the Southeast corner of said Southeast Quarter (SE¼) of Section 06;
THENCE N01°33'16"W along the Easterly line of said fraction for 1,300.61 feet to the Southeast corner of the Northeast Quarter (NE¼) of said Southeast Quarter (SE¼), said point being the POINT OF BEGINNING of the herein described parcel;
THENCE N01°30'16"W along the Easterly Line of said fraction for 1,208.36 feet;
THENCE S89°10'55"W for 349.43 feet;
THENCE S00°49'50"E for 162.49 feet;
THENCE N81°20'47"W for 600.53 feet;
THENCE S46°11'51"W for 523.67 feet;
THENCE S00°48'29"E for 775.70 feet;
THENCE N89°41'23"E along the Southerly line of the aforesaid fraction of a section for 1,339.45 feet to the POINT OF BEGINNING.

Parcel in Section 08

The West Third (W⅓) of the West Half (W½)) of the Northwest Quarter (NW¼) of said Section 08, less the Southerly 40.00 feet for the right-of-way of Coconut Rd.

ALSO

BEACH PARCEL
A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate

Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.

The applicant has indicated that the STRAP numbers for the subject property are:

05-47-25-00-00003.0000
05-47-25-00-00003.0010
05-47-25-00-00004.0000
05-47-25-00-00004.0010
05-47-25-00-00004.0020
05-47-25-00-00004.0030
05-47-25-01-00003.0000
05-47-25-01-00003.002C
06-47-25-00-00002.0010
06-47-25-00-00002.1000
07-47-25-00-00001.0000
07-47-25-00-00001.0010
07-47-25-00-00004.0000
07-47-25-00-00005.0000
07-47-25-00-00010.0000
08-47-25-00-00001.0000
08-47-25-00-00001.0010
08-47-25-00-00001.0020
08-47-25-00-00001.0030
08-47-25-00-00008.0000
08-47-25-01-00014.0080
08-47-25-18-00000.0040
08-47-25-18-00000.0050
08-47-25-18-00000.0060
08-47-25-18-0000D.0000
08-47-25-18-0000F.0000
08-47-25-18-0000G.0000
08-47-25-18-0000H.0000
08-47-25-18-0000A.0000
09-47-25-00-00001.0070
09-47-25-19-00000.0030
09-47-25-19-00000.0040
09-47-25-19-00000.0050
09-47-25-19-00000.0060
09-47-25-19-00000.0080
09-47-25-19-00000.0090
09-47-25-19-00000.0100
09-47-25-19-0000B.0000
09-47-25-21-00000.0040
09-47-25-21-00000.0350
09-47-25-21-00000.0360
09-47-25-21-00000.0370
09-47-25-21-00000.0380
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09-47-25-21-00000.0410
09-47-25-21-00000.0420
09-47-25-21-00000.0430
09-47-25-21-00000.0440
09-47-25-21-00000.0450
09-47-25-21-00000.0460
09-47-25-21-0000B.0000
09-47-25-21-0000C.0000
09-47-25-21-0000D.0000
09-47-25-21-0000A.0000
09-47-25-23-0000C.0000
09-47-25-23-0000D.0000
09-47-25-23-0000E.0000
16-47-25-00-00001.0010
16-47-25-00-00002.1010
16-47-25-00-00004.1030
16-47-25-01-0000C.0000
16-47-25-06-0000A.0000

16-47-25-07-0000F.0000
16-47-25-08-0000A.0000
16-47-25-09-0000C.0000
16-47-25-09-0000A.0000
16-47-25-11-000J0.0000
16-47-25-11-0000A.0000
16-47-25-12-0000B.0110
16-47-25-13-0000A.0000
16-47-25-15-0000F.0000
16-47-25-15-0000G.0000
16-47-25-19-00000.0110
17-47-25-00-00001.0000
17-47-25-00-00001.0020
17-47-25-00-00001.0060
17-47-25-00-00001.0080
17-47-25-00-00001.0090
17-47-25-00-00001.0100
17-47-25-00-00001.011A
17-47-25-00-00002.0000
17-47-25-11-0000A.0000
17-47-25-14-0000B.0000
17-47-25-18-0000E.0000
17-47-25-28-0000A.0000
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20-47-25-28-000O0.0000
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21-47-25-18-00000.0200
21-47-25-18-00000.0210
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21-47-25-23-00000.0410
21-47-25-23-0000F.0000
21-47-25-23-0000A.0000
21-47-25-27-0000A.0000
21-47-25-28-0000B.0000
21-47-25-28-0000C.0000
21-47-25-28-0000A.0000
32-46-25-00-00002.0070
32-46-25-00-00002.2000
33-46-25-00-00001.0070
33-46-25-00-00022.0000
35-47-25-00-00001.0110

~~FOURTH~~ FIFTH DEVELOPMENT ORDER
AMENDMENT
FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE 95-01-050.04Z 07.01

WHEREAS, on March 27, 1998, WCI Communities, L.P., the owner of the Pelican Landing Development of Regional Impact (DRI) requested an amendment to the original Development Order adopted August 29, 1994, as amended; and

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995; 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) November 4, 1996; 4) November 17, 1997; 5) and the conditions applicable to the proposed amendment to the Pelican Landing DRI DO; and

WHEREAS, the amendments proposed to the Development Order are not a substantial deviation, as that term is defined and identified in Subsection 380.06(19)(e)2, Florida Statutes, and as such there is no need for further DRI review. The development order amendment approves the addition of 204 acres to the Pelican Landing DRI development as residential and golf course uses; and allows the provision of additional golf course opportunities within the present Pelican Landing development area. The amendment will not increase the external traffic impacts of the project; and

WHEREAS, the developer has acquired 204 acres that are contiguous with the Pelican Landing DRI; and

WHEREAS, Chapter 380, F.S. requires a developer seeking to develop property contiguous to a previously approved DRI to incorporate the property into the DRI; and

WHEREAS, the 204 acres will be added without increasing the number of dwelling units approved for Pelican Landing DRI; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order described in this document are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local Land Development regulations; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order will not unreasonably interfere with the achievement of the objectives of the adopted State Land Development Plan applicable to the area; and

WHEREAS, the proposed changes are consistent with the State Comprehensive Plan; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and, after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on ~~2,373~~ 2,577± acres located approximately three miles north of the Lee/Collier County Line. 273± acres of the 2,577 acre total constitutes the Spring Creek West DRI. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct 4,400 residential units, of which 665 are single-family and 3,735 multi-family, 461,050 square feet of gross floor area of retail commercial, and 245,000 square feet of gross floor area of office commercial. The retail uses will provide up to 2,310 parking spaces and the office uses will provide up to 820 parking spaces. The project will also include 750 hotel/motel rooms, a 50,000 square foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, and a beach park for the benefit of the owners in Pelican Landing. There are 87 acres of upland habitat preserve, ~~507~~ 614 acres of salt and freshwater wetlands, ~~208~~ 227 acres of water management lakes, ~~140~~ 145 acres of public and private rights- of-way, 6 six acres of utilities and a .11 acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout is the year 2002.

B. LEGAL DESCRIPTION: In Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;

THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast comer of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;

THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;

THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2

A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;

THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

PARCEL 3
A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:
Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;

THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4
All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.
Bearings hereinabove mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO

BEACH PARCEL
A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,

N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

ALSO

KERSEY PARCEL

Parcels lying in Section 5, Section 6 and Section 8, Township 47 South, Range 25 East, Lee County, Florida, more particularly described as follows:

Parcels in Section 5:

The West One-Quarter (W¼) of the Northwest One-Quarter (NW¼) of the Southwest One-Quarter (SW¼); and

The West One-Third (W⅓) of the Southwest One-Quarter (SW¼) of the Southwest One-Quarter (SW¼).

Parcels in Section 6:

Government Lot 4 of said Section 6 and the Southeast One-Quarter (SE¼) of the Southeast One-Quarter (SE¼) of said Section 6; and

Parcel as shown in Official Record Book 1762 at Page 4173, Public Records of Lee County, Florida:

A tract or parcel of land situated in the State of Florida, County of Lee, being a part of the Southeast One-Quarter (SE¼) of Section 6, Township 47 South, Range 25 East. Further bounded and described as follows:

Starting at the Southeast corner of said Southeast One-Quarter (SE¼) of Section 6; Thence N00°44'33"W along the Easterly line of said fraction for 1300.67 feet to the Southeast corner of the Northeast One-Quarter (NE¼) of said Southeast One-Quarter (SE¼). Said point being the point of beginning of the herein described parcel; Thence N00°41'04"W along the Easterly line of said fraction for 1208.36 feet; Thence West for 349.47 feet; Thence South for 162.50 feet; Thence N80°32'07"W for 600.67 feet; Thence S47°00'45"W for 523.62 feet; Thence South for 778.51 feet; Thence S89°36'52"E along the Southerly line of the aforesaid fraction of a section for 1339.46 feet to the point of beginning

Bearings are based on a plat prepared by Tri-County Engineering, Inc. in May of 1968.

Parcel in Section 8:

The West One-Third (W⅓) of the West One-Half (W½) of the Northwest One-Quarter (NW¼) of said Section 8, less the Southerly 40.00 feet for the right-of-way of Coconut Road.

Parcel contains 203 acres, more or less.

ALSO

SMOOT PARCEL

That part of the South half of Government Lot 2, Section 7, Township 47 South, Range 25 East, Lee County, Florida, described as follows:

Begin 660 feet North 3 degrees 58 minutes West and 957 feet South 87 degrees 15 minutes West of the Southeast corner of Government Lot 2, Section 7,

Township 47 South, Range 25 East, thence South 87 degrees 15 minutes West 247.5 feet, thence South 11 degrees, 8 minutes East 199.6 feet, thence North 87 degrees, 15 minutes East 247.5 feet, thence North 11 degrees, 8 minutes West 199.5 feet to the point of beginning, containing 1.3 acres more or less.

ALSO

Spring Creek West DRI Parcel
All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:

ALSO INCLUDED THERETO:

All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;

ALSO INCLUDED THERETO:

All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida.

ALSO INCLUDED THERETO:

All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;
Subject to easements and restrictions of record.
Containing 273.1 acres more or less.

AND

The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.
Parcel contains 9.7 acres more or less.
TOGETHER WITH the right for ingress and egress over the following described parcel:

A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).
Subject to any easements, restrictions, reservations and rights-of-way to record.

C. The subject parcel is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, TFC-2 and RM-2; the property is partially developed.

D. This Application for Development Approval is consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Sections 380.05 and 380.06 (14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The proposed Development Order Amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes. The development, as proposed in the Application for Development Approval (ADA) and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06 (15) (d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that one annual monitoring report that includes both Pelican Landing and Spring Creek West DRI's must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for the Pelican Landing DRI adopted on August 29, 1994, and amended on March 22, 1995, August 16, 1995, ~~and~~ November 4, 1996~~,~~ and November 17, 1997, are further amended as follows, with new language underlined and deletions struck through. All other portions of the original Development Order will remain in full force and effect.

For the purposes of this Development Order, the term "developer" or "Applicant" ~~shall~~ includes his/her/its successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer ~~shall~~ will immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI DO, which ends on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI to locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time home buyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying home buyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. ~~Within six months, after the effective date of this DRI Development Order,~~ ~~t~~The developer ~~shall~~ provided Lee County with the funds for the provision and connection of a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure ~~which advises~~ advising all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their

vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for any Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan ~~shall~~ must address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan ~~shall~~ must be developed in coordination with the Lee County Emergency Management officials and ~~must be~~ found sufficient by those officials months after the effective date of the DRI DO.

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost

Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000 foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator ~~shall~~ must host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator ~~shall~~ will provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise.

1. There were three bald eagle's nests of concern prior to the original development order adoption. One nest ~~is~~ was on the Pelican Landing property in the Eco Park. The other two nests ~~are~~ were originally within 1500 to 1600 feet of Pelican Landing. One of these other nests was located on the Kersey parcel and declared abandoned by the

USFWS in July 1998. The buffers that ~~will~~ affect Pelican Landing property ~~will be~~ were established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to any new development within ~~2500~~ 1500 feet of any active eagle nest other than the nest located within the Eco Park, the Developer ~~shall~~ must prepare an on-site eagle management plan, addressing the Pelican Landing DRI property only, ~~which shall~~ that will be reviewed by DCA, SWFRPC, FGFWFC Lee County, and USFWS. ~~Said groups shall have a fifteen working day review period and must provide all comments to Lee County and the Developer in writing.~~ The agencies must provide specific written objections or concerns if any, regarding ~~the~~ any new proposed management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to ~~the~~ any lawful ~~and timely~~ objections. The agencies will review and respond to the management plan resubmittal~~, and any successive resubmittals, within fifteen working days of submittal~~. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or ~~which~~ outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. ~~The management plan will be deemed approved by the County and DCA if the respective agency fails to provide a written response within fifteen working days. The approval of the management plan will not be unreasonably withheld.~~ If a proposed management plan includes development within 750 feet of an active eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

~~The 2,500 foot limitation is intended to be a temporary restriction to insure the submission and approval for a management plan on a timely basis. The final primary and secondary buffer zones may be less than 2,500 feet. An eagle management plan will be included as part of an upland habitat protection area management plan.~~

2. A local development order for the Hickory Island Beach Park has been issued ~~which~~ to permit~~s~~ construction of beach park infrastructure. This local development order include~~ds~~s a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP ~~requires~~ required the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP ~~permits~~ permitted a refinement of the conservation easement boundaries after completion of a one year utilization study~~,~~. ~~t~~The final conservation easement ~~shall be~~ is consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI D.O., Section 704.06, F.S. will not preclude

educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI DO.

The Developer ~~must~~ submitted a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI DO, which was November 14, 1994. Lee County, FGFWFC, and DCA ~~will~~ reviewed the management plan. ~~within fifteen working days of submittal. The DCA, and Lee County must provide a written response to the proposed final management plan which reflects that there is no objection or outlines the specific objections and concerns. The agencies' response will specify how those concerns or objections can be addressed by the developer. The FGFWFC must provide all lawful objections within the same fifteen working day time frame.~~ Lee County approved this plan and its implementation was certified in October 1996.

~~If there are valid legal objections to the management plan, the Developer will revise and resubmit the plan to DCA, FGFWFC, and Lee County. DCA, Lee County, and FGFWFC will review the resubmittal, and any successive resubmittals, within fifteen working days. The agencies will provide a written response which reflects either the approval of the management plan or which outlines the specific objections and concerns. The agencies response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold approval of the management plan. If the agencies do not provide a written response within the prescribed time frames, the management plan will be deemed approved. The Final Management Plan Approval from Lee County must be obtained prior to the issuance of the Certificate of Compliance for local development order #90-10-003.00D.~~

3. The projected gopher tortoise burrow count ~~is~~ for the original Pelican Landing DRI area was 439, based on an estimate of FGFWFC habitat guidelines, a minimum of 75 acres ~~to~~ of gopher tortoise habitat must be protected.

The Developer ~~will~~ has set aside a 78± acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat for the original Pelican Landing DRI land area. This area ~~will be~~ is known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the original Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993 for the original Pelican Landing DRI. ~~The Developer shall submit a copy for the~~

~~management plan to the DCA, SWFRPC, and Lee County for review prior to the commencement of development in any area containing gopher tortoise habitat, beyond that approved in the Preliminary Development Agreement. The agencies shall will have a fifteen working day review period. The agencies shall will provide all lawful objections and concerns regarding the management plan to Lee County and the Developer in writing. The Developer will submit a revised management plan to DCA and Lee County that responds to the lawful objections. DCA and Lee County will review the management plan resubmittal, and any successive resubmittals, within fifteen working days of submittal. The agencies will provide a written response which approves the management plan or which outlines specific objections or concerns. The agencies' response will specify how those concerns or objections can be addressed by the developer. DCA and Lee County may not unreasonably withhold the approval of the management plan. Should DCA and Lee County not provide a written response within the prescribed time frames, the management plan will be deemed approved by the agency that failed to provide timely written comments.~~ A new protected species survey was conducted in March and April of 1998 on the addition to the Pelican Landing DRI known as the Kersey-Smooth parcel. The new survey revealed the presence of 114 active and inactive gopher tortoise burrows on 70 acres. The Developer has submitted for an Incidental Take Permit for the new gopher tortoise~~s~~ burrows located outside of the Eco-Park in the undeveloped ~~portion of Pelican Landing~~ Kersey-Smoot parcels. The Developer ~~shall~~ must obtain an Incidental Take Permit prior to proceeding with development within these new gopher tortoise habitat areas. Prior to the start of construction, all gopher tortoise burrows within these areas must be excavated and any resident gopher tortoises, or commensal species, relocated to open spaces within the Pelican Landing DRI.

~~The gopher tortoises addressed by the Incidental Take Permit shall~~ must ~~be relocated to the Eco-park, or other appropriate open space areas within Pelican Landing. The Eco-Park mitigates for regional impacts to the gopher tortoise population and xeric scrub within the Pelican Landing DRI.~~ Impacts to gopher tortoise habitat within the Kersey-Smoot parcels will be mitigated through incidental take funds paid to the FGFWFC for the purpose of regionally significant gopher tortoise habitat.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines ~~shall~~ will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek ~~shall be~~ is prohibited in wetland areas #14 and #21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot parcels.

The Developer ~~will~~ has granted a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to the FGFWFC ~~an entity approved by DCA. The Developer must submit a draft of the proposed conservation easement to DCA for review and comment. DCA must provide comments on the draft easement within 15 days so~~

~~as not to unduly delay development. Once approved by DCA, the Developer will record the conservation easement in the Lee County Public Records prior to the issuance of a local Development Order or "Early Work" approval for any area containing gopher tortoise habitat other than areas approved in the PDA.~~ The conservation easement ~~may be~~ was drafted ~~so as~~ to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage ~~will be~~ are permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes ~~which~~ prohibiting the destruction of trees.

5. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner ~~which~~ that is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner ~~which~~ that forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced ~~in the~~ above, the approved management practices ~~shall then~~ will be considered a part of this development

order for reinforcement purposes, and ~~shall~~ be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling ~~onto~~ of more than ~~8~~ 10 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasives, the restoration of historic hydroperiods, and a total of not more than ten acres of littoral zone plantings.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and~~/or~~ hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator ~~shall be~~ is responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, ~~shall~~ must notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, ~~shall~~ must contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials ~~which will be~~ located on the premises.

10. If required by federal, state ~~and/~~or local regulations:

a. The developer/property owner ~~shall~~ must prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner ~~shall~~ must establish an emergency notification system to be used in the event of a hazardous material release.

G. Stormwater Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or stormwater retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site stormwater wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent

cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD ~~shall~~ must establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Attachment B, "Pelican Landing DRI Development Parameters". The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2002). Each annual monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code ~~AC-13-16, dated August 8, 1991, see Attachment C~~) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane

US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

Buildout (2002)

Corkscrew Road		
- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane

US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Northbound dual left turn lanes
	-	Separate WB thru and right turn lanes
	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees are estimated to be $8,900,000 for the land uses identified in Attachment B. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican

Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted

at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until buildout of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the

submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and tuning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through buildout.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultralow volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities ~~shall~~ must be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a

glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through i. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, ~~which~~ that may result from the development of a golf course and water management area~~s~~ within five hundred feet of the mangrove fringe of Estero Bay.

3. The management practices ~~which~~ that the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications ~~which~~ that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the ~~proposed~~ original Pelican Landing DRI golf course adjacent to the mangrove fringe of Estero Bay. ~~The~~ This plan ~~will~~ must be ~~prepared~~ amended to include the Kersey-Smoot parcels prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended management plan ~~will~~ must: include a groundwater and surface water monitoring plan~~.~~; ~~The plan will~~ provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe~~.~~; ~~The plan will~~ identify the locations for the groundwater monitoring and testing on a map(s)~~.~~ ~~The plan will~~ ; and, set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written amended surface and groundwater quality management plan to Lee County and DCA. The amended plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100' undisturbed naturally vegetated corridor, except for

water management facilities permitted by the ~~South Florida Water Management District~~ SFWMD and except for the removal of exotic plants as required by Lee County. The 100' buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay south of Coconut Road.

The mangrove line for the Kersey-Smoot parcels is off set 50 feet, to over 250 feet west of the wetland jurisdictional line delineated along the western (Estero Bay) side of the Kersey-Smoot parcels. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcels. This includes both saltwater and freshwater wetlands contained within the boundary of the wetlands jurisdictional line. The proposed golf course fairways, tees and greens must be setback a minimum of 25 feet from all wetland jurisdictional lines on the Kersey-Smoot parcels, except where wetland impacts have been permitted by the SFWMD and the Army Corps of Engineers. Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot parcels.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI DO do not preempt the authority of the ~~South Florida Water Management District~~ SWFMD and the ~~Department of Environmental Protection~~ (DEP). Section 373.016, Florida Statutes provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI DO are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given preemptive authority, the requirements of the SFWMD and the DEP will control.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed

by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents ~~which~~ that are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, last revised ~~May 27, 1997~~ March 1, 1998 and stamped received ~~June 13, 1997~~ June 17, 1998, is attached hereto as Attachment A and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order ~~which~~ that clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality ~~which~~ that may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of, any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order, which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans ~~which~~ that creates a reasonable likelihood of adverse regional impacts or other regional impacts ~~which were~~ not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of 2002, and a termination date of 2005. This term is based on a ten year buildout and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as

Spring Creek Village, E1 Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005 as long as the Lee Plan amendment proposed in association with this DRI to upwardly adjust the 2010 Overlay allocations for Subdistricts 801 and 806 is adopted and effective. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

If the companion plan amendment is adopted, Lee County will reserve to this DRI, the appropriate uses from the allocations established for subdistricts (subdistricts 806/801) of the Lee Plan 2010 Overlay until 2005. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until buildout. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. ~~The Developer applied for an amendment to the DRI DO months of the effective date of this Development Order. The amendment to~~ In compliance with a condition of the first development order amendment, the developer did amend this Development Order to incorporate~~d~~ the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. ~~The amendment contained a~~ A legal description of that portion of the Spring Creek DRI, (~~and~~ along with the conditions of the Spring Creek Development Order ~~which~~ that are applicable to the Spring Creek West property are now incorporated into this

development order). The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation ~~which~~ that would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes.

THE MOTION TO ADOPT this Amendment was offered by Commissioner Coy and seconded by Commissioner St. Cerny and upon poll of the members present, the vote was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Nay
Andrew W. Coy	Aye
John E. Albion	Absent

DULY PASSED AND ADOPTED this 21st day of September, 1998.

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: Manning
(Chairman)

ATTEST:
Charlie Green, Ex - Officio Clerk
Board of County Commissioners
_____, Clerk

By: Ruth Trigueiro
Deputy Clerk

APPROVED AS TO FORM

By: Dawn E. Perry-Lehnert
County Attorney's Office

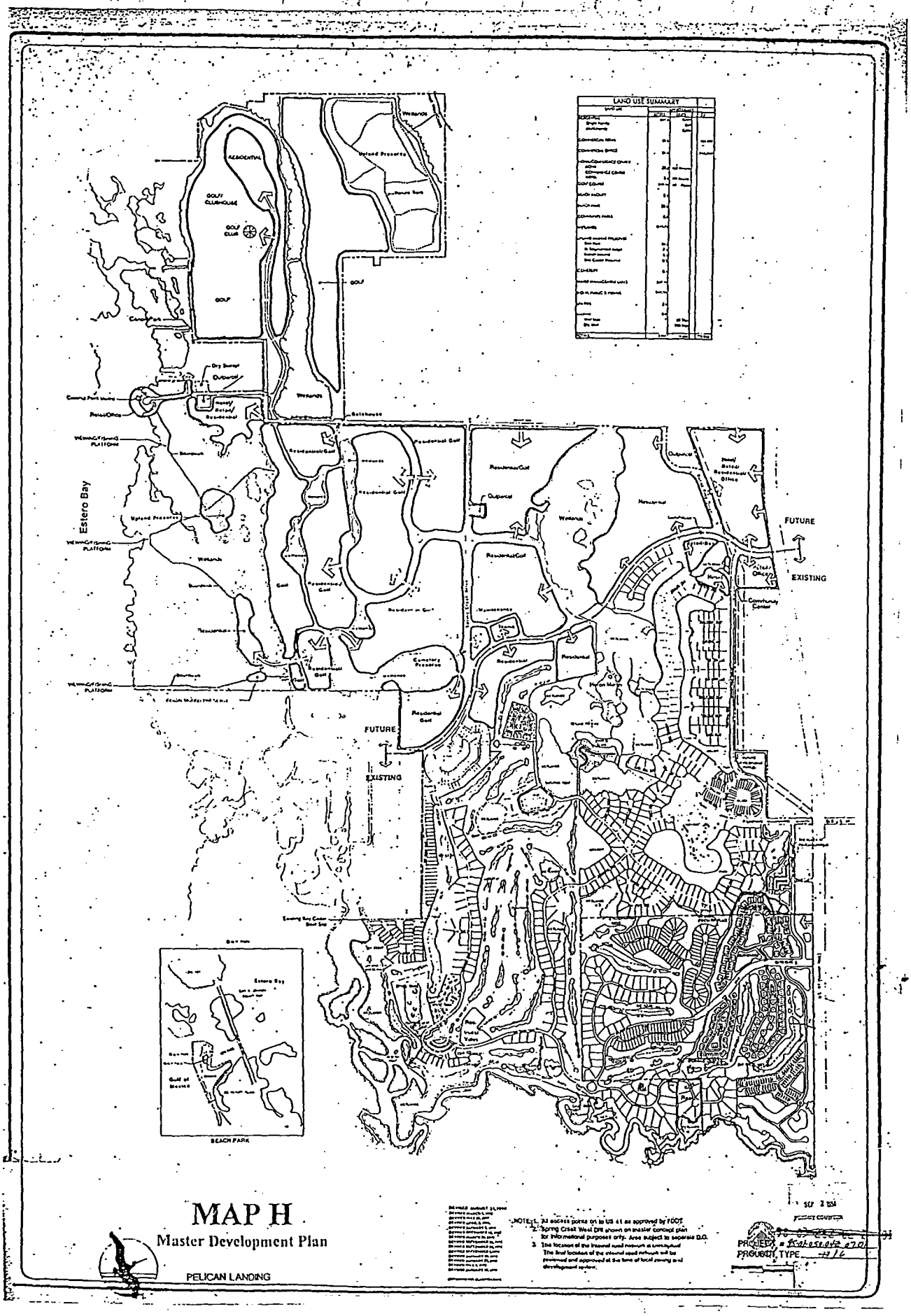
MINUTES DEPARTMENT
Ruth R
FILED SEP 28 1998

State of Florida
County of Lee

I Charlie Green, Clerk of the Circuit Court for Lee County, Florida, do hereby certify this document to be a true and correct copy of the original document filed in the Minutes Department.

Given under my hand and official seal at Fort Myers, Florida this 29th day of September, A.D. 1998

CHARLIE GREEN, CLERK
By Ruth Trigueiro
Deputy Clerk



ATTACHMENT "A"

ATTACHMENT "B"
~~FOURTH~~ FIFTH AMENDMENT
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS

Land Use	Units[1]	Existing ~~(1992)~~(1998)	~~Planning Horizon I~~ ~~(1997)~~	Buildout Total (2002)
Residential	DU	~~969~~1083	~~2,433~~	4,400
Single Family	DU	~~373~~402	~~625~~	665
Multi Family	DU	596	~~1,808~~	3,735
Retail[2]	GFA	11,000	~~291,000~~	461,050
Office[3]	GFA	~~40,000~~106,838	~~150,000~~	245,000
Hotel/Motel	Rooms	0	~~750~~	750
Recreation Uses				
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	~~29~~21	~~38~~	~~38~~30
Colony Range Club/ Golf Course/ Clubhouse/Practice Range	Holes	~~0~~19	~~9~~	~~9~~19
Resort Golf Course/ Clubhouse Practice Range	Holes	0		19
Tennis Center	Courts	~~0~~12	~~6~~	12
Coconut Marina	Boat Slips Wet	24	~~48~~	48
	Dry	0	~~150~~	150
Redfish Point	GFA	5,000	~~5,000~~	5,000
	Boat Slips Wet	15	~~15~~	15
Other[4]	Boat Slips Wet	2	~~2~~	2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

RESOLUTION NUMBER Z-99-065

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, Neale Montgomery filed an application on behalf of the owners of the property, WCI Watermark Communities, Inc., to amend the Pelican Landing DRI Map H to acknowledge the addition of 72± acres to the DRI and to determine whether the proposed change constitutes a substantial deviation from the original DRI Development Order approvals under the provisions of § 380.06(19), Florida Statutes, and requires further Development of Regional Impact review; and

WHEREAS, a public hearing was advertised and held on September 23, 1999, before the Lee County Zoning Hearing Examiner, who gave full consideration to the evidence in the record for Case #95-01-050.04Z 09.01; and

WHEREAS, a second public hearing was advertised and held on December 6, 1999, before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicants filed a request to amend DRI Map H to acknowledge the addition of 72± acres to the Pelican Landing DRI and to obtain a finding that the proposed change does not constitute a substantial deviation under the provisions of § 380.06(19), Florida Statutes. The property is located in the Urban Community, Outlying Suburban and Wetlands Land Use Categories and is legally described in attached Exhibit A. The request is APPROVED SUBJECT TO the conditions specified in Section B below:

SECTION B. CONDITIONS:

1. All deviations and conditions approved by resolutions Z-94-094, Z-95-061, Z-96-55, Z-97-073, and Z-99-024 will remain in full force and effect, except as specifically modified herein and by the amended Master Concept Plan.

2. Approval of the amendment to DRI Map H (Master Concept Plan) does not address mitigation of the project's vehicular or pedestrian traffic impacts. Additional conditions consistent with the Lee County Land Development Code (LDC) may be required to obtain a local development order.

3. Development of the 72 acres must comply with all of the requirements of the LDC at the time of local development order approval.

4. The development of the 72 acres must be in compliance with the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, dated January 7, 1999, last revised July 7, 1999, and stamped received at the permit counter on July 23, 1999.

SECTION C. EXHIBITS:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: The legal description and STRAP number of the property.
Exhibit B: Map (subject parcel identified with shading)
Exhibit C: DRI Map H (The Master Concept Plan)
Exhibit D: Pelican Landing DRI - Seventh Development Order Amendment

SECTION D. FINDINGS AND CONCLUSIONS:

1. There are no additional regional impacts created by the addition of the 72 acres to the Pelican Landing DRI. The 141 dwelling units currently permitted via local final development order on the 72-acre parcel will not be added to the 4,400 dwelling units approved pursuant to the existing DRI approvals. The 141 units will be deducted from the total dwelling units approved under the DRI resulting in a slight reduction in density for the DRI.

2. The addition of the 72-acre parcel does not constitute a substantial deviation from the original development approvals.

The foregoing resolution was adopted by the Lee County Board of Commissioners upon the motion of Commissioner Coy, seconded by Commissioner Manning, and, upon being put to a vote, the result was as follows:

John E. Albion	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Nay
John E. Manning	Aye
Andrew Coy	Aye

DULY PASSED AND ADOPTED this 6th day of December, 1999.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Chairman

Approved as to form by:

_____
Donna Marie Collins
County Attorney's Office

FILED DEC 17 1999
MGL
MINUTES OFFICE

CASE NO: 95-01-050.04Z 09.01
110899/1145

EXHIBIT A
LEGAL DESCRIPTION

B. LEGAL DESCRIPTION: In Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;
THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,

N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;
THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of

Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;
THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2

A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast

corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;
THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

PARCEL 3
A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:
Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;

THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.
Bearings herein above mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;

THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;
THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings herein above mentioned are Plane Coordinate for the Florida West Zone.

ALSO

KERSEY PARCEL

Parcels lying in Section 5, Section 6 and Section 8, Township 47 South, Range 25 East, Lee County, Florida, more particularly described as follows:

Parcels in Section 5:

The West One-Quarter (W¼) of the Northwest One-Quarter (NW¼) of the Southwest One-Quarter (SW¼); and

The West One-Third (W⅓) of the Southwest One-Quarter (SW¼) of the Southwest One-Quarter (SW¼).

Parcels in Section 6:

Government Lot 4 of said Section 6 and the Southeast One-Quarter (SE¼) of the Southeast One-Quarter (SE¼) of said Section 6; and

Parcel as shown in Official Record Book 1762 at Page 4173, Public Records of Lee County, Florida:

A tract or parcel of land situated in the State of Florida, County of Lee, being a part of the Southeast One-Quarter (SE¼) of Section 6, Township 47 South, Range 25 East. Further bounded and described as follows:

Starting at the Southeast corner of said Southeast One-Quarter (SE¼) of Section 6; Thence N00°44'33"W along the Easterly line of said fraction for 1300.67 feet to the Southeast corner of the Northeast One-Quarter (NE¼) of said Southeast One-Quarter (SE¼). Said point being the point of beginning of the herein described parcel; Thence N00°41'04"W along the Easterly line of said fraction for 1208.36 feet; Thence West for 349.47 feet; Thence South for 162.50 feet; Thence N80°32'07"W for 600.67 feet; Thence S47°00'45"W for 523.62 feet; Thence South for 778.51 feet; Thence S89°36'52"E along the Southerly line of the aforesaid fraction of a section for 1339.46 feet to the point of beginning

Bearings are based on a plat prepared by Tri-County Engineering, Inc. in May of 1968.

Parcel in Section 8:

The West One-Third (W⅓) of the West One-Half (W½) of the Northwest One-Quarter (NW¼) of said Section 8, less the Southerly 40.00 feet for the right-of-way of Coconut Road.

Parcel contains 203 acres, more or less.

ALSO

SMOOT PARCEL

That part of the South half of Government Lot 2, Section 7, Township 47 South, Range 25 East, Lee County, Florida, described as follows:

Begin 660 feet North 3 degrees 58 minutes West and 957 feet South 87 degrees 15 minutes West of the Southeast corner of Government Lot 2, Section 7, Township 47 South, Range 25 East, thence South 87 degrees 15 minutes West 247.5 feet, thence South 11 degrees, 8 minutes East 199.6 feet, thence North 87 degrees, 15 minutes East 247.5 feet, thence North 11 degrees, 8 minutes West 199.5 feet to the point of beginning, containing 1.3 acres more or less.

ALSO

SPRING CREEK WEST DRI PARCEL

All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:

ALSO INCLUDED THERETO:

All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;

ALSO INCLUDED THERETO:

All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida.

ALSO INCLUDED THERETO:

All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;
Subject to easements and restrictions of record.
Containing 273.1 acres more or less.

AND

The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.
Parcel contains 9.7 acres more or less.
TOGETHER WITH the right for ingress and egress over the following described

parcel:

A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).
Subject to any easements, restrictions, reservations and rights-of-way to record.

ALSO

BAYWINDS PARCEL (Added pursuant to the Seventh Development Order Amendment)

A tract or parcel of land being a portion of the South 990 feet of Government Lot 2, Section 18 and a portion of the West 2200 feet of the South 990 feet of the north half of Section 17, Township 47 South, Range 25, Lee County, Florida and being more particularly described as follows:

Beginning at the East quarter corner of said Section 18, run S89°16'50"W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967;

THENCE the following courses and distances along said Bulkhead Line:
N56°42'05"W, 265.00 feet, to a point of curvature;
Along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37°20'50", chord of 332.98 feet and chord bearing of N38°01'40"W, to a point of tangency;
N19°21'15"W, 481.24 feet, to a point of curvature;
Along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59°50'20", chord of 99.76 feet and chord bearing of N49°16'25"W, to a point of tangency;
N79°11'35"W, 144.73 feet, to a point of curvature;
Along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32°21'45:, chord of 55.74 feet and a chord bearing of N63°00'42"W, to a point of tangency;
THENCE run N89°16'50"E, leaving said Bulkhead Line on a line parallel to, and 990.00 feet distant, measured at right angles from, the south line of said Lot 2 and its westerly extension thereof, for 2081.30 feet, said line being the northerly property line, to the east line of said Section 18, said point of being N0°50'14"E and 990.35 feet from the East Quarter Corner of said Section 18;
THENCE run N89°19'25"E along a line parallel to, and 990.00 feet distant, measured at right angles from, the South line of said North half of said Section 17 for 2200.77 feet;

THENCE run S0°50'14"W along a line parallel to, and 2200.00 feet distant, measured at right angles from, the west line of said Section 17 for 960.34 feet to the North right-of-way of a 30 foot wide road as recorded in Deed Book 305, Page 276, Public Records of Lee County, Florida, said North right-of-way line being 30 feet northerly of and parallel to the South line of the North half of Section 17;
THENCE along said north right-of-way line S89°19'25"W, 430.89 feet;
THENCE along the lands known locally as Spring Creek Estates, and unrecorded plat, N0°40'35"W, 510.00 feet;
S89°19'25"W, 885.06 feet to a point of curvature;
Along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33°56'23", chord of 227.66 feet and chord bearing of S72°21'14"W, to a point on the curve; S0°40'35"E, 167.10 feet;
and S30°56'33"W, 130.70 feet to the Northeast corner of lands described in Official Record Book 1194, Page 1085;
THENCE westerly along said lands and waters of a canal 106 feet, more or less to the Northeast corner of said lands described in Official Record Book 1057, Page 38;
THENCE southwesterly and westerly along said lands and said canal 400 feet more or less to the northwest corner of lands described in Official Record Book 1453, Page 495;

THENCE southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of said north half of said Section 17;
THENCE S89°19'25"W, 136 feet more or less to the POINT OF BEGINNING, containing 72 acres more or less.

The applicant has indicated that the STRAP numbers for the subject property are:
17-47-25-00-00100.0000 & 18-47-25-00-00001.0020

ZONING MAP

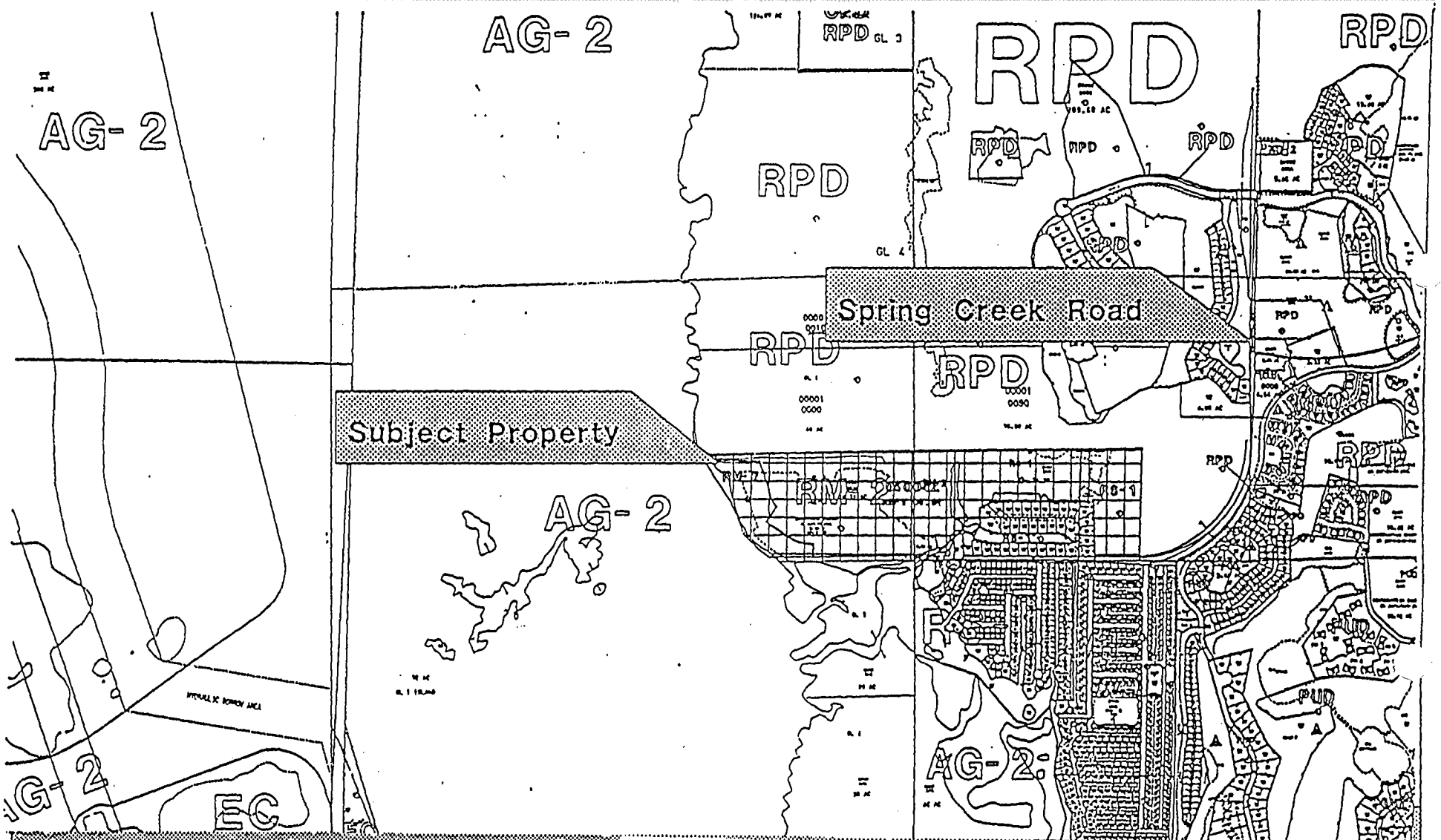
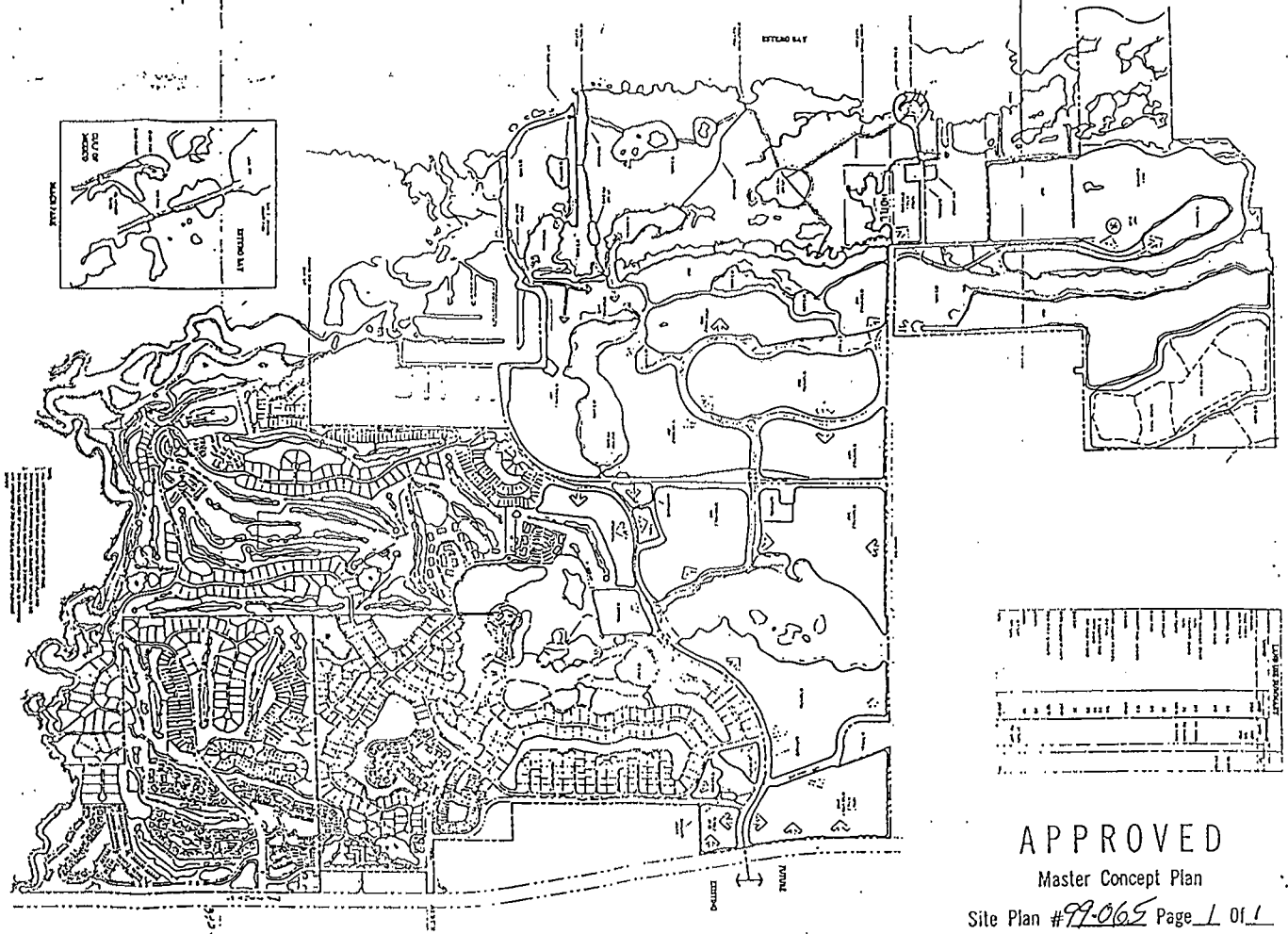


EXHIBIT B



APPROVED

Master Concept Plan

Site Plan #99-065 Page 1 Of 1

Subject to conditions in Resolution Z-99-065

Zoning Case #95-01-050.04Z 09.01

PROJECT

PELICAN LANDING

TASK

MAP H Master Concept Plan

WCI COMMUNITIES

JANUARY 7, 1999

Sheet 1 of 1

EXHIBIT C

EXHIBIT D

SEVENTH DEVELOPMENT ORDER AMENDMENT FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE 95-01-050.04Z ~~08.01~~ 09.01

WHEREAS, on October 19, 1998, WCI Communities, L.P., the owner of the Pelican Landing Development of Regional Impact (DRI) requested an amendment to the original Development Order adopted August 29, 1994, as amended; and

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995 (incorporating the terms of a settlement agreement); 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) November 4, 1996; 4) November 17, 1997; 5) September 21, 1998; 6) June 21, 1999, and the conditions proposed for the seventh amendment to the Pelican Landing DRI DO; and

WHEREAS, as part of the seventh development order amendment, the developer proposes to add 72 acres to the Pelican Landing DRI; and

WHEREAS, Chapter 380, F.S., requires a developer who seeks to develop property which is contiguous to a previously approved DRI to incorporate the property into the DRI; and

WHEREAS, the 72 acres of land proposed for addition to the DRI are contiguous to the Pelican Landing DRI and has certain vested local, state, and federal permits. The permits are those permits necessary to commence construction consistent with the plan of development shown on Lee County Development Order No. 95-12-068.00D and to permit impacts to jurisdictional wetlands and corresponding mitigation; and

WHEREAS, the 72 acres will be added without increasing the number of dwelling units approved for the DRI; and

WHEREAS, the requested amendment is presumed to be a substantial deviation pursuant to Section 380.06(19)(e)5.c, Florida Statutes. This presumption may be rebutted by clear and convincing evidence. Evidence was presented at the hearing that established that the addition of the 72-acre Baywinds Parcel **does not constitute** a substantial deviation requiring additional Development of Regional Impact review; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order described in this document are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local Land Development regulations; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that the proposed change ***does not constitute*** a substantial deviation warranting further DRI review.

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on ~~2,577~~ 2,649± acres located approximately three miles north of the Lee/Collier County Line. Approximately 273± acres of the ~~2,577~~ 2,649-acre total constitutes the Spring Creek West DRI. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct 4,400 residential units, of which 665 are single-family and 3,735 multi-family, 300,000 square feet of gross floor area of retail commercial, and 475,000 square feet of gross floor area of office commercial. The retail uses will provide up to 2,048 parking spaces and the office uses will provide up to 1,587 parking spaces. The project will also include 750 hotel/motel rooms, a 50,000 square-foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, an existing boat ramp on the Baywinds Parcel and a beach park for the benefit of the owners in Pelican Landing. There are 87 acres of upland habitat preserve, ~~614~~ 635 acres of salt and freshwater wetlands, ~~227~~ 234.68 acres of water management lakes, ~~145~~ 162.16 acres of public and private rights-of-way, 6 acres of utilities and a .11-acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project build out is the year 2002.

B. LEGAL DESCRIPTION: In Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida:

PARCEL 1

A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;
THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;

THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;
THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;
THENCE run along said centerline the following courses:
S78°50'00"W for 181.31 feet,
N34°24'12"W for 230.22 feet,
N30°59'12"W for 174.93 feet,
N24°25'16"E for 120.83 feet,
S65°47'43"E for 219.32 feet,
N18°24'43"E for 158.11 feet,
N75°11'47"W for 351.71 feet,
N65°09'33"W for 451.88 feet,
N84°18'44"W for 351.75 feet,
N66°54'31"W for 445.79 feet,
S63°24'43"W for 134.16 feet,
S03°23'22"E for 170.29 feet,
S50°30'17"W for 220.23 feet,
N84°49'43"W for 331.36 feet,
S62°13'07"W for 214.71 feet,
S22°08'36"W for 291.55 feet,
S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;
THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;
THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;
THENCE run along said centerline the following courses:
N09°13'28"W for 137.34 feet,
N29°08'22"W for 590.59 feet,
N38°31'58"W for 278.03 feet,
N65°16'43"W for 254.95 feet,
N37°18'28"W for 286.01 feet,
N32°51'05"E for 252.39 feet,
N20°11'00"E for 236.69 feet,
N27°23'47"W for 369.25 feet,
N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;
THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;
THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;
THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;
THENCE run S89°58'35"E along said South line for 739.45 feet;

THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;
THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;
THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;
THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);
THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;
THENCE continue N00°07'17"E along said East line for 343.54 feet;
THENCE run S89°38'58"E for 10.00 feet;
THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;
THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;
THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;
THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;
THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);
THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;
THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;
THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;
THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);
THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;
THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;
THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;
THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;
THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;
THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;
THENCE run S00°06'43"E for 1,085.91 feet;

THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;
THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;
THENCE run S00°06'43"E along said West line for 49.81 feet;
THENCE run S89°06'43"W for 300.00 feet;
THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;
THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;
THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.

ALSO

PARCEL 2
A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:
From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.
From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;
THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;
THENCE run S00°07'58"W along said West line for 2,646.47 feet;
THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;
THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;
THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;
THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;
THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;
THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;
THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;

THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;
THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;
THENCE run N89°35'27"E for 666.22 feet;
THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;
THENCE run S01°07'45"E along said West line for 488.63 feet;
THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.
LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.

ALSO

PARCEL 3

A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:
Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:
From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;
THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;
THENCE run N01°22'23"W for 1,304.41 feet;
THENCE run N89°56'22"W for 107.12 feet;
THENCE run N01°22'55"W for 1,303.87 feet;
THENCE run N89°34'15"E for 2,593.81 feet;
THENCE run S00°26'45"E for 2,655.42 feet;
THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;
THENCE run N89°25'01"W for 587.55 feet;
THENCE. run S00°50'16"E for 132.58 feet;
THENCE run N89°11'54"W for 75.00 feet;
THENCE run N00°50'16"W for 132.30 feet;
THENCE run N89°25'01"W for 610.69 feet;
THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;
THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.

ALSO

PARCEL 4

All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;
THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;
THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;
THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.
Containing 2,409 acres, more or less.
Bearings herein above mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.

ALSO

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:

From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;
THENCE run S62°26'49"W for 98.40 feet;
THENCE run N27°33'11"W for 1,863.42 feet;
THENCE run N20°00'41"W for 1,403.30 feet;
THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.
From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,
N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,
N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,
N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,
N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,
N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,
N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,
N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;
THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;
THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;

THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;
THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.

AND

From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;
THENCE run S19°13'48"E for 50.64 feet;
THENCE run S04°34'15"E for 54.63 feet;
THENCE run S24°53'12"E for 50.09 feet;
THENCE run S27°10'29"E for 50.01 feet;
THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;
THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;
THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;
THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.
Bearings herein above mentioned are Plane Coordinate for the Florida West Zone.

ALSO

KERSEY PARCEL

Parcels lying in Section 5, Section 6 and Section 8, Township 47 South, Range 25 East, Lee County, Florida, more particularly described as follows:

Parcels in Section 5:

The West One-Quarter (W¼) of the Northwest One-Quarter (NW¼) of the Southwest One-Quarter (SW¼); and

The West One-Third (W⅓) of the Southwest One-Quarter (SW¼) of the Southwest One-Quarter (SW¼).

Parcels in Section 6:

Government Lot 4 of said Section 6 and the Southeast One-Quarter (SE¼) of the Southeast One-Quarter (SE¼) of said Section 6; and

Parcel as shown in Official Record Book 1762 at Page 4173, Public Records of Lee County, Florida:

A tract or parcel of land situated in the State of Florida, County of Lee, being a part of the Southeast One-Quarter (SE¼) of Section 6, Township 47 South, Range 25 East. Further bounded and described as follows:

Starting at the Southeast corner of said Southeast One-Quarter (SE¼) of Section 6; Thence N00°44'33"W along the Easterly line of said fraction for 1300.67 feet to the Southeast corner of the Northeast One-Quarter (NE¼) of said Southeast One-Quarter (SE¼). Said point being the point of beginning of the herein described parcel; Thence N00°41'04"W along the Easterly line of said fraction for 1208.36 feet; Thence West for 349.47 feet; Thence South for 162.50 feet; Thence N80°32'07"W for 600.67 feet; Thence S47°00'45"W for 523.62 feet; Thence South for 778.51 feet; Thence S89°36'52"E along the Southerly line of the aforesaid fraction of a section for 1339.46 feet to the point of beginning

Bearings are based on a plat prepared by Tri-County Engineering, Inc. in May of 1968.

Parcel in Section 8:

The West One-Third (W⅓) of the West One-Half (W½) of the Northwest One-Quarter (NW¼) of said Section 8, less the Southerly 40.00 feet for the right-of-way of Coconut Road.

Parcel contains 203 acres, more or less.

ALSO

SMOOT PARCEL

That part of the South half of Government Lot 2, Section 7, Township 47 South, Range 25 East, Lee County, Florida, described as follows:

Begin 660 feet North 3 degrees 58 minutes West and 957 feet South 87 degrees 15 minutes West of the Southeast corner of Government Lot 2, Section 7, Township 47 South, Range 25 East, thence South 87 degrees 15 minutes West 247.5 feet, thence South 11 degrees, 8 minutes East 199.6 feet, thence North 87 degrees, 15 minutes East 247.5 feet, thence North 11 degrees, 8 minutes West 199.5 feet to the point of beginning, containing 1.3 acres more or less.

ALSO

SPRING CREEK WEST DRI PARCEL

All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:

ALSO INCLUDED THERETO:

All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;

ALSO INCLUDED THERETO:

All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida.

ALSO INCLUDED THERETO:

All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;
Subject to easements and restrictions of record.
Containing 273.1 acres more or less.

AND

The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.
Parcel contains 9.7 acres more or less.
TOGETHER WITH the right for ingress and egress over the following described parcel:

A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).
Subject to any easements, restrictions, reservations and rights-of-way to record.

ALSO

BAYWINDS PARCEL (Added pursuant to the Seventh Development Order Amendment)

A tract or parcel of land being a portion of the South 990 feet of Government Lot 2, Section 18 and a portion of the West 2200 feet of the South 990 feet of the north half

of Section 17, Township 47 South, Range 25, Lee County, Florida and being more particularly described as follows:

Beginning at the East quarter corner of said Section 18, run S89°16'50"W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967;

THENCE the following courses and distances along said Bulkhead Line:
N56°42'05"W, 265.00 feet, to a point of curvature;
Along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37°20'50", chord of 332.98 feet and chord bearing of N38°01'40"W, to a point of tangency;
N19°21'15"W, 481.24 feet, to a point of curvature;
Along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59°50'20", chord of 99.76 feet and chord bearing of N49°16'25"W, to a point of tangency;
N79°11'35"W, 144.73 feet, to a point of curvature;
Along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32°21'45:, chord of 55.74 feet and a chord bearing of N63°00'42"W, to a point of tangency;
THENCE run N89°16'50"E, leaving said Bulkhead Line on a line parallel to, and 990.00 feet distant, measured at right angles from, the south line of said Lot 2 and its westerly extension thereof, for 2081.30 feet, said line being the northerly property line, to the east line of said Section 18, said point of being N0°50'14"E and 990.35 feet from the East Quarter Corner of said Section 18;
THENCE run N89°19'25"E along a line parallel to, and 990.00 feet distant, measured at right angles from, the South line of said North half of said Section 17 for 2200.77 feet;
THENCE run S0°50'14"W along a line parallel to, and 2200.00 feet distant, measured at right angles from, the west line of said Section 17 for 960.34 feet to the North right-of-way of a 30 foot wide road as recorded in Deed Book 305, Page 276, Public Records of Lee County, Florida, said North right-of-way line being 30 feet northerly of and parallel to the South line of the North half of Section 17;
THENCE along said north right-of-way line S89°19'25"W, 430.89 feet;
THENCE along the lands known locally as Spring Creek Estates, and unrecorded plat, N0°40'35"W, 510.00 feet;
S89°19'25"W, 885.06 feet to a point of curvature;
Along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33°56'23", chord of 227.66 feet and chord bearing of S72°21'14"W, to a point on the curve; S0°40'35"E, 167.10 feet;
and S30°56'33"W, 130.70 feet to the Northeast corner of lands described in Official Record Book 1194, Page 1085;
THENCE westerly along said lands and waters of a canal 106 feet, more or less to the Northeast corner of said lands described in Official Record Book 1057, Page 38;

THENCE southwesterly and westerly along said lands and said canal 400 feet more or less to the northwest corner of lands described in Official Record Book 1453, Page 495;

THENCE southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of said north half of said Section 17;
THENCE S89°19'25"W, 136 feet more or less to the POINT OF BEGINNING, containing 72 acres more or less.

C. The DRI property is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, TFC-2 and RM-2; the property is partially developed.

D. The Application for Development Approval as modified by the settlement agreement was determined to be consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Sections 380.05 and 380.06 (14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The proposed Development Order Amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes. The development, as proposed in the Application for Development Approval (ADA) amended by subsequent Notices of Proposed Change, and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06 (15) (d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek

West DRI in the same manner as they are presently applicable, except that one annual monitoring report that includes both Pelican Landing and Spring Creek West DRIs must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for the Pelican Landing DRI adopted on August 29, 1994, and amended on March 22, 1995, August 16, 1995, November 4, 1996, November 17, 1997, and September 28, 1998, are further amended as follows, with new language underlined and deletions struck through. All other portions of the original Development Order will remain in full force and effect.

For the purposes of this Development Order, the term "developer" or "Applicant" includes successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer will immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI DO, which ends on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income

households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI to locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time home buyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying home buyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. The developer provided Lee County with the funds for the provision and connection of a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at build out. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure advising all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for any Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan must address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan must be developed in coordination with the Lee County Emergency Management officials and found sufficient by those officials months after the effective date of the DRI DO. *Editorial note: The developer submitted an emergency plan to Lee County Emergency Management for review and approval. The plan must be re-submitted annually to address changes in the development parameters and changes in local hurricane evacuation and sheltering policies. The plan must comply with Lee County Administrative Code 7-7.*

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate

sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000 foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator must host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator will provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise. <u>The Baywinds parcel has existing environmental permits that remain valid as of the date of the Seventh Development Order Amendment. These permits are based on the plan of development shown on the local Development Order Approval No. 95-12-068.00D. Some</u>

improvements were made pursuant to those permits. Future improvements to the Baywinds parcel must be consistent with the conditions set forth in those permits as may be amended.

1. There were three bald eagles' nests of concern prior to the original development order adoption. One nest was on the Pelican Landing property in the Eco Park. The other two nests were originally within 1500 to 1600 feet of Pelican Landing. One of these other nests was located on the Kersey parcel and declared abandoned by the USFWS in July 1998. The buffers that affect Pelican Landing property were established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to any new development within 1500 feet of any active eagle nest other than the nest located within the Eco Park, the Developer must prepare an on-site eagle management plan, addressing the Pelican Landing DRI property only, that will be reviewed by DCA, SWFRPC, ~~FGFWFC~~ FWC Lee County, and USFWS. The agencies must provide specific written objections or concerns if any, regarding any new proposed management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to any lawful objections. The agencies will review and respond to the management plan resubmittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. If a proposed management plan includes development within 750 feet of an active eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the ~~FGFWFC~~ FWC and USFWS.

2. A local development order for the Hickory Island Beach Park has been issued to permit construction of beach park infrastructure. This local development order includes a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP required the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permitted a refinement of the conservation easement boundaries after completion of a one year utilization study. The final conservation easement is consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI D.O., Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys

for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI DO.

The Developer submitted a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI DO, on November 14, 1994. Lee County, FGFWFC, and DCA reviewed the management plan. Lee County approved this plan and its implementation was certified in October 1996.

3. The projected gopher tortoise burrow count for the original Pelican Landing DRI area was 439, based on an estimate of FGFWFC habitat guidelines, a minimum of 75 acres of gopher tortoise habitat must be protected.

The Developer has set aside a 78±-acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat for the original Pelican Landing DRI land area. This area is known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the original Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993 for the original Pelican Landing DRI. A new protected species survey was conducted in March and April of 1998 on the addition to the Pelican Landing DRI known as the Kersey-Smoot parcel. The new survey revealed the presence of 114 active and inactive gopher tortoise burrows on 70 acres. A protected species survey was conducted in 1990 and February 1996 on the Baywinds parcel. The survey revealed the presence of 28 active and inactive gopher tortoise burrows on 15.41 acres. The Developer has submitted for an Incidental Take Permit for the new gopher tortoise burrows located outside of the Eco-Park in the undeveloped Kersey-Smoot and Baywinds parcels. The Developer must obtain an Incidental Take Permit prior to proceeding with development within these new gopher tortoise habitat areas. Prior to the start of construction, all gopher tortoise burrows within these areas must be excavated and any resident gopher tortoises, or commensal species, relocated to open spaces within the Pelican Landing DRI.

Impacts to gopher tortoise habitat within the Kersey-Smoot and Baywinds parcels will be mitigated through incidental take funds paid to the ~~FGFWFC~~ FWCfor the purpose of regionally significant gopher tortoise habitat.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), and Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot and Baywinds parcels. However, minor mangrove trimming is permitted within the vicinity of the

clubhouse on the Baywinds parcel to provide a limited view of the Estero Bay. The scope of the developer's DEP application request for minor trimming is subject to the review and approval of Lee County Division of Planning, Environmental Sciences staff. All trimming activity will be subject to the wetland regulatory permit approvals.

The Developer has granted a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to the FGFWFC. The conservation easement was drafted to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage are permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes prohibiting the destruction of trees.

5. Should any orchids, wild pine air plants, Florida Counties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner that is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner that forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced above, the approved management practices will be considered a part of this development order for reinforcement purposes, and be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling of not more than ~~10~~ 13 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasive plants, the restoration of historic hydro periods, and a total of not more than ten acres of littoral zone plantings. The mitigation for wetland impacts to the Baywinds parcel was determined prior to the inclusion of the property into the Pelican Landing DRI as part of the environmental and local government permitting. The mitigation was based on the plan of development reflected in Lee County Development Order 95-12-068.00D. Changes to the plan of development that include additional wetland impacts may necessitate modification to the environmental and local government permitting.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and~~/or~~ hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator is responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, must notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, must contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials located on the premises.

10. If required by federal, state or local regulations:

a. The developer/property owner must prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner must establish an emergency notification system to be used in the event of a hazardous material release.

G. Storm Water Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or Storm water retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site Storm water wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD must establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

7. The Baywinds parcel must be developed in accordance with the following permits: Water Management permit numbers 362932255 and 36-02043-S, ACOE permit number 89IPD-20127 and the letter of permission to continue work authorized in the original permit, LOP #1989001127, and FDEP permit number 36293225. These permits were granted based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These permits may be modified, updated or replaced as required by law. Changes to the local development order may also require modification of the referenced permits.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Attachment B, "Pelican Landing DRI Development Parameters." The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and build out (2002). Each annual monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

Build Out (2002)		
Corkscrew Road		
- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted

US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Northbound dual left turn lanes
	-	Separate WB thru and right turn lanes
	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees are estimated to be $8,900,000 for the land uses identified in Attachment B. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to

such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted

at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until build out of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and tuning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through build out.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultra low volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as

appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities must be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must be designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through l. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management areas within five hundred feet of the mangrove fringe of Estero Bay.

3. The management practices that the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the original Pelican Landing DRI golf course adjacent to the mangrove fringe of Estero Bay. This plan must be amended to include the Kersey-Smoot parcels prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended management plan must: include a groundwater and surface water monitoring plan; provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; identify the locations for the groundwater monitoring and testing on a map(s);: and, set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written amended surface and groundwater quality management plan to Lee County and DCA. The amended plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100' undisturbed naturally vegetated corridor, except for water management facilities permitted by the SFWMD and except for the removal of exotic plants as required by Lee County. The 100' buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay south of Coconut Road.

The mangrove line for the Kersey-Smoot parcels is off set 50 feet, to over 250 feet west of the wetland jurisdictional line delineated along the western (Estero Bay) side of the Kersey-Smoot parcels. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcels. This includes both saltwater and freshwater wetlands contained within the boundary of the wetlands jurisdictional line. The proposed golf course fairways, tees and greens must be set back a minimum of 25 feet from all wetland jurisdictional lines on the Kersey-Smoot parcels, except where wetland impacts have been permitted by the SFWMD and the Army Corps of Engineers. Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot parcels.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI DO do not preempt the authority of the SFWMD and the DEP. Section 373.016, Florida Statutes provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI DO are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given preemptive authority, the requirements of the SFWMD and the DEP will control.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents that are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, dated January 7, 1999, last revised ~~September 16,~~ July 7, 1999, and stamped received at the permit counter on July 23, 1999, is attached hereto as Attachment A and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order that clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality that may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of, any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order, which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans that creates a reasonable likelihood of adverse regional impacts or other regional impacts not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a build out date of 2002, and a termination date of 2005. This term is based on a ten year build out and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, E1 Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the

approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

Lee County will reserve to this DRI until 2005, 300 acres of residential use allocation in each of the Urban Community and Outlying Suburban Future Land Use Categories (for a total of 600 acres) and 60 acres of commercial use allocation in the Bonita Springs Planing Community, as established by Lee Plan Map 16, The Planning Communities Map and Table 1(b), known as the Planning Community Year 2020 Allocation. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until build out. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. In compliance with a condition of the first development order amendment, the developer did amend this Development Order to incorporate the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. A legal description of that portion of the Spring Creek DRI, along with the conditions of the Spring Creek Development Order that are applicable to the Spring Creek West property are now incorporated into this development order). The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation that would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective,

the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes. The inclusion of the Baywinds parcel as part of the Seventh Development Order amendment does not divest the rights provided in the permits, development orders, and government approvals obtained on that parcel based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These approvals were granted prior to its inclusion in the Pelican Landing DRI and will allow for the development of the Baywinds Parcel consistent with the plan of development reflected in Lee County Development Order No. 95-12-068.00D.

THE MOTION TO ADOPT this Amendment was offered by Commissioner Coy and seconded by Commissioner Manning and upon poll of the members present, the vote was as follows:

John E. Albion	Aye
Douglas R. St. Cerny	Aye
Andrew W. Coy	Aye
Ray Judah	Nay
John E. Manning	Aye

DULY PASSED AND ADOPTED on December 6, 1999.

ATTEST:
CHARLIE GREEN, CLERK

BY: Michelle D. Leisner
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: John E. Albion
Commissioner John Albion, Chairman

APPROVED AS TO FORM BY:
Donna Marie Collins
Donna Marie Collins
County Attorney's Office

Attachments: A - Map H, dated January 7, 1999, Revised July 7, 1999, and stamped received at the permit counter July 23, 1999
B - Development Parameters

FILED DEC 17 1999
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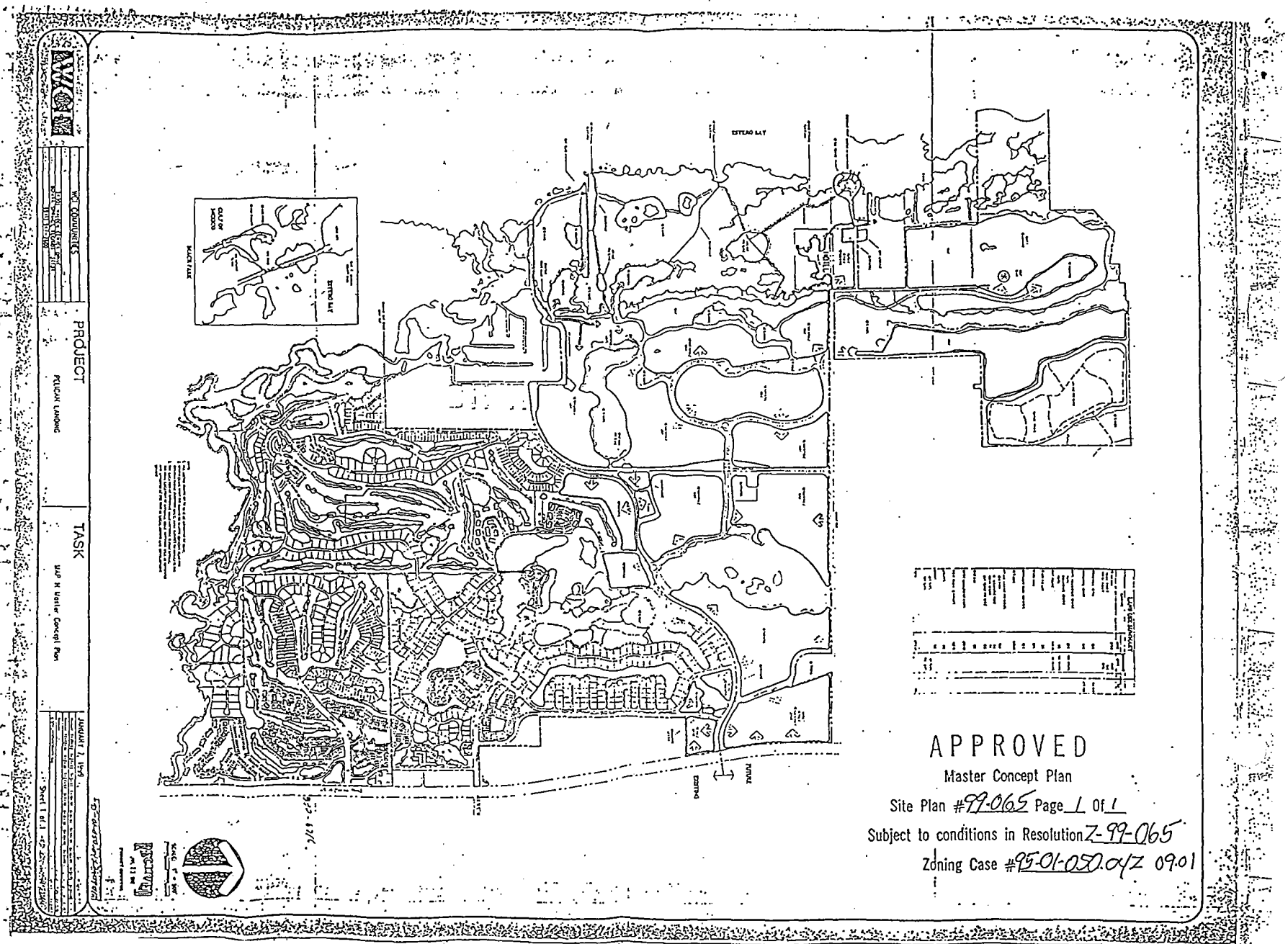
MINUTES OFFICE



Attachment A

ATTACHMENT "B"
~~SIXTH~~ SEVENTH AMENDMENT
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS

Land Use	Units[1]	Existing (1998)	Build out Total (2002)
Residential	DU	1083	4,400
Single Family	DU	402	665
Multi Family	DU	596	3,735
Retail[2]	GFA	11,000	300,000
Office[3]	GFA	134,738	475,000
Hotel/Motel	Rooms	0	750
Recreation Uses			
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	21	30
Colony Range Club/ Golf Course/ Clubhouse/Practice Range	Holes	19	19
Resort Golf Course/ Clubhouse Practice Range	Holes	0	19
Tennis Center	Courts	12	~~12~~ 24
Coconut Marina	Boat Slips Wet	24	48
	Dry	0	150
Redfish Point	GFA	5,000	5,000
	Boat Slips Wet	15	15
Other[4]	Boat Slips Wet	2	2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

ATTACHMENT L
ACCO

RESOLUTION NUMBER Z-02-002

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, an application was filed by the property owner, WCI Communities, Inc., for an amendment to the Pelican Landing DRI Development Order #1-9293-121; and

WHEREAS, a public hearing was advertised and held on January 9, 2002, before the Lee County Zoning Hearing Examiner, who gave full consideration to the evidence in the record for Case #DRI2000-00022; and

WHEREAS, a second public hearing was advertised and held on February 26, 2002 before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to amend the Pelican Landing DRI Development Order to:

a. revise the legal description to reflect the incorporation of a portion of the existing DRI into the City of Bonita Springs; and

b. revise the legal description to correct some minor discrepancies in the description associated with the addition of 140± acres to the DRI in accordance with Case DRI2000-00002; and

c. revise the legal description to conform with the requirements of LDC §34-202; and

d. determine whether the proposed changes constitute a substantial deviation under the provisions of §380.06(19), Florida Statutes requiring further Development of Regional Impact review.

The property is located in the Outlying Suburban, Wetlands, Urban Community and Suburban Land Use Categories and legally described in attached Exhibit A. The request to amend the development order is APPROVED, SUBJECT TO the conditions specified in Section B below.

SECTION B. CONDITIONS:

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

1. The development of this project must be in compliance with the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, dated January 7, 1999, last revised March 1, 2001, and stamped "Received Mar 6 2001 Permit Counter."

2. Approval of this rezoning does not guarantee local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocations Table, Map 16 and Table 1(b).

SECTION C. EXHIBITS:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: The legal description and STRAP number of the property.
Exhibit B: Zoning Map (subject parcel identified with shading)
Exhibit C. Tenth Development Order Amendment

SECTION D. FINDINGS AND CONCLUSIONS:

1. The applicant has proven entitlement to the amendment by demonstrating compliance with the Lee Plan, the LDC, and any other applicable code or regulation.

2. The amendment, as approved:

   a. is compatible with existing or planned uses in the surrounding area; and,

   b. will not place an undue burden upon existing transportation or planned infrastructure facilities and will be served by streets with the capacity to carry traffic generated by the development; and,

   c. will not adversely affect environmentally critical areas or natural resources.

3. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

4. The DRI development order amendment, as conditioned, does not create new or additional unreviewed regional impacts, and does not constitute a Substantial Deviation under §380.06(19), Florida Statutes.

The foregoing resolution was adopted by the Lee County Board of Commissioners upon the motion of Commissioner Ray Judah, seconded by Commissioner Douglas St. Cerny and, upon being put to a vote, the result was as follows:

Robert P. Janes	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Absent
John E. Albion	Aye

DULY PASSED AND ADOPTED this 26th day of February, 2002.

ATTEST:
CHARLIE GREEN, CLERK

BY: Michele S. Leismer
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: Ray Judah
Vice-Chairman

Approved as to form by:

County Attorney's Office

SEAL
BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

RECEIVED
MAR - 1 2002
MINUTES OFFICE

JOHNSON ENGINEERING

SINCE 1946

DRI 2000-00022 gm 1

November 1, 2001

DESCRIPTION

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 16, 17, 20 and 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, which tract or parcel is described as follows:

Parcel 1-A

Beginning at the Northwest corner of the Northeast Quarter (NE-1/4) of Section 16; thence run S 00° 02' 54" W along said West line of the Northeast Quarter (NE-1/4) for 2643.98 feet to the Southwest corner of the Northeast Quarter (NE-1/4) of said section; thence run N 89° 10' 38" E along the South line of said fraction for 538.06 feet; thence run S 00° 06' 43" E for 1085.91 feet; thence run N 89° 06' 43" E for 744.41 feet to an intersection with the West line of Tamiami Trail (US 41 S.R. No. 45); thence run southerly along said West line, along the arc of a non-tangent curve to the right of radius 5619.58 feet (chord bearing S 00° 22' 05" E) (chord 50.21 feet) (delta 00° 30' 43") for 50.21 feet to a point of tangency; thence run S 00° 06' 43" E along said West line for 49.81 feet; thence run S 89° 06' 43" W for 300.00 feet; thence run S 00° 06' 43" E for 1445.84 feet to an intersection with the South line of the Southeast Quarter (SE-1/4) of said Section 16; thence run S 89° 16' 54" W along the South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW-1/4) of said Section 16; thence run S 88° 38' 34" W along said South line of said Southwest Quarter (SW-1/4) for 2627.98 feet to the Northeast corner of said Section 20; thence run S 00° 35' 25" E along the East line of said section for 2659.47 feet to the Southeast corner of the Northeast Quarter (NE-1/4) of said section; thence run N 88° 52' 49" E along the North line of the Southwest Quarter (SW-1/4) of said Section 21 for 2,040.41 feet to an intersection with the West line of the East 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run S 00° 51' 35" E along said West line for 801 feet, more or less to the water of Spring Creek; thence run westerly along Spring Creek for 3630 feet more or less to an intersection of the East line of said Section 20; thence run S 00° 38' 52" E along said East line of Section 20 for 91 feet, more or less to an intersection with the approximate centerline of Spring Creek as shown on the Plat of Pelican Landing Unit 5 recorded in Plat Book 59 at Page 11 of said Public Records of Lee County, Florida; thence run along said centerline the following courses: S 78° 50' 00" W for 181.31 feet, N 34° 24' 12" W for 230.22 feet, N 30° 59' 12" W for 174.93 feet, N 24° 25' 16" E for 120.83 feet, S 65° 47' 43" E for 219.32 feet, N 18° 24' 43" E for 158.11 feet, N 75° 11' 47" W for 351.71 feet, N 65° 09' 33" W for 451.88 feet, N 84° 18' 44" W for 351.75 feet, N 66° 54' 31" W for 445.79 feet, S 63° 24' 43" W for 134.16 feet, S 03° 23' 22" E for 170.29 feet, S 50° 30' 17" W for 220.23 feet, N 84° 49' 43" W for 331.36 feet, S 62° 13' 07" W for 214.71 feet, S 22° 08' 36" W for 291.55 feet, S 72° 15' 11" W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW-1/4) of said Section 20; thence run N 00° 50' 19" W along said East line for 520.00 feet to the Northeast corner of said fraction; thence run S 89° 58' 37" W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most easterly branch of said Spring

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EXHIBIT A

Creek as shown on said Plat of Pelican Landing Unit 5; thence run along said centerline the following courses: N 09° 13' 28" W for 137.34 feet, N 29° 08' 22" W for 590.59 feet, N 38° 31' 58" W for 278.03 feet, N 65° 16' 43" W for 254.95 feet, N 37° 18' 28" W for 286.01 feet, N 32° 51' 05" E for 252.39 feet, N 20° 11' 00" E for 236.69 feet, N 27° 23' 47" W for 369.25 feet, N 89° 15' 43" E for 50 feet more or less to the easterly shore of said Spring Creek; thence run northerly along said easterly shore for 1220 feet more or less to an intersection with the North line of said Section 20; thence run N 89° 15' 13" E along said North line of said section for 970 feet, more or less to a Concrete Monument marking the Northwest corner of the Northeast Quarter (NE-1/4) of said Section 20; thence run N 00° 31' 30" E along the West line of the Southeast Quarter (SE-1/4) of said Section 17 for 2674.38 feet to the Northwest corner of said Southeast Quarter (SE-1/4); thence run N 00° 31' 29" E along the West Line of the Northeast Quarter (NE-1/4) of said Section 17 for 3.40 feet to an intersection with the curved southerly line of Spring Creek Road; thence run northeasterly and northerly along the arc of a curve to the left of radius 1130.00 feet (chord bearing N 35° 09' 06" E) (chord 1296.89 feet) (delta 70° 02' 16") for 1381.30 feet; thence run N 89° 52' 02" W for 5.00 feet; thence run N 00° 07' 58" E along the easterly line of Spring Creek Road (50 feet wide) for 1611.64 feet to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 17; thence run S 89° 25' 51" E along said north line of the Northeast Quarter (NE-1/4) of said Section 17 for 1838.15 feet to the Northeast corner of said Section 17; thence run N 89° 27' 22" E along the north line of the Northwest Quarter (NW-1/4) of said Section 16 for 2677.24 feet to the Point of Beginning.
Parcel contains 909 acres; more or less.

AND

PARCEL 1-B

Beginning at an intersection of the west line of Spring Creek Road with the north line of said Section 17; thence run the following courses and distances along the Southerly right-of-way of said Spring Creek Road: Southeasterly along an arc of a non-tangent curve to the right of radius 1725.00 feet (chord bearing S 03° 18' 23" E) (chord 206.27) (delta 06° 51' 19") for 206.40 feet to a point on a non-tangent line; thence run S 89° 52' 02" E for 16.47 feet; thence run S 00° 07' 58" W for 1406.64 feet; thence run N 89° 52' 02" W for 5.00 feet to a point of tangency; thence Southwesterly along an arc of said curve to the right of radius 1070.00 feet (chord bearing S 37° 51' 54" W) (chord 1309.62 feet) (delta 75° 27' 53") for 1409.31 feet to an intersection with the north right-of-way of a 30 foot wide road as recorded in Deed Book 305 at Page 276 of the Public Records of Lee County, Florida; thence run N 89° 59' 08" W along said right-of-way for 718.27 feet to an intersection with the easterly line of lands known locally as Spring Creek Estates, an unrecorded plat; thence along said lands the following courses and distances: N 00° 00' 52" E for 510.00 feet; N 89° 59' 08" W for 885.06 feet to a point of curvature; along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33° 56' 23", chord of 227.66 feet and chord bearing of S 73° 02' 41" W, to a point on the curve; S 00° 00' 52" W for 167.10 feet; and S 31° 38' 00" W for 130.70 feet to the northeast corner of lands described in Official Record Book 1194, Page 1085; thence westerly along said lands and waters of a canal 106 feet, more or less to the northeast corner of said lands described in Official Record Book 1057, Page 38; thence southwesterly and westerly along said lands and said canal 400 feet more or less to the

northwest corner of lands described in Official Record Book 1453, page 495; thence southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of the North Half (N-1/2) of said Section 17; thence N 89° 59' 08" W for 136 feet more or less to the east quarter corner of said Section 18, thence run S 89° 58' 17" W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967; thence the following courses and distances along said bulkhead line: N 56° 00' 38" W for 265.00 feet to a point of curvature; along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37° 20' 50", chord of 332.98 feet and chord bearing of N 37° 20' 13" W, to a point of tangency; N 18° 39' 48" W for 481.24 feet to a point of curvature; along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59° 50' 20", chord of 99.76 feet and a chord bearing of N 48° 34' 58" W, to a point of tangency; N 78° 30' 08" W for 144.73 to a point of curvature; along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32° 21' 45"; chord of 55.74 feet and a chord bearing of N 62° 19' 15" W, to a point of tangency and an intersection with the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 2270 feet more or less to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 18; thence run S 89° 25' 49" E along said north line of the Northeast Quarter (NE-1/4) of said Section 18 for 2330 feet, more or less to the northeast corner of Section 18; thence run S 89° 25' 49" E along the north line of the Northwest Quarter (NW-1/4) of said Section 17 for 2558.62 feet to the northeast corner of said Northwest Quarter (NW-1/4); thence run S 89° 25' 51" E along the north line of the Northeast Quarter (NE-1/4) of said Section 17 for 642.07 feet to the Point of Beginning.

Parcel contains 304 acres, more or less.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

20002476\Pelican Landing-City – 110101

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November 1, 2001

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SPRING CREEK WEST
SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Section 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, being described as follows:

Beginning at the northwest corner of said Section 21; thence run N 88° 38' 34" E along the north line of the Northwest Quarter (NW-1/4) of said Section 21 for 2627.98 feet to the northeast corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 89° 16' 54" E along the north line of the Northeast Quarter (NE-1/4) of said Section 21 for 1289.43 feet to an intersection with the westerly right-of-way line of Tamiami Trail (US 41 – SR No. 45); thence run the following three (3) courses and distances along the westerly right-of-way line of Tamiami Trail: South 00° 06' 50" E for 261.81 feet; S 02° 58' 35" E for 100.12 feet; S 00° 06' 50" E for 3690 feet more or less to the northeasterly waters of Spring Creek; thence run westerly along said northerly waters for 2765 feet more or less to an intersection with the west line of the east 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run N 00° 51' 35" W along said west line for 801 more or less to an intersection with the south line of the Northwest Quarter (NW-1/4) of said Section 21; thence run S 88° 52' 49" W along said south line for 2040.41 feet to the southwest corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 00° 35' 25" W along the west line of said Northwest Quarter (NW-1/4) for 2659.47 feet to the Point of Beginning.

Parcel contains 282 acres, more or less.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

20002476/Description 110101

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DRI 2000-00022 gm5

August 15, 2001

PARCEL IN
GOVERNMENT LOT 3, SECTION 13
AND
GOVERNMENT LOT 2, SECTION 24
TOWNSHIP 47 SOUTH, RANGE 24 EAST
BIG HICKORY ISLAND, LEE COUNTY, FLORIDA

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13 and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida which tract or parcel is described as follows:

From the center of a turnaround on State Road No. 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N 24° 28' 41" W along the northern prolongation of said centerline of State Road No. 865 for 266.00 feet; thence run S 62° 26' 49" W for 98.40 feet; thence run N 27° 33' 11" W for 1863.42 feet; thence run N 20° 00' 41" W for 1403.30 feet; thence run N 65° 00' 00" E for 313.91 feet to the Point of Beginning.

From said Point of Beginning run N 18° 55' 11" W for 97.51 feet, N 22° 26' 23" W for 100.53 feet, N 23° 09' 50" W for 100.14 feet, N 14° 51' 19" W for 73.01 feet, N 27° 40' 10" W for 88.01 feet, N 29° 33' 57" W for 46.01 feet, N 22° 14' 53" W for 47.27 feet, N 20° 39' 23" W for 46.98 feet, N 11° 15' 38" W for 29.80 feet, N 26° 10' 46" W for 46.87 feet, N 09° 09' 45" W for 48.26 feet, N 17° 35' 56" W for 46.04 feet, N 12° 49' 07" W for 50.04 feet, N 29° 20' 48" W for 69.12 feet, N 20° 48' 58" W for 63.82 feet; thence run N 79° 23' 51" W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico; thence run northerly and northeasterly along said waters for 1140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida; thence run along said South line, along the arc of a curve to the right of radius 12000.00 feet for 783 feet to an intersection with the Waters of New Pass; thence run southerly, easterly, southwesterly and southerly along said waters for 4080 feet more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet more or less to the Point of Beginning.

AND

From said Point of Beginning run S 13° 03' 59" E for 94.16 feet; thence run S 19° 13' 48" E for 50.64 feet; thence run S 04° 34' 15" E for 54.63 feet; thence run S 24° 53' 12" E for 50.09 feet; thence run S 27° 10' 29" E for 50.01 feet; thence run S 31° 01' 44" E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records; thence run N 65° 00' 00" E along said south line for 134 feet, more or less to the waters of Estero Bay; thence northerly along said waters for 358 feet, more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet, more or less to the Point of Beginning.

Containing 36.8 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

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JOHNSON ENGINEERING

SINCE 1946

DRI 2000-00022 gm 6

November 1, 2001

DESCRIPTION

PELICAN LANDING DRI –UNINCORPORATED LEE COUNTY
SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 5, 6, 7, 8 and 9, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

PARCEL 2-A

Beginning at an intersection of the West line of Tamiami Trail (State Road No. 45) with the south line of Coconut Road as described in Official Record Book 1738 at Page 2538 of the Public Records of Lee County, Florida; thence run S 00° 10' 56" W along said West line for 621.81 feet to a point of curvature; thence run southerly and southeasterly along said West line, along the arc of a curve to the left of radius 5797.58 feet (chord bearing S 04° 57' 34" E) (chord 1039.14 feet) (delta 10° 17' 00") for 1040.54 feet to a point of tangency; thence run S 10° 06' 04" E along said westerly line for 938.08 feet to an intersection with the south line of the Southeast Quarter (SE-1/4) of said Section 9; thence run S 89° 23' 00" W along said south line for 708.94 feet to the southwest corner of said Southeast Quarter (SE-1/4) of Section 9; thence run S 89° 27' 22" W along the south line of the Southwest Quarter (SW-1/4) of Section 9 for 2677.24 feet to the southwest corner of the Southwest Quarter (SW-1/4) of Section 9; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 1,838.15 feet to an intersection with the easterly line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records; thence continue N 00° 07' 17" E along said east line for 343.54 feet; thence run S 89° 38' 58" E for 10.00 feet; thence run N 00° 07' 17" E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records; thence run S 89° 21' 02" E along the South line of said lands for 189.98 feet; thence run N 00° 07' 17" E along the East line of said lands for 125.01 feet; thence run N 89° 21' 02" W along the North line of said lands for 199.98 feet to an intersection with the easterly line of said Spring Creek Road; thence run N 00° 07' 17" E along said East line for 1292.76 feet to an intersection with the South line of Coconut Road (50 feet wide); thence run S 89° 16' 14" E along said South line for 1802.38 feet to an intersection with the West line of said Section 9; thence run N 00° 39' 58" W along said West line for 25.00 feet to a Concrete Monument marking the Northwest corner of the Southwest Quarter (SW-1/4) of said section; thence continue along said west line N 00° 39' 58" W for 5.00 feet to an intersection with the south line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records; thence run S 89° 35' 50" E along said south line for 1549.14 feet; thence run southwesterly along a non-tangent curve to the left of radius 30.00 feet (chord bearing S 45° 24' 10" W) (chord 42.43 feet) (delta 90° 00' 00") for 47.12 feet to a point of tangency; thence run S 00° 24' 10" W for 336.31 feet to a point of curvature; thence run along the arc of a curve to the left of radius 270.00 feet (chord bearing S 44° 35' 50" E) (chord 381.84 feet) (delta 90° 00' 00") for 424.12 feet to a point of tangency; thence run S 89° 35' 50" E for 99.41 feet to a point of curvature; thence run along the arc of a curve to

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the right of radius 530.00 feet (chord bearing S 75° 44' 50" E) (chord 253.74 feet) (delta 27° 42' 00") for 256.23 feet; thence run N 20° 53' 52" W for 748.16 feet to an intersection with the aforementioned south line of Coconut Road; thence run along said south line S 89° 35' 50" E for 1,301.22 feet to the Point of Beginning.
Parcel contains 294.56 acres, more or less.

AND

PARCEL 2-B

From a railroad spike marking the northwest corner of the Southwest Quarter (SW-1/4) of said Section 8 run S 00° 23' 24" E along the west line of said fraction for 25.00 feet to an intersection with the south line of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of the Public Records of Lee County of Lee County, Florida, and the Point of Beginning.
From said Point of Beginning run S 89° 16' 14" E along said south line for 3253.00 feet to an intersection with the west line of Spring Creek Road; thence run the following courses and distances along said west line of said Spring Creek Road; S 00° 17' 17" W for 817.15 feet; N 89° 52' 43" W for 14.27 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the right of radius 1725.00 feet (chord bearing S 05° 52' 51" W) (chord 346.22 feet) (delta 11° 31' 09") for 346.81 feet to a point of tangency; thence run S 11° 38' 26" W for 178.50 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the left of radius 2400.00 feet (chord bearing S 00° 28' 49" W) (chord 929.06 feet) (delta 22° 19' 14") for 934.96 feet to a point of tangency; thence run S 10° 40' 48" E for 231.66 feet to a point of curvature; thence run Southeasterly along said arc of curve to the right of radius 1725.00 feet (chord bearing S 08° 42' 25" E) (chord 118.78) (delta 03° 56' 45") for 118.80 feet to an intersection with the south line of said Section 8; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 642.07 feet to the southeast corner of the Southwest Quarter (SW-1/4) of Section 8; thence run N 89° 25' 49" W along the south line of the Southwest Quarter (SW-1/4) of Section 8 for 2558.62 feet to the southwest corner of said Section 8; thence run N 89° 25' 49" W along the south line of the Southeast Quarter (SE-1/4) of said Section 7 for 2330 feet more or less to the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 6,485 feet more or less to an intersection with the north line of the South Half (S-1/2) of Government Lot 2 of said Section 7; thence run N 89° 32' 15" E along the north line of said South Half (S-1/2) of Government Lot 2 for 793 feet more or less to the northeast corner of lands described in Official Record Book 1895 at Page 3817 of said public records; thence run S 08° 50' 45" E along the east line of said lands for 199.50 feet to the southeast corner of said lands; thence run N 89° 35' 27" E for 666.22 feet; thence run N 89° 32' 15" E for 239.00 feet to an intersection with the west line of Coconut Road; thence run S 01° 07' 45" E along said west line for 488.63 feet; thence run N 89° 40' 05" E along the south line of said Coconut Road for 24.69 feet to the Point of Beginning. Less and except Official Record Book 1677 at Page 3516 of said Public Records.
Parcel contains 343 acres, more or less.

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AND

PARCEL 2-C

A parcel of land lying in and being a portion of the East Half of the Northwest Quarter of Section 8, Township 47 South, Range 25 East of Lee County, Florida, being more particularly described as follows:

Commencing at the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 00' 45" W along the west line of said East Half (E-1/2) of the Northwest Quarter (NW-1/4) for 40.02 feet to an intersection with the northerly right-of-way line of Coconut Road (as maintained); thence run S 89° 16' 14" E along said right-of-way for 171.25 feet to the Point of Beginning.

From said Point of Beginning continue S 89° 16' 14" E along said right-of-way a distance of 342.50 feet; thence run N 01° 00' 44" W a distance of 367.98 feet; thence run N 89° 16' 14" W a distance of 342.50 feet; thence run S 01° 00' 44" E a distance of 367.98 feet to the Point of Beginning.

Parcel contains 2.89 acres, more or less.

AND

PARCEL 2-D

All that part of Florida Gulf Land Company's Subdivision as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, Florida, lying in Section 5, Township 47 South, Range 25 East South and West of lands to Florida Power and Light Company as described by deed recorded in Deed Book 244, Page 138 of said Public Records, also Lot 8, Block 14 of Eldorado Acres (an Unrecorded Subdivision) as shown in Deed Book 310 at Page 183 of said public records; also part of Sections 5, 6, 7 and 8, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at the southeast corner of said Section 5; thence run N 88° 46' 30" W along the south line of the Southeast Quarter (SE-1/4) of said Section 5 for 2580.80 feet to the southeast corner of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 25' 13" W along the south line of said Southwest Quarter (SW-1/4) for 587.32 feet to an intersection with the east line of said Lot 8, Block 14, Eldorado Acres, an unrecorded subdivision; thence run the following three courses and distances along the boundary of said Lot 8: S 00° 50' 16" E for 132.70 feet; N 89° 11' 54" W for 75.00; N 00° 50' 16" W for 132.41 feet to an intersection with said south line of the Southwest Quarter (SW-1/4) of Section 5; thence run N 89° 25' 13" W along said south line for 610.82 feet to the northeast corner of the West Half (W-1/2) of the Northwest Quarter (NW-1/4) of

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said Section 8; thence run S 01° 00' 45" E along the east line of said West Half (W-1/2) of the Northwest Quarter (NW-1/4) of Section 8 for 2612.19 feet to an intersection with the northerly right-of-way line (as maintained) of Coconut Road being 40.00 feet north of the centerline of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of said Public Records, said right-of-way line being the south line of lands as described by deed recorded in Official Record Book 3052 at Page 1748 of said Public Records; thence run N 89° 16' 14" W along said maintained right-of-way for 1267.93 feet to an intersection with the west line of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 07' 45" W along said west line for 1284.51 feet to the southeast corner of Government Lot 1 of said Section 7; thence run S 89° 33' 42" W along the south line of said Government Lot 1 for 1813 feet more or less to the easterly waters of Estero Bay; thence run northerly along the waters of Estero Bay for 3000 feet more or less to an intersection with the north line of Government Lot 4 of said Section 6; thence run N 89° 41' 23" E along said north line or 1807 feet more or less to an intersection with the west line of lands as described by deed recorded in Official Record Book 1762 at Page 4173 of said Public Records; thence run the following courses and distances along the boundary of said lands: N 00° 48' 29" W for 775.70 feet; N 46° 11' 51" E for 523.67 feet; S 81° 20' 47" E for 600.53 feet; N 00° 49' 50" W for 162.49 feet; N 89° 10' 55" E for 349.43 feet; N 01° 31' 46" W for 92.78 feet to an intersection with the north line of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 34' 40" E along said north line for 2592.29 feet to the northeast corner of said Southwest Quarter (SW-1/4); thence run N 89° 31' 44" E along the north line of the Southeast Quarter (SE-1/4) of said Section 5 for 2401.02 feet to an intersection with the southwesterly line of said lands to Florida Power and Light Company; thence run S 20° 51' 33" E along said southwesterly line for 553.91 feet to an intersection with the east line of said Southeast Quarter (SE-1/4) of Section 5; thence run S 00° 08" 26" E along said east line for 2202.99 feet to the Point of Beginning.

Parcel contains 576 acres, more or less.
Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor Mapper
Florida Certificate No. 5652

Legal Checked
gm 12/22/01

20002476\Pelican Landing-County – 110101

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EXHIBIT "A"

LEGAL DESCRIPTION

Property located in Lee County, Florida

The applicant has indicated that the STRAP number for the subject property is: 05-47-25-01-0000B.0070

ZONING MAP

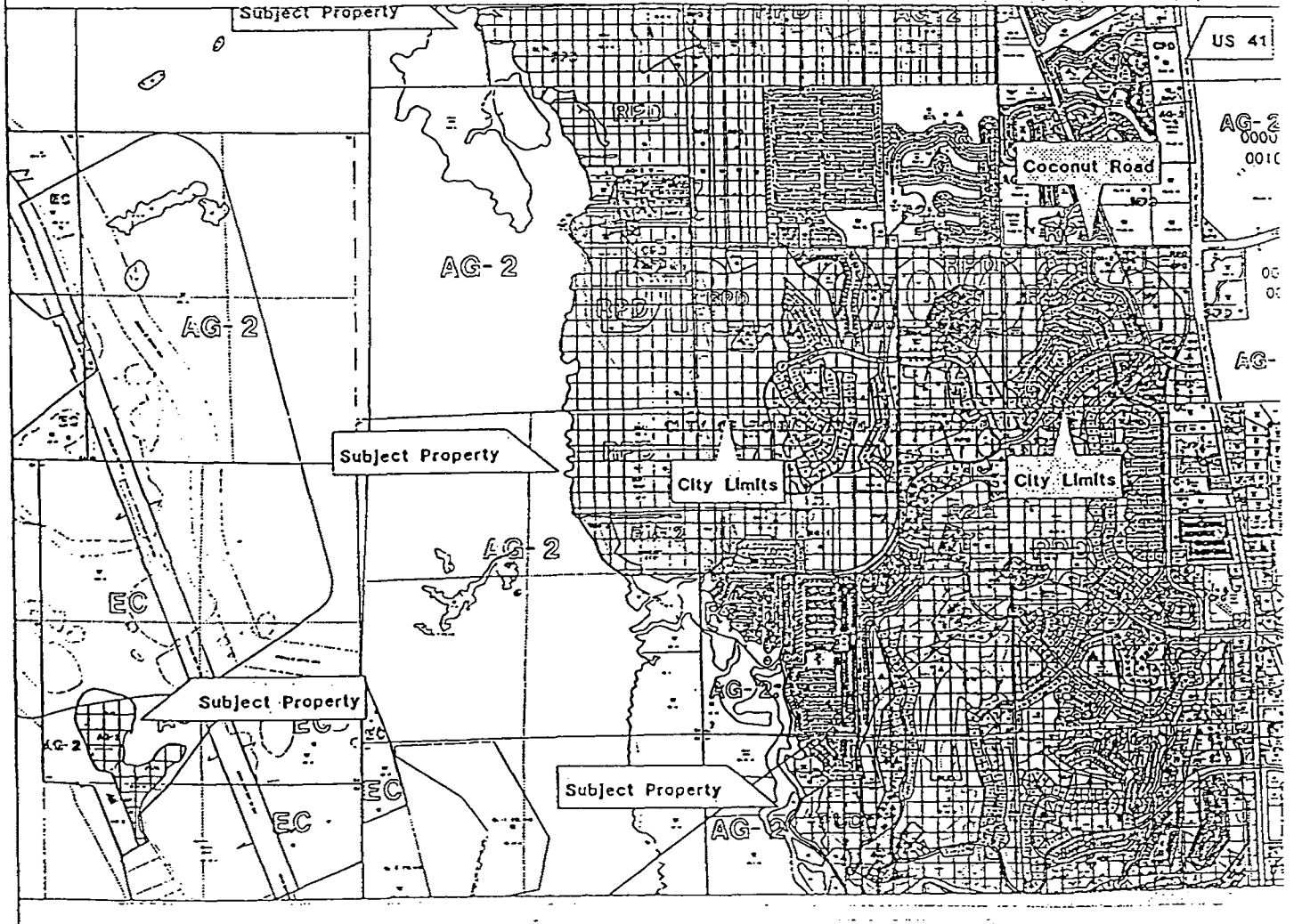


EXHIBIT B

EXHIBIT C

TENTH DEVELOPMENT ORDER AMENDMENT FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE DRI2000-00022

WHEREAS, on November 28, 2000, WCI Communities, Inc., the owner of the Pelican Landing Development of Regional Impact (DRI) most recently requested an amendment to the original Development Order (DO)adopted August 29, 1994, as amended; and

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995 (incorporating the terms of a settlement agreement); 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) November 4, 1996; 4) November 17, 1997; 5) September 21, 1998; 6) June 21, 1999; 7) December 6, 1999; 8) August 7, 2000; and the conditions proposed for the tenth amendment to the Pelican Landing DRI Development Order; and

WHEREAS, Condition II.L., adopted as part of the ninth development order amendment, requires the developer to file a Notice of Proposed Change to delineate the jurisdictional boundaries as to the DRI property between the City of Bonita Springs and Lee County; and

WHEREAS, the Developer has submitted an application for the Tenth Amendment to the Pelican Landing DRI Development Order to revise the legal description and clearly define the jurisdictional line between the City and County; and

WHEREAS, the City of Bonita Springs will adopt a substantially similar development order to be applicable within its jurisdiction; and

WHEREAS, the proposed changes to the Pelican Landing DRI Development Order described in this document are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local Land Development regulations; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and after full consideration of those reports, recommendations, comments, and documents, the Board of

County Commissioners of Lee County, Florida, finds and determines that the proposed change does not constitute a substantial deviation warranting further DRI review.

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on ~~2,792.2~~ a total of 2748.25± acres located approximately three miles north of the Lee/Collier County Line. Approximately 1249.8 acres of the Pelican Landing DRI are located within the City of Bonita Springs; approximately 1216.45 acres of the Pelican Landing DRI are located within the unincorporated area of Lee County; and approximately ~~273~~ 282± acres of the ~~2,792.2~~ 2748.25±-acre total constitutes the Spring Creek West DRI, which is located in the City of Bonita Springs. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct 4,400 residential units, of which 665 are single-family and 3,735 multi-family, 300,000 square feet of gross floor area of retail commercial, and 475,000 square feet of gross floor area of office commercial. The retail uses will provide up to 2,048 parking spaces and the office uses will provide up to 1,587 parking spaces. The project will also include 750 hotel/motel rooms, a 50,000-square-foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, an existing boat ramp on the Baywinds Parcel and a beach park for the benefit of the owners in Pelican Landing. There are 143.81 acres of upland habitat preserve, 678.5 acres of salt and freshwater wetlands, 247.49 acres of water management lakes, 162.16 acres of public and private rights-of-way, 3.2± acres of "off-site" parking, 6 acres of utilities and an .11-acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project build out is the year 2002.

B. LEGAL DESCRIPTION: ~~In~~ The Pelican Landing DRI is located in Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida~~:~~, as more particularly described in attached Exhibits A, B, C and D.

Exhibit A identifies the boundaries of the Pelican Landing DRI as located within unincorporated Lee County.

Exhibit B identifies the boundaries of the DRI located within the City of Bonita Springs, except the Spring Creek West DRI portion.

Exhibit C identifies the boundaries of the Spring Creek West DRI, which is located in City of Bonita Springs.

Exhibit D is a sketch of the legal descriptions, set forth in Exhibits A, B and C.

~~PARCEL 1~~

~~A tract or parcel of land lying in Sections 08, 09, 16, 17, 20, and 21, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:~~

~~Beginning at a concrete monument marking the Northeast corner of said Section 20 run S00°35'25"E along the East line of said section for 2,659.47 feet to the Southeast corner of the Northeast Quarter (NE¼) of said section;~~

~~THENCE run N88°52'49"E along the North line of the Southwest Quarter (SW¼) of said Section 21 for 2,040.41 feet;~~

~~THENCE run S00°51'35"E for 801.04 feet to the waters of Spring Creek;~~

~~THENCE run along Spring Creek for 3,630 feet, more or less to an intersection of the East line of said Section 20 and the approximate centerline of Spring Creek;~~

~~THENCE run along said centerline the following courses:~~

~~S78°50'00"W for 181.31 feet,~~

~~N34°24'12"W for 230.22 feet,~~

~~N30°59'12"W for 174.93 feet,~~

~~N24°25'16"E for 120.83 feet,~~

~~S65°47'43"E for 219.32 feet,~~

~~N18°24'43"E for 158.11 feet,~~

~~N75°11'47"W for 351.71 feet,~~

~~N65°09'33"W for 451.88 feet,~~

~~N84°18'44"W for 351.75 feet,~~

~~N66°54'31"W for 445.79 feet,~~

~~S63°24'43"W for 134.16 feet,~~

~~S03°23'22"E for 170.29 feet,~~

~~S50°30'17"W for 220.23 feet,~~

~~N84°49'43"W for 331.36 feet,~~

~~S62°13'07"W for 214.71 feet,~~

~~S22°08'36"W for 291.55 feet,~~

~~S72°15'11"W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW¼) of said Section 20;~~

~~THENCE run N00°50'19"W along said East line for 520.00 feet to the Northeast corner of said fraction;~~

~~THENCE run S89°58'37"W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most Easterly branch of said Spring Creek;~~

~~THENCE run along said centerline the following courses:~~

~~N09°13'28"W for 137.34 feet,~~

~~N29°08'22"W for 590.59 feet,~~

~~N38°31'58"W for 278.03 feet,~~

~~N65°16'43"W for 254.95 feet,~~

~~N37°18'28"W for 286.01 feet,~~

~~N32°51'05"E for 252.39 feet,~~

~~N20°11'00"E for 236.69 feet;~~
~~N27°23'47"W for 369.25 feet;~~
~~N89°15'43"E for 50 feet, more or less to the Easterly shore of said Spring Creek;~~
~~THENCE run along said Easterly shore for 1,220 feet, more or less to an intersection with the North line of said Section 20;~~
~~THENCE run N89°15'13"E along said North line of said Section for 970 feet, more or less to a concrete monument marking the Northwest corner of the Northeast Quarter (NE¼) of said Section 20;~~
~~THENCE run N00°31'30"E along the West line of the Southeast Quarter (SE¼) of said Section 17 for 2,644.38 feet to an intersection with the South line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records;~~
~~THENCE run S89°58'35"E along said South line for 739.45 feet;~~
~~THENCE run N00°07'58"E for 30.00 feet to an intersection with the North line of the Southeast Quarter (SE¼) of said Section 17;~~
~~THENCE run S89°58'35"E along the North line of said fraction for 375.91 feet to the Southeast corner of lands described in Official Record Book 1713 at Page 1188 of said Public Records;~~
~~THENCE run N00°41'04"W for 668.20 feet to the Northeast corner of said lands;~~
~~THENCE run N89°50'32"W along the North line of said lands for 366.38 feet to the Easterly line of said Spring Creek Road (50 feet wide);~~
~~THENCE run N00°07'58"E for 2,007.04 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 08;~~
~~THENCE continue N00°07'17"E along said East line for 343.54 feet;~~
~~THENCE run S89°38'58"E for 10.00 feet;~~
~~THENCE run N00°07'17"E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records;~~
~~THENCE run S89°21'02"E along the South line of said lands for 189.98 feet;~~
~~THENCE run N00°07'17"E along the East line of said lands for 125.01 feet;~~
~~THENCE run N89°21'02"W along the North line of said lands for 199.98 feet to an intersection with the Easterly line of said Spring Creek Road;~~
~~THENCE run N00°07'17"E along said East line for 1,292.76 feet to an intersection with the South line of Coconut Road (50 feet wide);~~
~~THENCE run S89°16'14"E along said South line for 1,802.38 feet to an intersection with the West line of said Section 09;~~
~~THENCE run N00°39'58"W along said West line for 25.00 feet to a concrete monument marking the Northwest corner of the Southwest Quarter (SW¼) of said Section;~~
~~THENCE continue along said West line N00°39'58"W for 5.00 feet to an intersection with the South line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records;~~
~~THENCE run S89°35'50"E along said South line for 3,164.37 feet to an intersection with the West line of Tamiami Trail (SR 45);~~
~~THENCE run S00°10'56"W along said West line for 621.81 feet to a Point of Curvature;~~

~~THENCE run Southerly and Southeasterly along said West line, along the arc of a curve to the left of radius 5,797.58 feet (chord bearing S04°57'34"E) (chord 1,039.14 feet) (delta 10°17'00") for 1,040.54 feet to a Point of Tangency;~~

~~THENCE run S10°06'04"E along said Westerly line for 938.08 feet to an intersection with the North line of the Northeast Quarter (NE¼) of said Section 16;~~

~~THENCE run S89°23'00"W along said North line for 708.94 feet to the Northwest corner of said Northeast Quarter (NE¼) of Section 16;~~

~~THENCE run S00°02'54"W along said West line of the Northeast Quarter (NE¼) for 2,643.98 feet to the Southwest corner of the Northeast Quarter (NE¼) of said Section;~~

~~THENCE run N89°10'38"E along the South line of said fraction for 538.06 feet;~~

~~THENCE run S00°06'43"E for 1,085.91 feet;~~

~~THENCE run N89°06'43"E for 744.41 feet to an intersection with the West line of said Tamiami Trail;~~

~~THENCE run Southerly along said West line, along the arc of a non-tangent curve to the right of radius 5,619.58 feet (chord bearing S00°22'05"E) (chord 50.21 feet) (delta 00°30'42") for 50.21 feet to a Point of Tangency;~~

~~THENCE run S00°06'43"E along said West line for 49.81 feet;~~

~~THENCE run S89°06'43"W for 300.00 feet;~~

~~THENCE run S00°06'43"E for 1,445.82 feet to an intersection with the South line of the Southeast Quarter (SE¼) of said Section 16;~~

~~THENCE run S89°16'54"W along said South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW¼) of said Section 16;~~

~~THENCE run S88°38'34"W along said South line of said Southwest Quarter (SW¼) for 2,627.98 feet to the POINT OF BEGINNING.~~

~~ALSO~~

~~**PARCEL 2**~~

~~A tract or parcel of land lying in Sections 07, 08, 17 and 18 which tract or parcel is described as follows:~~

~~From a railroad spike marking the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S00°23'24"E along the West line of said fraction for 25.00 feet to an intersection with the South line of Coconut Road (50 feet wide) and the POINT OF BEGINNING.~~

~~From said POINT OF BEGINNING run S89°16'14"E along said South line for 3,253.00 feet to an intersection with the West line of Spring Creek Road;~~

~~THENCE run S00°07'17"W along said West line for 2,610.71 feet to an intersection with the South line of said Section 08;~~

~~THENCE run S00°07'58"W along said West line for 2,646.47 feet;~~

~~THENCE run N89°58'35"W along the North line of Coconut Road for 689.04 feet to an intersection with the East line of the Northwest Quarter (NW¼) of said Section 17;~~

~~THENCE run N89°59'08"W along said North line for 404.79 feet to the Southeast corner of lands described in Official Record Book 411 at Page 759 of said Public Records;~~

~~THENCE run N01°31'36"E along the East line of said lands for 960.34 feet;~~

~~THENCE run N89°59'08"W along the North line of said lands for 2,200.77 feet to an intersection with the East line of the Northeast Quarter (NE¼) of said Section 18;~~

~~THENCE continue N89°59'08"W for 1,840 feet more or less to the waters of Estero Bay;~~

~~THENCE run Northerly along the waters of Estero Bay for 8,300 feet more or less to an intersection with the North line of the South Half (S½) of Government Lot 2 of said Section 07;~~

~~THENCE run N89°32'15"E along the North line of said Government Lot 2 for 545 feet more or less to the Northwest corner of lands described in Official Record Book 1895 at Page 3817 of said Public Records;~~

~~THENCE run S08°50'45"E along the West line of said lands for 199.50 feet;~~

~~THENCE run N89°32'15"E along the South line of said lands for 247.50 feet;~~

~~THENCE run N89°35'27"E for 666.22 feet;~~

~~THENCE run N89°32'15"E for 239.00 feet to an intersection with the West line of Coconut Road;~~

~~THENCE run S01°07'45"E along said West line for 488.63 feet;~~

~~THENCE run N89°40'05"E along the South line of said Coconut Road for 24.69 feet to the POINT OF BEGINNING.~~

~~LESS and EXCEPT lands described in Official Record Book 1677 at Page 3516 of the Public Records of Lee County, Florida.~~

~~ALSO~~

~~**PARCEL 3**~~

~~A tract or parcel of land lying in Sections 05 and 08, Township 47 South, Range 25 East, Lee County, Florida, consisting of:~~

~~Lots 8B, 9B, 10B, 11B, 12B, 21B, 22B, 23B, 24B and 25B of FLORIDA GULF LAND COMPANY SUBDIVISION as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, also Lot 8, Block 14 of ELDORADO ACRES (an Unrecorded Subdivision), as shown in Deed Book 310 at Page 183 of the Public Records of Lee County, also the East Three-quarters (E-¾) of the Northwest Quarter (NW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Southwest Quarter (SW¼) of the Southwest Quarter (SW¼) of said Section 05, also the East Two-thirds (E-⅔) of the Western Half (W½) of the Northwest Quarter (NW¼) of said Section 08; being more particularly described by metes and bounds as follows:~~

~~From the Northwest corner of the Southwest Quarter (SW¼) of said Section 08 run S89°16'14"E along the North line of said Southwest Quarter (SW¼) for 422.61 feet;~~

~~THENCE run N01°05'22"W for 40.02 feet to the POINT OF BEGINNING.~~

~~From said POINT OF BEGINNING continue N01°05'22"W for 2,610.06 feet;~~

~~THENCE run N01°22'23"W for 1,304.41 feet;~~
~~THENCE run N89°56'22"W for 107.12 feet;~~
~~THENCE run N01°22'55"W for 1,303.87 feet;~~
~~THENCE run N89°34'15"E for 2,593.81 feet;~~
~~THENCE run S00°26'45"E for 2,655.42 feet;~~
~~THENCE run N88°48'50"W along the North line of said Section 08 for 322.66 feet;~~
~~THENCE run N89°25'01"W for 587.55 feet;~~
~~THENCE. run S00°50'16"E for 132.58 feet;~~
~~THENCE run N89°11'54"W for 75.00 feet;~~
~~THENCE run N00°50'16"W for 132.30 feet;~~
~~THENCE run N89°25'01"W for 610.69 feet;~~
~~THENCE run S01°00'35"E for 2,612.12 feet to an intersection with the North right-of-way line of Coconut Road;~~
~~THENCE run N89°16'14"W along said North right-of-way line for 845.23 feet to the POINT OF BEGINNING.~~

~~ALSO~~

~~**PARCEL 4**~~
~~All of Government Lot 1, Section 07, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:~~
~~Beginning at a concrete monument marking the Northeast corner of Government Lot 1 of said Section 07, run S01°07'45"E along the East line of said Section 07 for 1,324.52 feet to the Southeast corner of said Government Lot 1;~~
~~THENCE run S89°33'42"W along the South line of said Government Lot for 1,747.82 feet to a concrete post at the waters of Estero Bay;~~
~~THENCE run Northerly and Westerly along the waters of Estero Bay to an intersection with the North line of said Section 07;~~
~~THENCE run N89°48'31"E along said North line for 2,575 feet more or less to the POINT OF BEGINNING.~~
~~Containing 2,409 acres, more or less.~~
~~Bearings herein above mentioned are based on the East boundary line of Pelican's Nest Unit No. 1 as recorded in Plat Book 41 at Pages 58 through 60 of the Public Records of Lee County, Florida.~~

~~ALSO~~

~~**BEACH PARCEL**~~
~~A tract or parcel of land lying in Government Lot 3, Section 13, and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida, which tract or parcel is described as follows:~~

~~From the center of a turnaround on SR 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N24°28'41"W along the northern prolongation of said centerline of SR 865 for 266.00 feet;~~

~~THENCE run S62°26'49"W for 98.40 feet;~~
~~THENCE run N27°33'11"W for 1,863.42 feet;~~
~~THENCE run N20°00'41"W for 1,403.30 feet;~~
~~THENCE run N65°00'00"E for 313.91 feet to the POINT OF BEGINNING.~~
~~From said POINT OF BEGINNING run N18°55'11"W for 97.51 feet,~~
~~N22°26'23"W for 100.53 feet, N23°09'50"W for 100.14 feet,~~
~~N14°51'19"W for 73.01 feet, N27°40'10"W for 88.01 feet,~~
~~N29°33'57"W for 46.01 feet, N22°14'53"W for 47.27 feet,~~
~~N20°39'23"W for 46.98 feet, N11°15'38"W for 29.80 feet,~~
~~N26°10'46"W for 46.87 feet, N09°09'45"W for 48.26 feet,~~
~~N17°35'56"W for 46.04 feet, N12°49'07"W for 50.04 feet,~~
~~N29°20'48"W for 69.12 feet, N20°48'58"W for 63.82 feet;~~
~~THENCE run N79°23'51"W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico;~~
~~THENCE run Northerly and Northeasterly along said waters for 1,140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida;~~
~~THENCE run along said South line, along the arc of a curve to the right of radius 12,000.00 feet for 783 feet to an intersection with the Waters of New Pass;~~
~~THENCE run Southerly, Easterly, Southwesterly and Southerly along said waters for 4,080 feet more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;~~
~~THENCE run S65°00'00"W for 181 feet more or less to the POINT OF BEGINNING.~~

~~AND~~

~~From said POINT OF BEGINNING run S13°03'59"E for 94.16 feet;~~
~~THENCE run S19°13'48"E for 50.64 feet;~~
~~THENCE run S04°34'15"E for 54.63 feet;~~
~~THENCE run S24°53'12"E for 50.09 feet;~~
~~THENCE run S27°10'29"E for 50.01 feet;~~
~~THENCE run S31°01'44"E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records;~~
~~THENCE run N65°00'00"E along said South line for 134 feet, more or less to the waters of Estero Bay;~~
~~THENCE Northerly along said waters for 358 feet, more or less to an intersection with a line bearing N65°00'00"E and passing through the POINT OF BEGINNING;~~
~~THENCE run S65°00'00"W for 181 feet, more or less to the POINT OF BEGINNING.~~
~~Bearings herein above mentioned are Plane Coordinate for the Florida West Zone.~~

~~ALSO~~

~~KERSEY PARCEL~~

~~Parcels lying in Section 5, Section 6 and Section 8, Township 47 South, Range 25 East, Lee County, Florida, more particularly described as follows:~~

~~Parcels in Section 5:~~

~~The West One-Quarter (W¼) of the Northwest One-Quarter (NW¼) of the Southwest One-Quarter (SW¼); and~~

~~The West One-Third (W⅓) of the Southwest One-Quarter (SW¼) of the Southwest One-Quarter (SW¼).~~

~~Parcels in Section 6:~~

~~Government Lot 4 of said Section 6 and the Southeast One-Quarter (SE¼) of the Southeast One-Quarter (SE¼) of said Section 6; and~~

~~Parcel as shown in Official Record Book 1762 at Page 4173, Public Records of Lee County, Florida:~~

~~A tract or parcel of land situated in the State of Florida, County of Lee, being a part of the Southeast One-Quarter (SE¼) of Section 6, Township 47 South, Range 25 East. Further bounded and described as follows:~~

~~Starting at the Southeast corner of said Southeast One-Quarter (SE¼) of Section 6; Thence N00°44'33"W along the Easterly line of said fraction for 1300.67 feet to the Southeast corner of the Northeast One-Quarter (NE¼) of said Southeast One-Quarter (SE¼). Said point being the point of beginning of the herein described parcel; Thence N00°41'04"W along the Easterly line of said fraction for 1208.36 feet; Thence West for 349.47 feet; Thence South for 162.50 feet; Thence N80°32'07"W for 600.67 feet; Thence S47°00'45"W for 523.62 feet; Thence South for 778.51 feet; Thence S89°36'52"E along the Southerly line of the aforesaid fraction of a section for 1339.46 feet to the point of beginning~~

~~Bearings are based on a plat prepared by Tri-County Engineering, Inc. in May of 1968.~~

~~Parcel in Section 8:~~

~~The West One-Third (W⅓) of the West One-Half (W½) of the Northwest One-Quarter (NW¼) of said Section 8, less the Southerly 40.00 feet for the right-of-way of Coconut Road.~~

~~Parcel contains 203 acres, more or less.~~

~~ALSO~~

~~**SMOOT PARCEL**~~

~~That part of the South half of Government Lot 2, Section 7, Township 47 South, Range 25 East, Lee County, Florida, described as follows:~~

~~Begin 660 feet North 3 degrees 58 minutes West and 957 feet South 87 degrees 15 minutes West of the Southeast corner of Government Lot 2, Section 7, Township 47 South, Range 25 East, thence South 87 degrees 15 minutes West 247.5 feet, thence South 11 degrees, 8 minutes East 199.6 feet, thence North 87 degrees, 15 minutes East 247.5 feet, thence North 11 degrees, 8 minutes West 199.5 feet to the point of beginning, containing 1.3 acres more or less.~~

~~ALSO~~

~~**SPRING CREEK WEST DRI PARCEL**~~

~~All of the Northwest Quarter (NW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida:~~

~~ALSO INCLUDED THERETO:~~

~~All of the Northeast Quarter (NE¼) lying west of Tamiami Trail (US 41) of Section 21, Township 47 South, Range 25 East, Lee County, Florida;~~

~~ALSO INCLUDED THERETO:~~

~~All of the East Half (E½) of the Southwest Quarter (SW¼), lying North of Spring Creek LESS the East 600 feet thereof, Section 21, Township 47 South, Range 25 East, Lee County, Florida.~~

~~ALSO INCLUDED THERETO:~~

~~All of the Southeast Quarter (SE¼) of Section 21, lying West of Tamiami Trail (US 41) and North of Spring Creek, Township 47 South, Range 25 East, Lee County, Florida;~~
~~Subject to easements and restrictions of record.~~
~~Containing 273.1 acres more or less.~~

~~AND~~

~~The East 600 feet of the East Half (E½) of the Southwest Quarter (SW¼) of Section 21, Township 47 South, Range 25 East, Lee County, Florida.~~
~~Parcel contains 9.7 acres more or less.~~

~~TOGETHER WITH the right for ingress and egress over the following described parcel:~~

~~A strip of land 60 feet in width lying 30 feet on each side of the East and West Quarter Section line of Section 21, Township 47 South, Range 25 East, extending from the Northwest corner of the East Half (E½) of the Southwest Quarter (SW¼) of said Section to Tamiami Trail (US 41).~~
~~Subject to any easements, restrictions, reservations and rights-of-way to record.~~

~~ALSO~~

~~BAYWINDS PARCEL~~ **~~(Added pursuant to the Seventh Development Order Amendment)~~**

~~A tract or parcel of land being a portion of the South 990 feet of Government Lot 2, Section 18 and a portion of the West 2200 feet of the South 990 feet of the north half of Section 17, Township 47 South, Range 25, Lee County, Florida and being more particularly described as follows:~~

~~Beginning at the East quarter corner of said Section 18, run S89°16'50"W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967;~~

~~THENCE the following courses and distances along said Bulkhead Line:~~
~~N56°42'05"W, 265.00 feet, to a point of curvature;~~
~~Along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37°20'50", chord of 332.98 feet and chord bearing of N38°01'40"W, to a point of tangency;~~
~~N19°21'15"W, 481.24 feet, to a point of curvature;~~
~~Along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59°50'20", chord of 99.76 feet and chord bearing of N49°16'25"W, to a point of tangency;~~
~~N79°11'35"W, 144.73 feet, to a point of curvature;~~
~~Along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32°21'45:, chord of 55.74 feet and a chord bearing of N63°00'42"W, to a point of tangency;~~
~~THENCE run N89°16'50"E, leaving said Bulkhead Line on a line parallel to, and 990.00 feet distant, measured at right angles from, the south line of said Lot 2 and its westerly extension thereof, for 2081.30 feet, said line being the northerly property line, to the east line of said Section 18, said point of being N0°50'14"E and 990.35 feet from the East Quarter Corner of said Section 18;~~

~~THENCE run N89°19'25"E along a line parallel to, and 990.00 feet distant, measured at right angles from, the South line of said North half of said Section 17 for 2200.77 feet;~~

~~THENCE run S0°50'14"W along a line parallel to, and 2200.00 feet distant, measured at right angles from, the west line of said Section 17 for 960.34 feet to the North right-of-way of a 30 foot wide road as recorded in Deed Book 305, Page 276, Public Records of Lee County, Florida, said North right-of-way line being 30 feet northerly of and parallel to the South line of the North half of Section 17;~~

~~THENCE along said north right-of-way line S89°19'25"W, 430.89 feet;~~

~~THENCE along the lands known locally as Spring Creek Estates, and unrecorded plat, N0°40'35"W, 510.00 feet;~~

~~S89°19'25"W, 885.06 feet to a point of curvature;~~

~~Along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33°56'23", chord of 227.66 feet and chord bearing of S72°21'14"W, to a point on the curve; S0°40'35"E, 167.10 feet;~~

~~and S30°56'33"W, 130.70 feet to the Northeast corner of lands described in Official Record Book 1194, Page 1085;~~

~~THENCE westerly along said lands and waters of a canal 106 feet, more or less to the Northeast corner of said lands described in Official Record Book 1057, Page 38;~~

~~THENCE southwesterly and westerly along said lands and said canal 400 feet more or less to the northwest corner of lands described in Official Record Book 1453, Page 495;~~

~~THENCE southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of said north half of said Section 17;~~

~~THENCE S89°19'25"W, 136 feet more or less to the POINT OF BEGINNING,~~

~~containing 72 acres more or less.~~

~~ALSO~~

~~ACCESSORY PARKING LOT PARCEL (Added pursuant to the Eighth Development Order Amendment)~~

~~A parcel of land lying in and being a portion of the East half of the Northwest quarter of Section 8, Township 47 South, Range 25 East of Lee County, Florida and being more particularly described as follows:~~

~~COMMENCING at the southwest corner of the East half of the Northwest quarter of Section 8, thence S 89°40'09" E a distance of 342.50 feet to the POINT OF BEGINNING,~~

~~Thence S 89°40'09" E a distance of 342.50 feet,~~

~~Thence N 01°24'39" W a distance of 408.00 feet,~~

~~Thence N 89°40'09" W a distance of 342.50 feet,~~

~~Thence S 01°24'39" E a distance of 408.00 feet to the POINT OF BEGINNING,~~

~~Containing 3.20 acres more or less.~~

~~ALSO~~

~~SKEBE PARCEL (Added pursuant to the Ninth Development Order Amendment)~~

~~A tract or parcel of land lying in Section 5, Township 47 South, Range 25 East, Lee County Florida, which tract or parcel is described as follows:~~

~~All of Lots B-1 through B-7 and Lots B-26 through B-32, Florida Gulf Land Company's Subdivision as recorded in Plat Book 1 at Page 59, Lee County Public Records, Section 4, Township 47 South, Range 25 East, Lee County Florida.~~

C. The DRI property is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, TFC-2 and RM-2; the property is partially developed.

D. The Application for Development Approval as modified by the settlement agreement was determined to be consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Sections 380.05 and 380.06 (14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The proposed Development Order Amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes. The development, as proposed in the Application for Development Approval (ADA) amended by subsequent Notices of Proposed Change, and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order.

I. The proposed conditions below meet the criteria found in Section 380.06 (15) (d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that one annual monitoring report that includes both Pelican Landing and Spring Creek West DRIs must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

K. A portion of the DRI property has been included in the incorporated limits of the City of Bonita Springs pursuant to legislation adopted during the 1999 Legislative session. The property now located in the City of Bonita Springs lies within the area described in section 6 of the Committee Substitute for Senate Bill 2626, 1st Engrossed. Pursuant to Florida Statutes section 380.06(15)(h), a separate DRI development order must be adopted by the City of Bonita Springs that incorporates the rights and obligations specified in this development order as they affect property located within the city limits. Also pursuant to that section of the Florida Statues, the Pelican Landing DRI development order adopted by the county must be amended to remove property now located in the City of Bonita Springs. Conditions pertaining to the adoption of an amended DRI development order for property remaining within unincorporated Lee County are set forth in Section II. L. of this development order.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for the Pelican Landing DRI adopted on August 29, 1994, and amended on March 22, 1995, August 16, 1995, November 4, 1996, November 17, 1997, and September 21, 1998, June 21, 1999, December 6, 1999, and August 7, 2000, are further amended as follows, with new language underlined and deletions struck through. All other portions of the original Development Order will remain in full force and effect.

For the purposes of this Development Order, the term "developer" or "Applicant" includes successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer will immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI Development Order, which ends on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner-occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI to locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time home buyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying home buyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. The developer provided Lee County with the funds for the provision and connection of a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at build out. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure advising all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for any Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan must address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan must be developed in coordination with the Lee County Emergency Management officials and found sufficient by those officials months after the effective date of the DRI Development Order. *Editorial note: The developer submitted an emergency plan to Lee County Emergency Management for review and approval. The plan must be re-submitted annually to address changes in the development parameters and changes in local hurricane evacuation and sheltering policies. The plan must comply with Lee County Administrative Code 7-7.*

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000-foot conservation easement already required in Spring Creek. The location and extent of the

conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator must host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator will provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) [now known as the Florida Fish & Wildlife Conservation Commission (FWC)] guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise. The Baywinds parcel has existing environmental permits that remain valid as of the date of the Seventh Development Order Amendment. These permits are based on the plan of development shown on the local Development Order Approval No. 95-12-068.00D. Some improvements were made pursuant to those permits. Future improvements to the Baywinds parcel must be consistent with the conditions set forth in those permits as may be amended.

1. There were three bald eagles' nests of concern prior to the original development order adoption. One nest was on the Pelican Landing property in the Eco Park. The other two nests were originally within 1500 to 1600 feet of Pelican Landing. One of these other nests was located on the Kersey parcel and declared abandoned by the USFWS in July 1998. The buffers that affect Pelican Landing property were established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to any new development within 1500 feet of any active eagle nest other than the nest located within the Eco Park, the Developer must prepare an on-site eagle management plan, addressing the Pelican Landing DRI property only, that will be reviewed by DCA, SWFRPC, FWC Lee County, and USFWS. The agencies must provide specific

written objections or concerns if any, regarding any new proposed management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to any lawful objections. The agencies will review and respond to the management plan resubmittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. If a proposed management plan includes development within 750 feet of an active eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FWC and USFWS.

2. A local development order for the Hickory Island Beach Park has been issued to permit construction of beach park infrastructure. This local development order includes a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP required the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permitted a refinement of the conservation easement boundaries after completion of a one year utilization study. The final conservation easement is consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI Development Order, Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI Development Order.

The Developer submitted a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI Development Order, on November 14, 1994. Lee County, FGFWFC, and DCA reviewed the management plan. Lee County approved this plan and its implementation was certified in October 1996.

3. The projected gopher tortoise burrow count for the original Pelican Landing DRI area was 439, based on an estimate of FGFWFC habitat guidelines, a minimum of 75 acres of gopher tortoise habitat must be protected.

The Developer has set aside a 78±-acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat for the original Pelican Landing DRI land area. This area is known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the original Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993 for the original Pelican Landing DRI. A new protected species survey was conducted in March and April of 1998 on the addition to the Pelican Landing DRI known as the Kersey-Smoot parcel. The new survey revealed the presence of 114 active and inactive gopher tortoise burrows on 70 acres. A protected species survey was conducted in 1990 and February 1996 on the Baywinds parcel. The survey revealed the presence of 28 active and inactive gopher tortoise burrows on 15.41 acres. The Developer has an Incidental Take Permit for the new gopher tortoise burrows located outside of the Eco-Park in the undeveloped Kersey-Smoot and Baywinds parcels. The Developer obtained an Incidental Take Permit prior to proceeding with development within the gopher tortoise habitat areas. Prior to the start of construction, all gopher tortoise burrows within the development areas must be excavated and any resident gopher tortoises, or commensal species, relocated to open spaces within the Pelican Landing DRI.

Impacts to gopher tortoise habitat within the Kersey-Smoot and Baywinds parcels have been mitigated through incidental take funds paid to the FWC for the purpose of regionally significant gopher tortoise habitat.

The applicant and the Florida Fish and Wildlife Conservation Commission (FWC) have had considerable discussion regarding the modifications and refinements to the existing 78-acre Eco-Park boundaries. The addition of the eastern 140-acre "Skebe Tract", of which 63.24 acres will be added to the Eco-Park, will provide for an 81% increase in the overall size of the Pelican Landing Eco-Park.

The new Eco-Park configuration will delete the southern-most ±22 acres, while adding new lands to the park area within the confines of the "Skebe Tract". An overall increase (net gain) of ±11 acres of upland habitat, plus 52.24 additional acres of forested wetland acreage will increase the overall size of the revised Eco–Park boundaries to approximately 141.45 acres.

Any active or inactive gopher tortoise burrows found within the Eco-Park deletion zone or the new golf lands of the eastern portion of the "Skebe Tract" will be excavated to search for activity. Any tortoises found will be relocated to the modified Eco-Park boundaries, pursuant to the Eco-Park Reconfiguration Plan, authored by Wilson, Miller, Inc., and accepted by the FWC. The initial Gopher Tortoise Incidental Take Permit LEE-9 must be modified by the FWC in order to adopt the Eco-Park Reconfiguration for both the existing Eco-Park south deletion area, the "Skebe Tract" addition to the Eco-Park, and the inclusion of a portion of the "Skebe Tract" in the development area.

A revised perpetual Conservation Easement will be recorded in the Lee County records, pursuant to the revised boundaries of the Eco-Park. The delete ±22 acres will be formally released from the Conservation Easement by the FWC.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), and Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot and Baywinds parcels. However, minor mangrove trimming is permitted within the vicinity of the clubhouse on the Baywinds parcel to provide a limited view of the Estero Bay. The scope of the developer's DEP application request for minor trimming is subject to the review and approval of Lee County Division of Planning, Environmental Sciences staff. All trimming activity will be subject to the wetland regulatory permit approvals.

The Developer has granted a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to the FGFWFC. The conservation easement was drafted to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage are permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes prohibiting the destruction of trees. A paved golf cart path, a wooden golf cart bridge across Halfway Creek, a buried irrigation line to be under the path and bridge, and a buried outfall pipe for a surface water management system will be located within the Eco-Park.

5. Should any orchids, wild pine air plants, Florida Counties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas.

Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner that is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner that forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced above, the approved management practices will be considered a part of this development order for reinforcement purposes, and be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling of not more than 13.25 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasive plants, the restoration of historic hydro periods, and a total of not more than ten acres of littoral zone plantings. The mitigation for wetland impacts to the Baywinds parcel was determined prior to the inclusion of the property into the Pelican Landing DRI as part of the environmental and local government permitting. The mitigation was based on the plan of development reflected in Lee County Development Order 95-12-068.00D. Changes to the plan of development that include additional wetland impacts may necessitate modification to the environmental and local government permitting.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator is responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, must notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, must contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials located on the premises.

10. If required by federal, state or local regulations:

a. The developer/property owner must prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner must establish an emergency notification system to be used in the event of a hazardous material release.

G. Storm Water Management

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida

Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or Storm water retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. ~~W~~ater Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site Storm water wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD must establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

7. The Baywinds parcel must be developed in accordance with the following permits: Water Management permit numbers ~~362932255~~ 36-02043-S-02 and 36-02043-S, ACOE permit number 89IPD-20127 and the letter of permission to continue work authorized in the original permit, LOP #1989001127, and FDEP permit number 36293225. These permits were granted based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These permits may be modified, updated or replaced as required

by law. Changes to the local development order may also require modification of the referenced permits.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in ~~Attachment B~~ Exhibit F, "Pelican Landing DRI Development Parameters." The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and build out (2002). Each annual monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

Build Out (2002)

Corkscrew Road		
- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Northbound dual left turn lanes

	-	Separate WB thru and right turn lanes
	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees are estimated to be $8,900,000 for the land uses identified in ~~Attachment B~~ Exhibit F. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), unless subsequently dedicated to and accepted by Lee County.

4. Annual Monitoring Report

a. The developer will submit an annual traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report will be submitted one year after the date of the issuance of this DRI Development Order. Reports must be submitted annually thereafter until build out of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the annual traffic monitoring report may be revised if agreed upon by all parties.

c. The annual traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and tuning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through build out.

(4) An estimate of when the monitored roadways and intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the annual monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the annual traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the

project is utilizing more than 5% of level of service D service volume during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the Annual Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultra low volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities must be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must be designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project. The parking lot for the beach parking lot is required to be gated or closed by the zoning resolution. The gate, chain or other device to prohibit access to the parking lot after hours will be unmanned, and the override system required by this condition does not apply to the parking lot gate, chain, or other device.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through l. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management areas within 500 feet of the mangrove fringe of Estero Bay.

3. The management practices that the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the original Pelican Landing DRI golf course adjacent to the mangrove fringe of Estero Bay. This plan must be amended to include the Kersey-Smoot parcels prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended management plan must: include a groundwater and surface water monitoring plan; provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; identify the locations for the groundwater monitoring and testing on a map(s);: and, set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written amended surface and groundwater quality management plan to Lee County and DCA. The amended plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100-foot-wide undisturbed naturally vegetated corridor, except for water management facilities permitted by the SFWMD and except for the removal of exotic plants as required by Lee County. The 100-foot-wide buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay south of Coconut Road.

The mangrove line for the Kersey-Smoot and Johnson (Government Lot 1, Parcel 3) parcels is offset 50 feet, to over 250 feet west of the wetland jurisdictional line delineated along the western (Estero Bay) side of the Kersey-Smoot parcels. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcels. This includes both saltwater and freshwater wetlands contained within the boundary of the wetlands jurisdictional line. The proposed golf course fairways, tees and greens must be set back a minimum of 25 feet from all wetland jurisdictional lines on the Kersey-Smoot and Johnson parcels, except where wetland impacts have been permitted by the SFWMD and the Army Corps of Engineers. Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot and Johnson parcels.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI Development Order do not preempt the authority of the SFWMD and the DEP. Section 373.016, Florida Statutes provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI Development Order are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given preemptive authority, the requirements of the SFWMD and the DEP will control.

L. ~~Adoption of Amended DRI Development Order for Property Remaining in Unincorporated Lee County.~~ **Dual Jurisdiction**

~~The developer must file and pursue in good faith a Notice of Proposed Change to amend this development order to delete property located within the limits of the City of Bonita Springs. In the event the application for the referenced Notice of Proposed Change is not found sufficient by December 31, 2000, no further permits for development will be issued by Lee County.~~ The Pelican Landing DRI is located within two jurisdictions, namely Lee County and the City of Bonita Springs. For State review purposes, the DRI will be considered an integrated and whole development, such that all approvals for development under the DRI Development Order will be applicable to the entire Pelican Landing DRI without regard to the jurisdictional split.

To this end, the developer is required to provide contemporaneous copies of any and all NOPC applications filed with respect to the Pelican Landing DRI to both the City and the County, even though the property actually affected by the amendment may be located wholly with one or the other jurisdiction. The jurisdiction most affected by the NOPC (i.e., as determined by the location of property affected by the proposed change) will take the lead in processing the NOPC. However, both jurisdictions may have input into the NOPC process, as a principle, if desired.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents that are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, last revised ~~July 5, 2000~~ _____, and stamped received at the permit counter on ~~July 6, 2000~~ _____, is attached hereto as ~~Attachment A~~ Exhibit E and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County. A synopsis of the development parameters permitted under this approval and depicted on Map H are set forth in attached Exhibit F.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this

Development Order that clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality that may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of, any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order, which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans that creates a reasonable likelihood of adverse regional impacts or other regional impacts not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a build out date of 2002, and a termination date of 2005. This term is based on a ten year build out and the recognition that a local Development Order, which is valid for three years, may be obtained in the tenth year.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2005. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

Lee County will reserve to this DRI until 2005, 300 acres of residential use allocation in each of the Urban Community and Outlying Suburban Future Land Use Categories (for a total of 600 acres) and 60 acres of commercial use allocation in the Bonita Springs Planing Community, as established by Lee Plan Map 16, The Planning Communities Map and Table 1(b), known as the Planning Community Year 2020 Allocation. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor(s) in title to the undeveloped portion of the subject property, will submit a report annually to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first monitoring report must be submitted to the Administrative Director of the DCA not later than one year after the effective date of this Development Order. Further reporting must be submitted not later than one year of subsequent calendar years thereafter, until build out. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. In compliance with a condition of the first development order amendment, the developer did amend this Development Order to incorporate the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. A legal description of that portion of the Spring Creek DRI, along with the conditions of the Spring Creek Development Order that are applicable to the Spring Creek West property are now incorporated into this development order). The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation that would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes. The inclusion of the Baywinds parcel as part of the Seventh Development Order amendment does not divest the rights provided in the permits, development orders, and government approvals obtained on that parcel based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These approvals were granted prior to its inclusion in the Pelican Landing DRI and will allow for the development of the Baywinds Parcel consistent with the plan of development reflected in Lee County Development Order No. 95-12-068.00D.

THE MOTION TO ADOPT this Amendment was offered by Commissioner Ray Judah, and seconded by Commissioner Douglas St. Cerny and, upon poll of the members present, the vote was as follows:

Robert P. Janes	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Absent
John E. Albion	Aye

DULY PASSED AND ADOPTED this 26th day of February, 2002

ATTEST:
CHARLIE GREEN, CLERK

BY: Michelle L. Leisner
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: Ray Judah
Vice-Chairman

RECEIVED
MAR - 1 2002

APPROVED AS TO FORM BY:
County Attorney's Office

Attachments:

Exhibit A. Legal Description of the Pelican Landing DRI area within unincorporated Lee County.

Exhibit B. Legal Description of the Pelican Landing DRI area within the City of Bonita Springs, but excluding the Spring Creek West DRI area.

Exhibit C. Legal Description of the Pelican Landing DRI area encompassed by the Spring Creek West DRI, located in the City of Bonita Springs.

Exhibit D. Sketch of the legal descriptions of Pelican Landing DRI.

Exhibit E. Map H, Master Development Plan - last revised March 1, 2001, stamped received March 6, 2001.

Exhibit F. Pelican Landing DRI Development Parameters

November 1, 2001

DESCRIPTION

PELICAN LANDING DRI –UNINCORPORATED LEE COUNTY SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 5, 6, 7, 8 and 9, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

PARCEL 2-A

Beginning at an intersection of the West line of Tamiami Trail (State Road No. 45) with the south line of Coconut Road as described in Official Record Book 1738 at Page 2538 of the Public Records of Lee County, Florida; thence run S 00° 10' 56" W along said West line for 621.81 feet to a point of curvature; thence run southerly and southeasterly along said West line, along the arc of a curve to the left of radius 5797.58 feet (chord bearing S 04° 57' 34" E) (chord 1039.14 feet) (delta 10° 17' 00") for 1040.54 feet to a point of tangency; thence run S 10° 06' 04" E along said westerly line for 938.08 feet to an intersection with the south line of the Southeast Quarter (SE-1/4) of said Section 9; thence run S 89° 23' 00" W along said south line for 708.94 feet to the southwest corner of said Southeast Quarter (SE-1/4) of Section 9; thence run S 89° 27' 22" W along the south line of the Southwest Quarter (SW-1/4) of Section 9 for 2677.24 feet to the southwest corner of the Southwest Quarter (SW-1/4) of Section 9; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 1,838.15 feet to an intersection with the easterly line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records; thence continue N 00° 07' 17" E along said east line for 343.54 feet; thence run S 89° 38' 58" E for 10.00 feet; thence run N 00° 07' 17" E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records; thence run S 89° 21' 02" E along the South line of said lands for 189.98 feet; thence run N 00° 07' 17" E along the East line of said lands for 125.01 feet; thence run N 89° 21' 02" W along the North line of said lands for 199.98 feet to an intersection with the easterly line of said Spring Creek Road; thence run N 00° 07' 17" E along said East line for 1292.76 feet to an intersection with the South line of Coconut Road (50 feet wide); thence run S 89° 16' 14" E along said South line for 1802.38 feet to an intersection with the West line of said Section 9; thence run N 00° 39' 58" W along said West line for 25.00 feet to a Concrete Monument marking the Northwest corner of the Southwest Quarter (SW-1/4) of said section; thence continue along said west line N 00° 39' 58" W for 5.00 feet to an intersection with the south line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records; thence run S 89° 35' 50" E along said south line for 1549.14 feet; thence run southwesterly along a non-tangent curve to the left of radius 30.00 feet (chord bearing S 45° 24' 10" W) (chord 42.43 feet) (delta 90° 00' 00") for 47.12 feet to a point of tangency; thence run S 00° 24' 10" W for 336.31 feet to a point of curvature; thence run along the arc of a curve to the left of radius 270.00 feet (chord bearing S 44° 35' 50" E) (chord 381.84 feet) (delta 90° 00' 00") for 424.12 feet to a point of tangency; thence run S 89° 35' 50" E for 99.41 feet to a point of curvature; thence run along the arc of a curve to

the right of radius 530.00 feet (chord bearing S 75° 44' 50" E) (chord 253.74 feet) (delta 27° 42' 00") for 256.23 feet; thence run N 20° 53' 52" W for 748.16 feet to an intersection with the aforementioned south line of Coconut Road; thence run along said south line S 89° 35' 50" E for 1,301.22 feet to the Point of Beginning.
Parcel contains 294.56 acres, more or less.

AND

PARCEL 2-B

From a railroad spike marking the northwest corner of the Southwest Quarter (SW-1/4) of said Section 8 run S 00° 23' 24" E along the west line of said fraction for 25.00 feet to an intersection with the south line of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of the Public Records of Lee County of Lee County, Florida, and the Point of Beginning.
From said Point of Beginning run S 89° 16' 14" E along said south line for 3253.00 feet to an intersection with the west line of Spring Creek Road; thence run the following courses and distances along said west line of said Spring Creek Road; S 00° 17' 17" W for 817.15 feet; N 89° 52' 43" W for 14.27 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the right of radius 1725.00 feet (chord bearing S 05° 52' 51" W) (chord 346.22 feet) (delta 11° 31' 09") for 346.81 feet to a point of tangency; thence run S 11° 38' 26" W for 178.50 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the left of radius 2400.00 feet (chord bearing S 00° 28' 49" W) (chord 929.06 feet) (delta 22° 19' 14") for 934.96 feet to a point of tangency; thence run S 10° 40' 48" E for 231.66 feet to a point of curvature; thence run Southeasterly along said arc of curve to the right of radius 1725.00 feet (chord bearing S 08° 42' 25" E) (chord 118.78) (delta 03° 56' 45") for 118.80 feet to an intersection with the south line of said Section 8; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 642.07 feet to the southeast corner of the Southwest Quarter (SW-1/4) of Section 8; thence run N 89° 25' 49" W along the south line of the Southwest Quarter (SW-1/4) of Section 8 for 2558.62 feet to the southwest corner of said Section 8; thence run N 89° 25' 49" W along the south line of the Southeast Quarter (SE-1/4) of said Section 7 for 2330 feet more or less to the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 6,485 feet more or less to an intersection with the north line of the South Half (S-1/2) of Government Lot 2 of said Section 7; thence run N 89° 32' 15" E along the north line of said South Half (S-1/2) of Government Lot 2 for 793 feet more or less to the northeast corner of lands described in Official Record Book 1895 at Page 3817 of said public records; thence run S 08° 50' 45" E along the east line of said lands for 199.50 feet to the southeast corner of said lands; thence run N 89° 35' 27" E for 666.22 feet; thence run N 89° 32' 15" E for 239.00 feet to an intersection with the west line of Coconut Road; thence run S 01° 07' 45" E along said west line for 488.63 feet; thence run N 89° 40' 05" E along the south line of said Coconut Road for 24.69 feet to the Point of Beginning. Less and except Official Record Book 1677 at Page 3516 of said Public Records.
Parcel contains 343 acres, more or less.

AND

PARCEL 2-C

A parcel of land lying in and being a portion of the East Half of the Northwest Quarter of Section 8, Township 47 South, Range 25 East of Lee County, Florida, being more particularly described as follows:

Commencing at the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 00' 45" W along the west line of said East Half (E-1/2) of the Northwest Quarter (NW-1/4) for 40.02 feet to an intersection with the northerly right-of-way line of Coconut Road (as maintained); thence run S 89° 16' 14" E along said right-of-way for 171.25 feet to the Point of Beginning.

From said Point of Beginning continue S 89° 16' 14" E along said right-of-way a distance of 342.50 feet; thence run N 01° 00' 44" W a distance of 367.98 feet; thence run N 89° 16' 14" W a distance of 342.50 feet; thence run S 01° 00' 44" E a distance of 367.98 feet to the Point of Beginning.

Parcel contains 2.89 acres, more or less.

AND

PARCEL 2-D

All that part of Florida Gulf Land Company's Subdivision as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, Florida, lying in Section 5, Township 47 South, Range 25 East South and West of lands to Florida Power and Light Company as described by deed recorded in Deed Book 244, Page 138 of said Public Records, also Lot 8, Block 14 of Eldorado Acres (an Unrecorded Subdivision) as shown in Deed Book 310 at Page 183 of said public records; also part of Sections 5, 6, 7 and 8, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at the southeast corner of said Section 5; thence run N 88° 46' 30" W along the south line of the Southeast Quarter (SE-1/4) of said Section 5 for 2580.80 feet to the southeast corner of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 25' 13" W along the south line of said Southwest Quarter (SW-1/4) for 587.32 feet to an intersection with the east line of said Lot 8, Block 14, Eldorado Acres, an unrecorded subdivision; thence run the following three courses and distances along the boundary of said Lot 8: S 00° 50' 16" E for 132.70 feet; N 89° 11' 54" W for 75.00; N 00° 50' 16" W for 132.41 feet to an intersection with said south line of the Southwest Quarter (SW-1/4) of Section 5; thence run N 89° 25' 13" W along said south line for 610.82 feet to the northeast corner of the West Half (W-1/2) of the Northwest Quarter (NW-1/4) of

said Section 8; thence run S 01° 00' 45" E along the east line of said West Half (W-1/2) of the Northwest Quarter (NW-1/4) of Section 8 for 2612.19 feet to an intersection with the northerly right-of-way line (as maintained) of Coconut Road being 40.00 feet north of the centerline of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of said Public Records, said right-of-way line being the south line of lands as described by deed recorded in Official Record Book 3052 at Page 1748 of said Public Records; thence run N 89° 16' 14" W along said maintained right-of-way for 1267.93 feet to an intersection with the west line of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 07' 45" W along said west line for 1284.51 feet to the southeast corner of Government Lot 1 of said Section 7; thence run S 89° 33' 42" W along the south line of said Government Lot 1 for 1813 feet more or less to the easterly waters of Estero Bay; thence run northerly along the waters of Estero Bay for 3000 feet more or less to an intersection with the north line of Government Lot 4 of said Section 6; thence run N 89° 41' 23" E along said north line or 1807 feet more or less to an intersection with the west line of lands as described by deed recorded in Official Record Book 1762 at Page 4173 of said Public Records; thence run the following courses and distances along the boundary of said lands: N 00° 48' 29" W for 775.70 feet; N 46° 11' 51" E for 523.67 feet; S 81° 20' 47" E for 600.53 feet; N 00° 49' 50" W for 162.49 feet; N 89° 10' 55" E for 349.43 feet; N 01° 31' 46" W for 92.78 feet to an intersection with the north line of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 34' 40" E along said north line for 2592.29 feet to the northeast corner of said Southwest Quarter (SW-1/4); thence run N 89° 31' 44" E along the north line of the Southeast Quarter (SE-1/4) of said Section 5 for 2401.02 feet to an intersection with the southwesterly line of said lands to Florida Power and Light Company; thence run S 20° 51' 33" E along said southwesterly line for 553.91 feet to an intersection with the east line of said Southeast Quarter (SE-1/4) of Section 5; thence run S 00° 08" 26" E along said east line for 2202.99 feet to the Point of Beginning.

Parcel contains 576 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor Mapper
Florida Certificate No. 5652

20002476\Pelican Landing-County – 110101

Q. GRADY MINOR & ASSOCIATES, P.A.

Civil Engineers ▪ Land Surveyors ▪ Planners

Q. GRADY MINOR, P.E.
MARK W. MINOR, P.E.
C. DEAN SMITH, P.E.
DAVID W. SCHMITT, P.E.
MICHAEL J. DELATE, P.E.
BLAIR A. FOLEY, P.E.

D. WAYNE ARNOLD, A.I.C.P.
ERIC V. SANDOVAL, P.S.M.
THOMAS CHERNESKY, P.S.M.
ALAN V. ROSEMAN

SURVEYOR'S AFFIDAVIT

I am a Professional Surveyor and Mapper holding Certificate Number 5426 under the laws of the State of Florida.

I hereby certify that the dividing line described in the legal descriptions of ***"Pelican Landing DRI – City of Bonita Springs"*** *and* ***"Pelican Landing DRI – Unincorporated Lee County"*** *(submitted with the DRI), as prepared by Johnson Engineering, dated November 1, 2001, is the same as the Jurisdictional line as decribed in the legal description established by the Charter for the City of Bonita Springs; and is also the same line shown and depicted on the Specific Purpose Survey, as prepared by Q. Grady Minor & Associates, P.A., dated October 2, 2001, as Drawing number C-1497.*

I also certify that there are ***no*** *overlaps or hiatus between the legal descriptions and the lines mentioned above.*

DRI 2000-00022

Q. Grady Minor & Associates, P.A.

By: _____ *Date:* 11-2-01

Thomas Chernesky, P.S.M. #5426

(941) 947-1144 ▪ FAX (941) 947-0375 ▪ E-Mail: engineering@gradyminor.com
3800 Via Del Rey ▪ Bonita Springs, Florida 34134

JOHNSON ENGINEERING

SINCE 1946

DRI 2000-00022

November 1, 2001

DESCRIPTION

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 16, 17, 20 and 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, which tract or parcel is described as follows:

Parcel 1-A

Beginning at the Northwest corner of the Northeast Quarter (NE-1/4) of Section 16; thence run S 00° 02' 54" W along said West line of the Northeast Quarter (NE-1/4) for 2643.98 feet to the Southwest corner of the Northeast Quarter (NE-1/4) of said section; thence run N 89° 10' 38" E along the South line of said fraction for 538.06 feet; thence run S 00° 06' 43" E for 1085.91 feet; thence run N 89° 06' 43" E for 744.41 feet to an intersection with the West line of Tamiami Trail (US 41 S.R. No. 45); thence run southerly along said West line, along the arc of a non-tangent curve to the right of radius 5619.58 feet (chord bearing S 00° 22' 05" E) (chord 50.21 feet) (delta 00° 30' 43") for 50.21 feet to a point of tangency; thence run S 00° 06' 43" E along said West line for 49.81 feet; thence run S 89° 06' 43" W for 300.00 feet; thence run S 00° 06' 43" E for 1445.84 feet to an intersection with the South line of the Southeast Quarter (SE-1/4) of said Section 16; thence run S 89° 16' 54" W along the South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW-1/4) of said Section 16; thence run S 88° 38' 34" W along said South line of said Southwest Quarter (SW-1/4) for 2627.98 feet to the Northeast corner of said Section 20; thence run S 00° 35' 25" E along the East line of said section for 2659.47 feet to the Southeast corner of the Northeast Quarter (NE-1/4) of said section; thence run N 88° 52' 49" E along the North line of the Southwest Quarter (SW-1/4) of said Section 21 for 2,040.41 feet to an intersection with the West line of the East 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run S 00° 51' 35" E along said West line for 801 feet, more or less to the water of Spring Creek; thence run westerly along Spring Creek for 3630 feet more or less to an intersection of the East line of said Section 20; thence run S 00° 38' 52" E along said East line of Section 20 for 91 feet, more or less to an intersection with the approximate centerline of Spring Creek as shown on the Plat of Pelican Landing Unit 5 recorded in Plat Book 59 at Page 11 of said Public Records of Lee County, Florida; thence run along said centerline the following courses: S 78° 50' 00" W for 181.31 feet, N 34° 24' 12" W for 230.22 feet, N 30° 59' 12" W for 174.93 feet, N 24° 25' 16" E for 120.83 feet, S 65° 47' 43" E for 219.32 feet, N 18° 24' 43" E for 158.11 feet, N 75° 11' 47" W for 351.71 feet, N 65° 09' 33" W for 451.88 feet, N 84° 18' 44" W for 351.75 feet, N 66° 54' 31" W for 445.79 feet, S 63° 24' 43" W for 134.16 feet, S 03° 23' 22" E for 170.29 feet, S 50° 30' 17" W for 220.23 feet, N 84° 49' 43" W for 331.36 feet, S 62° 13' 07" W for 214.71 feet, S 22° 08' 36" W for 291.55 feet, S 72° 15' 11" W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW-1/4) of said Section 20; thence run N 00° 50' 19" W along said East line for 520.00 feet to the Northeast corner of said fraction; thence run S 89° 58' 37" W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most easterly branch of said Spring

Creek as shown on said Plat of Pelican Landing Unit 5; thence run along said centerline the following courses: N 09° 13' 28" W for 137.34 feet, N 29° 08' 22" W for 590.59 feet, N 38° 31' 58" W for 278.03 feet, N 65° 16' 43" W for 254.95 feet, N 37° 18' 28" W for 286.01 feet, N 32° 51' 05" E for 252.39 feet, N 20° 11' 00" E for 236.69 feet, N 27° 23' 47" W for 369.25 feet, N 89° 15' 43" E for 50 feet more or less to the easterly shore of said Spring Creek; thence run northerly along said easterly shore for 1220 feet more or less to an intersection with the North line of said Section 20; thence run N 89° 15' 13" E along said North line of said section for 970 feet, more or less to a Concrete Monument marking the Northwest corner of the Northeast Quarter (NE-1/4) of said Section 20; thence run N 00° 31' 30" E along the West line of the Southeast Quarter (SE-1/4) of said Section 17 for 2674.38 feet to the Northwest corner of said Southeast Quarter (SE-1/4); thence run N 00° 31' 29" E along the West Line of the Northeast Quarter (NE-1/4) of said Section 17 for 3.40 feet to an intersection with the curved southerly line of Spring Creek Road; thence run northeasterly and northerly along the arc of a curve to the left of radius 1130.00 feet (chord bearing N 35° 09' 06" E) (chord 1296.89 feet) (delta 70° 02' 16") for 1381.30 feet; thence run N 89° 52' 02" W for 5.00 feet; thence run N 00° 07' 58" E along the easterly line of Spring Creek Road (50 feet wide) for 1611.64 feet to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 17; thence run S 89° 25' 51" E along said north line of the Northeast Quarter (NE-1/4) of said Section 17 for 1838.15 feet to the Northeast corner of said Section 17; thence run N 89° 27' 22" E along the north line of the Northwest Quarter (NW-1/4) of said Section 16 for 2677.24 feet to the Point of Beginning.
Parcel contains 909 acres; more or less.

AND

PARCEL 1-B

Beginning at an intersection of the west line of Spring Creek Road with the north line of said Section 17; thence run the following courses and distances along the Southerly right-of-way of said Spring Creek Road: Southeasterly along an arc of a non-tangent curve to the right of radius 1725.00 feet (chord bearing S 03° 18' 23" E) (chord 206.27) (delta 06° 51' 19") for 206.40 feet to a point on a non-tangent line; thence run S 89° 52' 02" E for 16.47 feet; thence run S 00° 07' 58" W for 1406.64 feet; thence run N 89° 52' 02" W for 5.00 feet to a point of tangency; thence Southwesterly along an arc of said curve to the right of radius 1070.00 feet (chord bearing S 37° 51' 54" W) (chord 1309.62 feet) (delta 75° 27' 53") for 1409.31 feet to an intersection with the north right-of-way of a 30 foot wide road as recorded in Deed Book 305 at Page 276 of the Public Records of Lee County, Florida; thence run N 89° 59' 08" W along said right-of-way for 718.27 feet to an intersection with the easterly line of lands known locally as Spring Creek Estates, an unrecorded plat; thence along said lands the following courses and distances: N 00° 00' 52" E for 510.00 feet; N 89° 59' 08" W for 885.06 feet to a point of curvature; along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33° 56' 23", chord of 227.66 feet and chord bearing of S 73° 02' 41" W, to a point on the curve; S 00° 00' 52" W for 167.10 feet; and S 31° 38' 00" W for 130.70 feet to the northeast corner of lands described in Official Record Book 1194, Page 1085; thence westerly along said lands and waters of a canal 106 feet, more or less to the northeast corner of said lands described in Official Record Book 1057, Page 38; thence southwesterly and westerly along said lands and said canal 400 feet more or less to the

northwest corner of lands described in Official Record Book 1453, page 495; thence southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of the North Half (N-1/2) of said Section 17; thence N 89° 59' 08" W for 136 feet more or less to the east quarter corner of said Section 18, thence run S 89° 58' 17" W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967; thence the following courses and distances along said bulkhead line: N 56° 00' 38" W for 265.00 feet to a point of curvature; along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37° 20' 50", chord of 332.98 feet and chord bearing of N 37° 20' 13" W, to a point of tangency; N 18° 39' 48" W for 481.24 feet to a point of curvature; along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59° 50' 20", chord of 99.76 feet and a chord bearing of N 48° 34' 58" W, to a point of tangency; N 78° 30' 08" W for 144.73 to a point of curvature; along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32° 21' 45"; chord of 55.74 feet and a chord bearing of N 62° 19' 15" W, to a point of tangency and an intersection with the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 2270 feet more or less to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 18; thence run S 89° 25' 49" E along said north line of the Northeast Quarter (NE-1/4) of said Section 18 for 2330 feet, more or less to the northeast corner of Section 18; thence run S 89° 25' 49" E along the north line of the Northwest Quarter (NW-1/4) of said Section 17 for 2558.62 feet to the northeast corner of said Northwest Quarter (NW-1/4); thence run S 89° 25' 51" E along the north line of the Northeast Quarter (NE-1/4) of said Section 17 for 642.07 feet to the Point of Beginning.

Parcel contains 304 acres, more or less.

Frances L. Yerdón (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

JOHNSON ENGINEERING

SINCE 1946

August 15, 2001

PARCEL IN
GOVERNMENT LOT 3, SECTION 13
AND
GOVERNMENT LOT 2, SECTION 24
TOWNSHIP 47 SOUTH, RANGE 24 EAST
BIG HICKORY ISLAND, LEE COUNTY, FLORIDA

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13 and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida which tract or parcel is described as follows:

From the center of a turnaround on State Road No. 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N 24° 28' 41" W along the northern prolongation of said centerline of State Road No. 865 for 266.00 feet; thence run S 62° 26' 49" W for 98.40 feet; thence run N 27° 33' 11" W for 1863.42 feet; thence run N 20° 00' 41" W for 1403.30 feet; thence run N 65° 00' 00" E for 313.91 feet to the Point of Beginning.

From said Point of Beginning run N 18° 55' 11" W for 97.51 feet, N 22° 26' 23" W for 100.53 feet, N 23° 09' 50" W for 100.14 feet, N 14° 51' 19" W for 73.01 feet, N 27° 40' 10" W for 88.01 feet, N 29° 33' 57" W for 46.01 feet, N 22° 14' 53" W for 47.27 feet, N 20° 39' 23" W for 46.98 feet, N 11° 15' 38" W for 29.80 feet, N 26° 10' 46" W for 46.87 feet, N 09° 09' 45" W for 48.26 feet, N 17° 35' 56" W for 46.04 feet, N 12° 49' 07" W for 50.04 feet, N 29° 20' 48" W for 69.12 feet, N 20° 48' 58" W for 63.82 feet; thence run N 79° 23' 51" W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico; thence run northerly and northeasterly along said waters for 1140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida; thence run along said South line, along the arc of a curve to the right of radius 12000.00 feet for 783 feet to an intersection with the Waters of New Pass; thence run southerly, easterly, southwesterly and southerly along said waters for 4080 feet more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet more or less to the Point of Beginning.

AND

From said Point of Beginning run S 13° 03' 59" E for 94.16 feet; thence run S 19° 13' 48" E for 50.64 feet; thence run S 04° 34' 15" E for 54.63 feet; thence run S 24° 53' 12" E for 50.09 feet; thence run S 27° 10' 29" E for 50.01 feet; thence run S 31° 01' 44" E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records; thence run N 65° 00' 00" E along said south line for 134 feet, more or less to the waters of Estero Bay; thence northerly along said waters for 358 feet, more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet, more or less to the Point of Beginning.

Containing 36.8 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

22005\BeachParcel-081501

Q. GRADY MINOR & ASSOCIATES, P.A.

Civil Engineers ▪ Land Surveyors ▪ Planners

GRADY MINOR, P.E.
MARK W. MINOR, P.E.
C. DEAN SMITH, P.E.
DAVID W. SCHMITT, P.E.
MICHAEL J. DELATE, P.E.
BLAIR A. FOLEY, P.E.

D. WAYNE ARNOLD, A.I.C.P.
ERIC V. SANDOVAL, P.S.M.
THOMAS CHERNESKY, P.S.M.
ALAN V. ROSEMAN

SURVEYOR'S AFFIDAVIT

I am a Professional Surveyor and Mapper holding Certificate Number 5426 under the laws of the State of Florida.

*I hereby certify that the dividing line described in the legal descriptions of "**Pelican Landing DRI – City of Bonita Springs**" and "**Pelican Landing DRI – Unincorporated Lee County**" (submitted with the DRI), as prepared by Johnson Engineering, dated November 1, 2001, is the same as the Jurisdictional line as decribed in the legal description established by the Charter for the City of Bonita Springs; and is also the same line shown and depicted on the Specific Purpose Survey, as prepared by Q. Grady Minor & Associates, P.A., dated October 2, 2001, as Drawing number C-1497.*

I also certify that there are no overlaps or hiatus between the legal descriptions and the lines mentioned above.

DRI 2000-00022

Q. Grady Minor & Associates, P.A.

By: _____ *Date:* 11-2-01

Thomas Chernesky, P.S.M. #5426

EXHIBIT B
Page 5 of 5

(941) 947-1144 ▪ FAX (941) 947-0375 ▪ E-Mail: engineering@gradyminor.com
3800 Via Del Rey ▪ Bonita Springs, Florida 34134

JOHNSON ENGINEERING

SINCE 1946

November 1, 2001

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SPRING CREEK WEST
SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Section 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, being described as follows:

Beginning at the northwest corner of said Section 21; thence run N 88° 38' 34" E along the north line of the Northwest Quarter (NW-1/4) of said Section 21 for 2627.98 feet to the northeast corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 89° 16' 54" E along the north line of the Northeast Quarter (NE-1/4) of said Section 21 for 1289.43 feet to an intersection with the westerly right-of-way line of Tamiami Trail (US 41 – SR No. 45); thence run the following three (3) courses and distances along the westerly right-of-way line of Tamiami Trail: South 00° 06' 50" E for 261.81 feet; S 02° 58' 35" E for 100.12 feet; S 00° 06' 50" E for 3690 feet more or less to the northeasterly waters of Spring Creek; thence run westerly along said northerly waters for 2765 feet more or less to an intersection with the west line of the east 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run N 00° 51' 35" W along said west line for 801 more or less to an intersection with the south line of the Northwest Quarter (NW-1/4) of said Section 21; thence run S 88° 52' 49" W along said south line for 2040.41 feet to the southwest corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 00° 35' 25" W along the west line of said Northwest Quarter (NW-1/4) for 2659.47 feet to the Point of Beginning.

Parcel contains 282 acres, more or less.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

EXHIBIT C

20002476/Description 110101

SKETCH TO ACCOMPANY DESCRIPTIONS
PREPARED FOR

WCI COMMUNITIES LIMITED PARTNERSHIP

LOCATED IN

SECTIONS 5, 6, 7, 8, 9, 16, 17, 18, 20 & 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST

AND

SECTIONS 13 AND 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST

LEE COUNTY, FLORIDA

DRI 2000-00022

DESCRIPTION
PELICAN LANDING DRI - CITY OF BONITA SPRINGS
SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, CITY OF BONITA SPRINGS, LEE COUNTY, FLORIDA, WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

PARCEL 1-A

[illegible]

AND

PARCEL 1-B

[illegible]

DESCRIPTION CONTINUED
PELICAN LANDING DRI - CITY OF BONITA SPRINGS

[illegible]

AND

BEACH PARCEL

SECTIONS 13 & 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST
CITY OF BONITA SPRINGS
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN GOVERNMENT LOT 3, SECTION 13 AND GOVERNMENT LOT 3, SECTION 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST, THE WATERS OF BONITA BEACH, LEE COUNTY, FLORIDA WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

[illegible]

PARCEL CONTAINS 2.64 ACRES, MORE OR LESS

PELICAN LANDING DRI - CITY OF BONITA SPRINGS
SPRING CREEK WEST
SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

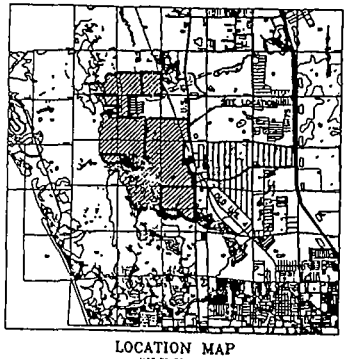
A TRACT OF PARCEL OF LAND LYING IN SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, CITY OF BONITA SPRINGS, LEE COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

[illegible]

PARCEL CONTAINS 302 ACRES, MORE OR LESS

INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	PARCELS 1-A & 1-B
3	PARCEL 1-B
4	PARCELS 2-A THROUGH 2-D
5	BEACH PARCEL



LOCATION MAP
NOT TO SCALE

THIS IS NOT A SURVEY

DATE SIGNED 10-31-01

UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS DRAWING, SKETCH, PLAT OR REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT

DESCRIPTION
PELICAN LANDING DRI - UNINCORPORATED LEE COUNTY
SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

PARCEL 2-A

[illegible]

AND

PARCEL 2-B

[illegible]

DESCRIPTION CONTINUED
PELICAN LANDING DRI - UNINCORPORATED LEE COUNTY

[illegible]

AND

PARCEL 2-C

[illegible]

AND

PARCEL 2-D

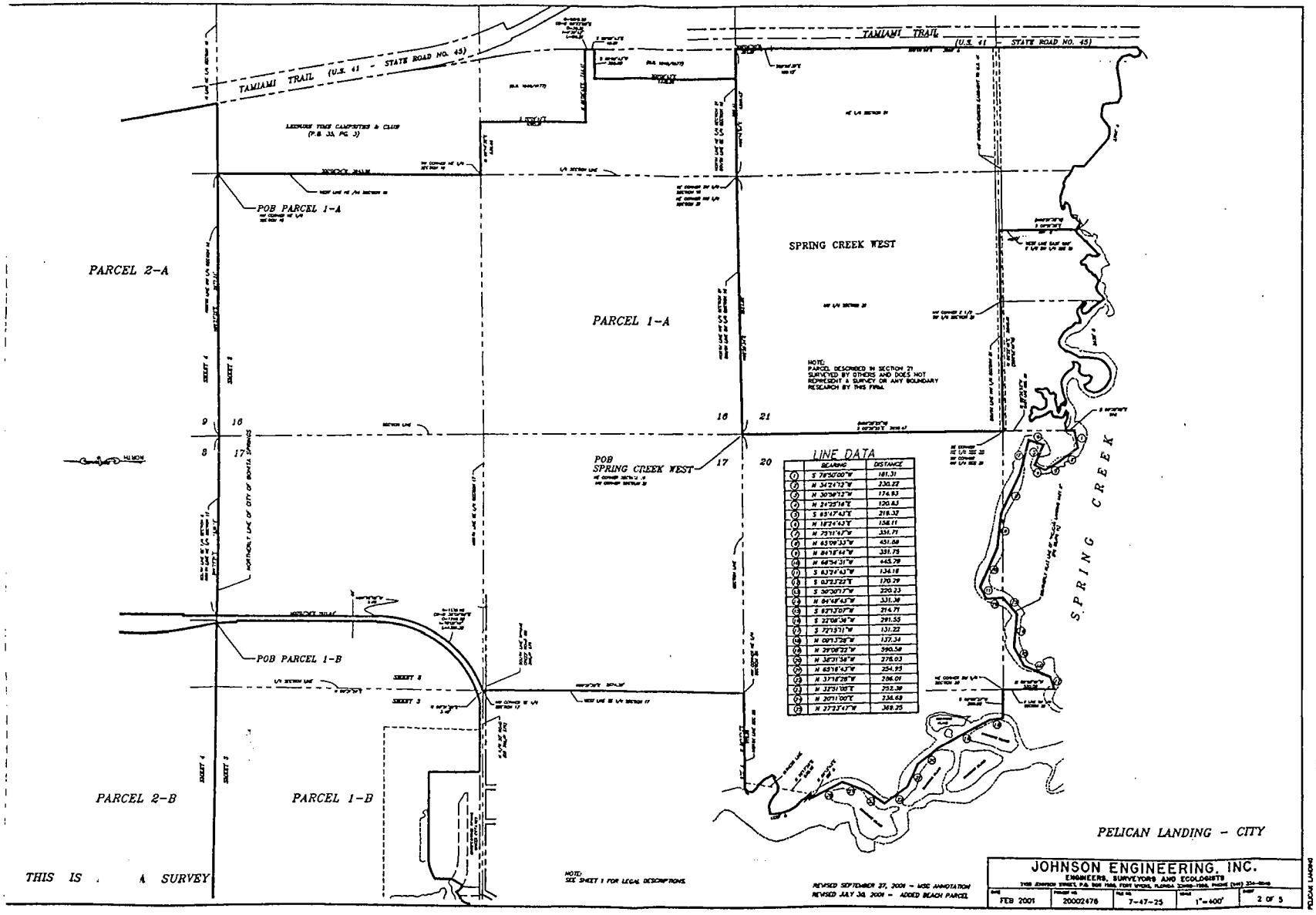
[illegible]

EXHIBIT D
Page 1 of 5

REVISED SEPTEMBER 27, 2001 - DESCRIPTIONS
REVISED JULY 3, 2001 - ADDED BEACH PARCEL

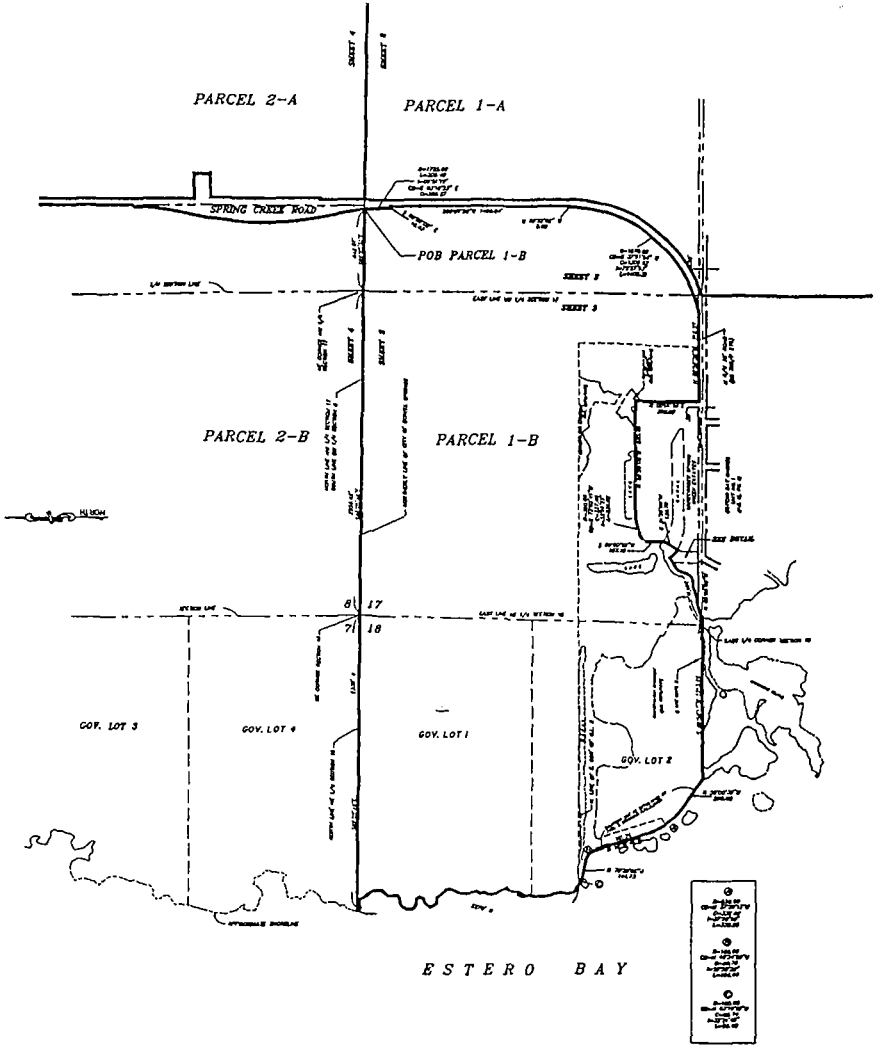
JOHNSON ENGINEERING, INC.
ENGINEERS, SURVEYORS AND ECOLOGISTS
2158 JOHNSON STREET, P.O. BOX 1986, FORT MYERS, FLORIDA 33902-1986 PHONE (941) 334-5048

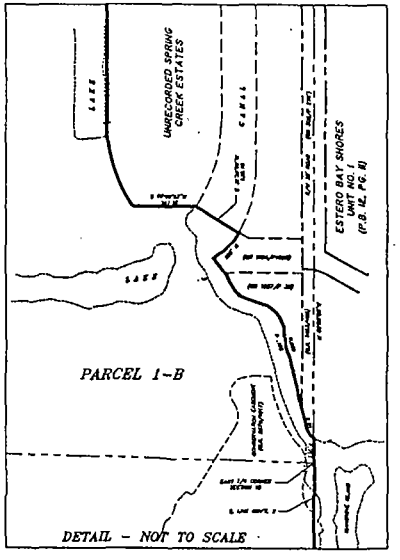
DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
FEB 2001	20002476	7-47-25	N/A	1 OF 5



	BEARING	DISTANCE
1	S 78°50'00"W	181.31
2	N 34°24'12"W	230.22
3	N 30°38'13"W	174.93
4	N 24°25'16"W	120.63
5	S 65°17'43"W	216.33
6	N 18°24'43"W	154.11
7	N 73°11'57"W	331.71
8	N 63°09'33"W	451.88
9	N 84°18'44"W	331.75
10	N 68°54'31"W	445.79
11	S 63°24'43"W	134.18
12	S 63°23'22"W	170.79
13	S 30°30'17"W	220.23
14	N 84°48'43"W	331.38
15	S 83°13'09"W	214.71
16	S 22°08'38"W	291.55
17	S 72°13'11"W	131.22
18	N 09°13'28"W	137.34
19	N 29°08'22"W	590.58
20	N 38°31'38"W	375.03
21	N 63°18'43"W	254.93
22	N 37°18'28"W	206.01
23	N 32°51'05"E	252.38
24	N 20°11'00"E	336.68
25	N 27°23'47"W	369.25

EXHIBIT D
Page 2 of 5





NOTE:
SEE SHEET 1 FOR LEGAL DESCRIPTIONS

PELICAN LANDING - CITY

THIS IS NOT SURVEY

REVISED SEPTEMBER 27, 2001 - MSC ANNOTATION
REVISED JULY 30, 2001 - ADDED BEACH PARCEL

JOHNSON ENGINEERING, INC. ENGINEERS, SURVEYORS AND ECOLOGISTS				
FEB 2001	20002476	7-47-25	1"=400'	3 OF 5

PELICAN LANDING

EXHIBIT D
Page 3 of 5

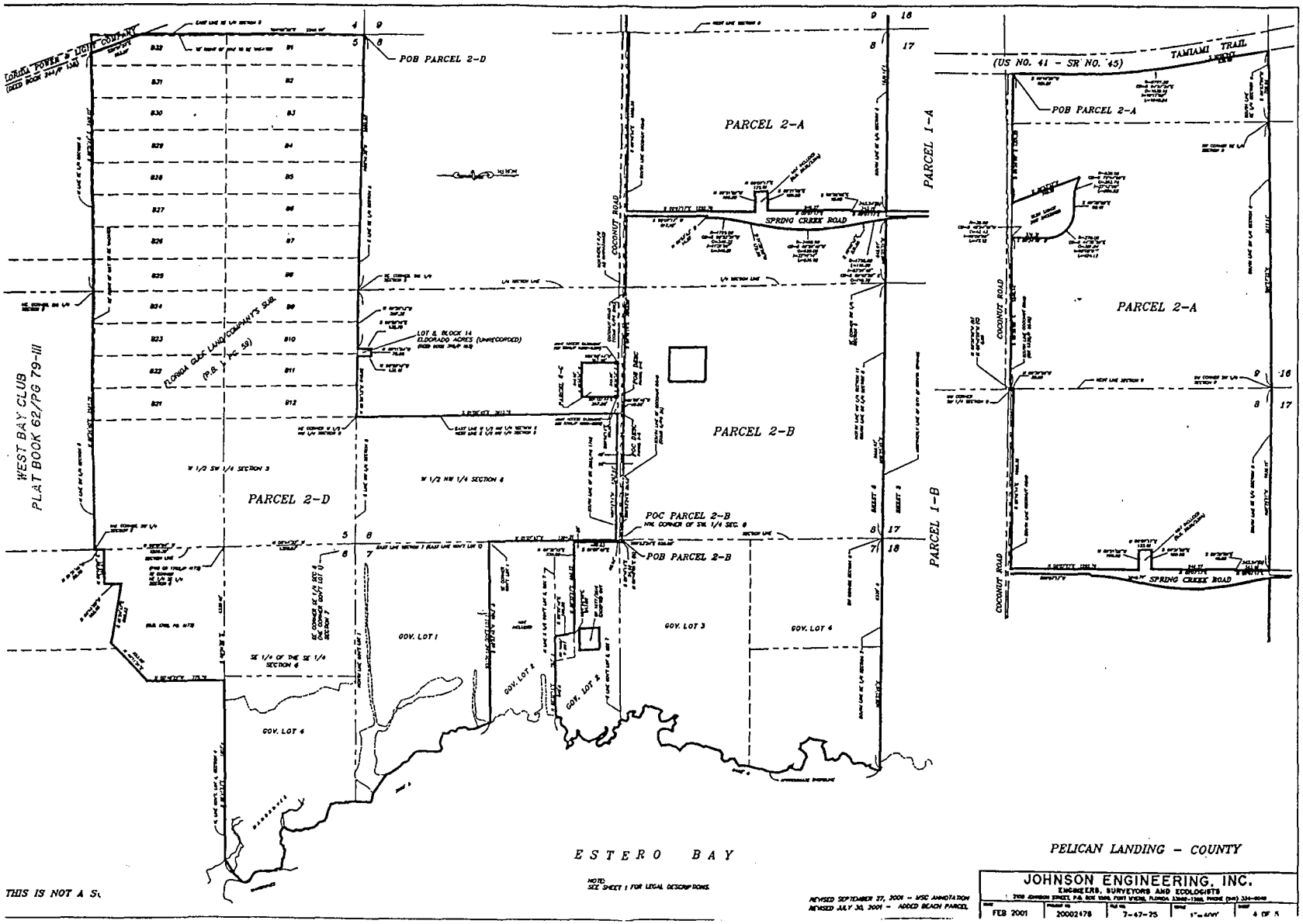


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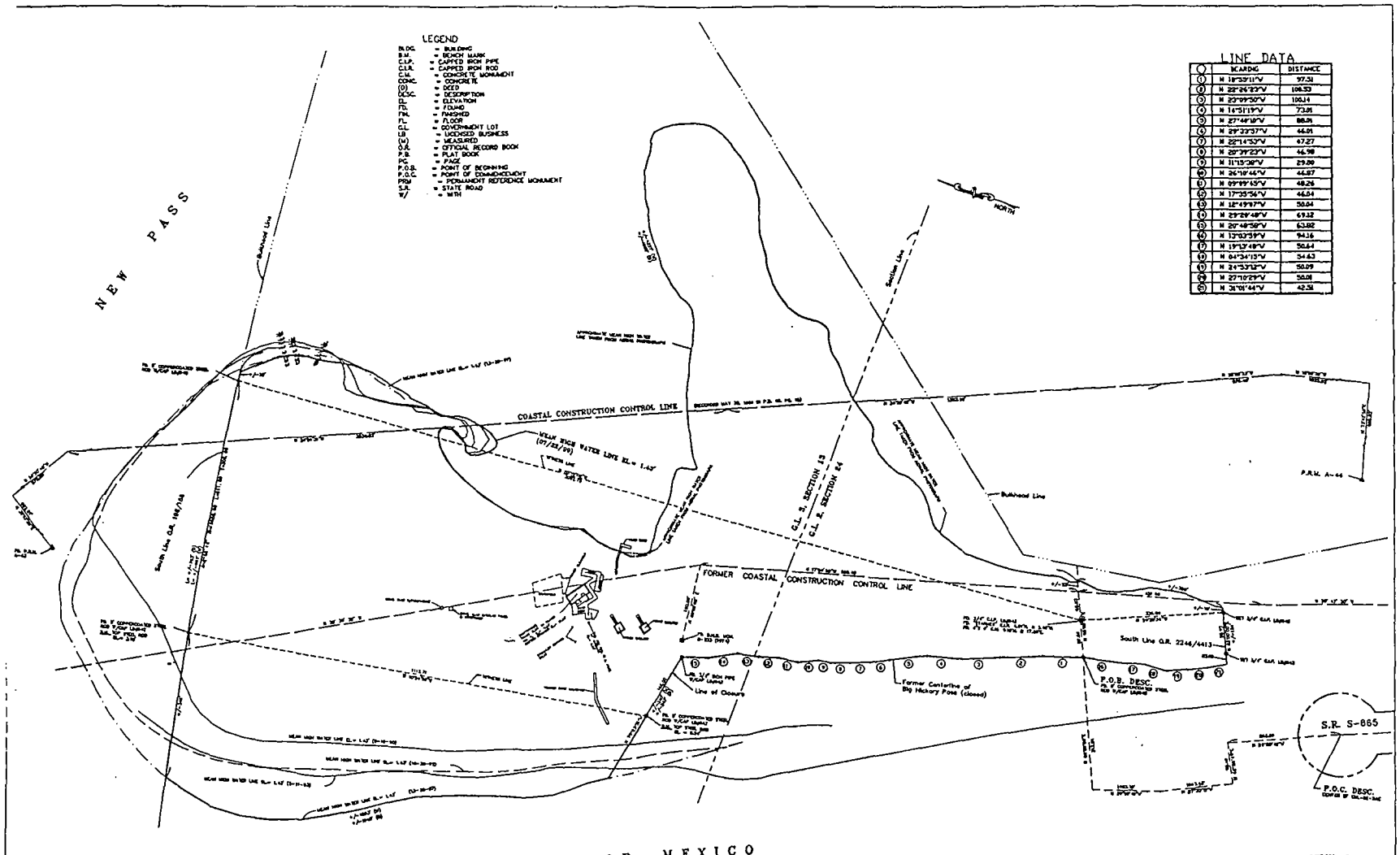
EXHIBIT D
Page 4 of 5



THIS IS NOT A SURVEY

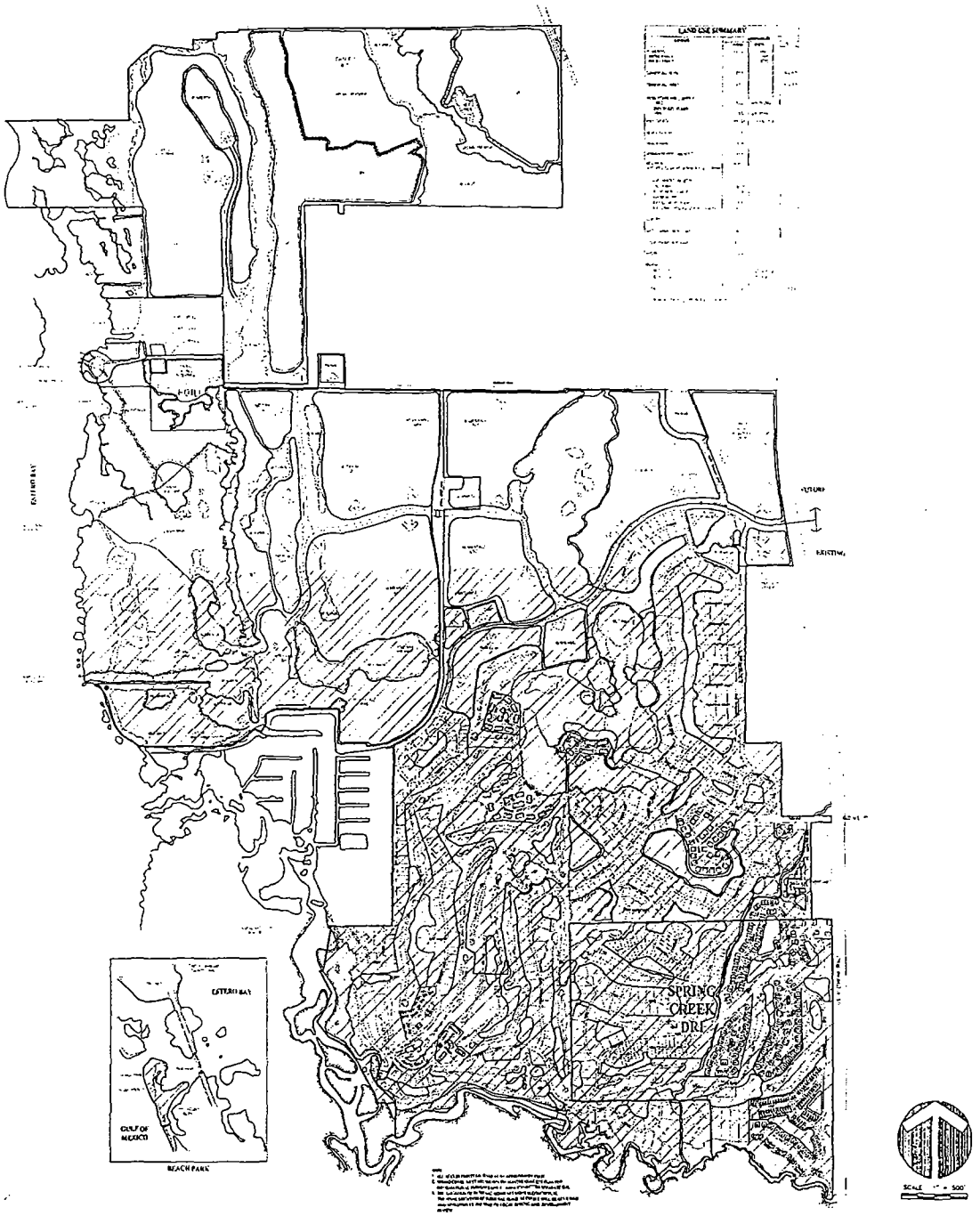
BEACH PARCEL

SKETCH TO ACCOMPANY DESCRIPTION
PARCEL IN
SECTIONS 13 & 24
TOWNSHIP 47 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING, INC.
ENGINEERS, SURVEYORS AND ECOLOGISTS

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
JULY 30, 2001	20002476	13-47-24	1" = 100'	5 OF 5

EXHIBIT D
Page 5 of 5



WCI	WCI COMMUNITIES 24301 WALDEN CENTER DRIVE BONITA SPRINGS, FLORIDA 34134 (941) 947-2600	PROJECT PELICAN LANDING LEE COUNTY	TASK MAP H Master Concept Plan	JANUARY 7, 1999 Sheet 1 of 1

DRI

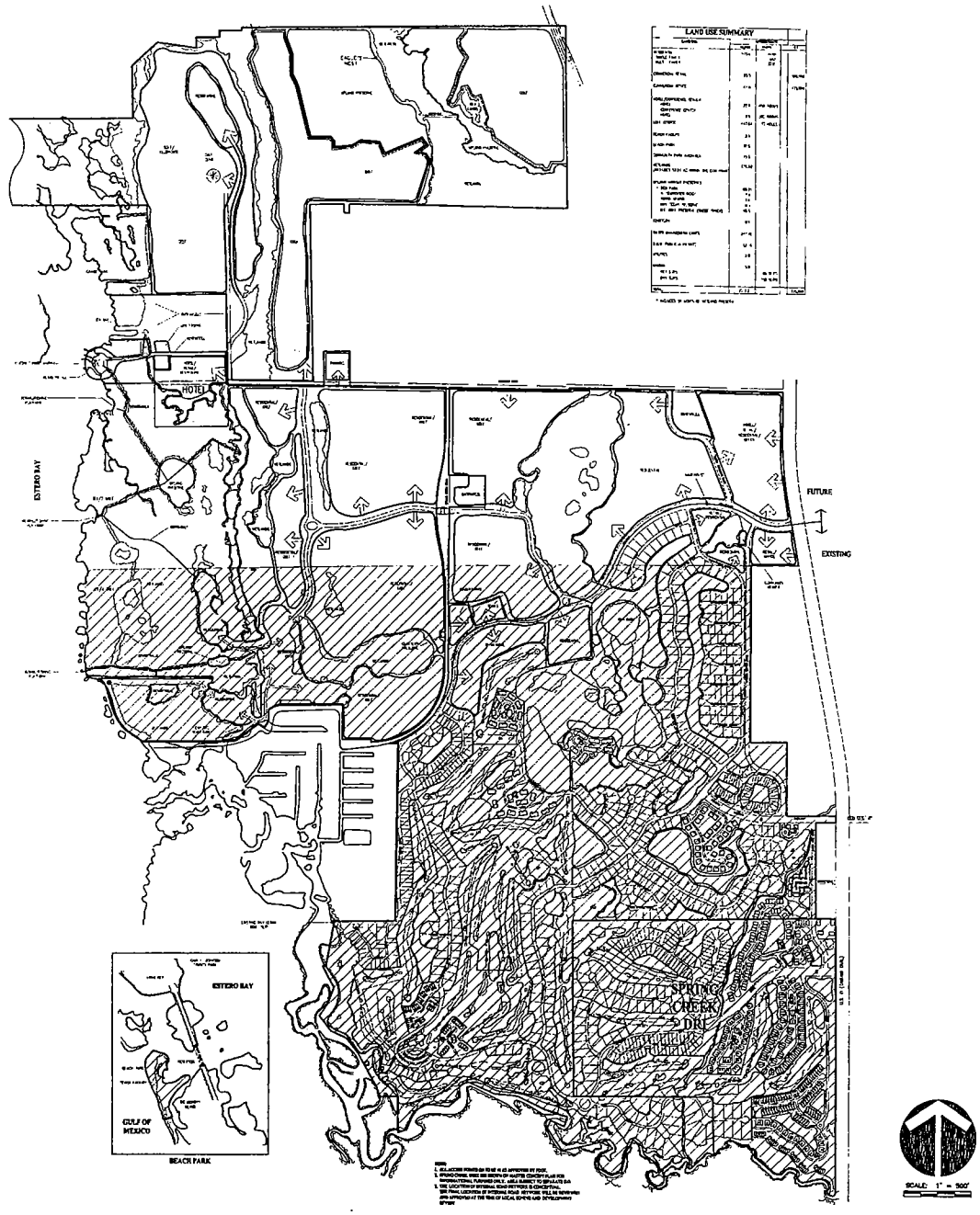
EXHIBIT E

EXHIBIT "F"
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS
(updated through 3-1-01)

Land Use	Units[1]	Existing (1998)	Build out Total (2002)
Residential	DU	1083	4,400
Single Family	DU	402	665
Multi Family	DU	596	3,735
Retail[2]	GFA	11,000	300,000
Office[3]	GFA	134,738	475,000
Hotel/Motel	Rooms	0	750
Recreation Uses			
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	21	30
Colony Range Club/ Golf Course/ Clubhouse/Practice Range	Holes	19	19
Resort Golf Course/ Clubhouse Practice Range	Holes	0	~~19~~ 28
Tennis Center	Courts	12	24
Coconut Marina	Boat Slips		
	Wet	24	48
	Dry	0	150
Redfish Point	GFA	5,000	5,000
	Boat Slips		
	Wet	15	15
Other[4]	Boat Slips		
	Wet	2	2
	Accessory Parking	0	3.2

Footnotes:

1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use



APPROVED

WCI	WCI COMMUNITIES 24301 WALDEN CENTER DRIVE BONITA SPRINGS, FLORIDA 34134 (941) 947-2600	PROJECT PELICAN LANDING LEE COUNTY	TASK MAP H Master Concept Plan	JANUARY 7, 1999 Sheet 1 of 1

RECEIVED

DRI 2000-00022

RESOLUTION NUMBER Z-06-069

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, Bayside Community Improvement District filed an application on behalf of the property owner, Dean G. Prevolos Trustee for the Dean G. Prevolos Trust, to amend the Pelican Landing DRI Development Order #1-9293-121; and

WHEREAS, a public hearing was advertised and held on August 16, 2006 before the Lee County Zoning Hearing Examiner, Diana M. Parker, who gave full consideration to the evidence in the record for Case #DRI2005-00001 and DCI2005-00005; and

WHEREAS, a second public hearing was advertised and held on December 4, 2006, before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to:

a. Consider a Notice of Proposed Change (NOPC) to amend the Pelican Landing DRI Development Order and DRI Map H to;

   1. Add a 1.45-acre tract for the purpose of constructing a maintenance facility for Bayside Community Improvement District (BCID); and

   2. Reduce the number of residential dwelling units from 4,400 to 3,912 residential units and change the mix of unit types to allow an increase in single family units from 665 to 930 units and a reduction in multi-family units from 3,735 to 2,982; and

b. Determine whether the proposed changes constitute a substantial deviation from the original development approvals warranting further Development of Regional Impact review; and

c. Rezone 1.45 acres from Residential Single-Family (RS-1) to a Residential Planned Development (RPD) to permit a maintenance facility for Bayside Community Development District (CDD) having a 2,400-square-foot

12/4/06

maintenance building and an 800 square-foot-office, outdoor material storage, equipment washing area and fuel island.

The property is located in the Outlying Suburban Land Use Category and is legally described in attached Exhibit A. The request is APPROVED, SUBJECT TO the conditions and deviations specified in Sections B and C below.

SECTION B. CONDITIONS:

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

1. The development of this project must be consistent with the 6-page Master Concept Plan labeled:

a.	Sheet 3 of 11	Master Concept Plan
b.	Sheet 7 of 11	Landscape Betterment Plan
c.	Sheet 8 of 11	Planting Plans
d.	Sheet 9 of 11	Landscape Details
e.	Sheet 10 of 11	Entry Details and Notes
f.	Sheet 11 of 11	Buffer Wall Details and Notes

date stamped received on February 16, 2007, last revised December 2006, and attached hereto as Exhibit C, except as modified by the conditions below. This development must comply with all requirements of the Lee County LDC at time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the Master Concept Plan are subsequently pursued, appropriate approvals will be necessary.

The development will be limited to a 2,400-square-foot maintenance building and an 800-square-foot office, outdoor material storage, equipment washing area and fuel island.

2. The following limits apply to the project and uses:

a. **Schedule of Uses**

ACCESSORY USES: BUILDINGS AND STRUCTURES
ADMINISTRATIVE OFFICES
ENTRANCE GATES AND GATE HOUSES
ESSENTIAL SERVICES
FENCES AND WALLS
MAINTENANCE FACILITY (see Condition #4), Limited to:
    Equipment washing area
    Horticultural Services

Lawn and Garden Services
Outdoor material storage
Self-Service Fuel Pump, limited to one having a maximum storage capacity of 1,000 gallons of gasoline
PARKING LOT, ACCESSORY
SIGNS, in accordance with Chapter 30 of the LDC

b. **Site Development Regulations**

Minimum Lot Area and Dimensions:

Area:	40,000 square feet
Width:	150 feet
Depth:	400 feet

Minimum Setbacks:

Street:	Variable according to the functional classification of the street or road (LDC §34-2191 *et seq.*)	
Side:	east side	25 feet
	west side	15 feet
Rear:		25 feet

Maximum Lot Coverage: 50 percent

Maximum Building Height: 18 feet

3. Environmental Conditions

Prior to local development order approval, the development order plans must include a landscape plan in substantial compliance with the "Landscape Betterment Plan" stamped received on July 19, 2006 with the following revisions and clarifications:

a. The east, north and west property line must include buffer plantings of seven trees per 100 linear feet and a double continuous hedge (minimum 3-gallon container size; 24-inch height at planting; shrubs must be allowed to grow to their natural height); and

b. The south property line must include buffer plantings of 12 trees per 100 linear feet (at least 50% being native canopy species) and a double continuous hedge (minimum 3-gallon container size; 24-inch height at planting; shrubs must be allowed to grow to their natural height); and

c. A minimum 8-foot tall wall or wall and berm combination must be provided around the entire property as depicted on the Master Concept Plan, received on July 19, 2006; and

d. The pine trees must be South Florida slash pine (Pinus elliottii densa); and

e. No more than 50% of the buffer trees may be palms; and

f. All pine and oak trees must be a minimum 16-foot height, 4-inch caliper at time of planting; and

g. Firecracker plant (*russelia equisetiformis*) must be replaced with a non-invasive shrub.

h. Prior to issuance of a local development order for the maintenance facility, the applicant must submit a landscape plan to embellish the landscaping on the south side of Coconut Road to protect the second story views of the condos within the Merano development. [This will require landscape embellishment along approximately 300 feet of Coconut Road frontage beginning at the southern prolongation of the western subject property boundary and proceeding east.]

4. Maintenance Facility

a. The maintenance facility must only be used to service the horticultural and lawn and garden service needs of property within the Bayside CDD boundary, which service is further limited to only the common areas and rights-of-way within the Bayside CDD.

b. The regular working hours for the maintenance facility will be from 7:00 a.m. to 3:00 p.m. Monday through Friday. The maintenance facility must be closed on Saturdays, Sundays and holidays. Ancillary activities, such as: cleaning machinery, removing horticultural debris, refueling and routine equipment maintenance and repairs may continue until 5:30 p.m. Monday through Friday, except on holidays, provided the entrance gates remain closed during that time period.

The maintenance facility may remain open after the scheduled hours in emergency situations, such as after a hurricane, major storm event or similar event to clean up debris.

c. The entrance gates to the maintenance facility may remain open during the regular working hours to facilitate the maintenance operation. No equipment or machinery may be visible from Coconut Road while the gates are open during regular business hours. However, the entrance gates must remain closed at all

other times, except when equipment and trucks are actually entering or leaving the property.

d. All routine maintenance and repair work done on machinery and equipment must be carried on entirely within the maintenance building. The overhead doors on the east side of the maintenance building must remain closed when such maintenance work is being performed.

The maintenance building must be insulated with sound attenuating materials to reduce adverse impacts on the adjoining properties.

e. No chipping or shredding of horticultural waste is permitted on the site and all horticultural waste must be stored in the designated location (30 yard roll off pad) on site for later removal. All horticultural waste must be removed at least once a week. Horticultural waste or other material must not be stored higher than eight feet in height.

f. Light standards must be no higher than 15 feet and lighting values must be in accordance with LDC §34-625, Outdoor Lighting Standards.

g. All fertilizer and maintenance liquids (i.e. spray fertilizer, weed killer, insect spray, etc.) must be stored inside the maintenance building.

5. Prior to local development order approval, the existing Joint Access Agreement, with the adjacent parcel to the west (beach parking lot) must be amended or extinguished.

6. Local development order approval must include conditions requiring the design of the entrance gates to be visually and aesthetically pleasing and architecturally consistent with the finished wall.

7. Accessory uses, including accessory parking, must be located on the same tract, lot, parcel or outparcel where a principal use is located. Accessory uses must be incidental and subordinate to the principal use of the tract, lot, parcel or outparcel. This condition is not intended to prohibit a joint parking agreement and the use of the beach parking lot to the west for employee parking, if such a need arises. (See Condition 9 below.)

8. The developer must connect to the Bonita Springs Utilities sewer and potable water system.

9. If additional employee parking spaces are required, the applicant must apply for special exception approval for joint use of parking lots with the beach parking lot on the west boundary.

10. No development blasting is permitted as part of this project.

11. Approval of this rezoning does not constitute a finding that the proposed project meets the concurrency requirements set forth in LDC Chapter 2 and the Lee Plan. The developer is required to demonstrate compliance with all concurrency requirements prior to issuance of a local development order.

12. Approval of this zoning request does not address mitigation of the project's vehicular or pedestrian traffic impacts. Additional conditions consistent with the Lee County LDC may be required to obtain a local development order.

13. Approval of this rezoning does not guarantee local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocation Table, Map 16 and Table 1(b), be reviewed for, and found consistent with the general function, as well as all other Lee Plan provisions.

14. The 1,000-gallon fuel storage container and pumping station must be relocated to the area designated "Dumpster Pad," or similar location, along the west boundary of the site, so as to have it located as far as possible from the adjoining residential properties to the north and east.

SECTION C. DEVIATIONS:

1. Deviation (1) seeks relief from the LDC §10-285(a), Table 1, Connection Separation, requirement to provide a minimum separation of 330 feet on collector streets, to allow a minimum separation of approximately 209 feet from the proposed driveway for the subject parcel to the existing driveway immediately to the east. This deviation is APPROVED.

2. Deviation (2) seeks relief from the LDC §10-416(d)(6) requirement to provide a solid wall or combination berm and solid wall, not less that eight feet in height, that is constructed not less than 25 feet from abutting property, if the project's road, drives, or parking areas are located less than 125 feet from an existing residential subdivision or residential lots, with landscaping between the wall and abutting properties that includes a minimum of five trees and 18 shrubs per 100 linear feet, to allow a wall 7.5 feet from the property lines with enhanced buffer plantings as described on the Landscape Betterment Plan. This deviation is APPROVED, SUBJECT TO Condition 3 above.

SECTION D. EXHIBITS AND STRAP NUMBER:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: Legal description of the property
Exhibit B: Zoning Map (with the subject parcel indicated)
Exhibit C: The Master Concept Plan
Exhibit D: Twelfth Development Order Amendment

The applicant has indicated that the STRAP number for the subject property is: 08-47-25-00-00003.0000.

SECTION E. FINDINGS AND CONCLUSIONS:

1. The applicant has proven entitlement to the rezoning and DRI DO amendment requests, as conditioned, by demonstrating compliance with the Lee Plan, the LDC, Section 380.06 Florida Statutes, and other applicable codes or regulations.

2. The rezoning, as approved:

   a. meets or exceeds all performance and locational standards set forth for the potential uses allowed by the request; and,

   b. is consistent with the densities, intensities and general uses set forth in the Lee Plan; and,

   c. is compatible with existing or planned uses in the surrounding area; and,

   d. will not place an undue burden upon existing transportation or planned infrastructure facilities and will be served by streets with the capacity to carry traffic generated by the development; and,

   e. will not adversely affect environmentally critical areas or natural resources.

3. The rezoning satisfies the following criteria:

   a. the proposed use or mix of uses is appropriate at the subject location; and

   b. the recommended conditions to the concept plan and other applicable regulations provide sufficient safeguard to the public interest; and

   c. the recommended conditions are reasonably related to the impacts on the public interest created by or expected from the proposed development.

4. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

5. The approved deviations, as conditioned, enhance achievement of the planned development objectives, and preserve and promote the general intent of LDC Chapter 34, to protect the public health, safety and welfare.

6. The requests to add land and change the mix of single-family and multi-family dwelling units, as conditioned, do not create new or additional unreviewed regional impacts and do not constitute a Substantial Deviation under F.S. §380.06(19).

Commissioner Judah made a motion to adopt the foregoing resolution, seconded by Commissioner Hall. The vote was as follows:

Robert P. Janes	Aye
A. Brian Bigelow	Aye
Ray Judah	Aye
Tammara Hall	Aye
Franklin B. Mann	Aye

DULY PASSED AND ADOPTED this 4th day of December 2006.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Robert P. Janes, Chair

Approved as to form by:

_____
Dawn E. Perry-Lehnert
County Attorney's Office

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

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MINUTES OFFICE

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JOHNSON
ENGINEERING

SINCE 1946

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JAN 2 1 2005
PERMIT COUNTER

May 11, 2004

DCI 2005 00005

DESCRIPTION

A PARCEL LYING IN
SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Section 8, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

From the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8 run S 89° 41' 30" E along the East/West Quarter (E/W-1/4) section line for 513.75 feet to the southwest corner of the lands described in deed recorded in Official Record Book 3354 at Page 3248, Public Records of Lee County, Florida; thence run N 01° 25' 30" W departing said fraction line along the west line of said deed for 40.01 feet to an intersection with the line that is 40 feet north of (as measured on a perpendicular) and parallel with said fraction line, said line being the north maintained right-of-way line of Coconut Road and the Point of Beginning.

From said Point of Beginning continue N 01° 25' 30" W along said deed line for 367.99 feet to an intersection with the south line of Lot 20, Block 17 of unrecorded El Dorado Acres as shown on map as recorded in Official Record Book 291 at Page 898, Public Records of Lee County, Florida; thence run S 89° 41' 30" E along the south line of said block for 171.25 feet to an intersection with the west line of Lot 10, said Block 17; thence run S 01° 25' 30" E along the west line of said Lot 10 and the west line of Lot 6 and Lot 5 of said Block 17 and the east line of said deed for 367.99 feet to an intersection with the north line of said maintained right-of-way line of Coconut Road; thence run N 89° 41' 30" W along said maintained right-of-way line for 171.25 feet to the Point of Beginning.

Parcel contains 1.45 acres, more or less.

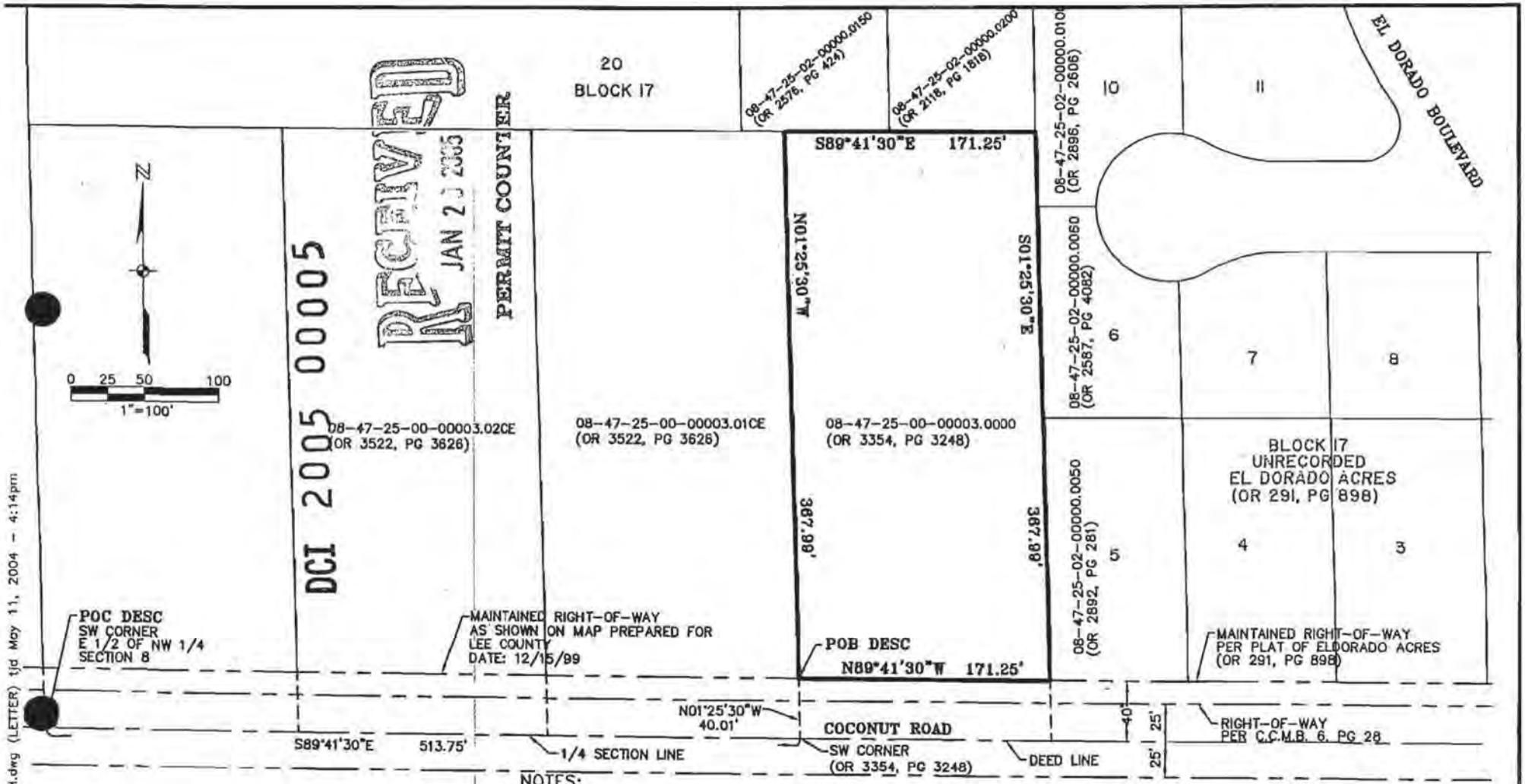
Subject to easements, restrictions and reservations of record. Bearings hereinabove mentioned are based on the unrecorded plat of El Dorado Acres wherein the center line of Coconut Road bears S 89° 41' 30" E.

Michael W. Norman (for The Firm LB-642)
Professional Land Surveyor
Florida Certificate No. 4500

20023590 Parcel 051104

EXHIBIT A
Page 1 of 2

2158 Johnson Street ▪ Post Office Box 1550 ▪ Fort Myers, Florida 33902-1550
(239) 334-0046 ▪ Fax (239) 334-3661



S:\023590\023590-SKETCH.dwg (LETTER) tjd May 11, 2004 - 4:14pm

EXHIBIT A
Page 2 of 2

NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE UNRECORDED EL DORADO ACRES PLAT WHEREIN THE CENTERLINE OF COCONUT ROAD BEARS S 89°41'30" E.
2. THIS SKETCH DOES NOT MAKE ANY REPRESENTATION AS TO ZONING OR DEVELOPMENT RESTRICTIONS ON SUBJECT PARCEL.
3. POC = POINT OF COMMENCEMENT.
4. POB = POINT OF BEGINNING
5. OR = OFFICIAL RECORDS BOOK
6. PG = PAGE
7. DESC. = DESCRIPTION
8. DESCRIPTION ATTACHED.
9. C.C.M.B. = COUNTY COMMISSIONERS MINUTES BOOK

THIS IS NOT A SURVEY

MICHAEL W. NORMAN (FOR THE FIRM LB-642)
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 4500

DATE SIGNED: MAY 11 2004

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

PARCEL IN
SECTION 8, TOWNSHIP 47 S, RANGE 25 E
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 L.B. #642

SKETCH TO ACCOMPANY DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
[redacted]/04	[redacted]0235[redacted]	08-4[redacted]	[redacted]	[redacted]F 1 [redacted]

DCI2005-00005

Zoning Map

8/15/2006

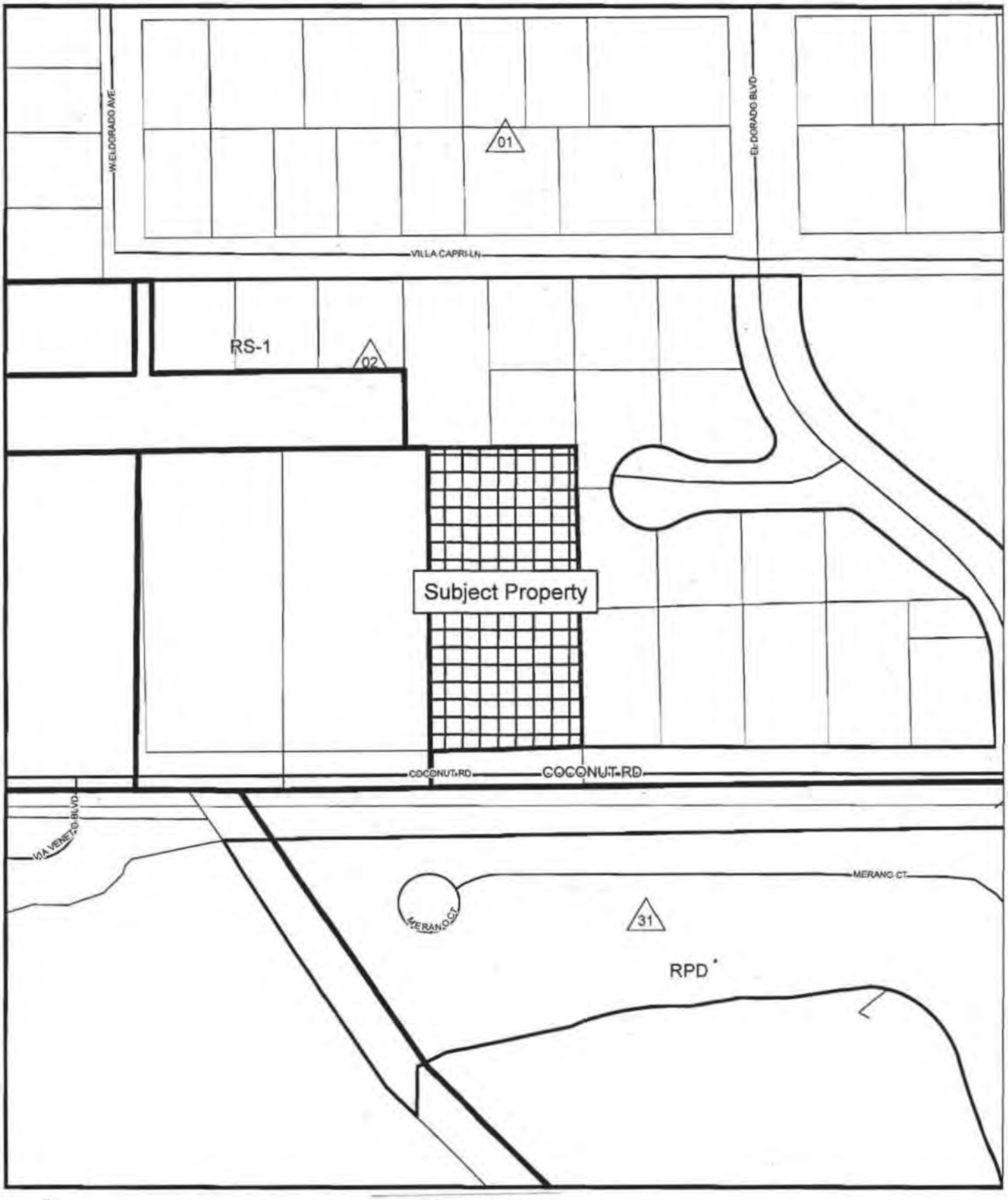
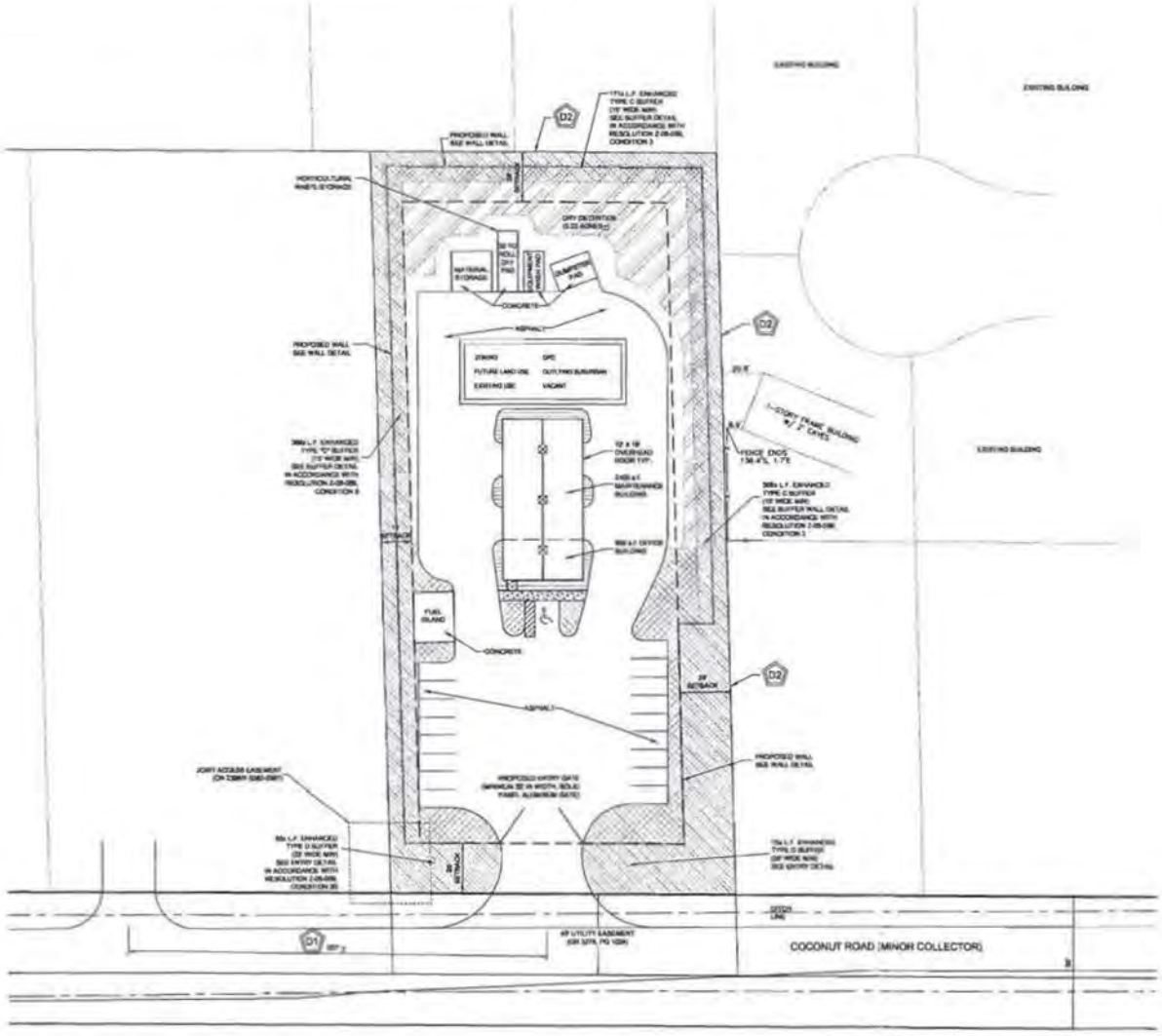


EXHIBIT B



PROJECT INFORMATION

SITE INFORMATION
PARCEL SIZE 1.49 AC +/- (65,182 SQ. FT.)
LEE PLAN LAND USE CLASSIFICATION OUTLYING SUBURBAN
ZONING REQUEST CPD

DEVELOPMENT PROGRAM

7,200 S.F.	MAINTENANCE BUILDING
200 S.F.	MATERIAL STORAGE BUILDING
1,000 S.F.	EQUIPMENT WASH PAD
500 S.F.	FUEL ISLAND
26,004 S.F.	PARKING/DRIVES

REQUIRED DEVELOPMENT CALCULATIONS

OPEN SPACE:
1) TOTAL OPEN SPACE REQUIREMENT MUST EQUAL A MINIMUM OF 30% OF THE TOTAL DEVELOPED SITE.

OPEN SPACE REQUIRED:
TOTAL DEVELOPED AREA ~1.46 ACRES +/-
OPEN SPACE REQUIRED (1.46x30%) ~0.76 ACRES +/-

OPEN SPACE PROVIDED:
GENERAL OPEN SPACE ~0.64 ACRES +/-
INDIGENOUS OPEN SPACE (SEE NOTE BELOW) ~0.04 ACRES +/-
TOTAL OPEN SPACE PROVIDED (44% OR 27,578 S.F.) ~0.64 ACRES +/-

NOTE: DEVELOPMENT SITES UNDER 2 ACRES DO NOT REQUIRE INDIGENOUS VEGETATION PER LEE COUNTY CODE

DRY DETENTION:
1) DRY DETENTION SPACE REQUIREMENT MUST EQUAL 15% OF THE TOTAL DEVELOPED SITE
DRY DETENTION REQUIRED (1.46X15%) ~0.20 ACRES +/-
DRY DETENTION PROVIDED ~0.23 ACRES +/-

STRUCTURAL LOT COVERAGE NOT TO EXCEED 50% OF SITE ~0.72 ACRES

LEGEND

- DRY DETENTION
- REQUIRED TYPE C AND D BUFFERS
- INTERNAL LANDSCAPE AREAS
- BUILDING PERIMETER PLANTINGS
- D1 DEVIATION REFERENCE NUMBER

RECEIVED
FEB 16 2007

DCI 2005-00005

Approved as Exhibit C
MCP Page 1 of 6
Resolution # Z-06-069

EXHIBIT C
Page 1 of 6

REVISIONS	
Revised per Lee Co Sufficency Comments	5/09/05
Revised per County BOCC	Dec 06

SEVERN - TRENT
FOR BAYSIDE CDD

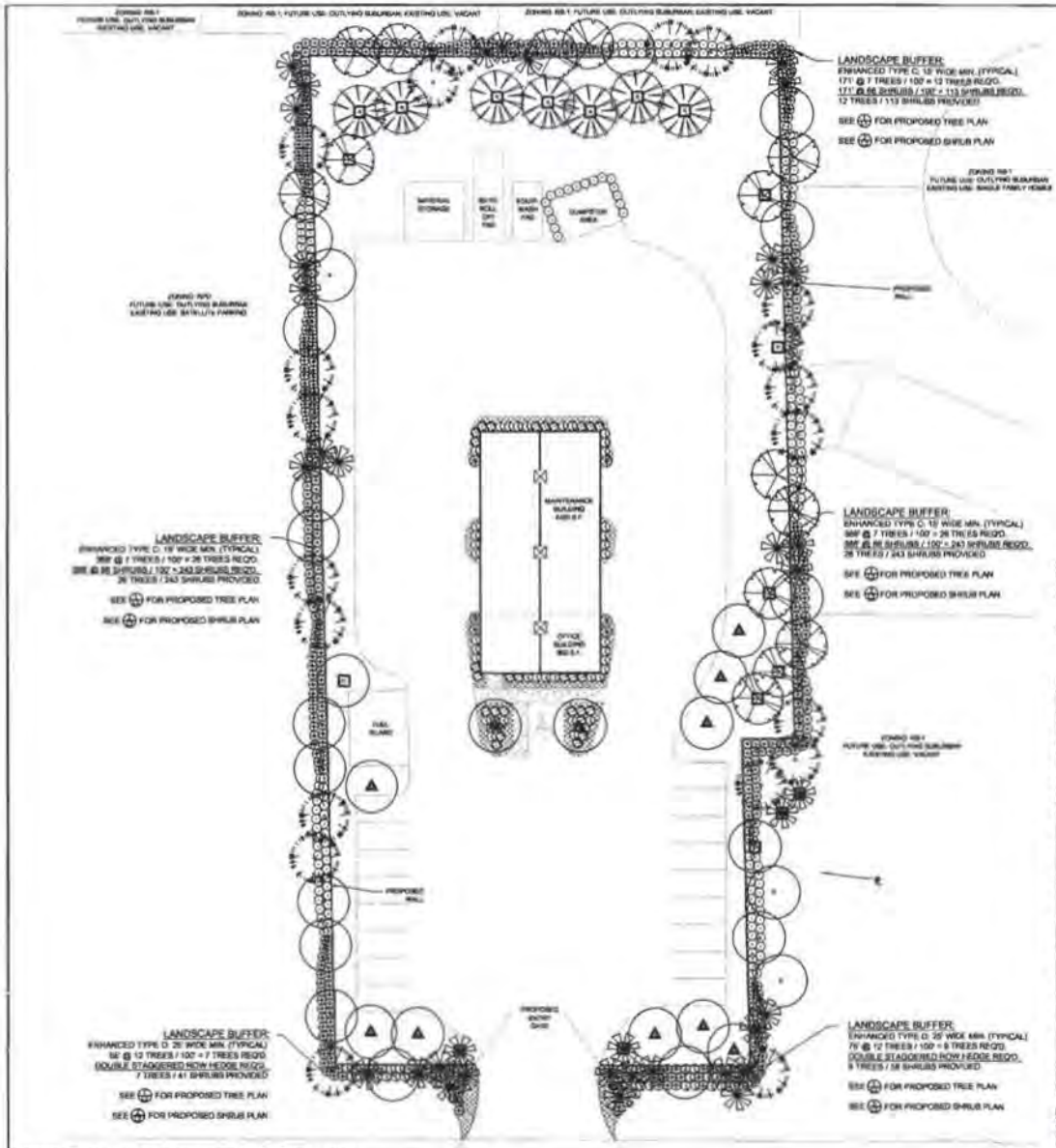
BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

MASTER CONCEPT PLAN

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	2002.3590-07		AS SHOWN	3 OF 11



Approved as Exhibit C
MCP Page 2 of 6
Resolution # Z-06-069

NATIVE TREE & SHRUB REQUIREMENT

OVERALL SITE: 75% TREES ARE REQUIRED TO BE NATIVE
157 OF 157 REQUIRED TREES ARE NATIVE = 100% NATIVE

OVERALL SITE: 50% SHRUBS ARE REQUIRED TO BE NATIVE
438 OF 517 REQUIRED SHRUBS ARE NATIVE = 85% NATIVE

MATERIALS SCHEDULE

SYM		QTY	BOTANICAL NAME	COMMON NAME	SIZE/CS	NATIVE
			TREES/PALMS			
	FE	32	FRAXINUS ELLIOTTII 'DERBY'	FLORIDA SLASH PINE	10' HT., 3" CAL. 45 GAL.	YES
	QL	14	QUERCUS LAURIFOLIA	LAUREL OAK	12'-14' HT., 3" CAL. 45 GAL.	YES
	QV	32	QUERCUS VIRGINIANA	LIVE OAK	12'-14' HT., 3" CAL. 45 GAL.	YES
	SP	17 @ 12' 13 @ 14' 17 @ 18'	SABAL PALMETTO	CABBAGE PALM	12' OA, 10' CT. MIN. 14' OA, 10' CT. MIN. 18' OA, 10' CT. MIN.	YES
	TD	7	TAXODIUM DISTICHUM	BALD CYPRESS	12'-14' HT., 3" CAL. 45 GAL.	YES
			SHRUBS/GROUNDCOVER/ORNAMENTALS			
	CI	252	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL. @ 36" O.C. 24" HT. MIN.	YES
	HP	180	HABENARIA PAPOR	FRINGELEAF	1 GAL. @ 36" O.C. 24" HT. MIN.	YES
	PN	200	PENTACYSTA NEVIUSII	WILD COFFEE	3 GAL. @ 36" O.C. 24" HT. MIN.	YES
	VS	64	VIBURNUM SUBSCAPOSUM	WILD RAIN VIBURNUM	3 GAL. @ 36" O.C. 24" HT. MIN.	NO
	ZI	8	ZAMIA FURFURACEA	CARDBOARD PALM	3 GAL. @ 48" O.C. 24" HT. MIN.	NO
	ZP	31	ZAMIA PUMILA	COONTIE	3 GAL. @ 36" O.C. 24" HT. MIN.	YES
	TA	112	TRACHELOSPERMUM ASIATICUM	ASIATIC JASMINE	1 gal @ 24" O.C.	NO

NOTES:
1) ALL SIZES SPECIFIED ARE MINIMUMS.
2) LANDSCAPE ARCHITECT RESERVES THE RIGHT TO FIELD ADJUST ALL PLANT MATERIALS
3) ALL TURF AREAS TO BE BY HYDROSEED, SOD, OR SPRIGS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
4) LANDSCAPE ARCHITECT TO APPROVE FINAL LOCATIONS, SIZE, AND SPECIES OF ALL PLANT MATERIALS.

REQUIRED DEVELOPMENT CALCULATIONS

OPEN SPACE REQUIREMENT

TOTAL SITE AREA	= 1.45 ACRES +/-
OPEN SPACE REQUIRED (20%)	= 0.29 ACRES +/-
OPEN SPACE PROVIDED (44%)	= 0.64 ACRES +/-

GENERAL LANDSCAPE REQUIREMENT

63,162 SF @ 1 TREE PER 3,500 SF REQUIRED	= 19 TREES
TOTAL GENERAL TREES PROVIDED	= 19 TREES
☐ GENERAL TREES	

NOTES:
1) ONE (1) TREE MUST BE PLANTED OR RETAINED PER 3500 SF OF DEVELOPMENT AREA
2) NO MORE THAN 50% OF THE REQUIRED TREES MAY BE LOCATED IN THE REAR OF THE LOT
3) FOR PRESERVED TREES, A MINIMUM OF 4" TREES IN DIAMETER AREA MUST BE SAVED TO REGAIN CREDIT.
4) TREE REPLACEMENTS MUST BE AT A 6 (TREES) TO 1 (CREDIT) RATIO AND MEET LEE COUNTY CODE REQUIREMENTS.

BUILDING PERIMETER LANDSCAPE REQUIREMENT

3,200 SF GROUND LEVEL FLOOR AREA @ 10% REQUIRED	
BUILDING PERIMETER PLANTING AREA	= 320 SF
BUILDING PERIMETER PLANTING AREA PROVIDED	= 797 SF

NOTES:
1) PERIMETER PLANTING AREAS MUST BE A MINIMUM OF FIVE FEET WIDE.
2) RUNNING FOR PLANTING AREAS MUST CONTAIN SHRUBS AND GROUNDCOVER PLANTS WITH A MINIMUM 50% COVERAGE.
3) TURF SHALL MAKE UP NO MORE THAN 10% OF INTERNAL LANDSCAPE AREAS

INTERNAL LANDSCAPE AREA REQUIREMENT

TOTAL VEHICLE USE AREA	= 27,531 SF +/-
INTERNAL LANDSCAPE AREA REQUIRED	= 2,754 SF
INTERNAL LANDSCAPE AREA PROVIDED	= 3,467 SF

NOTES:
1) LANDSCAPED AREAS ON THE PARKING AREA PERIMETER OR IN THE INTERNAL ISLANDS MUST EQUAL OR EXCEED A MINIMUM OF TEN (10) PERCENT OF THE TOTAL PAVED SURFACE AREA.
2) LANDSCAPED AREAS RESERVED FOR FUTURE PARKING SPACES PURSUANT TO SECTION 34-2017(c) MAY NOT BE INCLUDED IN THE CALCULATION.
3) VEHICLES MAY OVERHANG ANY LANDSCAPED AREA BY A MAXIMUM OF TWO (2) FEET AS LONG AS THE AREA IS PROTECTED BY A CURB OR MOTOR VEHICLE WHEEL STOPS. THE OVERHANG MAY BE PART OF THE REQUIRED DEPTH OF THE ABUTTING PARKING SPACE.
4) TURF SHALL MAKE UP NO MORE THAN 10% OF INTERNAL LANDSCAPE AREAS

INTERNAL LANDSCAPE AREA TREE REQUIREMENT

2,754 SF @ 1 TREE PER 250 SF	= 11 TREES REQUIRED
△ PARKING TREES	= 11 TREES PROVIDED

NOTES:
1) LANDSCAPED AREAS ON THE PARKING AREA PERIMETER OR IN THE INTERNAL ISLANDS MUST EQUAL OR EXCEED A MINIMUM OF TEN (10) PERCENT OF THE TOTAL PAVED SURFACE AREA.
2) ONE (1) TREE MUST BE PLANTED OR RETAINED PER 250 SF OF INTERNAL PARKING AREA.
3) NO PARKING SPACE MAY BE MORE THAN 100 FEET FROM A TREE PLANTED IN A PERMEABLE ISLAND, PENINSULA, OR MEDIAN OF A 20-FOOT MINIMUM WIDTH.

LANDSCAPE BUFFER REQUIREMENT

ENHANCED TYPE "C" LANDSCAPE BUFFER
15' WIDE MINIMUM, APPROXIMATELY 7 NATIVE TREES AND 66 SHRUBS (50% NATIVE MINIMUM) PER 100 LINEAR FEET. A SOLID WALL OR WALL AND BERM COMBINATION IS TO BE INSTALLED AT A MINIMUM HEIGHT OF 8' FROM THE AVERAGE ELEVATION AT THE STREET CENTERLINE ALONG THE ABUTTING ROAD. BUFFER PLANTINGS SHALL BE PLACED ON THE EXTERIOR OF THE WALL. THE WALLS SHALL BE CONSTRUCTED TO ENSURE HISTORIC STORMWATER DRAINAGE PATTERNS.

EASTERN BOUNDARY:

368 LINEAR FEET @ 7 TREES PER 100 FEET	= 26 TREES REQUIRED = 26 TREES PROVIDED
368 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 243 SHRUBS PROVIDED

NORTHERN BOUNDARY:

171 LINEAR FEET @ 7 TREES PER 100 FEET	= 12 TREES REQUIRED = 12 TREES PROVIDED
171 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 113 SHRUBS PROVIDED

WESTERN BOUNDARY:

368 LINEAR FEET @ 7 TREES PER 100 FEET	= 26 TREES REQUIRED = 26 TREES PROVIDED
368 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 243 SHRUBS PROVIDED

ENHANCED TYPE "D" LANDSCAPE BUFFER
25' WIDE MINIMUM, APPROXIMATELY 12 NATIVE TREES AND A DOUBLE ROW STAGGERED HEDGE (50% NATIVE MINIMUM) PER 100 LINEAR FEET. A SOLID WALL OR WALL AND BERM COMBINATION IS TO BE INSTALLED AT A MINIMUM HEIGHT OF 8' FROM THE AVERAGE ELEVATION AT THE STREET CENTERLINE ALONG THE ABUTTING ROAD. BUFFER PLANTINGS SHALL BE PLACED ON THE EXTERIOR OF THE WALL. THE WALLS SHALL BE CONSTRUCTED TO ENSURE HISTORIC STORMWATER DRAINAGE PATTERNS.

WEST SIDE OF BUILDING ENTRANCE:

75 LINEAR FEET @ 12 TREES PER 100 FEET	= 9 TREES REQUIRED = 9 TREES PROVIDED
DOUBLE ROW STAGGERED HEDGE PROVIDED	= 48 SHRUBS

EAST SIDE OF BUILDING ENTRANCE:

55 LINEAR FEET @ 12 TREES PER 100 FEET	= 7 TREES REQUIRED = 7 TREES PROVIDED
DOUBLE ROW STAGGERED HEDGE PROVIDED	= 41 SHRUBS

NOTE:
1) TREES WITHIN THE R.O.W. BUFFER MUST BE APPROXIMATELY SPACED IN A MANNER THAT CONFLICTS WITH OVERHEAD UTILITIES, LIGHTING AND SIGNS ARE AVOIDED.
2) ALL REQUIRED TREES AND SHRUBS SHALL BE PLANTED ON THE IN RESIDENTIAL REAR YARDS.

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DCI 2005-00005

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REVISIONS	
Revised per County BOCC	Dec 06

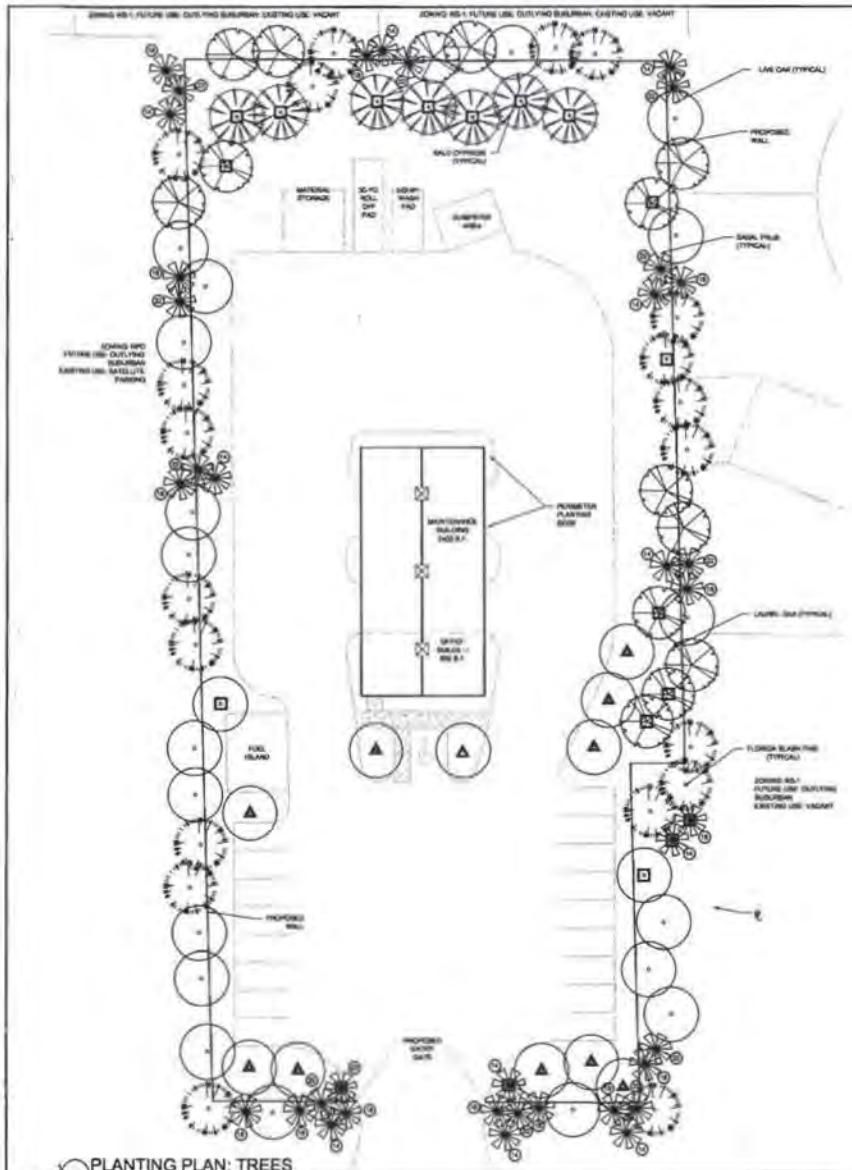
SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

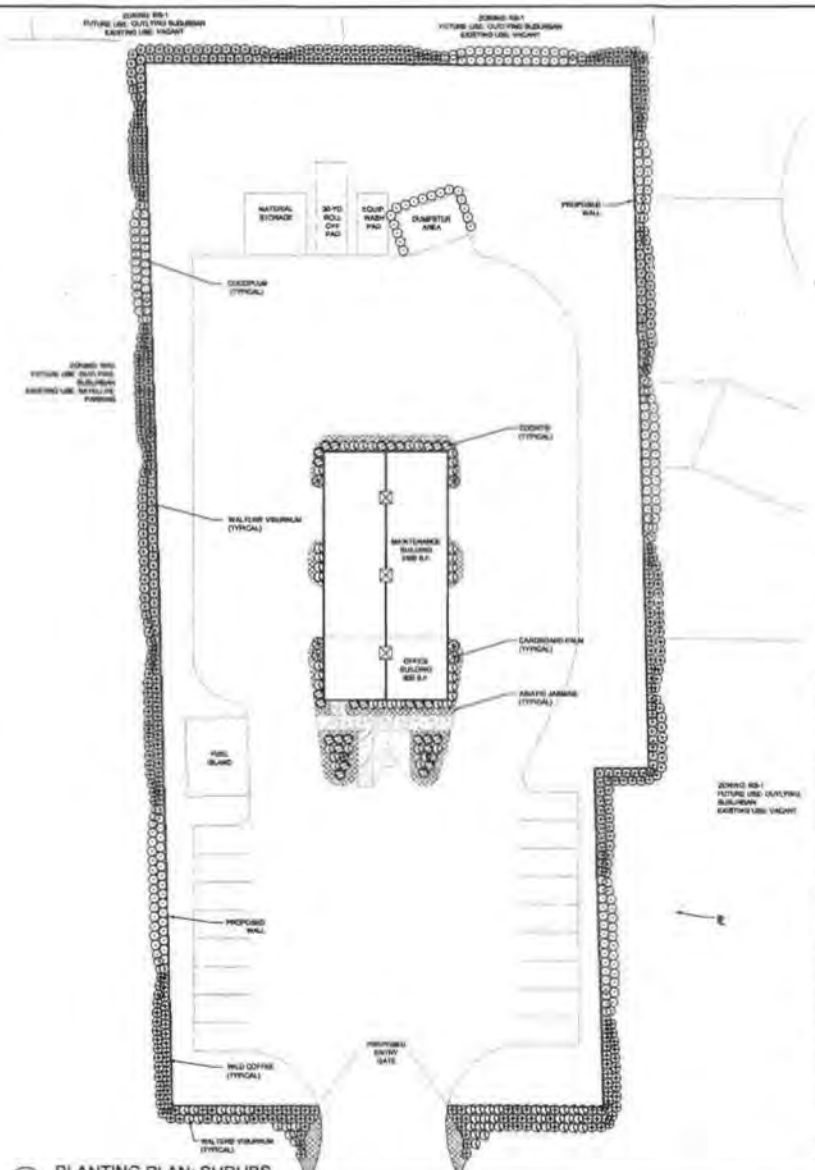
JOHNSON ENGINEERING
3150 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

LANDSCAPE BETTERMENT PLAN

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023590-07		AS SHOWN	7 OF 11



PLANTING PLAN: TREES



PLANTING PLAN: SHRUBS

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MCP Page 3 **of** 6
Resolution # Z-06-069

PLANT LEGEND

SYM		BOTANICAL NAME	COMMON NAME
		TREES/PALMS	
	PE	PINUS ELLIOTTI	SLASH PINE
	QL	QUERCUS LAURIFOLIA	LAUREL OAK
	QV	QUERCUS VIRGINIANA	LIVE OAK
	SP	SABAL PALMETTO	CABBAGE PALM
	TD	TAXODIUM DISTICHUM	BALD CYPRESS
		SHRUBS/GROUNDCOVERS/ORNAMENTALS	
	CI	CHRYSOBALANUS ICACO	COCOPLUM
	GF	GARDENIA FATONE	VINEBUSH
	PR	PSYCHOTRIA NERVOSA	WILD COFFEE
	VB	VIBURNUM BARKWOOD	WALTER'S VIBURNUM
	ZF	ZAMIA FURFURACEA	CARDBOARD PALM
	ZP	ZAMIA PUMILA	COCHITI
	TA	TRACHELOSPERMUM ASIATICUM	ASIATIC JASMINE

△ PARKING TREES
□ GARDEN TREES

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EXHIBIT C
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REVISIONS		
	Revised per County Bocc	Dec 06

SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

2158 JOHNSON STREET
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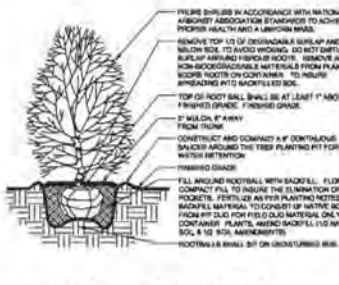
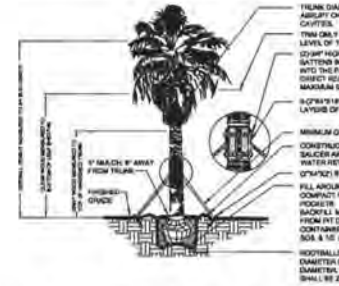
PLANTING PLANS

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023590-07		AS SHOWN	8 OF 11



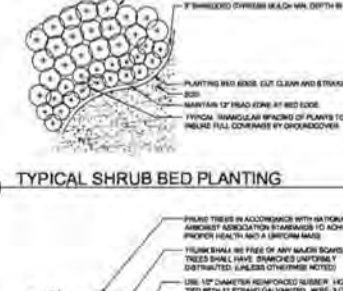
1 L-3 TYPICAL SHRUB PIT PLANTING N.T.S.



4 L-3 TYPICAL PALM TREE PLANTING N.T.S.

2 L-3 TYPICAL SHRUB BED PLANTING N.T.S.

5 L-3 TYPICAL SINGLE TRUNK TREE PLANTING N.T.S.



3 L-3 TYPICAL MULTI-TRUNK TREE PLANTING N.T.S.

LANDSCAPE CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES AND SERVICES BOTH UNDERGROUND AND OVERHEAD PRIOR TO THE COMMENCEMENT OF WORK. PROTECTION OF ALL UTILITIES AND SERVICES THROUGHOUT THE COURSE OF WORK IS EXPECTED.
2. ALL LANDSCAPE AREAS (EXCEPT FOR PLANTING BEDS) SHALL BE SODDED UNLESS OTHERWISE INDICATED ON THE DRAWINGS. CONTRACTOR SHALL GET APPROVAL OF FINE GRADING FROM LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF TURF. GRADING FOR LANDSCAPE BERMING SHOWN ON PLANS AND DETAILS IS APPROXIMATE ONLY, CONTRACTOR SHALL CONFER WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING THIS WORK TO CONFIRM ACTUAL SHAPES AND ELEVATIONS OF THE LANDSCAPE BERMING. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FINISH GRADE ALL LANDSCAPE AREAS ELIMINATING ALL BUMPS, DEPRESSIONS, ROCKS, STICK, OR OTHER DEBRIS PRIOR TO THE INSTALLATION OF PLANT MATERIAL. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING POSITIVE SHEET FLOW DRAINAGE AWAY FROM ALL STRUCTURES AND TO ALL DRAINAGE WAYS SHOWN OR IMPLIED ON THE DRAWINGS.
3. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO RELOCATE/ REPOSITION ANY PLANTS AS SITE CONDITIONS MAY DICTATE DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL TRADES SO AS TO AVOID ANY CONFLICT WITH THE EXECUTION OF WORK BY OTHERS. OWNER SHALL NOT BE RESPONSIBLE FOR THE DAMAGE TO PLANT MATERIALS CAUSED BY OTHER TRADES OR SUBCONTRACTORS. THE CONDITION OF PLANT MATERIAL SHALL BE IN ACCORDANCE TO THE LANDSCAPE ARCHITECT.
5. INSTALLATION OF INTERLOCKING PAVERS SHALL HAVE A BASE USING ROAD-BASE CRUSHED STONE OR ASTM D2940, COMPACTED TO 98% DENSITY FOR PEDESTRIAN & LIGHT VEHICULAR TRAFFIC. 98% FOR HEAVY VEHICULAR TRAFFIC. PROVIDE PITCH FOR DRAINAGE. ONE INCH PER TEN FEET OF PAVING SURFACE. TO BE DONE DURING SUB-GRADE PREPARATION. BEDDING SAND SHOULD BE 1" TO 1 1/2" THICK, USING CONCRETE SAND (ASTM C33). WHEN COMPACTING PAVERS A RUBBER PAD SHOULD BE ATTACHED TO THE PLATE BOTTOM OF THE MECHANICAL VIBRATING MACHINE. FOR BEST PAVER COMPACTION USE A ROLLER COMPACTOR. FOR PRECISE CUTS, USE A DIAMOND BLADE SAW. A SOFT-BOND, MATRIX-BLADE IS RECOMMENDED.
6. ALL LANDSCAPE AREAS SHALL BE PROTECTED FROM VEHICULAR ENCROACHMENT BY WHEELSTOPS AND/OR CURBING WHERE IMMEDIATELY ADJACENT TO PAVEMENT.
7. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES ON THE DRAWINGS PRIOR TO BIDDING. ALL QUANTITIES ON THE DRAWINGS ARE PROVIDED FOR CONVENIENCE ONLY.
8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS.

SPECIFICATIONS

PLANT MATERIALS: ALL TREES, PALMS, SHRUBS, GROUNDCOVERS, LITTORALS, WATER PLANTS, SOD AND VINES SHALL CONFORM TO THOSE SPECIES AND SIZES INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS AS DETERMINED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. SPECIMEN MEANS A PLANT THAT IS TRAINED IN ITS DEVELOPMENT TO POSSESS UNQUESTIONABLE AND OUTSTANDINGLY SUPERIOR IN FORM, BRANCHING, COMPACTNESS AND SYMMETRY. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. SINGLE TRUNK TREES SHALL HAVE A STRAIGHT, CENTRAL LEADER. MULTI-TRUNK TREES ARE TO HAVE 3-5 EQUAL SIZED TRUNKS UNLESS OTHERWISE SPECIFIED. PLANTS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY IN ACCORDANCE WITH INTERNATIONAL SOCIETY OF ARBORIST GUIDELINES TO INSURE PROPER HEALTH AND VIGOROUS GROWTH. ALL MATERIALS SHALL BE SUBJECT TO JOHNSON ENGINEERING INC'S APPROVAL.

BALLED & BURLAPPED: ALL BALLED & BURLAPPED STOCK SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED, FREE FROM DISEASE AND INSECTS, SECURE IN THE ROOTBALL, AND POSSESS ADEQUATE ROOT SYSTEMS. ALL BURLAP SHALL BE REMOVED FROM THE TOP ONE-THIRD OF THE BALL TO PREVENT WICKING. ANY BURLAP THAT IS NOT BIODEGRADABLE SHALL BE CAREFULLY REMOVED TO PROTECT DAMAGE TO FEEDER ROOTS. GROW BAGS SHALL BE REMOVED IN THEIR ENTIRETY. ALL BALLED & BURLAPPED STOCK THAT IS NOT IMMEDIATELY PLANTED, SHALL BE HEALED IN AND THOROUGHLY WATERED UNTIL PLANTING. LIFTING, MOVING, OR ADJUSTING THE PLANT MATERIAL BY THE TRUNK IS PROHIBITED.

CONTAINER GROWN STOCK: ALL CONTAINER GROWN STOCK SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED (NOT ROOT BOUND), AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS OF GOOD QUALITY AND BE IN A HEALTHY GROWING CONDITION. ALL CONTAINER GROWN STOCK THAT IS NOT IMMEDIATELY PLANTED, SHALL BE STORED IN A MANNER TO SHADE THE CONTAINERS FROM DIRECT SUNLIGHT TO MINIMIZE ROOT DAMAGE. ALL CONTAINER STOCK SHALL BE THOROUGHLY WATERED PRIOR TO PLANTING AND DURING STORAGE UNTIL PLANTING. LIFTING AND MOVING OF THE PLANT MATERIAL SHALL BE BY THE CONTAINER ONLY.

MEASUREMENTS: TREE HEIGHTS SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS SHALL NOT INCLUDE ANY TERMINAL GROWTH. SHRUBS HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT SHALL NOT INCLUDE ANY TERMINAL GROWTH. PALMS SHALL BE MEASURED BY THREE HEIGHT CLASSIFICATIONS: OVERALL HEIGHT, CLEAR WOOD, AND GRAY WOOD. OVERALL HEIGHT SHALL BE MEASURED FROM THE FROM THE GROUND TO THE AVERAGE FROND HEIGHT AT TIME OF INSTALLATION. CLEAR WOOD SHALL BE MEASURED FROM THE GROUND AT TIME OF INSTALLATION TO THE BOTTOM OF THE FROND SHEATH. GRAY WOOD SHALL BE MEASURED FROM THE GROUND AT TIME OF INSTALLATION TO THE TOP OF HARDENED WOOD.

PLANTING SOIL AND BACKFILL: PLANTING SOIL FOR USE IN PREPARING BACKFILL FOR PLANT PITS SHALL BE A FERTILE, FRIABLE, NATIVE SOIL WITHOUT MIXTURE OF SUBSOIL MATERIALS. IT SHALL BE FREE FROM HEAVY CLAY, STONES, LIME, LUMPS, PLANTS, ROOTS OR OTHER FOREIGN MATERIALS, NOXIOUS GRASSES OR WEEDS. IT SHALL NOT CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. AMEND BEDS WITH 3" MINIMUM OF ORGANICS TO ACHIEVE OPTIMAL PH LEVELS AND SOIL AERATION. ROTOTILL TO A DEPTH OF 6" AND INCORPORATE A COMPLETE SLOW RELEASE FERTILIZER AT A 3-1-2 RATIO. THE RESULTS OF POST SOIL MODIFICATION TESTING BASED ON LIKE PLANTING CONDITIONS AND AREA PROXIMITY, SHALL BE SUBMITTED TO JOHNSON ENGINEERING INC'S FOR APPROVAL PRIOR TO PLANTING.

COMMERCIAL FERTILIZER: FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, DRY, AND FREE FLOWING AND DELIVERED TO THE SITE IN ORIGINAL UNOPENED BAGS BEARING ALL THE MANUFACTURER'S LABELS. ALL FERTILIZER IS TO BE SLOW RELEASE AND COMPLETE WITH NECESSARY MICRONUTRIENTS. AFTER INSTALLATION, FERTILIZER SHALL BE CLEANED FROM ALL HARDSCAPE SURFACES AND WATERED IN THOROUGHLY PER MANUFACTURER'S SPECIFICATIONS. TREES AND SHRUBS MIXTURE SHALL CONSIST OF A SLOW RELEASE THE FORMULATION OF 3 PARTS NITROGEN TO 1 PART PHOSPHOROUS TO 2 PARTS POTASSIUM (3-1-2 RATIO). ALL TREES AND SHRUBS SHALL BE FERTILIZED 3 MONTHS PRIOR TO THE GROWING SEASON AT A RATE OF 4 # LBS. OF A PER 100 SQ. FT. OF BEDS / TREE CANOPY (2 FORM BASE TO DRIPLINE) OR PER MANUFACTURE'S RECOMMENDATION. SOD FERTILIZER SHALL BE TURF SPECIFIC FOR ESTABLISHING NEW LAWNS AND APPLIED PER MANUFACTURE'S RECOMMENDATION. UPON ESTABLISHMENT, THE TURF SHALL BE FERTILIZED AT A RATE OF 1 LB OF ACTUAL NITROGEN PER 1000 FT SQ. OR PER MANUFACTURE'S RECOMMENDATION. NOTE: SAHA TURF SHALL RECEIVE FERTILIZATION AT A HALF RATE OF THE ABOVE TURF RECOMMENDATIONS. APPLY A 10 LBS. OF A PALM SPECIFIC (1 PART NITROGEN TO 1 PART POTASSIUM WITH 0.3 PARTS MAGNESIUM) FERTILIZER QUARTERLY FOR ALL ESTABLISHED PALMS PER 2' OF HEIGHT OR PER MANUFACTURE'S RECOMMENDATION.

MULCH: MULCH MATERIAL SHALL BE SHREDDED EUCALYPTUS MULCH, FREE FROM WEED SEEDS, AND APPLIED TO A MINIMUM 3" DEPTH.

SOD: ALL SOD SHALL MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS. ABSOLUTELY TRUE TO VARIETY TYPE, AND FREE FROM WEEDS, INSECTS, AND DISEASES OF ANY KIND. JOINTS SHALL BE STAGGERED AND BUTT TIGHT TO MINIMIZE AIR GAPS. THE GRADE SHALL BE SMOOTH, FREE OF DEBRIS, POSITIVELY DRAINED, AND MOIST TO SOD INSTALLATION. THE SOD SHALL BE ROLLED IN TWO DIRECTIONS PERPENDICULAR FROM ONE ANOTHER AFTER INSTALLATION TO ENSURE PROPER GROUND CONTACT. IN AREAS WHERE A ROLLER CANNOT BE USED, HAND TAMPING SHALL BE REQUIRED. SOD SHALL BE INSTALLED AND WATERED WITHIN 24 HOURS AFTER HARVESTING.

SUBSTITUTIONS: NO SUBSTITUTION OF ANY MATERIALS/ VARIETIES, GRADES, OR SIZES SHALL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM JOHNSON ENGINEERING, INC. ANY / ALL UNAUTHORIZED SUBSTITUTIONS MAY REQUIRE REPAIRING / REPLACING AT THE CONTRACTOR'S EXPENSE AT JOHNSON ENGINEERING, INC'S DISCRETION.

WARRANTY: THE CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP FOR THE PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE FROM THE OWNER AND JOHNSON ENGINEERING, INC. ANY DEAD, UNHEALTHY, NON-CONFORMING PLANT MATERIAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHIN 1 DAYS OF NOTICE FROM THE OWNER OR JOHNSON ENGINEERING, INC. THE CONTRACTOR SHALL NOT BE LIABLE FOR "ACTS OF GOD" AND VANDALISM, NEGLIGENCE AND THEFT BY OTHERS.

QUALITY ASSURANCE: THE CONTRACTOR SHALL PROVIDE SUBSTANTIAL PROOF TO JOHNSON ENGINEERING, INC. THAT HE / SHE HAS A MINIMUM OF 5 YEARS EXPERIENCE IN THE FIELD OF LANDSCAPE CONTRACTING WITH PROJECTS OF SIMILAR SCOPE. THE CONTRACTOR MUST SUPPLY AT ALL TIMES ON SITE WHEN WORK IS BEING PERFORMED A QUALIFIED SUPERVISOR WITH A MINIMUM OF 18 MONTHS FIELD EXPERIENCE. ALCA LANDSCAPE CERTIFICATIONS CAN SUBSTITUTE IN LIEU OF THE EXPERIENCE REQUIREMENT AT JOHNSON ENGINEERING, INC.'S DISCRETION.

Approved as Exhibit C
MCP Page 4 of 6
Resolution # Z-06-0069

STATUTORY LANDSCAPE NOTES:

1. SEE ENGINEERING PLANS FOR ALL OTHER REQUIRED CALCULATIONS. THIS VEGETATION PLAN MEETS AND/OR EXCEEDS THE MINIMUM REQUIREMENTS OF THE LANDSCAPING SECTION OF THE LEE COUNTY LANDSCAPING CODE.
2. SEVENTY-FIVE PERCENT (75%) OF THE TOTAL NUMBER OF REQUIRED TREES AND FIFTY PERCENT (50%) OF THE TOTAL NUMBER OF REQUIRED SHRUBS USED IN BUFFERS AND LANDSCAPE SHALL BE OF INDIGENOUS NATIVE VARIETIES.
3. ALL REQUIRED TREES AT THE TIME OF INSTALLATION MUST:
   1) BE A MINIMUM OF 10' IN HEIGHT.
   2) HAVE A 2" CALIPER OF TRUNK DIAMETER (AT 12" ABOVE THE GROUND).
   3) HAVE A 6' DIAMETER SPREAD OF CANOPY.
4. PALMS MUST HAVE A MINIMUM OF 12' OF CLEAN TRUNK AT THE TIME OF INSTALLATION.
5. ALL TREES NOT HAVING A MATURE CANOPY OF A TWENTY FEET (20') MINIMUM SHALL BE MASSED TO CREATE AN EQUIVALENT TWENTY FEET (20') OF CANOPY.
6. ALL TREES ADJACENT TO WALKS, BIKE PATHS, AND RIGHTS-OF-WAY MUST BE MAINTAINED WITH EIGHT FOOT OF CLEAR TRUNK.
7. REQUIRED SHRUBS AND HEDGES MUST BE A MINIMUM OF 24" (48" FOR TYPE F BUFFERS) IN HEIGHT ABOVE THE ON-SITE ADJACENT PAVEMENT SURFACE REQUIRED TO BE BUFFERED AND/OR SCREENED WHEN MEASURED AT THE TIME OF PLANTING. THEY MUST BE A MINIMUM THREE (3) GALLON CONTAINER SIZE, AND SPACED 18" TO 36" ON CENTER. REQUIRED SHRUBS AND HEDGES MUST BE AT LEAST 36" (60" FOR TYPE F BUFFERS) IN HEIGHT WITHIN 12 MONTHS OF INSTALLATION, EXCEPT FOR VISIBILITY AT INTERSECTIONS AND WHERE PEDESTRIAN ACCESS IS PROVIDED. REQUIRED HEDGES MUST BE PLANTED IN DOUBLE STAGGERED ROWS AND MAINTAINED TO FORM A CONTINUOUS, UNIBROKEN, VISUAL SCREEN WITHIN 12 MONTHS OF INSTALLATION.
8. PLANT MATERIALS SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO 1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS", PART I AND II, DEPARTMENT OF AGRICULTURE, STATE OF FLORIDA (AS AMENDED).
9. ALL TREES INSTALLED IN RESPONSE TO THE REQUIRED INTERNAL LANDSCAPE AREAS, ALSO KNOWN AS CONTINUAL CANOPY TREES, SHALL BE LOCATED WHERE AND AS SHOWN ON THE DRAWINGS. PALMS MAY BE SUBSTITUTED ON A 3:1 RATIO AND CLUSTERED WITH CONSENT OF LANDSCAPE ARCHITECT.
10. PLANTINGS IN EASEMENTS: UTILITY, POWER, OR DRAINAGE EASEMENTS MAY OVERLAP REQUIRED BUFFERS; HOWEVER NO REQUIRED TREES OR SHRUBS MAY BE LOCATED IN ANY UTILITY, POWER, OR STREET EASEMENT OR RIGHT-OF-WAY.
11. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN THROUGH FINAL ACCEPTANCE (CERTIFICATE OF COMPLIANCE) A TREE PROTECTION BARRIER FOR ALL INDIVIDUAL OR MASSES OF INDIGENOUS PLANT MATERIALS BEING CREATED AND/OR PRESERVED. ANY SIZE IS USED FOR CREDIT THAT ARE DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED AT A 5:1 RATIO FOR TREES AND 3:1 RATIO FOR PALMS.
12. PLANT MATERIAL PROVIDED IN COMPLIANCE TO THE LEE COUNTY LDC MAY ONLY BE PRUNED TO PROMOTE HEALTH, UNIFORM, AND NATURAL GROWTH OF THE SPECIFIC PLAN (EXCEPT WHERE NECESSARY TO PROTECT PUBLIC HEALTH, SAFETY, AND WELFARE). PRUNING MUST BE IN ACCORDANCE TO AND ACCEPTABLE WITH THE "PRUNING STANDARDS" (LATEST EDITION) ISSUED BY THE NATIONAL ARBORIST ASSOCIATION. * SEVERELY PRUNED AND/OR DAMAGED TREES MUST BE REPLACED. NAT HACKING PRACTICES ARE PROHIBITED.
13. THE FOLLOWING EXOTIC SPECIES OF PLANTS SHALL BE REMOVED AND MAINTAINED FROM OPEN SPACES IN PERPETUITY: A. MELALEUCA SPP. (PUNK, CAJEPUT, PAPERBARK TREE) B. CASUARINA SPP. (AUSTRALIAN PINE) C. SCHINUS SPP. (BRAZILIAN PEPPER, FLORIDA HOLLY) D. ACACIA AURICULIFORMIS (EARLEAF ACACIA) E. RHODOMYRTUS TOMENTOSUS (DOWNY ROSE MYRTLE) F. SOLANUM VIARUM (TROPICAL SODA APPLE) G. ALBIZIA LEBBECK (WOMANS TONGUE) H. BISCHOFIA JAVANICA (BISHOPWOOD) I. CUPANIOPSIS ANACARDIOIDES (CARROTWOOD) J. DALBERGIA SISSOO (ROSEWOOD) K. DIOSCOREA ALATA (AIR POTATO) L. EUCALYPTUS CAMALDULENSIS (MURRAY RED GUM) M. FICUS (WEEPING FIG, CHINAM LAUREL, FICUS N. LYCORIS AURAPHEISE CLIMBING FERN, OLD WORLD CLIMBING FERN) O. SAPIUM SEBIFERUM (CHINESE TALLOW) P. SYZYGIUM JAVA PLUM, ROSE APPLE) Q. THESPESIA POPULNEA (CORK TREE) R. WEDELIA.
14. AN AUTOMATIC IRRIGATION SYSTEM COMBINING DRIP, SPRAY HEADS AND ROTORS AS APPROPRIATE WILL BE INSTALLED TO PROVIDE 100% COVERAGE TO ALL LANDSCAPED AREAS. A MOISTURE RAIN SENSOR WILL BE INCLUDED IN THE IRRIGATION SYSTEM LOCATED ON THE SITE SO THAT IT WILL RECEIVE DIRECT RAINFALL, NOT IMPEDED BY OTHER OBJECTS. THE IRRIGATION SYSTEM WILL BE DESIGNED TO ELIMINATE THE APPLICATION OF WATER TO IMPERVIOUS AREAS, INCLUDING ROADS, DRIVES, AND OTHER VEHICLE USE AREAS. THE IRRIGATION SYSTEM WILL BE DESIGNED TO AVOID IMPACTS ON EXISTING NATIVE VEGETATION THAT WILL BE RETAINED ON THE DEVELOPMENT SITE AND NEW VERTICAL ARCHITECTURAL FEATURES.
15. A 3" MINIMUM LAYER OF ORGANIC MULCH, AFTER WATERING IN, OR OTHER RECYCLED MATERIALS MUST BE PLACED AND MAINTAINED AROUND ALL NEWLY INSTALLED TREES, SHRUBS AND GROUNDCOVER PLANTINGS. EACH TREE MUST HAVE A RING OF MULCH NO LESS THAN 36" BEYOND ITS TRUNK IN ALL DIRECTIONS.
16. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN SAFE SIGHT DISTANCE TRIANGLES AT ALL INTERSECTIONS AND VEHICULAR CONNECTIONS. SIGHT TRIANGLES MUST BE IN ACCORDANCE WITH THE ROADSIDE RECOVERY AREA PROVISIONS OF FDOT GREEN BOOK. ALL SIGHT TRIANGLES SHALL MAINTAIN A CLEAR ZONE BETWEEN THIRTY-SIX (36) INCHES AND EIGHT FEET (8). CONTRACTOR TO VERIFY PRIOR TO FINAL ACCEPTANCE.
17. VEGETATION REMOVAL PERMIT MUST BE OBTAINED FROM LEE COUNTY ENVIRONMENTAL SCIENCES DIVISION PRIOR TO THE COMMENCEMENT OF SITE WORK.

LANDSCAPE IRRIGATION NOTES:

1. SET DRAIN AND CHECK VALVES AS APPROPRIATE PER MANUFACTURER'S RECOMMENDATIONS
2. GROUP (WHEN PRACTICAL) AND LOCATE VALVES BOXES AND CONTROL LINES IN AN UNOBTRUSIVE / ACCESSIBLE LOCATIONS APPROVED BY JOHNSON ENGINEERING, INC.
3. HEAD SPACINGS, WORKING PRESSURE, AND PIPE SIZES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. USE BUBBLERS, DRIP, ROTORS, AND SPRAY HEADS WHEN APPROPRIATE. HEADS SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE TO ALL LANDSCAPED AREAS. A MOISTURE OR RAIN SENSOR SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
5. HEADS SHALL BE INSTALLED TO MINIMIZE OVERSPRAY TO ALL IMPERVIOUS AREAS INCLUDING SIDEWALKS, ROADS, DRIVES AND OTHER VEHICLE USE AREAS. NO OVERSPRAY ON WALLS, COLUMNS OR OTHER VERTICAL ARCHITECTURAL FEATURES SHALL BE ALLOWED.
6. ALL LITTORAL PLANTING AREAS SHALL HAVE INDEPENDENT ZONES TO ENSURE THE FLEXIBILITY OF REDUCING IRRIGATION APPLICATIONS DURING EXTENDED PERIODS OF RAINFALL. CUSTOMIZATION OF THE WATERING SCHEDULING SHALL INCLUDE DAILY, WEEKLY, AND MONTHLY OPTIONS.
7. GROUP PLANT MATERIALS ACCORDING TO SIMILAR XERISCAPE PRINCIPLES WHEN PRACTICAL.
8. TURFGRASS AREAS AND PLANTING BEDS SHALL HAVE SEPARATE ZONES AND TO BE INDEPENDENTLY FROM ONE ANOTHER WHEN PRACTICAL.

RECEIVED
FEB 16 2007
LANDSCAPE DETAILS
DCI 2005-00005

EXHIBIT C
Page 4 of 6

REVISIONS					

SEVERN - TRENT
FOR BAYSIDE CDD

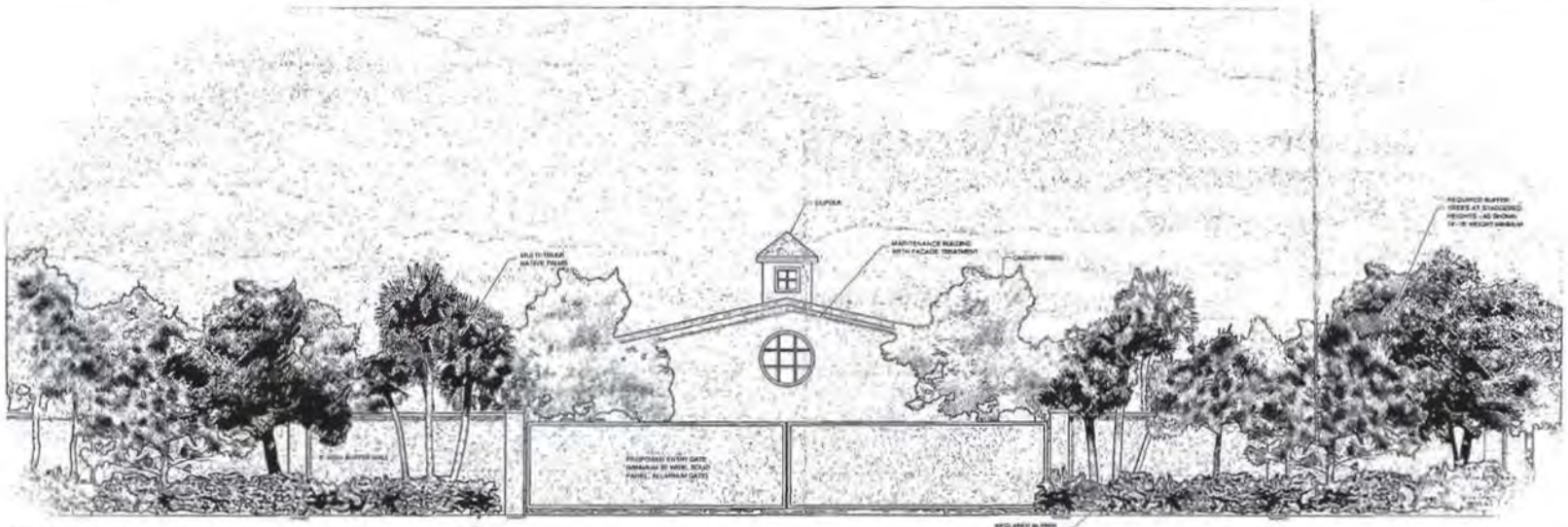
BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

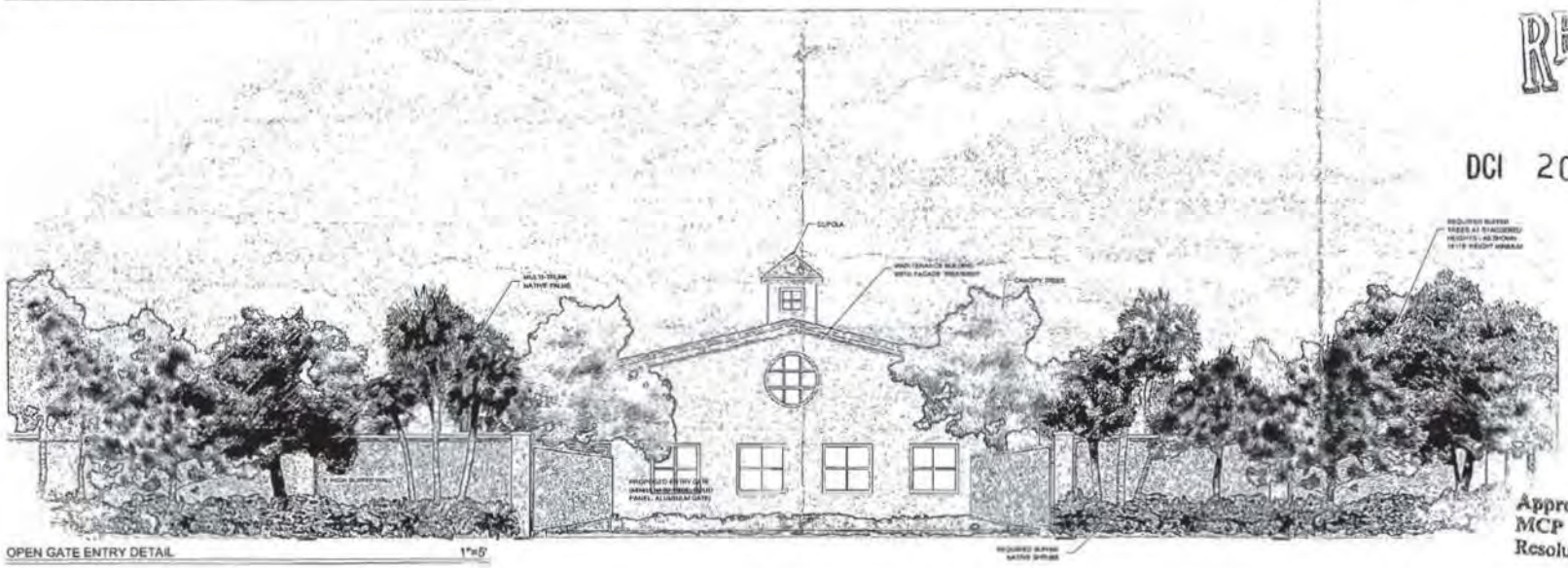
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023590-07		AS SHOWN	9 OF 11

H:\20023590-07\MCP\Landscape Plan.dwg (Details) mar Feb 15, 2007 - 3:04pm



CLOSED GATE ENTRY DETAIL 1"=5'



OPEN GATE ENTRY DETAIL 1"=5'

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FEB 16 2007

DCI 2005-00005

Approved as Exhibit C
MCP Page 5 of 6
Resolution # Z-06-069

n:\20023560-07\MCP\1560-MCP.dwg (L0 ENTRY DETAILS AND NOTES) Mar Feb 15, 2007 - 2:44pm

REVISIONS		

SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

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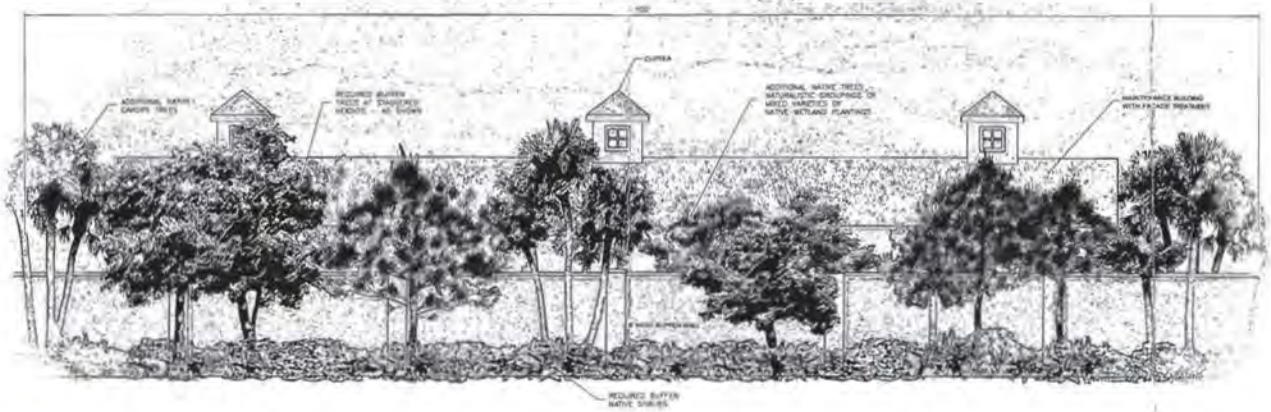
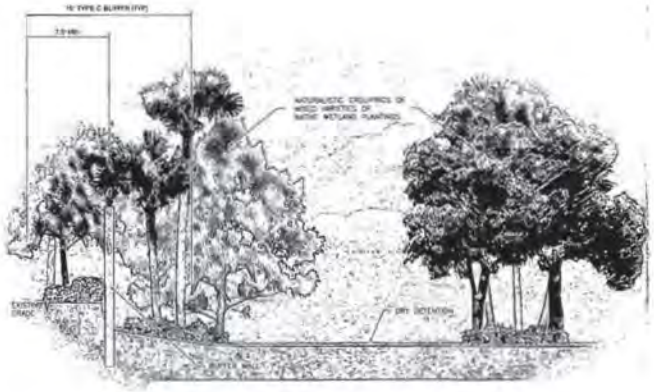
ENTRY DETAILS AND NOTES

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023560-07		AS SHOWN	10 OF 11



BUFFER WALL DETAIL - TYPICAL 100' SECTION 1"=5'



ENHANCED TYPE C BUFFER/DRY DETENTION - TYPICAL 1"=5'

RECEIVED
FEB 16 2007

DCI 2005-00005

Approved as Exhibit C
MCP Page 6 **of** 6
Resolution # Z-06-069

REVISIONS		

SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
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BUFFER DETAILS AND NOTES

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023560-07		AS SHOWN	11 OF 11

MEMORANDUM
FROM THE
OFFICE OF COUNTY ATTORNEY

DATE: March 15, 2007

TO: Commissioner Robert P. Janes
Chairman, BOCC

FROM: Dawn E. Perry-Lehnert
Assistant County Attorney

RE: **Pelican Landing DRI**
Twelfth Amendment
State DRI #1-9293-121
County Case #DRI2005-00001

The Board of County Commissioners approved the Twelfth Amendment for the Pelican Landing DRI Development Order on December 4, 2006. The original development order amendment and zoning resolution have been attached to this memorandum for execution. Kindly execute both documents at your earliest convenience and then forward them to Lisa Pierce in the Minutes Department.

Please note, the delay of this submission for the Chairman's signature is due to required revisions to the approved Master Concept Plan (MCP) by the project applicant. Lee County Land Development Code (LDC) Section 34-377(b)(6) requires the project MCP to be conformed to the Board's approval. Consequently, changes had to be made to the MCP before the resolution could be signed.

By copy of this memorandum to Lisa Pierce, I request that a clerk attest to the Chairman's signature on each document. Once this has been accomplished, please prepare 4 certified copies of the executed development order and all exhibits and one fully executed copy of the zoning resolution and forward these documents to my office no later than March 22, 2007.

Thank you for your assistance.

DPL/tlb
Attachments

cc: (w/o attachments)
Timothy Jones, Chief Assistant County Attorney
Lisa Pierce, Supervisor, Minutes Department

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MINUTES OFFICE
2007 MAR 20 AM 7:39

TWELFTH AMENDED DEVELOPMENT ORDER[1]
FOR

PELICAN LANDING

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121
COUNTY CASE DRI2005-00001

WHEREAS, on November 28, 2000, WCI Communities, Inc., the owner of the Pelican Landing Development of Regional Impact (DRI) most recently requested an amendment to the original Development Order (DO) adopted August 29, 1994, as amended; and

WHEREAS, this document incorporates the Development Order Amendments for Pelican Landing DRI adopted: 1) March 22, 1995 (incorporating the terms of a settlement agreement); 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9; 3) November 4, 1996; 4) November 17, 1997; 5) September 21, 1998; 6) June 21, 1999; 7) December 6, 1999; 8) August 7, 2000 to add 140 acres; 9) February 26, 2002 to revise the legal description and clearly define the jurisdictional line between the City and County; 10) October 7, 2002 to accomplish the following: (a) adjust the original buildout date (from December 31, 2002 to May 21, 2004) and termination date (from December 31, 2005 to May 21, 2007) to reflect the one year and 141 days the effectiveness of the Development Order was tolled as a result of the 1996 appeal and challenge; and (b) extend the buildout and termination dates by 4 years and 364 days to May 20, 2009 and May 20, 2012, respectively; and, the conditions proposed for the twelfth amendment to the Pelican Landing DRI Development Order; and

WHEREAS, the City of Bonita Springs has adopted a substantially similar development order that is applicable within its jurisdiction; and

WHEREAS, a Notice of Proposed Change was submitted by Bayside Improvement Community Development District on January 25, 2005 to amend the legal description and Map H to (a) include a 1.45 acre tract for the purpose of constructing a maintenance facility, and, (b) reduce the number of residential dwelling units from 4,400 to 3,912 residential units and change the mix of units types to allow an increase in single family units from 665 to 930 unit and a reduction in multi-family units from 3,735 to 2,982; and

[1] This is a codification and a restatement of all DRI Development Orders rendered with respect to Pelican Landing within Lee County, including actions taken on March 25, 1995, August 16, 1995, November 17, 1997, September 21, 1998, June 21, 1999, December 6, 1999, August 7, 2000, February 26, 2002, October 7, 2002, and December 4, 2006.

WHEREAS, under F.S. §380.06(19), the proposed change must be reviewed cumulatively with previous changes to the DRI Development Order to determine whether they constitute a substantial deviation from the terms of the original DRI Development Order approvals; and

WHEREAS, the Board of County Commissioners has reviewed the proposed amendment and found that the changes do not constitute a substantial deviation; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Hearing Examiner, the documents and comments upon the record made before the Board in public hearing, and after full consideration of those reports, recommendations, comments, and documents, the Board of County Commissioners of Lee County, Florida, finds and determines that:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on a total of ~~2748.25~~ 2749.7± acres located approximately three miles north of the Lee/Collier County Line. Approximately 1249.8 acres of the Pelican Landing DRI are located within the City of Bonita Springs; approximately ~~1216.45~~ 1217.9 acres of the Pelican Landing DRI are located within the unincorporated area of Lee County; and approximately 282± acres of the ~~2748.25~~ 2749.7±-acre total constitutes the Spring Creek West DRI, which is located in the City of Bonita Springs. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing; however, a part of the project is located north of Coconut Road.

The proposal is to construct ~~4,400~~ 3,912 residential units, of which ~~665~~ 930 are single-family and ~~3,735~~ 2,982 multi-family, 300,000 square feet of gross floor area of retail commercial, and 475,000 square feet of gross floor area of office commercial. The retail uses will provide up to 2,048 parking spaces and the office uses will provide up to 1,587 parking spaces. The project will also include 750 hotel/motel rooms, a 50,000-square-foot conference center, 65 wet boat slips and 150 dry boat slips, various recreational amenities including, but not limited to: golf, tennis, canoe parks, an existing boat ramp on the Baywinds Parcel and a beach park for the benefit of the owners in Pelican Landing. There are 143.81 acres of upland habitat preserve, 678.5 acres of salt and freshwater wetlands, 247.49 acres of water management lakes, 162.16 acres of public and private rights-of-way, 3.2± acres of "off-site" parking, 6 acres of utilities and an .11-acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout date is May 20, 2009.

B. LEGAL DESCRIPTION: The Pelican Landing DRI is located in Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and

24, Township 47 South, Range 24 East, Lee County, Florida, as more particularly described in attached Exhibits A, B, C and D.

Exhibit A identifies the boundaries of the Pelican Landing DRI as located within unincorporated Lee County.

Exhibit B identifies the boundaries of the DRI located within the City of Bonita Springs, except the Spring Creek West DRI portion.

Exhibit C identifies the boundaries of the Spring Creek West DRI, which is located in City of Bonita Springs.

Exhibit D is a sketch of the legal descriptions, set forth in Exhibits A, B and C.

C. The DRI property is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, TFC-2 and RM-2; the property is partially developed.

D. The Application for Development Approval as modified by the settlement agreement was determined to be consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Sections 380.05 and 380.06(14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The proposed Development Order Amendment has been reviewed by the Southwest Florida Regional Planning Council (SWFRPC) and is the subject of the report and recommendations adopted by that body and subsequently forwarded to Lee County pursuant to the provisions of Section 380.06, Florida Statutes. The development, as proposed in the Application for Development Approval (ADA) amended by subsequent Notices of Proposed Change, and as modified by this Development Order Amendment, is generally consistent with the report and the recommendations of the SWFRPC pursuant to Section 380.06(11).

H. The development is located in the Urban Community, Outlying Suburban and Resource Protection Areas classifications of the Lee Plan with the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order Amendment.

I. The proposed conditions below meet the criteria found in Section 380.06(15)(d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that ~~one annual~~ a biennial monitoring report that includes both Pelican Landing and Spring Creek West DRIs must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16.

K. A portion of the DRI property has been included in the incorporated limits of the City of Bonita Springs pursuant to legislation adopted during the 1999 Legislative session. The property now located in the City of Bonita Springs lies within the area described in section 6 of the Committee Substitute for Senate Bill 2626, 1st Engrossed. Pursuant to Florida Statutes section 380.06(15)(h), a separate DRI development order must be adopted by the City of Bonita Springs that incorporates the rights and obligations specified in this development order as they affect property located within the city limits. Also pursuant to that section of the Florida Statues, the Pelican Landing DRI development order adopted by the county must be amended to remove property now located in the City of Bonita Springs. Conditions pertaining to the adoption of an amended DRI development order for property remaining within unincorporated Lee County are set forth in Section II. L. of this development order.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, in public meeting duly constituted and assembled on December 4, 2006 that the proposed amendments to the Pelican Landing DRI Development Order are hereby APPROVED, SUBJECT TO the following conditions, restrictions and limitations.

For the purposes of this Development Order, the term "developer" or "Applicant" includes successors or assigns, and all references to County Ordinances and codes include future amendments.

A. Historical/Archaeological Sites

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and will

be recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The developer will immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

B. Housing

1. There are no regionally significant housing impacts for the first planning horizon of the DRI Development Order, which ends on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner-occupied affordable housing are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the DCA 1991 Draft methodology.

2. The Southwest Florida Regional Planning Council, the Florida Department of Community Affairs, and Lee County accept the Developer's contribution of $20,000.00 to assist existing and prospective employees within the Pelican Landing DRI to locate affordable housing. The $20,000.00 will be contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time home buyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying home buyers for either closing costs or down payments associated with the purchase loan.

C. Hurricane Preparedness

1. The developer provided Lee County with the funds for the provision and connection of a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle

the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The developer will be responsible for the initial electrical hook-up costs. The selection of the generator will be in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources staff, a brochure advising all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for any Hotel, the developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan must address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane

evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan must be developed in coordination with the Lee County Emergency Management officials and found sufficient by those officials months after the effective date of the DRI Development Order. *Editorial note: The developer submitted an emergency plan to Lee County Emergency Management for review and approval. The plan must be re-submitted annually to address changes in the development parameters and changes in local hurricane evacuation and sheltering policies. The plan must comply with Lee County Administrative Code 7-7.*

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

10. Conditions C.1. through C.3. address the hurricane mitigation requirements for the initial 4050 units. The developer will mitigate the hurricane shelter impacts for units 4051 through 4400 by paying $18.50 per unit to the Lee County Impact Fee Coordinator at the time of building permit approval. If the developer constructs an assisted living facility, the developer must comply with all aspects of Section 440.441(1)(b), F.S., as may be amended, including the preparation and submittal of a comprehensive emergency management plan that addresses emergency evacuation transportation and adequate sheltering arrangements for the ALF residents. The developer must update this plan annually. The County must use the funds paid pursuant to this condition to construct or upgrade hurricane shelter space in a location that will benefit the residents of the Pelican Landing Community. The eighteen dollar and fifty cents fee (1996 dollars) will be multiplied by the Dodge Data Service Building Cost Index for U.S. and Canadian cities for June 1 of each year subsequent to 1996, up to the time building permits are issued. This multiplier ensures payment of current dollars at the time the permits are issued. If the Building Cost Index is not available, the Consumer Price Index will be used instead, and applied by the method described above. If Lee County adopts an impact fee for hurricane shelters prior to, or during, the acquisition of building permits 4051 through 4400 then the Developer will pay the duly adopted impact fee, provided that fee is no less per unit than the per unit amount set out above, and this condition will have no further force and effect.

D. Marina Facilities

1. The developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000-foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The developer has constructed dock and channel markers within Estero Bay. The Lee County Division of Natural Resources Management will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the Lee County Division of Natural Resources Management.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the Lee County Division of Natural Resources Management, Marine Sciences Program and Turtle Time.

10. The developer will comply with all water quality monitoring requirements imposed by the FDEP and the SFWMD.

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator must host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator will provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the Lee County Division of Natural Resources Management, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

13. The dry storage facilities must be located in a building or structure that is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.

E. Vegetation and Wildlife/Wetlands

The developer has conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) [now known as the Florida Fish & Wildlife Conservation Commission (FWC)] guidelines and the Lee County Land Development Code. These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise. The Baywinds parcel has existing environmental permits that remain valid as of the date of the Seventh Development Order Amendment. These permits are based on the plan of development shown on the local Development Order Approval No. 95-12-068.00D. Some improvements were made pursuant to those permits. Future improvements to the Baywinds parcel must be consistent with the conditions set forth in those permits as may be amended.

1. There were three bald eagles' nests of concern prior to the original development order adoption. One nest was on the Pelican Landing property in the Eco Park. The other two nests were originally within 1500 to 1600 feet of Pelican Landing. One of these other nests was located on the Kersey parcel and declared abandoned by the USFWS in July 1998. The buffers that affect Pelican Landing property were established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to any new development within 1500 feet of any active eagle nest other than the nest located within the Eco Park, the Developer must prepare an on-site eagle management plan, addressing the Pelican Landing DRI property only, that will be reviewed by DCA, SWFRPC, FWC Lee County, and USFWS. The agencies must provide specific written objections or concerns if any, regarding any new proposed management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to any lawful

objections. The agencies will review and respond to the management plan resubmittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the developer. Lee County and DCA will have the final approval authority. If a proposed management plan includes development within 750 feet of an active eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FWC and USFWS.

2. A local development order for the Hickory Island Beach Park has been issued to permit construction of beach park infrastructure. This local development order includes a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated Lee County Division of Natural Resources Management (DNRM) and Florida Game and Fresh Water Fish Commission (FGFWFC) recommendations.

The PMP required the developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permitted a refinement of the conservation easement boundaries after completion of a one year utilization study. The final conservation easement is consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI Development Order, Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI Development Order.

The Developer submitted a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI Development Order, on November 14, 1994. Lee County, FGFWFC, and DCA reviewed the management plan. Lee County approved this plan and its implementation was certified in October 1996.

3. The projected gopher tortoise burrow count for the original Pelican Landing DRI area was 439, based on an estimate of FGFWFC habitat guidelines, a minimum of 75 acres of gopher tortoise habitat must be protected.

The Developer has set aside a 78±-acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat for the original Pelican Landing DRI land area. This area is known as the Pelican Landing Eco-Park. The Eco-Park

area contains significant portions of the xeric oak habitat existing on the original Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the Florida Game and Fresh Water Fish Commission on or about December 22, 1993 for the original Pelican Landing DRI. A new protected species survey was conducted in March and April of 1998 on the addition to the Pelican Landing DRI known as the Kersey-Smoot parcel. The new survey revealed the presence of 114 active and inactive gopher tortoise burrows on 70 acres. A protected species survey was conducted in 1990 and February 1996 on the Baywinds parcel. The survey revealed the presence of 28 active and inactive gopher tortoise burrows on 15.41 acres. The Developer has an Incidental Take Permit for the new gopher tortoise burrows located outside of the Eco-Park in the undeveloped Kersey-Smoot and Baywinds parcels. The Developer obtained an Incidental Take Permit prior to proceeding with development within the gopher tortoise habitat areas. Prior to the start of construction, all gopher tortoise burrows within the development areas must be excavated and any resident gopher tortoises, or commensal species, relocated to open spaces within the Pelican Landing DRI.

Impacts to gopher tortoise habitat within the Kersey-Smoot and Baywinds parcels have been mitigated through incidental take funds paid to the FWC for the purpose of regionally significant gopher tortoise habitat.

The applicant and the Florida Fish and Wildlife Conservation Commission (FWC) have had considerable discussion regarding the modifications and refinements to the existing 78-acre Eco-Park boundaries. The addition of the eastern 140-acre "Skebe Tract", of which 63.24 acres will be added to the Eco-Park, will provide for an 81% increase in the overall size of the Pelican Landing Eco-Park.

The new Eco-Park configuration will delete the southern-most ±22 acres, while adding new lands to the park area within the confines of the "Skebe Tract". An overall increase (net gain) of ±11 acres of upland habitat, plus 52.24 additional acres of forested wetland acreage will increase the overall size of the revised Eco–Park boundaries to approximately 141.45 acres.

Any active or inactive gopher tortoise burrows found within the Eco-Park deletion zone or the new golf lands of the eastern portion of the "Skebe Tract" will be excavated to search for activity. Any tortoises found will be relocated to the modified Eco-Park boundaries, pursuant to the Eco-Park Reconfiguration Plan, authored by Wilson, Miller, Inc., and accepted by the FWC. The initial Gopher Tortoise Incidental Take Permit LEE-9 must be modified by the FWC in order to adopt the Eco-Park Reconfiguration for both the existing Eco-Park south deletion area, the "Skebe Tract" addition to the Eco-Park, and the inclusion of a portion of the "Skebe Tract" in the development area.

A revised perpetual Conservation Easement will be recorded in the Lee

County records, pursuant to the revised boundaries of the Eco-Park. The delete ±22 acres will be formally released from the Conservation Easement by the FWC.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), and Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot and Baywinds parcels. However, minor mangrove trimming is permitted within the vicinity of the clubhouse on the Baywinds parcel to provide a limited view of the Estero Bay. The scope of the developer's DEP application request for minor trimming is subject to the review and approval of Lee County Division of Planning, Environmental Sciences staff. All trimming activity will be subject to the wetland regulatory permit approvals.

The Developer has granted a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to the FGFWFC. The conservation easement was drafted to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FGFWFC. Educational and directional signage are permitted within the Eco-Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes prohibiting the destruction of trees. A paved golf cart path, a wooden golf cart bridge across Halfway Creek, a buried irrigation line to be under the path and bridge, and a buried outfall pipe for a surface water management system will be located within the Eco-Park.

5. Should any orchids, wild pine air plants, Florida Counties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development

orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner that is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner that forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced above, the approved management practices will be considered a part of this development order for reinforcement purposes, and be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling of not more than 13.25 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasive plants, the restoration of historic hydro periods, and a total of not more than ten acres of littoral zone plantings. The mitigation for wetland impacts to the Baywinds parcel was determined prior to the inclusion of the property into the Pelican Landing DRI as part of the environmental and local government permitting. The mitigation was based on the plan of development reflected in Lee County Development Order 95-12-068.00D. Changes to the plan of development that include additional wetland impacts may necessitate modification to the environmental and local government permitting.

F. Solid/Hazardous/Medical Waste

1. All storage, siting, and disposal of hazardous wastes and hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must insure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator is responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, must notify the Division of Natural Resources Management for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will insure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and insure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, must contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials located on the premises.

10. If required by federal, state or local regulations:

a. The developer/property owner must prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner must establish an emergency notification system to be used in the event of a hazardous material release.

G. Storm Water Management

1. The surface water management system must be designed, constructed

and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District (SFWMD) "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside Improvement District (a district formed pursuant to Chapter 190, Florida Statutes), must insure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or Storm water retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site Storm water wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement District, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and South Florida Water Management District guidelines.

6. The SFWMD must establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the County Attorney's office.

7. The Baywinds parcel must be developed in accordance with the following permits: Water Management permit numbers 36-02043-S-02 and 36-02043-S, ACOE permit number 89IPD-20127 and the letter of permission to continue work authorized in the original permit, LOP #1989001127, and FDEP permit number 36293225. These permits were granted based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These permits may be modified, updated or replaced as required by law.

Changes to the local development order may also require modification of the referenced permits.

H. Transportation

1. Significant Impact

a. The traffic impact assessment for this project assumes the development parameters and land uses shown in Exhibit F, "Pelican Landing DRI Development Parameters." The assessment indicates that the significantly impacted roadways and intersections described below will be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2009). Each ~~annual~~ monitoring report, described in Paragraph 4, must reflect whether the roadways and intersections described below are significantly impacted or are projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI is projected to significantly and adversely impact (as defined by Lee County Administrative Code) the following roadways and intersections:

Planning Horizon I (1997)		Needed Improvement
US 41/Corkscrew Road	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turns
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted
US 41/Terry Street	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left & right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

Buildout (2009)

Corkscrew Road		
- Three Oaks Parkway to 1-75	-	Widen to 4 lanes
Old 41		
- Bonita Beach Road to Terry St.	-	Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41		
- Immokalee Road to Old 41 (Collier County)	-	Widen to 6 lanes
- Bonita Beach Road to West Terry Street	-	Widen to 6 lanes
- West Terry Street to Pelican's Nest Drive	-	Widen to 6 lanes
- Coconut Road to Williams Rd.	-	Widen to 6 lanes
- Constitution Boulevard to Alico Road	-	Widen to 6 lanes
US 41/Corkscrew Road	-	Separate EB left and thru/right lanes
	-	Westbound dual left turn lanes
	-	Signal retiming
US 41/Williams Road	-	Signalization, if warranted
US 41/Coconut Road	-	Separate EB left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Commercial Entrance	-	Northbound left turn lanes
	-	Southbound right turn lane
	-	Eastbound right turn lane
US 41/North Pelican Entrance	-	Northbound left turn lane
	-	Southbound right turn lane
	-	Eastbound left and right turn lanes
	-	Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-	Southbound dual left turn lanes
	-	Northbound dual left turn lanes
	-	Eastbound thru/right turn lane
	-	Westbound two thru lanes
	-	Signal retiming
US 41/Pelican's Nest Drive	-	Northbound left and right turn lanes
	-	Southbound left and right turn lanes
	-	Eastbound left and thru/right lanes
	-	Westbound left and thru/right lanes
	-	Signalization, if warranted

US 41/Terry Street	-	Northbound dual left turn lanes
	-	Separate WB thru and right turn lanes
	-	Signal retiming
US 41/Bonita Beach Road	-	Signal retiming
Coconut Road/Spring Creek Road	-	Separate NB left and right turn lanes
	-	Separate EB thru and right turn lanes
	-	Separate WB thru and left turn lanes

2. Mitigation

a. The developer will pay impact fees as defined in the Lee County Land Development Code to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees are estimated to be $8,900,000 for the land uses identified in Exhibit F. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2009. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the Land Development Code Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the Lee County Land Development Code.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the Land Development Code.

c. The developer must dedicate 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer must construct, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the Land Development Code. Dedication of the roadway right-of-way and construction of Burnt Pine Drive will occur as follows:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Burnt Pine Drive North from Pelican Landing Parkway to Pelican Landing North Entrance: under construction no later than December 31, 1998.

3) Burnt Pine Drive North from Pelican Landing North Entrance to Coconut Road: should be under construction no later than December 31, 1999.

d. The developer agrees to reserve 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way will be dedicated to Lee County if and when requested. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the Land Development Code in effect at that time.

e. As a mitigation option, the developer may, with the concurrence of Lee County, make an advance payment of a portion of Pelican Landing's total Impact Fees up to 2 million dollars. Lee County would then utilize the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study is currently scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

3. Access and Site-Related Improvements

a. The developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points will be located and

developed consistent with the Florida DOT's access management classification for US 41, unless otherwise approved by the Florida DOT. Improvements to those access points will be consistent with the Department's permitting requirements.

c. Site-related improvements will be as defined in the Land Development Code.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID), a properly constituted and designated property owners association or other appropriate entity, unless subsequently dedicated to and accepted by Lee County.

4. ~~Annual~~ Traffic Monitoring Report

a. The developer will submit ~~an annual~~ biennial traffic monitoring report to the following entities for review and approval: Lee County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report ~~will~~ must be submitted ~~one year after the date of the issuance of this DRI Development Order~~ by December 31, 2007. Reports must be submitted ~~annually~~ biennially thereafter until build out of the project.

b. The monitoring report will be designed in cooperation with the Lee County Department of Transportation, FDOT, the SWFRPC and the FDCA prior to the submittal of the first report. The methodology of the ~~annual~~ traffic monitoring report may be revised if agreed upon by all parties.

c. The ~~annual~~ traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and turning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season tuning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through build out.

(4) An estimate of when the monitored roadways and

intersections will exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

Roadway	Segment	Improvement	Schedule
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the ~~annual~~ monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing more than 5% of LOS "D" service volume during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service is scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the ~~annual~~ traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing more than 5% of level of service D service volume during peak hour, peak

season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by the Florida Department of Transportation and/or Collier County.

f. In the event the developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the transportation monitoring portion of the ~~Annual~~ Biennial Monitoring Report.

I. Wastewater Management/Water Supply

1. The developer or the Bayside Improvement District must obtain a South Florida Water Management District Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E-20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultra low volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the developer or Bayside Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. The developer must provide written assurance that any hazardous commercial effluent, generated by the project, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities must be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County, and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must be designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address

irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

J. Police and Fire Protection

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act (SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. The developer must provide for the emergency medical service impacts and fire protection impacts generated by the proposed development as defined by Lee County regulations.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project. The parking lot for the beach parking lot is required to be gated or closed by the zoning resolution. The gate, chain or other device to prohibit access to the parking lot after hours will be unmanned, and the override system required by this condition does not apply to the parking lot gate, chain, or other device.

5. The project's impact on fire protection and rescue service delivery will be met by the ad valorem taxes, EMS impact fees and fire impact fees.

K. Interface Zone

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through l. of Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management area within 500 feet of the mangrove fringe of Estero Bay.

3. The management practices that the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed

fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer will prepare a management plan for the application of herbicides, pesticides, and fertilizers on the original Pelican Landing DRI golf course adjacent to the mangrove fringe of Estero Bay. This plan must be amended to include the Kersey-Smoot parcels prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended management plan must: include a groundwater and surface water monitoring plan; provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; identify the locations for the groundwater monitoring and testing on a map(s); and, set forth the testing and reporting requirements. The developer will submit the test reports with the annual monitoring report. The monitoring program will be established and operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This plan will be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.

5. The Developer will submit a written amended surface and groundwater quality management plan to Lee County and DCA. The amended plan must be approved by DCA prior to the application of chemicals to the proposed golf course. The DCA will have 30 working days to review the management plan and approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the

concerns or issues can be addressed by the developer. The Developer must resubmit a revised water quality management plan to address the valid objections. DCA will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should DCA fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by DCA will be implemented by the developer. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay will be buffered from the proposed golf course by a 100-foot-wide undisturbed naturally vegetated corridor, except for water management facilities permitted by the SFWMD and except for the removal of exotic plants as required by Lee County. The 100-foot-wide buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay south of Coconut Road.

The mangrove line for the Kersey-Smoot and Johnson (Government Lot 1, Parcel 3) parcels is offset 50 feet, to over 250 feet west of the wetland jurisdictional line delineated along the western (Estero Bay) side of the Kersey-Smoot parcels. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcels. This includes both saltwater and freshwater wetlands contained within the boundary of the wetlands jurisdictional line. The proposed golf course fairways, tees and greens must be set back a minimum of 25 feet from all wetland jurisdictional lines on the Kersey-Smoot and Johnson parcels, except where wetland impacts have been permitted by the SFWMD and the Army Corps of Engineers. Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot and Johnson parcels.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the DEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI Development Order do not preempt the authority of the SFWMD and the DEP. Section 373.016, Florida Statutes provides that the legislature has vested the authority in the DEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of DCA, SWFRPC, or Lee County pursuant to this DRI Development Order are contrary to those of the SFWMD/DEP, in areas where the SFWMD and DEP have been given preemptive authority, the requirements of the SFWMD and the DEP will control.

L. Dual Jurisdiction

The Pelican Landing DRI is located within two jurisdictions, namely Lee County and the City of Bonita Springs. For State review purposes, the DRI will be considered an integrated and whole development, such that all approvals for development under the DRI Development Order will be applicable to the entire Pelican Landing DRI without regard to the jurisdictional split.

To this end, the developer is required to provide contemporaneous copies of any and all NOPC applications filed with respect to the Pelican Landing DRI to both the City and the County, even though the property actually affected by the amendment may be located wholly with one or the other jurisdiction. The jurisdiction most affected by the NOPC (i.e., as determined by the location of property affected by the proposed change) will take the lead in processing the NOPC. However, both jurisdictions may have input into the NOPC process, as a principle, if desired.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed by WCI Communities, L.P. to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents that are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

(a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;

(b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;

(c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;

(d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and

(e) Pelican Landing DRI sufficiency response, stamped Received November 22, 1993.

3. Map H, last revised ~~April, 2001~~ January 2006, and stamped received at the permit counter on ~~April 8, 2002~~ May 2, 2006, is attached hereto as Exhibit E and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County. A synopsis of the development parameters permitted under this approval and depicted on Map H are set forth in attached Exhibit F.

4. The Development Order is binding upon the developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order that clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality that may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of, any referenced governmental

agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order, which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

(a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans that creates a reasonable likelihood of adverse regional impacts or other regional impacts not evaluated in the review by the Southwest Florida Regional Planning Council; or

(b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of May 20, 2009, and a termination date of May 20, 2012. The buildout and termination dates reflect adjustment of one year and 141 days applicable to the tolling of time for the appeal/challenge to the original DRI Development Order. The termination date recognizes that a local Development Order, which is valid for three years, may be obtained prior to the buildout expiration date.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring

compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until 2012. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

Lee County will reserve to this DRI until 2012, 300 acres of residential use allocation in each of the Urban Community and Outlying Suburban Future Land Use Categories (for a total of 600 acres) as established by Lee Plan Map 16, The Planning Communities Map and Table 1(b), known as the Planning Community Year 2020 Allocation. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The developer, or its successor~~(s)~~ in title to the undeveloped portion of the subject property, will submit a report ~~annually~~ biennially to Lee County, SWFRPC, FDCA and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDCA. The first biennial monitoring report must be submitted to the Administrative Director of the DCA ~~not later than one year after the effective date of this Development Order~~ by December 31, 2007. Further reporting must be submitted ~~not later than one year of subsequent calendar years~~ biennially thereafter, until build out. Failure to comply with this reporting procedure is governed by Section 380.06(18), Florida Statutes. The developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. In compliance with a condition of the first development order amendment, the developer did amend this Development Order to incorporate the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. A legal description of that portion of the Spring Creek DRI, along with the conditions of the Spring Creek Development Order that are applicable to the Spring Creek West property are now incorporated into this development order. The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation that would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes. The inclusion of the Baywinds parcel as part of the Seventh Development Order amendment does not divest the rights provided in the permits, development orders, and government approvals obtained on that parcel based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These approvals were granted prior to its inclusion in the Pelican Landing DRI and will allow for the development of the Baywinds Parcel consistent with the plan of development reflected in Lee County Development Order No. 95-12-068.00D.

Commissioner Hall made a motion to adopt this amendment, seconded by Commissioner Judah. The vote was as follows:

Robert P. Janes	Aye
A. Brian Bigelow	Aye
Ray Judah	Aye
Tammara Hall	Aye
Franklin B. Mann	Aye

DULY PASSED AND ADOPTED this 4th day of December 2006.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Robert P. Janes, Chair

Approved as to form by:

_____
Dawn E. Perry-Lehnert
County Attorney's Office

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

Attachments:

Exhibit A. Legal Description of the Pelican Landing DRI area within unincorporated Lee County.

Exhibit B. Legal Description of the Pelican Landing DRI area within the City of Bonita Springs, but excluding the Spring Creek West DRI area.

Exhibit C. Legal Description of the Pelican Landing DRI area encompassed by the Spring Creek West DRI, located in the City of Bonita Springs.

Exhibit D. Sketch of the legal descriptions of Pelican Landing DRI.

Exhibit E. Map H, Master Development Plan - last revised ~~April 2001~~ January 2006, stamped received ~~April 8, 2002~~ May 02, 2006.

Exhibit F. Pelican Landing DRI Development Parameters

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DRI 2005-00001

February 8, 2006

DESCRIPTION

PELICAN LANDING DRI –UNINCORPORATED LEE COUNTY
SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 5, 6, 7, 8 and 9, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

PARCEL 2-A

Beginning at an intersection of the west line of Tamiami Trail (State Road No. 45) with the south line of Coconut Road as described in Official Record Book 1738 at Page 2538 of the Public Records of Lee County, Florida; thence run S 00° 10' 56" W along said west line for 621.81 feet to a point of curvature; thence run southerly and southeasterly along said west line, along the arc of a curve to the left of radius 5797.58 feet (chord bearing S 04° 57' 34" E) (chord 1039.14 feet) (delta 10° 17' 00") for 1040.54 feet to a point of tangency; thence run S 10° 06' 04" E along said westerly line for 938.08 feet to an intersection with the south line of the Southeast Quarter (SE-1/4) of said Section 9; thence run S 89° 23' 00" W along said south line for 708.94 feet to the southwest corner of said Southeast Quarter (SE-1/4) of Section 9; thence run S 89° 27' 22" W along the south line of the Southwest Quarter (SW-1/4) of Section 9 for 2677.24 feet to the southwest corner of the Southwest Quarter (SW-1/4) of Section 9; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 1,838.15 feet to an intersection with the easterly line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records; thence continue N 00° 07' 17" E along said east line for 343.54 feet; thence run S 89° 38' 58" E for 10.00 feet; thence run N 00° 07' 17" E along said east line for 849.27 feet to the southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records; thence run S 89° 21' 02" E along the south line of said lands for 189.98 feet; thence run N 00° 07' 17" E along the east line of said lands for 125.01 feet; thence run N 89° 21' 02" W along the north line of said lands for 199.98 feet to an intersection with the easterly line of said Spring Creek Road; thence run N 00° 07' 17" E along said east line for 1292.76 feet to an intersection with the south line of Coconut Road (50 feet wide); thence run S 89° 16' 14" E along said south line for 1802.38 feet to an intersection with the west line of said Section 9; thence run N 00° 39' 58" W along said west line for 25.00 feet to a Concrete Monument marking the northwest corner of the Southwest Quarter (SW-1/4) of said section; thence continue along said west line N 00° 39' 58" W for 5.00 feet to an intersection with the south line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records; thence run S 89° 35' 50" E along said south line for 1549.14 feet; thence run southwesterly along a non-tangent curve to the left of radius 30.00 feet (chord bearing S 45° 24' 10" W) (chord 42.43 feet) (delta 90° 00' 00") for 47.12 feet to a point of tangency; thence run S 00° 24' 10" W for 336.31 feet to a point of curvature;

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thence run along the arc of a curve to the left of radius 270.00 feet (chord bearing S 44° 35' 50" E) (chord 381.84 feet) (delta 90° 00' 00") for 424.12 feet to a point of tangency; thence run S 89° 35' 50" E for 99.41 feet to a point of curvature; thence run along the arc of a curve to the right of radius 530.00 feet (chord bearing S 75° 44' 50" E) (chord 253.74 feet) (delta 27° 42' 00") for 256.23 feet; thence run N 20° 53' 52" W for 748.16 feet to an intersection with the aforementioned south line of Coconut Road; thence run along said south line S 89° 35' 50" E for 1,301.22 feet to the Point of Beginning.
Parcel contains 294.56 acres, more or less.

AND

DRI 2005-00001

PARCEL 2-B

From a railroad spike marking the northwest corner of the Southwest Quarter (SW-1/4) of said Section 8 run S 00° 23' 24" E along the west line of said fraction for 25.00 feet to an intersection with the south line of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of the Public Records of Lee County of Lee County, Florida, and the Point of Beginning.
From said Point of Beginning run S 89° 16' 14" E along said south line for 3253.00 feet to an intersection with the west line of Spring Creek Road; thence run the following courses and distances along said west line of said Spring Creek Road; S 00° 17' 17" W for 817.15 feet; N 89° 52' 43" W for 14.27 feet to a point of curvature; thence run southwesterly along said arc of a curve to the right of radius 1725.00 feet (chord bearing S 05° 52' 51" W) (chord 346.22 feet) (delta 11° 31' 09") for 346.81 feet to a point of tangency; thence run S 11° 38' 26" W for 178.50 feet to a point of curvature; thence run southwesterly along said arc of a curve to the left of radius 2400.00 feet (chord bearing S 00° 28' 49" W) (chord 929.06 feet) (delta 22° 19' 14") for 934.96 feet to a point of tangency; thence run S 10° 40' 48" E for 231.66 feet to a point of curvature; thence run southeasterly along said arc of curve to the right of radius 1725.00 feet (chord bearing S 08° 42' 25" E) (chord 118.78) (delta 03° 56' 45") for 118.80 feet to an intersection with the south line of said Section 8; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 642.07 feet to the southeast corner of the Southwest Quarter (SW-1/4) of Section 8; thence run N 89° 25' 49" W along the south line of the Southwest Quarter (SW-1/4) of Section 8 for 2558.62 feet to the southwest corner of said Section 8; thence run N 89° 25' 49" W along the south line of the Southeast Quarter (SE-1/4) of said Section 7 for 2330 feet more or less to the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 6,485 feet more or less to an intersection with the north line of the South Half (S-1/2) of Government Lot 2 of said Section 7; thence run N 89° 32' 15" E along the north line of said South Half (S-1/2) of Government Lot 2 for 793 feet more or less to the northeast corner of lands described in Official Record Book 1895 at Page 3817 of said public records; thence run S 08° 50' 45" E along the east line of said lands for 199.50 feet to the southeast corner of said lands; thence run N 89° 35' 27" E for 666.22 feet; thence run N 89° 32' 15" E for 239.00 feet to an intersection with the west line of Coconut Road; thence run S 01° 07' 45" E along said west line for 488.63 feet; thence run

N 89° 40' 05" E along the south line of said Coconut Road for 24.69 feet to the Point of Beginning. Less and except Official Record Book 1677 at Page 3516 of said Public Records.
Parcel contains 343 acres, more or less.

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PARCEL 2-C

A parcel of land lying in and being a portion of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of Section 8, Township 47 South, Range 25 East of Lee County, Florida, being more particularly described as follows:

Commencing at the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 00' 45" W along the west line of said East Half (E-1/2) of the Northwest Quarter (NW-1/4) for 40.02 feet to an intersection with the northerly right-of-way line of Coconut Road (as maintained); thence run S 89° 16' 14" E along said right-of-way for 171.25 feet to the Point of Beginning.
From said Point of Beginning continue S 89° 16' 14" E along said right-of-way a distance of 513.75 feet; thence run N 01° 00' 44" W a distance of 367.98 feet; thence run N 89° 16' 14" W a distance of 513.75 feet; thence run S 01 00' 44" E a distance of 367.98 feet to the Point of Beginning.
Parcel contains 4.34 acres, more or less.

AND

DRI 2005-00001

PARCEL 2-D

All that part of Florida Gulf Land Company's Subdivision as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, Florida, lying in Section 5, Township 47 South, Range 25 East, South and West of lands to Florida Power and Light Company as described by deed recorded in Deed Book 244, Page 138 of said Public Records, also Lot 8, Block 14 of Eldorado Acres (an Unrecorded Subdivision) as shown in Deed Book 310 at Page 183 of said public records; also part of Sections 5, 6, 7 and 8, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:
Beginning at the southeast corner of said Section 5; thence run N 88° 46' 30" W along the south line of the Southeast Quarter (SE-1/4) of said Section 5 for 2580.80 feet to the southeast corner of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 25' 13" W along the south line of said Southwest Quarter (SW-1/4) for 587.32 feet to an intersection with the east line of said Lot 8, Block 14, Eldorado Acres, an unrecorded subdivision; thence run the following three courses and distances along the boundary of said Lot 8: S 00° 50' 16" E for 132.70 feet; N 89° 11' 54" W for 75.00 feet; N 00° 50' 16" W for 132.41 feet to an intersection with said south line of the Southwest Quarter (SW-1/4) of Section 5; thence run N 89° 25' 13" W along said south line for 610.82 feet to the northeast corner of the West Half (W-1/2) of the Northwest Quarter (NW-1/4) of said Section 8; thence run

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S 01° 00' 45" E along the east line of said West Half (W-1/2) of the Northwest Quarter (NW-1/4) of Section 8 for 2612.19 feet to an intersection with the northerly right-of-way line (as maintained) of Coconut Road being 40.00 feet north of the centerline of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of said Public Records, said right-of-way line being the south line of lands as described by deed recorded in Official Record Book 3052 at Page 1748 of said Public Records; thence run N 89° 16' 14" W along said maintained right-of-way for 1267.93 feet to an intersection with the west line of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 07' 45" W along said west line for 1284.51 feet to the southeast corner of Government Lot 1 of said Section 7; thence run S 89° 33' 42" W along the south line of said Government Lot 1 for 1813 feet more or less to the easterly waters of Estero Bay; thence run northerly along the waters of Estero Bay for 3000 feet more or less to an intersection with the north line of Government Lot 4 of said Section 6; thence run N 89° 41' 23" E along said north line or 1807 feet more or less to an intersection with the west line of lands as described by deed recorded in Official Record Book 1762 at Page 4173 of said Public Records; thence run the following courses and distances along the boundary of said lands: N 00° 48' 29" W for 775.70 feet; N 46° 11' 51" E for 523.67 feet; S 81° 20' 47" E for 600.53 feet; N 00° 49' 50" W for 162.49 feet; N 89° 10' 55" E for 349.43 feet; N 01° 31' 46" W for 92.78 feet to an intersection with the north line of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 34' 40" E along said north line for 2592.29 feet to the northeast corner of said Southwest Quarter (SW-1/4); thence run N 89° 31' 44" E along the north line of the Southeast Quarter (SE-1/4) of said Section 5 for 2401.02 feet to an intersection with the southwesterly line of said lands to Florida Power and Light Company; thence run S 20° 51' 33" E along said southwesterly line for 553.91 feet to an intersection with the east line of said Southeast Quarter (SE-1/4) of Section 5; thence run S 00° 08" 26" E along said east line for 2202.99 feet to the Point of Beginning.

Parcel contains 576 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Summerall (for the Firm LB-642)
Professional Surveyor Mapper
Florida Certificate No. 5652

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February 8, 2006

DESCRIPTION

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Sections 16, 17, 20 and 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, which tract or parcel is described as follows:

DRI 2005-00001

Parcel 1-A

Beginning at the Northwest corner of the Northeast Quarter (NE-1/4) of Section 16; thence run S 00° 02' 54" W along said West line of the Northeast Quarter (NE-1/4) for 2643.98 feet to the Southwest corner of the Northeast Quarter (NE-1/4) of said section; thence run N 89° 10' 38" E along the south line of said fraction for 538.06 feet; thence run S 00° 06' 43" E for 1085.91 feet; thence run N 89° 06' 43" E for 744.41 feet to an intersection with the west line of Tamiami Trail (US 41 S.R. No. 45); thence run southerly along said West line, along the arc of a non-tangent curve to the right of radius 5619.58 feet (chord bearing S 00° 22' 05" E) (chord 50.21 feet) (delta 00° 30' 43") for 50.21 feet to a point of tangency; thence run S 00° 06' 43" E along said west line for 49.81 feet; thence run S 89° 06' 43" W for 300.00 feet; thence run S 00° 06' 43" E for 1445.84 feet to an intersection with the south line of the Southeast Quarter (SE-1/4) of said Section 16; thence run S 89° 16' 54" W along the south line of said fraction for 989.41 feet to the southeast corner of the Southwest Quarter (SW-1/4) of said Section 16; thence run S 88° 38' 34" W along said south line of said Southwest Quarter (SW-1/4) for 2627.98 feet to the northeast corner of said Section 20; thence run S 00° 35' 25" E along the East line of said section for 2659.47 feet to the southeast corner of the Northeast Quarter (NE-1/4) of said section; thence run N 88° 52' 49" E along the north line of the Southwest Quarter (SW-1/4) of said Section 21 for 2,040.41 feet to an intersection with the west line of the east 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run S 00° 51' 35" E along said west line for 801 feet, more or less to the water of Spring Creek; thence run westerly along Spring Creek for 3630 feet more or less to an intersection of the east line of said Section 20; thence run S 00° 38' 52" E along said east line of Section 20 for 91 feet, more or less to an intersection with the approximate centerline of Spring Creek as shown on the Plat of Pelican Landing Unit 5 recorded in Plat Book 59 at Page 11 of said Public Records of Lee County, Florida; thence run along said centerline the following courses: S 78° 50' 00" W for 181.31 feet, N 34° 24' 12" W for 230.22 feet, N 30° 59' 12" W for 174.93 feet, N 24° 25' 16" E for 120.83 feet, S 65° 47' 43" E for 219.32 feet, N 18° 24' 43" E for 158.11 feet, N 75° 11' 47" W for 351.71 feet, N 65° 09' 33" W for 451.88 feet, N 84° 18' 44" W for 351.75 feet, N 66° 54' 31" W for 445.79 feet, S 63° 24' 43" W for 134.16 feet, S 03° 23' 22" E for 170.29 feet, S 50° 30' 17" W for 220.23 feet, N 84° 49' 43" W for 331.36 feet, S 62° 13' 07" W for 214.71 feet, S 22° 08' 36" W for 291.55 feet, S 72° 15' 11" W for 131.22 feet to an intersection with the east line of the Southwest Quarter (SW-1/4) of said Section 20; thence run N 00° 50' 19" W along said east line for 520.00 feet to the northeast corner of said fraction; thence run S 89° 58' 37" W along the north line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most easterly branch of said Spring

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Creek as shown on said Plat of Pelican Landing Unit 5; thence run along said centerline the following courses: N 09° 13' 28" W for 137.34 feet, N 29° 08' 22" W for 590.59 feet, N 38° 31' 58" W for 278.03 feet, N 65° 16' 43" W for 254.95 feet, N 37° 18' 28" W for 286.01 feet, N 32° 51' 05" E for 252.39 feet, N 20° 11' 00" E for 236.69 feet, N 27° 23' 47" W for 369.25 feet, N 89° 15' 43" E for 50 feet more or less to the easterly shore of said Spring Creek; thence run northerly along said easterly shore for 1220 feet more or less to an intersection with the north line of said Section 20; thence run N 89° 15' 13" E along said north line of said section for 970 feet, more or less to a Concrete Monument marking the Northwest corner of the Northeast Quarter (NE-1/4) of said Section 20; thence run N 00° 31' 30" E along the west line of the Southeast Quarter (SE-1/4) of said Section 17 for 2674.38 feet to the northwest corner of said Southeast Quarter (SE-1/4); thence run N 00° 31' 29" E along the west Line of the Northeast Quarter (NE-1/4) of said Section 17 for 3.40 feet to an intersection with the curved southerly line of Spring Creek Road; thence run northeasterly and northerly along the arc of a curve to the left of radius 1130.00 feet (chord bearing N 35° 09' 06" E) (chord 1296.89 feet) (delta 70° 02' 16") for 1381.30 feet; thence run N 89° 52' 02" W for 5.00 feet; thence run N 00° 07' 58" E along the easterly line of Spring Creek Road (50 feet wide) for 1611.64 feet to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 17; thence run S 89° 25' 51" E along said north line of the Northeast Quarter (NE-1/4) of said Section 17 for 1838.15 feet to the northeast corner of said Section 17; thence run N 89° 27' 22" E along the north line of the Northwest Quarter (NW-1/4) of said Section 16 for 2677.24 feet to the Point of Beginning.
Parcel contains 909 acres; more or less.

DRI 2005-00001

AND

PARCEL 1-B

Beginning at an intersection of the west line of Spring Creek Road with the north line of said Section 17; thence run the following courses and distances along the southerly right-of-way of said Spring Creek Road: Southeasterly along an arc of a non-tangent curve to the right of radius 1725.00 feet (chord bearing S 03° 18' 23" E) (chord 206.27) (delta 06° 51' 19") for 206.40 feet to a point on a non-tangent line; thence run S 89° 52' 02" E for 16.47 feet; thence run S 00° 07' 58" W for 1406.64 feet; thence run N 89° 52' 02" W for 5.00 feet to a point of tangency; thence southwesterly along an arc of said curve to the right of radius 1070.00 feet (chord bearing S 37° 51' 54" W) (chord 1309.62 feet) (delta 75° 27' 53") for 1409.31 feet to an intersection with the north right-of-way of a 30 foot wide road as recorded in Deed Book 305 at Page 276 of the Public Records of Lee County, Florida; thence run N 89° 59' 08" W along said right-of-way for 718.27 feet to an intersection with the easterly line of lands known locally as Spring Creek Estates, an unrecorded plat; thence along said lands the following courses and distances: N 00° 00' 52" E for 510.00 feet; N 89° 59' 08" W for 885.06 feet to a point of curvature; along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33° 56' 23", chord of 227.66 feet and chord bearing of S 73° 02' 41" W, to a point on the curve; S 00° 00' 52" W for 167.10 feet; and S 31° 38' 00" W for 130.70 feet to the northeast corner of lands described in Official Record Book 1194, Page 1085; thence westerly along said lands and waters of a canal 106 feet, more or less to the northeast corner of said lands described in Official Record Book 1057, Page 38; thence southwesterly and westerly along said lands and said canal 400 feet more or less to the

northwest corner of lands described in Official Record Book 1453, Page 495; thence southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of the North Half (N-1/2) of said Section 17; thence N 89° 59' 08" W for 136 feet more or less to the east quarter corner of said Section 18, thence run S 89° 58' 17" W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hargan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967; thence the following courses and distances along said bulkhead line: N 56° 00' 38" W for 265.00 feet to a point of curvature; along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37° 20' 50", chord of 332.98 feet and chord bearing of N 37° 20' 13" W, to a point of tangency; N 18° 39' 48" W for 481.24 feet to a point of curvature; along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59° 50' 20", chord of 99.76 feet and a chord bearing of N 48° 34' 58" W, to a point of tangency; N 78° 30' 08" W for 144.73 to a point of curvature; along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32° 21' 45"; chord of 55.74 feet and a chord bearing of N 62° 19' 15" W, to a point of tangency and an intersection with the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 2270 feet more or less to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 18; thence run S 89° 25' 49" E along said north line of the Northeast Quarter (NE-1/4) of said Section 18 for 2330 feet, more or less to the northeast corner of Section 18; thence run S 89° 25' 49" E along the north line of the Northwest Quarter (NW-1/4) of said Section 17 for 2558.62 feet to the northeast corner of said Northwest Quarter (NW-1/4); thence run S 89° 25' 51" E along the north line of the Northeast Quarter (NE-1/4) of said Section 17 for 642.07 feet to the Point of Beginning.

Parcel contains 304 acres, more or less.

Frances L. Summerall (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

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February 8, 2006

PARCEL IN
GOVERNMENT LOT 3, SECTION 13
AND
GOVERNMENT LOT 2, SECTION 24
TOWNSHIP 47 SOUTH, RANGE 24 EAST
BIG HICKORY ISLAND, LEE COUNTY, FLORIDA

BEACH PARCEL DRI 2005-00001

A tract or parcel of land lying in Government Lot 3, Section 13 and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida which tract or parcel is described as follows:

From the center of a turnaround on State Road No. 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N 24° 28' 41" W along the northern prolongation of said centerline of State Road No. 865 for 266.00 feet; thence run S 62° 26' 49" W for 98.40 feet; thence run N 27° 33' 11" W for 1863.42 feet; thence run N 20° 00' 41" W for 1403.30 feet; thence run N 65° 00' 00" E for 313.91 feet to the Point of Beginning.

From said Point of Beginning run N 18° 55' 11" W for 97.51 feet, N 22° 26' 23" W for 100.53 feet, N 23° 09' 50" W for 100.14 feet, N 14° 51' 19" W for 73.01 feet, N 27° 40' 10" W for 88.01 feet, N 29° 33' 57" W for 46.01 feet, N 22° 14' 53" W for 47.27 feet, N 20° 39' 23" W for 46.98 feet, N 11° 15' 38" W for 29.80 feet, N 26° 10' 46" W for 46.87 feet, N 09° 09' 45" W for 48.26 feet, N 17° 35' 56" W for 46.04 feet, N 12° 49' 07" W for 50.04 feet, N 29° 20' 48" W for 69.12 feet, N 20° 48' 58" W for 63.82 feet; thence run N 79° 23' 51" W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico; thence run northerly and northeasterly along said waters for 1140 feet more or less to an intersection with the south line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida; thence run along said south line, along the arc of a curve to the right of radius 12000.00 feet for 783 feet to an intersection with the Waters of New Pass; thence run southerly, easterly, southwesterly and southerly along said waters for 4080 feet more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet more or less to the Point of Beginning.

AND

From said Point of Beginning run S 13° 03' 59" E for 94.16 feet; thence run S 19° 13' 48" E for 50.64 feet; thence run S 04° 34' 15" E for 54.63 feet; thence run S 24° 53' 12" E for 50.09 feet; thence run S 27° 10' 29" E for 50.01 feet; thence run S 31° 01' 44" E for 42.51 feet to an intersection with the south line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records; thence run N 65° 00' 00" E along said south line for 134 feet, more or less to the waters of Estero Bay; thence northerly along said waters for 358 feet, more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet, more or less to the Point of Beginning.

Containing 36.8 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

Frances L. Summerall (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

20023590 – 02-08-06 – Beach Parcel

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February 8, 2006

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SPRING CREEK WEST
SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

DRI 2005-00001

A tract or parcel of land lying in Section 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, being described as follows:

Beginning at the northwest corner of said Section 21; thence run N 88° 38' 34" E along the north line of the Northwest Quarter (NW-1/4) of said Section 21 for 2627.98 feet to the northeast corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 89° 16' 54" E along the north line of the Northeast Quarter (NE-1/4) of said Section 21 for 1289.43 feet to an intersection with the westerly right-of-way line of Tamiami Trail (US 41 – SR No. 45); thence run the following three (3) courses and distances along the westerly right-of-way line of Tamiami Trail: S 00° 06' 50" E for 261.81 feet; S 02° 58' 35" E for 100.12 feet; S 00° 06' 50" E for 3690 feet more or less to the northeasterly waters of Spring Creek; thence run westerly along said northerly waters for 2765 feet more or less to an intersection with the west line of the east 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run N 00° 51' 35" W along said west line for 801 feet, more or less, to an intersection with the south line of the Northwest Quarter (NW-1/4) of said Section 21; thence run S 88° 52' 49" W along said south line for 2040.41 feet to the southwest corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 00° 35' 25" W along the west line of said Northwest Quarter (NW-1/4) for 2659.47 feet to the Point of Beginning.

Parcel contains 282 acres, more or less.

Frances L. Summerall (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

20023590 – 02-08-06 – Pelican Landing DRI – Spring Creek West

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JOHNSON
ENGINEERING

SINCE 1946

November 1, 2001

PELICAN LANDING DRI – CITY OF BONITA SPRINGS
SPRING CREEK WEST
SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Section 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, being described as follows:

Beginning at the northwest corner of said Section 21; thence run N 88° 38' 34" E along the north line of the Northwest Quarter (NW-1/4) of said Section 21 for 2627.98 feet to the northeast corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 89° 16' 54" E along the north line of the Northeast Quarter (NE-1/4) of said Section 21 for 1289.43 feet to an intersection with the westerly right-of-way line of Tamiami Trail (US 41 – SR No. 45); thence run the following three (3) courses and distances along the westerly right-of-way line of Tamiami Trail: South 00° 06' 50" E for 261.81 feet; S 02° 58' 35" E for 100.12 feet; S 00° 06' 50" E for 3690 feet more or less to the northeasterly waters of Spring Creek; thence run westerly along said northerly waters for 2765 feet more or less to an intersection with the west line of the east 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run N 00° 51' 35" W along said west line for 801 more or less to an intersection with the south line of the Northwest Quarter (NW-1/4) of said Section 21; thence run S 88° 52' 49" W along said south line for 2040.41 feet to the southwest corner of the Northwest Quarter (NW-1/4) of said Section 21; thence run N 00° 35' 25" W along the west line of said Northwest Quarter (NW-1/4) for 2659.47 feet to the Point of Beginning.

Parcel contains 282 acres, more or less.

Frances L. Yerdon (for the Firm LB-642)
Professional Surveyor and Mapper
Florida Certificate No. 5652

EXHIBIT C

20002476/Description 110101

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SKETCH TO ACCOMPANY DESCRIPTIONS
PREPARED FOR

WCI COMMUNITIES LIMITED PARTNERSHIP

LOCATED IN
SECTIONS 5, 6, 7, 8, 9, 16, 17, 18, 20 & 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
AND
SECTIONS 13 AND 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA

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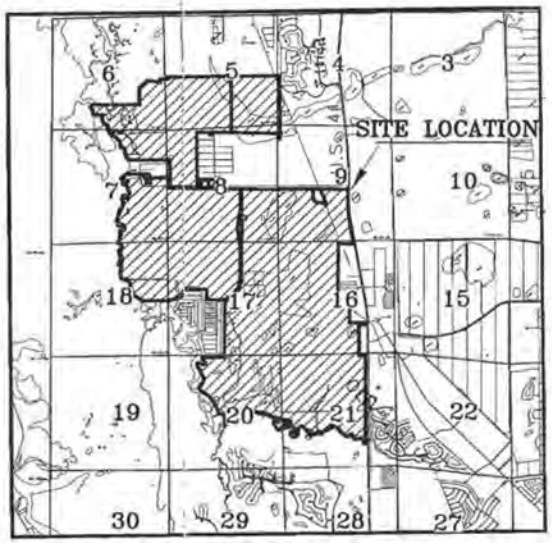
DRI 2005-00001



LOCATION MAP
NOT TO SCALE

INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	DESCRIPTION - CITY
3	DESCRIPTION - COUNTY
4	PARCEL 1-A & SPRING CREEK WEST - CITY
5	PARCEL 1-B - CITY
6	BEACH PARCEL - CITY
7	PARCELS 2A - 2D - COUNTY

THIS IS NOT A SURVEY

FRANCES L. SUMMERALL (FOR THE FIRM LS-642)
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 5502

DATE SIGNED: 05-01-06
NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER AND NOT VALID WITHOUT LEGAL DESCRIPTION.

S:\023590\PEL-LANDING-REV-APRIL 2006-.dwg (SHEET1-APRIL-2006 () Fri May 01, 2006 - 6:41am

PELICAN LANDING

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

SKETCH TO ACCOMPANY DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023590	3-47-25	AS SHOWN	1 OF 7

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DESCRIPTION
PELICAN LANDING DRI – CITY OF BONITA SPRINGS

SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, CITY OF BONITA SPRINGS, LEE COUNTY, FLORIDA, WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

PARCEL 1–A

BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER (NE=1/4) OF SECTION 16, THENCE RUN S 00° 02' 54" W ALONG SAID WEST LINE OF THE NORTHEAST QUARTER (NE=1/4) FOR 2643.98 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION; THENCE RUN N 89° 10' 38" E ALONG THE SOUTH LINE OF SAID FRACTION FOR 538.06 FEET; THENCE RUN S 00° 06' 43" E FOR 1085.91 FEET; THENCE RUN N 89° 06' 43" E FOR 744.41 FEET TO AN INTERSECTION WITH THE WEST LINE OF TAMIAMI TRAIL (US 41 S.R. NO 45); THENCE RUN SOUTHERLY ALONG SAID WEST LINE, ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT OF RADIUS 5819.58 FEET (CHORD BEARING S 00° 22' 05" E) (CHORD 50.21 FEET) (DELTA 00° 30' 43") FOR 50.21 FEET TO A POINT OF TANGENCY; THENCE RUN S 00° 08' 43" E ALONG SAID WEST LINE FOR 49.81 FEET; THENCE RUN S 89° 06' 43" W FOR 300.00 FEET; THENCE RUN S 00° 06' 43" E FOR 1445.84 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE=1/4) OF SAID SECTION 16; THENCE RUN S 89° 16' 54" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 989.41 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW=1/4) OF SAID SECTION 16; THENCE RUN S 88° 38' 34" W ALONG SAID SOUTH LINE OF SAID SOUTHWEST QUARTER (SW=1/4) FOR 2627.98 FEET TO THE NORTHEAST CORNER OF SAID SECTION 20; THENCE RUN S 00° 35' 25" E ALONG THE EAST LINE OF SAID SECTION FOR 2659.47 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION; THENCE RUN N 88° 52' 49" E ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER (SW=1/4) OF SAID SECTION 21 FOR 2,040.41 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE EAST 600.00 FEET OF THE EAST HALF (E=1/2) OF THE SOUTHWEST QUARTER (SW=1/4) OF SAID SECTION 21; THENCE RUN S 00° 51' 35" E ALONG SAID WEST LINE FOR 801 FEET, MORE OR LESS TO THE WATER OF SPRING CREEK; THENCE RUN WESTERLY ALONG SPRING CREEK FOR 3630 FEET MORE OR LESS TO AN INTERSECTION OF THE EAST LINE OF SAID SECTION 20; THENCE RUN S 00° 38' 52" E ALONG SAID EAST LINE OF SECTION 20 FOR 91 FEET, MORE OR LESS TO AN INTERSECTION WITH THE APPROXIMATE CENTERLINE OF SPRING CREEK AS SHOWN ON THE PLAT OF PELICAN LANDING UNIT 5 RECORDED IN PLAT BOOK 59 AT PAGE 11 OF SAID PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN ALONG SAID CENTERLINE THE FOLLOWING COURSES: S 78° 50' 00" W FOR 181.31 FEET, N 34° 24' 12" W FOR 230.22 FEET, N 30° 59' 12" W FOR 174.93 FEET, N 24° 25' 16" E FOR 120.83 FEET, S 65° 47' 43" E FOR 219.32 FEET, N 18° 24' 43" E FOR 158.11 FEET, N 75° 11' 43" W FOR 351.71 FEET, N 65° 09' 33" W FOR 451.88 FEET, N 84° 18' 44" W FOR 391.75 FEET, N 66° 54' 31" W FOR 445.79 FEET, S 63° 24' 43" W FOR 134.16 FEET, S 03° 23' 22" E FOR 170.29 FEET, S 50° 30' 17" W FOR 220.23 FEET, N 84° 48' 43" W FOR 331.36 FEET, S 62° 13' 07" W FOR 214.71 FEET, S 22° 08' 36" W FOR 291.55 FEET, S 72° 15' 11" W FOR 131.22 FEET TO AN INTERSECTION WITH THE EAST LINE OF THE SOUTHWEST QUARTER (SW=1/4) OF SAID SECTION 20; THENCE RUN N 00° 50' 19" W ALONG SAID EAST LINE FOR 520.00 FEET TO THE NORTHEAST CORNER OF SAID FRACTION; THENCE RUN S 89° 58' 37" W ALONG THE NORTH LINE OF SAID FRACTION FOR 290.00 FEET TO AN INTERSECTION WITH THE APPROXIMATE CENTERLINE OF THE MOST EASTERLY BRANCH OF SAID SPRING CREEK AS SHOWN ON SAID PLAT OF PELICAN LANDING UNIT 5; THENCE RUN ALONG SAID CENTERLINE THE FOLLOWING COURSES: N 09° 13' 28" W FOR 137.34 FEET, N 29° 08' 22" W FOR 590.55 FEET, N 38° 31' 58" W FOR 278.03 FEET, N 65° 16' 43" W FOR 254.95 FEET, N 37° 18' 28" W FOR 286.01 FEET, N 32° 51' 05" E FOR 252.39 FEET, N 20° 11' 00" E FOR 236.69 FEET, N 27° 23' 47" W FOR 369.25 FEET, N 89° 15' 43" E FOR 50 FEET MORE OR LESS TO THE EASTERLY SHORE OF SAID SPRING CREEK; THENCE RUN NORTHERLY ALONG SAID EASTERLY SHORE FOR 1220 FEET MORE OR LESS TO AN INTERSECTION WITH THE NORTH LINE OF

PARCEL 1–A CONTINUED

SAID SECTION 20; THENCE RUN N 89° 15' 13" E ALONG SAID NORTH LINE OF SAID SECTION FOR 970 FEET, MORE OR LESS TO A CONCRETE MONUMENT MARKING THE NORTHWEST CORNER OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 20; THENCE RUN N 00° 31' 30" E ALONG THE WEST LINE OF THE SOUTHEAST QUARTER (SE=1/4) OF SAID SECTION 17 FOR 2674.38 FEET TO THE NORTHWEST CORNER OF SAID SOUTHEAST QUARTER (SE=1/4); THENCE RUN N 00° 31' 29" E ALONG THE WEST LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 17 FOR 3.40 FEET TO AN INTERSECTION WITH THE CURVED SOUTHERLY LINE OF SPRING CREEK ROAD; THENCE RUN NORTHEASTERLY AND NORTHERLY ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 1130.00 FEET (CHORD BEARING N 35° 09' 06" E) (CHORD 1298.89 FEET) (DELTA 70° 02' 16") FOR 1381.30 FEET; THENCE RUN N 89° 52' 02" W FOR 5.00 FEET; THENCE RUN N 00° 07' 58" E ALONG THE EASTERLY LINE OF SPRING CREEK ROAD (50 FEET WIDE) FOR 1611.64 FEET TO AN INTERSECTION WITH THE NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 17; THENCE RUN S 89° 25' 51" E ALONG SAID NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 17 FOR 1838.15 FEET TO THE NORTHEAST CORNER OF SAID SECTION 17; THENCE RUN N 89° 27' 22" E ALONG THE NORTH LINE OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 16 FOR 2677.24 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 909 ACRES, MORE OR LESS.

AND

PARCEL 1–B

BEGINNING AT AN INTERSECTION OF THE WEST LINE OF SPRING CREEK ROAD WITH THE NORTH LINE OF SAID SECTION 17; THENCE RUN THE FOLLOWING COURSES AND DISTANCES ALONG THE SOUTHERLY RIGHT-OF-WAY OF SAID SPRING CREEK ROAD: SOUTHEASTERLY ALONG AN ARC OF A NON-TANGENT CURVE TO THE RIGHT OF RADIUS 1725.00 FEET (CHORD BEARING S 03° 18' 23" E) (CHORD 206.27) (DELTA 06° 51' 19") FOR 206.40 FEET TO A POINT ON A NON-TANGENT LINE; THENCE RUN S 89° 52' 02" E FOR 16.47 FEET; THENCE RUN S 00° 07' 58" W FOR 1406.64 FEET; THENCE RUN N 89° 52' 02" W FOR 5.00 FEET TO A POINT OF TANGENCY; THENCE SOUTHWESTERLY ALONG AN ARC OF SAID CURVE TO THE RIGHT OF RADIUS 1070.00 FEET (CHORD BEARING S 37° 51' 54" W) (CHORD 1309.62 FEET) (DELTA 75° 27' 53") FOR 1409.31 FEET TO AN INTERSECTION WITH THE NORTH RIGHT-OF-WAY OF A 30 FOOT WIDE ROAD AS RECORDED IN DEED BOOK 305 AT PAGE 276 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN N 89° 59' 08" W ALONG SAID RIGHT-OF-WAY FOR 718.27 FEET TO AN INTERSECTION WITH THE EASTERLY LINE OF LANDS KNOWN LOCALLY AS SPRING CREEK ESTATES, AN UNRECORDED PLAT; THENCE ALONG SAID LANDS THE FOLLOWING COURSES AND DISTANCES: N 00° 00' 52" E FOR 510.00 FEET; N 89° 59' 08" W FOR 885.06 FEET TO A POINT OF CURVATURE; ALONG AN ARC OF A CURVE FOR 231.02 FEET, HAVING A RADIUS OF 390.00 FEET, CENTRAL ANGLE OF 33° 56' 23", CHORD OF 227.66 FEET AND CHORD BEARING OF S 73° 02' 41" W, TO A POINT ON THE CURVE; S 00° 00' 52" W FOR 167.10 FEET; AND S 31° 38' 00" W FOR 130.70 FEET TO THE NORTHEAST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 1194, PAGE 1085; THENCE WESTERLY ALONG SAID LANDS AND WATERS OF A CANAL 106 FEET, MORE OR LESS TO THE NORTHEAST CORNER OF SAID LANDS DESCRIBED IN OFFICIAL RECORD BOOK 1057, PAGE 38; THENCE SOUTHWESTERLY AND WESTERLY ALONG SAID LANDS AND SAID CANAL 400 FEET MORE OR LESS TO THE NORTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 1453, PAGE 495; THENCE SOUTHWESTERLY ALONG THE MEAN HIGH WATER LINE OF A CANAL, 45 FEET MORE OR LESS TO THE SOUTH LINE OF THE NORTH HALF (N=1/2) OF SAID SECTION 17; THENCE N 89° 59' 08" W FOR 138 FEET MORE OR LESS TO THE EAST QUARTER CORNER OF SAID SECTION 18; THENCE RUN S 89° 58' 17" W ALONG THE SOUTH LINE OF SAID LOT 2, SAID LINE BEING THE BASIS OF BEARINGS FOR 1213.22 FEET, SAID LINE BEING THE SOUTHERLY PROPERTY LINE, TO A BULKHEAD LINE ESTABLISHED BY PAUL T. O'HARGAN, FLORIDA PROFESSIONAL LAND SURVEYOR #1936 AND

PARCEL 1–B CONTINUED

DULY APPROVED BY THE COUNTY OF LEE ON SEPTEMBER 27, 1967 AND THE STATE OF FLORIDA ON NOVEMBER 21, 1967; THENCE THE FOLLOWING COURSES AND DISTANCES ALONG SAID BULKHEAD LINE: N 56° 00' 38" W FOR 265.00 FEET TO A POINT OF CURVATURE; ALONG AN ARC OF A CURVE FOR 338.95 FEET, HAVING A RADIUS OF 520.00 FEET, CENTRAL ANGLE OF 37° 20' 50", CHORD OF 332.98 FEET AND CHORD BEARING OF N 37° 20' 13" W, TO A POINT OF TANGENCY; N 18° 39' 48" W FOR 48.24 FEET TO A POINT OF CURVATURE; ALONG AN ARC OF A CURVE FOR 104.44 FEET, HAVING A RADIUS OF 100.00 FEET, CENTRAL ANGLE OF 59° 50' 20", CHORD OF 99.76 FEET AND A CHORD BEARING OF N 48° 34' 58" W, TO A POINT OF TANGENCY; N 78° 30' 08" W FOR 144.73 TO A POINT OF CURVATURE; ALONG AN ARC OF A CURVE FOR 56.48 FEET, HAVING A RADIUS OF 100.00 FEET, CENTRAL ANGLE OF 32° 21' 45", CHORD OF 55.74 FEET AND A CHORD BEARING OF N 62° 19' 15" W, TO A POINT OF TANGENCY AND AN INTERSECTION WITH THE WATERS OF ESTERO BAY; THENCE RUN NORTHERLY ALONG THE WATERS OF ESTERO BAY FOR 2270 FEET MORE OR LESS TO AN INTERSECTION WITH THE NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 18; THENCE RUN S 89° 25' 49" E ALONG SAID NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 18, MORE OR LESS TO THE NORTHEAST CORNER OF SECTION 18; THENCE RUN S 89° 25' 49" E ALONG THE NORTH LINE OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 17 FOR 2558.62 FEET TO THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER (NW=1/4); THENCE RUN S 89° 25' 51" E ALONG THE NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 17 FOR 842.07 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 304 ACRES, MORE OR LESS.

AND

SPRING CREEK WEST

SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN SECTION 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST, CITY OF BONITA SPRINGS, LEE COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 21; THENCE RUN N 88° 38' 34" E ALONG THE NORTH LINE OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 21 FOR 2627.98 FEET TO THE NORTHEAST CORNER OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 21; THENCE RUN N 89° 16' 54" E ALONG THE NORTH LINE OF THE NORTHEAST QUARTER (NE=1/4) OF SAID SECTION 21 FOR 1289.45 FEET TO AN INTERSECTION WITH THE WESTERLY RIGHT-OF-WAY LINE OF TAMIAMI TRAIL (US 41 – SR NO 45); THENCE RUN THE FOLLOWING THREE (3) COURSES AND DISTANCES ALONG THE WESTERLY RIGHT-OF-WAY LINE OF TAMIAMI TRAIL: SOUTH 00° 06' 50" E FOR 281.81 FEET; S 02° 58' 35" E FOR 100.12 FEET; S 00° 06' 50" E FOR 3690 FEET MORE OR LESS TO THE NORTHEASTERLY WATERS OF SPRING CREEK; THENCE RUN WESTERLY ALONG SAID NORTHERLY WATERS FOR 2765 FEET MORE OR LESS TO AN INTERSECTION WITH THE WEST LINE OF THE EAST 600.00 FEET OF THE EAST HALF (E=1/2) OF THE SOUTHWEST QUARTER (SW=1/4) OF SAID SECTION 21; THENCE RUN N 00° 51' 35" W ALONG SAID WEST LINE FOR 801 MORE OR LESS TO AN INTERSECTION WITH THE SOUTH LINE OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 21; THENCE RUN S 88° 52' 49" W ALONG SAID SOUTH LINE FOR 2040.41 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER (NW=1/4) OF SAID SECTION 21; THENCE RUN N 00° 35' 25" W ALONG THE WEST LINE OF SAID NORTHWEST QUARTER (NW=1/4) FOR 2659.47 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 282 ACRES, MORE OR LESS.

AND

BEACH PARCEL

SECTIONS 13 & 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST
CITY OF BONITA SPRINGS
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN GOVERNMENT LOT 3, SECTION 13 AND GOVERNMENT LOT 2, SECTION 24, TOWNSHIP 47 SOUTH, RANGE 24 EAST, BIG HICKORY ISLAND, LEE COUNTY, FLORIDA WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

FROM THE CENTER OF A TURNAROUND ON STATE ROAD NO. 865 (BONITA BEACH ROAD) BEING S.R.D. STATION 19184.75 AND N 24° 28' 41" W ALONG THE NORTHERN PROLONGATION OF SAID CENTERLINE OF STATE ROAD NO. 865 FOR 266.00 FEET; THENCE RUN S 62° 26' 49" W FOR 98.40 FEET; THENCE RUN N 27° 33' 11" W FOR 1863.42 FEET; THENCE RUN N 20° 00' 41" W FOR 1403.30 FEET; THENCE RUN N 65° 00' 00" E FOR 313.81 FEET TO THE POINT OF BEGINNING.
FROM SAID POINT OF BEGINNING RUN
N 18° 55' 11" W FOR 97.31 FEET,
N 22° 20' 23" W FOR 100.53 FEET,
N 23° 09' 50" W FOR 100.14 FEET,
N 14° 51' 19" W FOR 73.01 FEET,
N 27° 40' 10" W FOR 88.01 FEET,
N 29° 33' 57" W FOR 46.01 FEET,
N 22° 14' 53" W FOR 47.27 FEET,
N 20° 39' 23" W FOR 46.98 FEET,
N 11° 15' 38" W FOR 23.60 FEET;
N 26° 10' 49" W FOR 49.57 FEET,
N 09° 09' 45" W FOR 48.28 FEET,
N 17° 35' 56" W FOR 46.04 FEET,
N 13° 49' 07" W FOR 50.04 FEET,
N 29° 20' 48" W FOR 69.12 FEET,
N 20° 48' 58" W FOR 63.82 FEET, THENCE RUN N 79° 23' 51" W FOR 247 FEET MORE OR LESS TO AN INTERSECTION WITH THE APPROXIMATE MEAN HIGH WATER LINE OF THE GULF OF MEXICO; THENCE RUN NORTHERLY AND NORTHEASTERLY ALONG SAID WATERS FOR 1140 FEET MORE OR LESS TO AN INTERSECTION WITH THE SOUTH LINE OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 198 AT PAGE 188 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN ALONG SAID SOUTH LINE, ALONG THE ARC OF A CURVE TO THE RIGHT OF RADIUS 12000.00 FEET FOR 785 FEET TO AN INTERSECTION WITH THE WATERS OF NEW PASS; THENCE RUN SOUTHERLY, EASTERLY, SOUTHWESTERLY AND SOUTHERLY ALONG SAID WATERS FOR 4080 FEET MORE OR LESS TO AN INTERSECTION WITH A LINE BEARING N 65° 00' 00" E AND PASSING THROUGH THE POINT OF BEGINNING; THENCE RUN
S 65° 00' 00" W FOR 181 FEET MORE OR LESS TO THE POINT OF BEGINNING.
AND
FROM SAID POINT OF BEGINNING RUN
S 13° 03' 50" E FOR 94.18 FEET; THENCE RUN
S 19° 13' 48" E FOR 50.64 FEET; THENCE RUN
S 04° 34' 15" E FOR 34.63 FEET; THENCE RUN
S 24° 53' 12" E FOR 50.09 FEET; THENCE RUN
S 27° 10' 29" E FOR 50.01 FEET; THENCE RUN
S 31° 01' 44" E FOR 42.51 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 2246 AT PAGE 4413 OF THE LEE COUNTY RECORDS; THENCE RUN N 65° 00' 00" E ALONG SAID SOUTH LINE FOR 134 FEET, MORE OR LESS TO THE WATERS OF ESTERO BAY; THENCE NORTHERLY ALONG SAID WATERS FOR 358 FEET, MORE OR LESS TO AN INTERSECTION WITH A LINE BEARING N 65° 00' 00" E AND PASSING THROUGH THE POINT OF BEGINNING; THENCE RUN
S 65° 00' 00" W FOR 181 FEET, MORE OR LESS TO THE POINT OF BEGINNING.
CONTAINING 36.6 ACRES, MORE OR LESS.
BEARINGS HEREINABOVE MENTIONED ARE PLANE COORDINATE FOR THE FLORIDA WEST ZONE.

S:\023590\PEL-LANDING-REV-APRIL 2006\ Dwg (SHEET2-APRIL-2006) file May 01, 2006 - 8:50am

PELICAN LANDING
CITY DESCRIPTION

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

DESCRIPTION
SEE SHEETS 4 THROUGH 6 FOR SKETCH

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023590	7-47-25	N/A	2 OF 7

DESCRIPTION

PELICAN LANDING DRI -UNINCORPORATED LEE COUNTY

SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND LYING IN SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

PARCEL 2-A

BEGINNING AT AN INTERSECTION OF THE WEST LINE OF TAMIAMI TRAIL (STATE ROAD NO. 45) WITH THE SOUTH LINE OF COCONUT ROAD AS DESCRIBED IN OFFICIAL RECORD BOOK 1738 AT PAGE 2538 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN S 00° 10' 56" W ALONG SAID WEST LINE FOR 821.81 FEET TO A POINT OF CURVATURE; THENCE RUN SOUTHERLY AND SOUTHEASTERLY ALONG SAID WEST LINE, ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 5797.58 FEET (CHORD BEARING S 04° 57' 34" E) (CHORD 1039.14 FEET) (DELTA 10° 17' 00") FOR 1040.54 FEET TO A POINT OF TANGENCY; THENCE RUN S 10° 06' 04" E ALONG SAID WESTERLY LINE FOR 938.08 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 9; THENCE RUN S 89° 23' 00" W ALONG SAID SOUTH LINE FOR 708.94 FEET TO THE SOUTHWEST CORNER OF SAID SOUTHEAST QUARTER (SE-1/4) OF SECTION 9; THENCE RUN S 89° 27' 22" W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 9 FOR 2677.24 FEET TO THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 9; THENCE RUN N 89° 25' 51" W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 8 FOR 1,638.15 FEET TO AN INTERSECTION WITH THE EASTERLY LINE OF SPRING CREEK ROAD AS DESCRIBED IN DEED BOOK 305 AT PAGE 276, LEE COUNTY RECORDS; THENCE CONTINUE N 00° 07' 17" E ALONG SAID EAST LINE FOR 343.54 FEET; THENCE RUN S 89° 38' 58" E FOR 10.00 FEET; THENCE RUN N 00° 07' 17" E ALONG SAID EAST LINE FOR 849.27 FEET TO THE SOUTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 2039 AT PAGE 3364 SAID PUBLIC RECORDS; THENCE RUN S 89° 21' 02" E ALONG THE SOUTH LINE OF SAID LANDS FOR 189.98 FEET; THENCE RUN N 00° 07' 17" E ALONG THE EAST LINE OF SAID LANDS FOR 125.01 FEET; THENCE RUN N 89° 21' 02" W ALONG THE NORTH LINE OF SAID LANDS FOR 189.98 FEET TO AN INTERSECTION WITH THE EASTERLY LINE OF SAID SPRING CREEK ROAD; THENCE RUN N 00° 07' 17" E ALONG SAID EAST LINE FOR 1292.78 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF COCONUT ROAD (50 FEET WIDE); THENCE RUN S 89° 16' 14" E ALONG SAID SOUTH LINE FOR 1802.38 FEET TO AN INTERSECTION WITH THE WEST LINE OF SAID SECTION 9; THENCE RUN N 00° 39' 58" W ALONG SAID WEST LINE FOR 25.00 FEET TO A CONCRETE MONUMENT MARKING THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER (SW-1/4) OF SAID SECTION; THENCE CONTINUE ALONG SAID WEST LINE N 00° 39' 58" W FOR 5.00 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF SAID COCONUT ROAD AS DESCRIBED IN OFFICIAL RECORD BOOK 1738 AT PAGE 2538, SAID PUBLIC RECORDS; THENCE RUN S 89° 35' 50" E ALONG SAID SOUTH LINE FOR 1549.14 FEET; THENCE RUN SOUTHWESTERLY ALONG A NON-TANGENT CURVE TO THE LEFT OF RADIUS 30.00 FEET (CHORD BEARING S 45° 24' 10" W) (CHORD 42.43 FEET) (DELTA 90° 00' 00") FOR 47.12 FEET TO A POINT OF TANGENCY; THENCE RUN S 00° 24' 10" W FOR 336.31 FEET TO A POINT OF CURVATURE; THENCE RUN ALONG THE ARC OF A CURVE TO THE LEFT OF RADIUS 270.00 FEET (CHORD BEARING S 44° 35' 50" E) (CHORD 381.84 FEET) (DELTA 90° 00' 00") FOR 424.12 FEET TO A POINT OF TANGENCY; THENCE RUN S 89° 35' 50" E FOR 99.41 FEET TO A POINT OF CURVATURE; THENCE RUN ALONG THE ARC OF A CURVE TO THE RIGHT OF RADIUS 530.00 FEET (CHORD BEARING S 75° 44' 50" E) (CHORD 253.74 FEET) (DELTA 27° 42' 00") FOR 256.23 FEET; THENCE RUN N 20° 53' 52" W FOR 748.16 FEET TO AN INTERSECTION WITH THE AFOREMENTIONED SOUTH LINE OF COCONUT ROAD; THENCE RUN ALONG SAID SOUTH LINE S 89° 35' 50" E FOR 1,301.22 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 294.56 ACRES, MORE OR LESS.

AND

PARCEL 2-B

FROM A RAILROAD SPIKE MARKING THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER (SW-1/4) OF SAID SECTION 8 RUN S 00° 23' 24" E ALONG THE WEST LINE OF SAID FRACTION FOR 25.00 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF COCONUT ROAD AS RECORDED IN COUNTY COMMISSIONERS MINUTES BOOK 6 AT PAGE 288 OF THE PUBLIC RECORDS OF LEE COUNTY OF LEE COUNTY, FLORIDA, AND THE POINT OF BEGINNING.
FROM SAID POINT OF BEGINNING RUN S 89° 16' 14" E ALONG SAID SOUTH LINE FOR 3253.00 FEET TO AN INTERSECTION WITH THE WEST LINE OF SPRING CREEK ROAD; THENCE RUN THE FOLLOWING COURSES AND DISTANCES ALONG SAID WEST LINE OF SAID SPRING CREEK ROAD; S 00° 17' 17" W FOR 817.15 FEET; N 89° 52' 43" W FOR 14.27 FEET TO A POINT OF CURVATURE; THENCE RUN SOUTHWESTERLY ALONG SAID ARC OF A CURVE TO THE RIGHT OF RADIUS 1725.00 FEET (CHORD BEARING S 05° 32' 51" W) (CHORD 346.22 FEET) (DELTA 11° 31' 09") FOR 346.81 FEET TO A POINT OF TANGENCY; THENCE RUN S 11° 38' 26" W FOR 178.50 FEET TO A POINT OF CURVATURE; THENCE RUN SOUTHWESTERLY ALONG SAID ARC OF A CURVE TO THE LEFT OF RADIUS 2400.00 FEET (CHORD BEARING S 00° 28' 48" W) (CHORD 929.06 FEET) (DELTA 22° 19' 14") FOR 934.96 FEET TO A POINT OF TANGENCY; THENCE RUN S 10° 40' 48" E FOR 231.66 FEET TO A POINT OF CURVATURE; THENCE RUN SOUTHEASTERLY ALONG SAID ARC OF CURVE TO THE RIGHT OF RADIUS 1725.00 FEET (CHORD BEARING S 08° 42' 25" E) (CHORD 116.78) (DELTA 03° 56' 45") FOR 116.80 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF SAID SECTION 8; THENCE RUN N 89° 25' 51" W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 8 FOR 642.07 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 8; THENCE RUN N 89° 25' 49" W ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 8 FOR 2556.62 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 8; THENCE RUN N 89° 25' 49" W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 7 FOR 2330 FEET MORE OR LESS TO THE WATERS OF ESTERO BAY; THENCE RUN NORTHERLY ALONG THE WATERS OF ESTERO BAY FOR 6,485 FEET MORE OR LESS TO AN INTERSECTION WITH THE NORTH LINE OF THE SOUTH HALF (S-1/2) OF GOVERNMENT LOT 2 OF SAID SECTION 7; THENCE RUN N 89° 32' 15" E ALONG THE NORTH LINE OF SAID SOUTH HALF (S-1/2) OF GOVERNMENT LOT 2 FOR 793 FEET MORE OR LESS TO THE NORTHEAST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORD BOOK 1895 AT PAGE 3817 OF SAID PUBLIC RECORDS; THENCE RUN S 08° 50' 45" E ALONG THE EAST LINE OF SAID LANDS FOR 199.50 FEET TO THE SOUTHEAST CORNER OF SAID LANDS; THENCE RUN N 89° 35' 27" E FOR 664.22 FEET; THENCE RUN N 89° 32' 15" E FOR 239.00 FEET TO AN INTERSECTION WITH THE WEST LINE OF COCONUT ROAD; THENCE RUN S 01° 07' 45" E ALONG SAID WEST LINE FOR 488.63 FEET; THENCE RUN N 89° 40' 05" E ALONG THE SOUTH LINE OF SAID COCONUT ROAD FOR 24.89 FEET TO THE POINT OF BEGINNING. LESS AND EXCEPT OFFICIAL RECORD BOOK 1677 AT PAGE 3516 OF SAID PUBLIC RECORDS.
PARCEL CONTAINS 343 ACRES, MORE OR LESS

AND

PARCEL 2-C

A PARCEL OF LAND LYING IN AND BEING A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST OF LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF (E-1/2) OF THE NORTHWEST QUARTER (NW-1/4) OF SAID SECTION 8; THENCE RUN N 01° 00' 45" W ALONG THE WEST LINE OF SAID EAST HALF (E-1/2) OF THE NORTHWEST QUARTER (NW-1/4) FOR 40.02 FEET TO AN INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE OF COCONUT ROAD (AS MAINTAINED); THENCE RUN S 89° 16' 14" E ALONG SAID RIGHT-OF-WAY FOR 171.25 FEET TO THE POINT OF BEGINNING.
FROM SAID POINT OF BEGINNING CONTINUE S 89° 16' 14" E ALONG SAID RIGHT-OF-WAY A DISTANCE OF 513.75 FEET; THENCE RUN N 01° 00' 44" W A DISTANCE OF 357.98 FEET; THENCE RUN N 89° 16' 14" W A DISTANCE OF 513.75 FEET; THENCE RUN S 01° 00' 44" E A DISTANCE OF 357.98 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 4.34 ACRES, MORE OR LESS.

AND

PARCEL 2-D

ALL THAT PART OF FLORIDA GULF LAND COMPANY'S SUBDIVISION AS RECORDED IN PLAT BOOK 1 AT PAGE 59 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, LYING IN SECTION 5, TOWNSHIP 47 SOUTH, RANGE 25 EAST SOUTH AND WEST OF LANDS TO FLORIDA POWER AND LIGHT COMPANY AS DESCRIBED BY DEED RECORDED IN DEED BOOK 244, PAGE 138 OF SAID PUBLIC RECORDS, ALSO LOT 8, BLOCK 14 OF ELDORADO ACRES (AN UNRECORDED SUBDIVISION) AS SHOWN IN DEED BOOK 310 AT PAGE 183 OF SAID PUBLIC RECORDS; ALSO PART OF SECTIONS 5, 6, 7 AND 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 5; THENCE RUN N 88° 46' 30" W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 5 FOR 2580.80 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW-1/4) OF SAID SECTION 5; THENCE RUN N 89° 25' 13" W ALONG THE SOUTH LINE OF SAID SOUTHWEST QUARTER (SW-1/4) FOR 587.32 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID LOT 8, BLOCK 14, ELDORADO ACRES, AN UNRECORDED SUBDIVISION; THENCE RUN THE FOLLOWING THREE COURSES AND DISTANCES ALONG THE BOUNDARY OF SAID LOT 8: S 00° 50' 16" E FOR 132.70 FEET; N 89° 11' 54" W FOR 75.00; N 00° 50' 16" W FOR 132.41 FEET TO AN INTERSECTION WITH SAID SOUTH LINE OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 5; THENCE RUN N 89° 25' 13" W ALONG SAID SOUTH LINE FOR 610.82 FEET TO THE NORTHEAST CORNER OF THE WEST HALF (W-1/2) OF THE NORTHWEST

PARCEL 2-D CONTINUED

QUARTER (NW-1/4) OF SAID SECTION 8; THENCE RUN S 01° 00' 45" E ALONG THE EAST LINE OF SAID WEST HALF (W-1/2) OF THE NORTHWEST QUARTER (NW-1/4) OF SECTION 8 FOR 2612.19 FEET TO AN INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE (AS MAINTAINED) OF COCONUT ROAD BEING 40.00 FEET NORTH OF THE CENTERLINE OF COCONUT ROAD AS RECORDED IN COUNTY COMMISSIONERS MINUTES BOOK 6 AT PAGE 288 OF SAID PUBLIC RECORDS, SAID RIGHT-OF-WAY LINE BEING THE SOUTH LINE OF LANDS AS DESCRIBED BY DEED RECORDED IN OFFICIAL RECORD BOOK 3052 AT PAGE 1748 OF SAID PUBLIC RECORDS; THENCE RUN N 89° 16' 14" W ALONG SAID MAINTAINED RIGHT-OF-WAY FOR 1267.93 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE NORTHWEST QUARTER (NW-1/4) OF SAID SECTION 8; THENCE RUN N 01° 07' 45" W ALONG SAID WEST LINE FOR 1264.51 FEET TO THE SOUTHEAST CORNER OF GOVERNMENT LOT 1 OF SAID SECTION 7; THENCE RUN S 89° 33' 42" W ALONG THE SOUTH LINE OF SAID GOVERNMENT LOT 1 FOR 1813 FEET MORE OR LESS TO THE EASTERLY WATERS OF ESTERO BAY; THENCE RUN NORTHERLY ALONG THE WATERS OF ESTERO BAY FOR 3000 FEET MORE OR LESS TO AN INTERSECTION WITH THE NORTH LINE OF GOVERNMENT LOT 4 OF SAID SECTION 6; THENCE RUN N 89° 41' 23" E ALONG SAID NORTH LINE OR 1807 FEET MORE OR LESS TO AN INTERSECTION WITH THE WEST LINE OF LANDS AS DESCRIBED BY DEED RECORDED IN OFFICIAL RECORD BOOK 1782 AT PAGE 4173 OF SAID PUBLIC RECORDS; THENCE RUN THE FOLLOWING COURSES AND DISTANCES ALONG THE BOUNDARY OF SAID LANDS: N 00° 48' 29" W FOR 775.70 FEET; N 48° 11' 51" E FOR 523.67 FEET; S 81° 20' 47" E FOR 600.53 FEET; N 00° 49' 50" W FOR 162.49 FEET; N 89° 10' 55" E FOR 349.43 FEET; N 01° 31' 46" W FOR 92.78 FEET TO AN INTERSECTION WITH THE NORTH LINE OF THE SOUTHWEST QUARTER (SW-1/4) OF SAID SECTION 5; THENCE RUN N 89° 34' 40" E ALONG SAID NORTH LINE FOR 2592.29 FEET TO THE NORTHEAST CORNER OF SAID SOUTHWEST QUARTER (SW-1/4); THENCE RUN N 89° 31' 44" E ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER (SE-1/4) OF SAID SECTION 5 FOR 2401.02 FEET TO AN INTERSECTION WITH THE SOUTHWESTERLY LINE OF SAID LANDS TO FLORIDA POWER AND LIGHT COMPANY; THENCE RUN S 20° 51' 33" E ALONG SAID SOUTHWESTERLY LINE FOR 553.91 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID SOUTHEAST QUARTER (SE-1/4) OF SECTION 5; THENCE RUN S 00° 08' 26" E ALONG SAID EAST LINE FOR 2202.99 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 576 ACRES, MORE OR LESS.
BEARINGS HEREINABOVE MENTIONED ARE PLANE COORDINATE FOR THE FLORIDA WEST ZONE.

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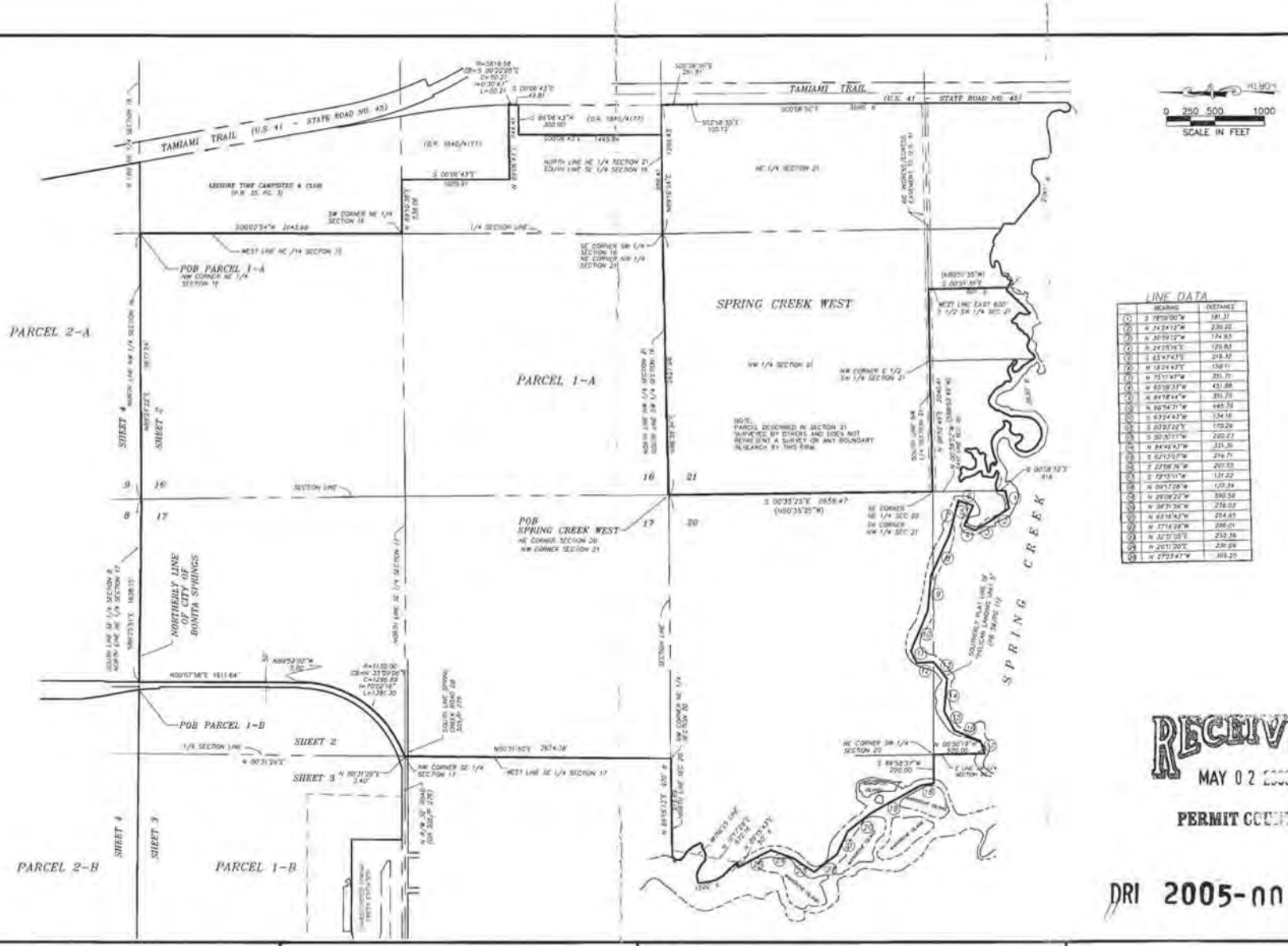
PELICAN LANDING
COUNTY DESCRIPTION

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

DESCRIPTION
SEE SHEET 7 FOR SKETCH

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023560	7-47-25	N/A	3 OF 7



LINE DATA

	BEARING	DISTANCE
(1)	S 78°59'00"W	181.31
(2)	N 24°41'12"W	236.22
(3)	N 30°59'12"W	174.93
(4)	N 24°25'16"E	120.83
(5)	S 83°47'43"E	218.52
(6)	N 18°24'43"E	156.11
(7)	N 75°11'47"W	331.71
(8)	N 83°09'23"W	431.88
(9)	N 84°16'44"W	351.75
(10)	N 80°54'31"W	445.78
(11)	S 63°24'43"W	134.16
(12)	S 03°31'22"E	170.29
(13)	S 30°30'17"W	200.23
(14)	N 84°46'43"W	231.30
(15)	S 62°33'12"W	274.71
(16)	S 22°58'36"W	201.53
(17)	S 72°51'11"W	131.22
(18)	N 84°17'28"W	177.34
(19)	N 29°08'22"W	390.59
(20)	N 38°31'36"W	276.03
(21)	N 83°16'42"W	254.85
(22)	N 37°16'28"W	286.01
(23)	N 32°31'05"E	232.56
(24)	N 20°11'00"E	236.64
(25)	N 27°23'47"W	189.25

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PERMIT COUNTER

DRI 2005-00001

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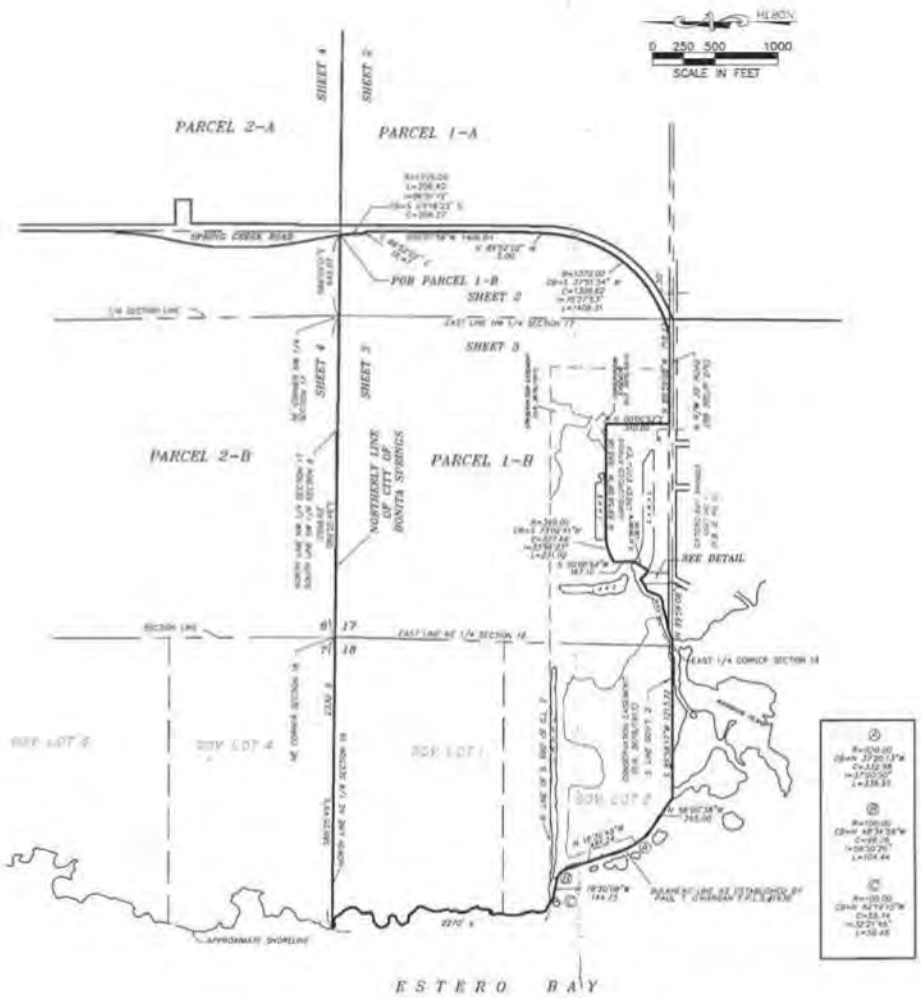
PELICAN LANDING
CITY SKETCH
PARCEL 1-A & SPRING CREEK WEST

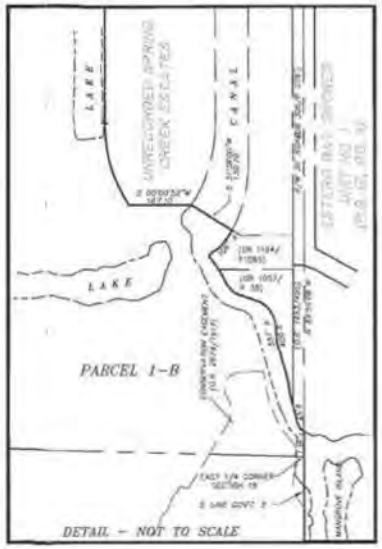
JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

SKETCH
SEE SHEET 2 FOR LEGAL DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023590	7-47-25	1" = 1000'	4 OF 7





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MAY 02 2006
PERMIT COUNTER

DRI 2005-00001

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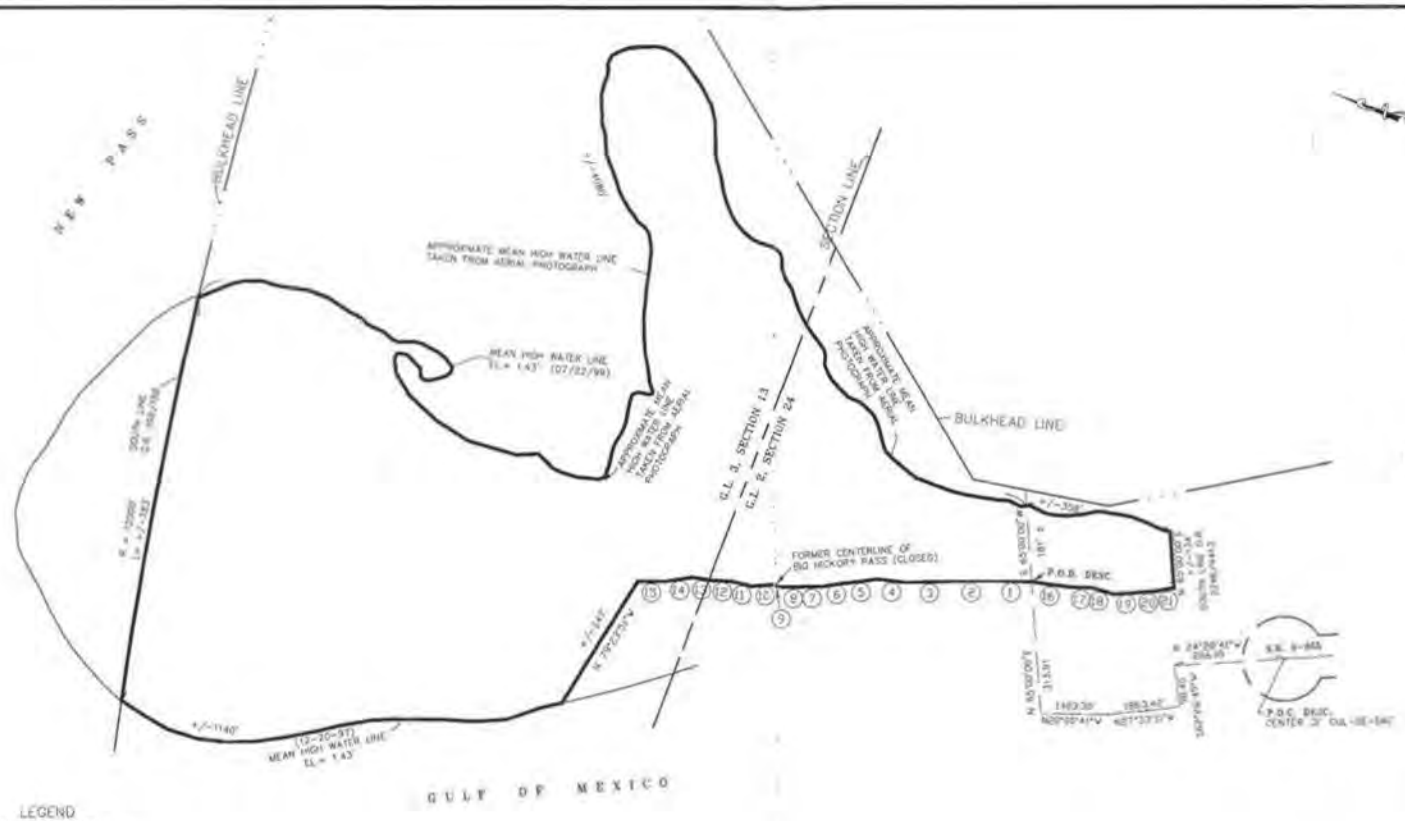
PELICAN LANDING
CITY SKETCH
PARCEL 1-B

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
L.B. #642 & L.B. #642

SKETCH
SEE SHEET 2 FOR LEGAL DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023580	7-47-25	1" = 1000'	5 OF 7



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PERMIT

DRI 2005-00001

LINE DATA

	BEARING	DISTANCE
1	N 38°55'11"W	97.51
2	N 22°26'22"W	100.53
3	N 23°09'58"W	109.14
4	N 14°58'19"W	72.91
5	N 27°40'10"W	86.01
6	N 29°33'57"W	46.01
7	N 22°14'53"W	47.27
8	N 20°39'23"W	46.98
9	N 11°15'38"W	79.80
10	N 26°18'46"W	46.87
11	N 09°09'43"W	48.26
12	N 17°35'56"W	46.04
13	N 12°43'07"W	50.04
14	N 29°20'48"W	69.12
15	N 20°48'58"W	63.62
16	S 13°03'59"E	94.16
17	S 19°13'40"E	50.64
18	S 04°34'15"E	54.63
19	S 24°53'12"E	50.09
20	S 27°10'23"E	55.01
21	S 31°01'44"E	42.51

LEGEND

BLDG.	= BUILDING
B.M.	= BENCH MARK
C.I.P.	= CAPPED IRON PIPE
C.I.R.	= CAPPED IRON ROD
C.M.	= CONCRETE MONUMENT
CONC.	= CONCRETE
(D)	= DEED
DESC.	= DESCRIPTION
EL.	= ELEVATION
FD.	= FOUND
FIN.	= FINISHED
FL.	= FLOOR
G.L.	= GOVERNMENT LOT
LB	= LICENSED BUSINESS
(M)	= MEASURED
O.R.	= OFFICIAL RECORD BOOK
P.B.	= PLAT BOOK
PG.	= PAGE
P.O.B.	= POINT OF BEGINNING
P.O.C.	= POINT OF COMMENCEMENT
PRM	= PERMANENT REFERENCE MONUMENT
S.R.	= STATE ROAD
W/	= WITH

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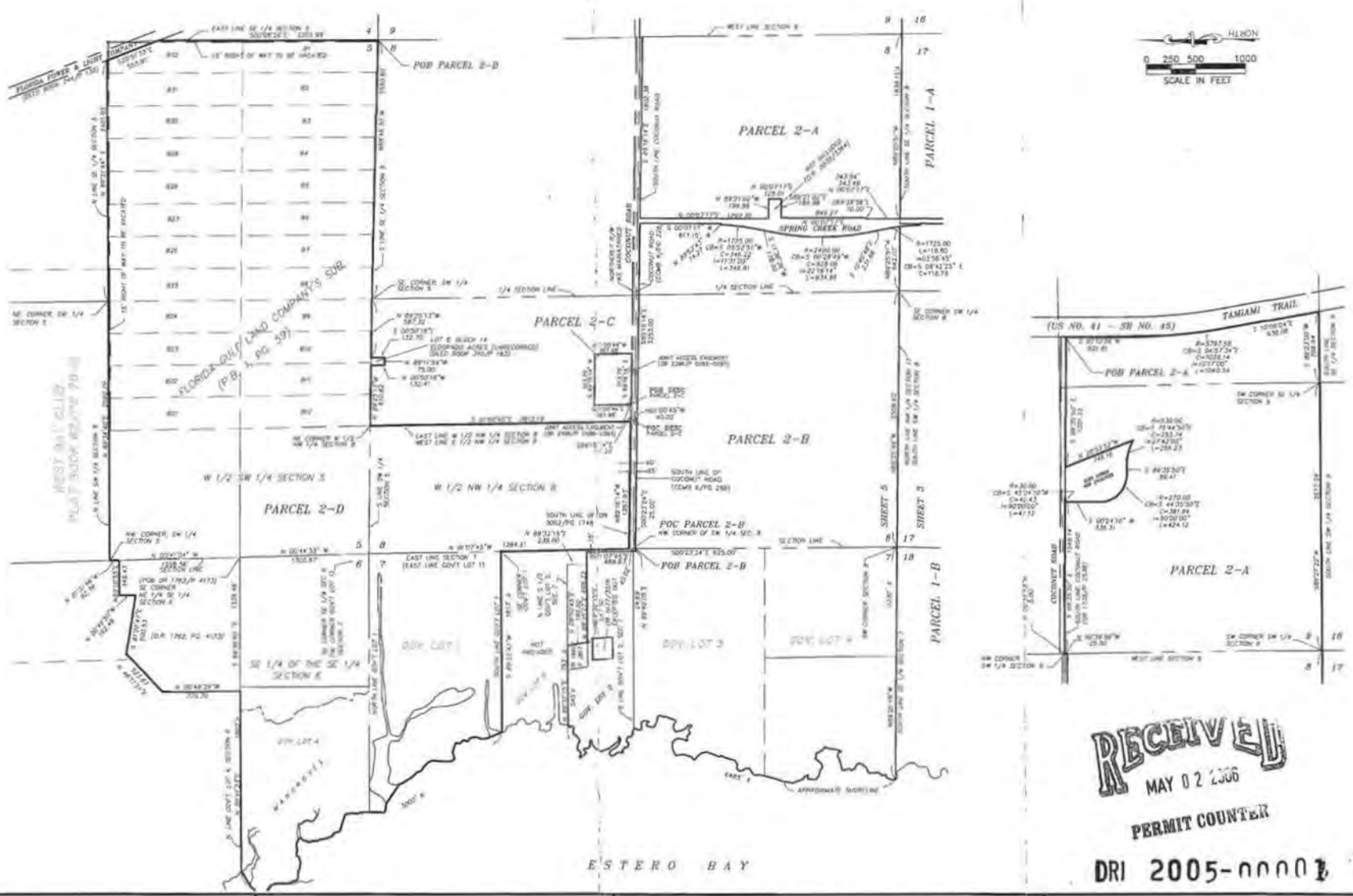
PELICAN LANDING
CITY SKETCH
BEACH PARCEL

JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

SKETCH
SEE SHEET 2 FOR LEGAL DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023560	7-47-25	1" = 300'	6 OF 7



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DRI 2005-00001

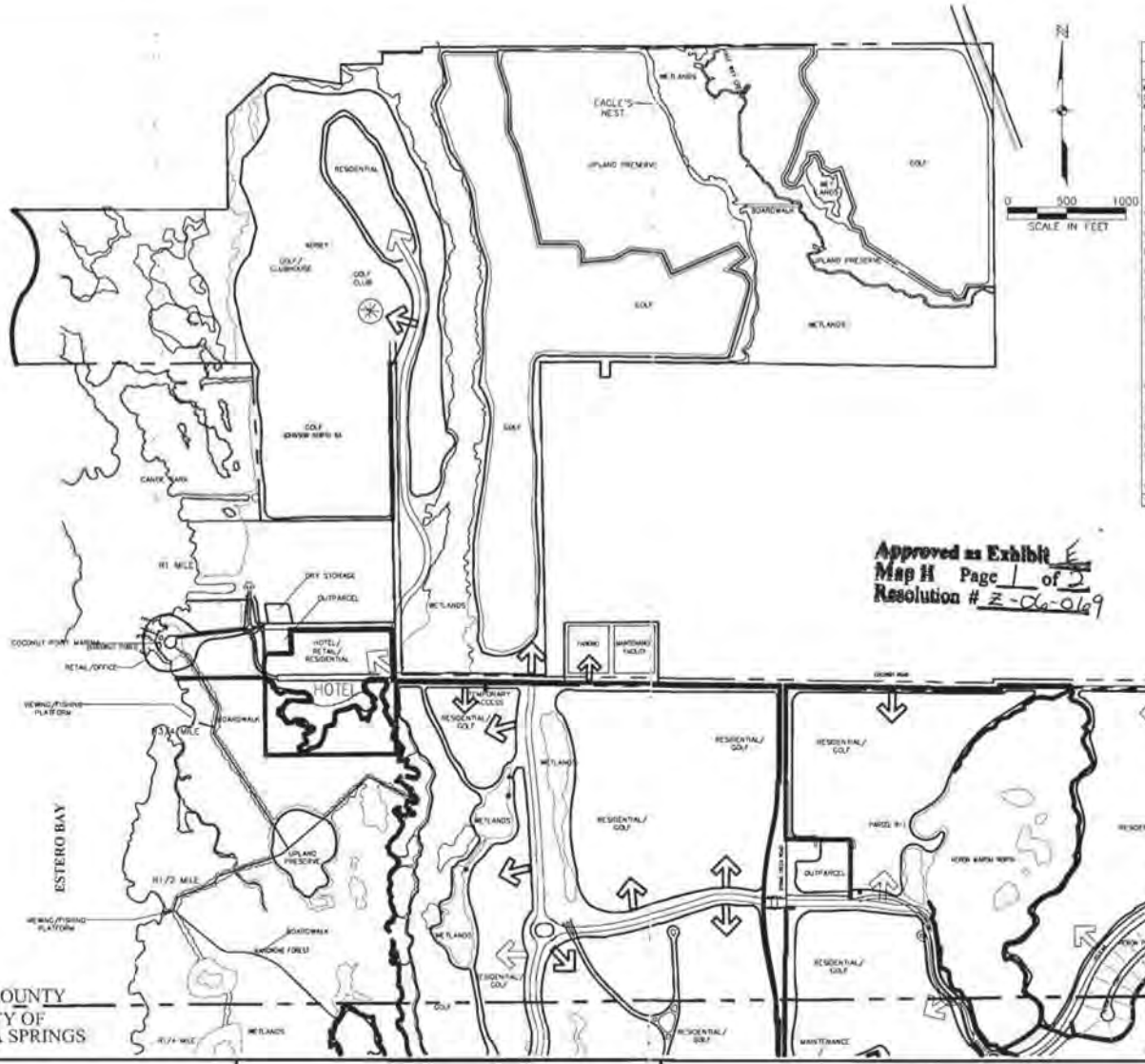
PELICAN LANDING
COUNTY SKETCH
PARCELS 2A - 2D

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

SKETCH
SEE SHEET 3 FOR LEGAL DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
APRIL 2006	20023590	7-47-25	1" = 1000'	7 OF 7

DRI 2005-00001



LAND USE SUMMARY

LAND USE	APPROXIMATE ACRES	APPROXIMATE UNITS	S.F.
RESIDENTIAL	875.0	2912	
SINGLE FAMILY		630	
MULTI-FAMILY		2282	
COMMERCIAL RETAIL	35.0		300,000
COMMERCIAL OFFICE	47.0		475,000
HOTEL/CONFERENCE CENTER			
HOTEL	22.0	450 ROOMS	
CONFERENCE CENTER			
HOTEL	3.0	300 ROOMS	
GOLF COURSE	447.44	77 HOLES	
BEACH FACILITY	3.5		
BEACH PARK	30.5		
COMMUNITY PARK AMENITIES	15.0		
WETLANDS (INCLUDES 52.04 AC WITHIN THE ECO-PARK)	678.50		
UPLAND HABITAT PRESERVES			
* ECO PARK	89.21		
N. SEDIMENTO MINE	7.4		
INDIAN MOUND	1.1		
BAY CEDAR PRESERVE	2.5		
N.E. GOLF PRESERVE (OKEBE TRACT)	43.6		
CEMETERY	0.1		
WATER MANAGEMENT LAKES	247.49		
R.O.W. PUBLIC & PRIVATE	182.16		
UTILITIES	2.0		
MARINA			
WET SLIPS	5.0	85 SLIPS	
DRY SLIPS		150 SLIPS	
MAINTENANCE FACILITY	1.45		
TOTAL	2520.00		775,000

* INCLUDES 52.66 ACRES OF WETLAND PRESERVE

Approved as Exhibit E
Map H Page 1 of 2
Resolution # Z-06-019

RECEIVED
MAY 02 2006
PERMIT COUNTER

PELICAN LANDING

JOHNSON ENGINEERING
2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

MAP "H"
LEE COUNTY HALF

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
JANUARY 2006	20023590		1" = 1000'	2

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EXHIBIT E
Page 1 of 2

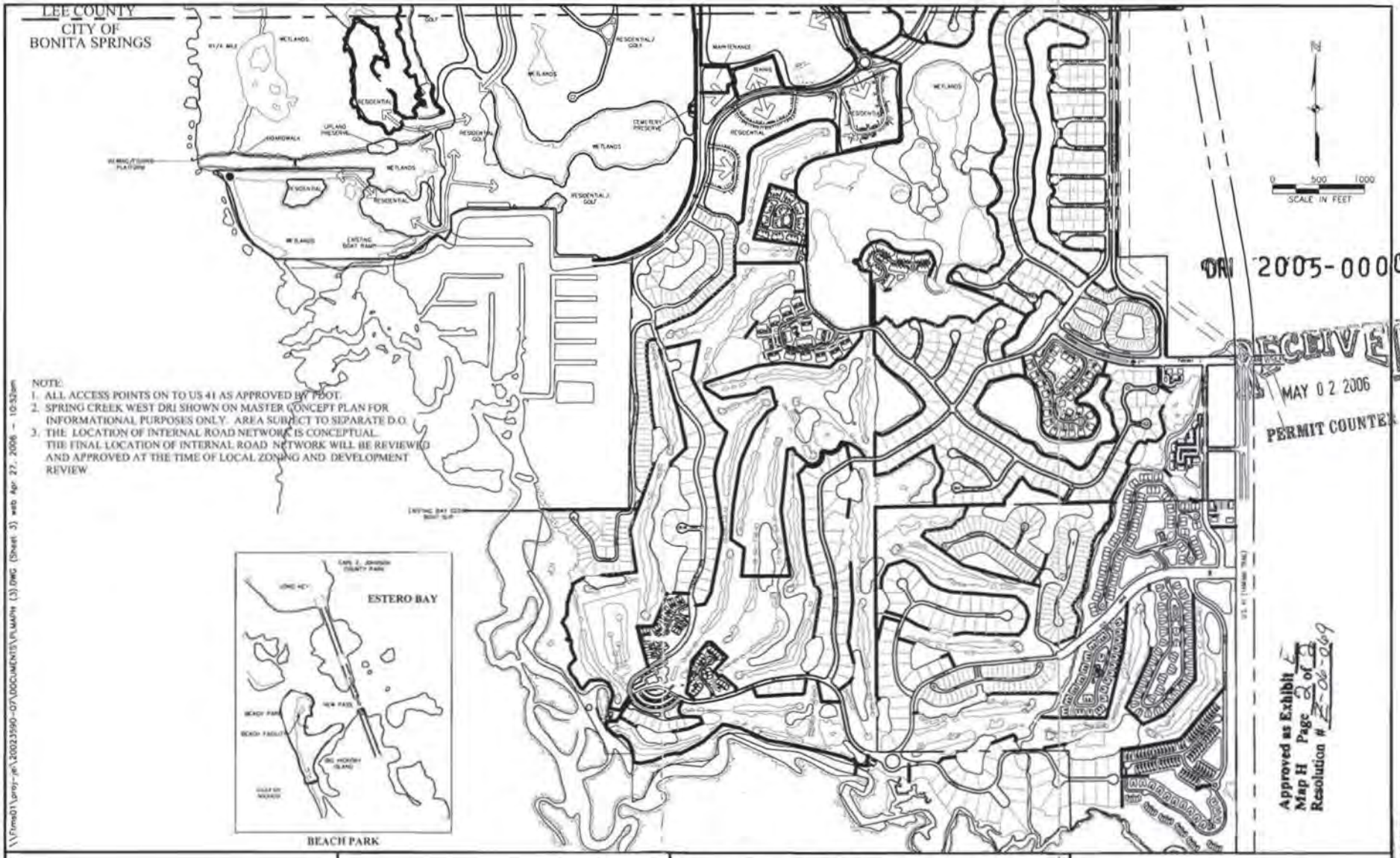

EXHIBIT E
Page 2 of 2

MEMORANDUM
FROM THE
OFFICE OF COUNTY ATTORNEY

DATE: March 15, 2007

TO: Commissioner Robert P. Janes
Chairman, BOCC

FROM: Dawn E. Perry-Lehnert
Assistant County Attorney

RE: Pelican Landing DRI
Twelfth Amendment
State DRI #1-9293-121
County Case #DRI2005-00001

The Board of County Commissioners approved the Twelfth Amendment for the Pelican Landing DRI Development Order on December 4, 2006. The original development order amendment and zoning resolution have been attached to this memorandum for execution. Kindly execute both documents at your earliest convenience and then forward them to Lisa Pierce in the Minutes Department.

Please note, the delay of this submission for the Chairman's signature is due to required revisions to the approved Master Concept Plan (MCP) by the project applicant. Lee County Land Development Code (LDC) Section 34-377(b)(6) requires the project MCP to be conformed to the Board's approval. Consequently, changes had to be made to the MCP before the resolution could be signed.

By copy of this memorandum to Lisa Pierce, I request that a clerk attest to the Chairman's signature on each document. Once this has been accomplished, please prepare 4 certified copies of the executed development order and all exhibits and one fully executed copy of the zoning resolution and forward these documents to my office no later than March 22, 2007.

Thank you for your assistance.

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MINUTES OFFICE
2007 MAR 20 AM 7:39

DPL/tlb
Attachments

cc: (w/o attachments)
Timothy Jones, Chief Assistant County Attorney
Lisa Pierce, Supervisor, Minutes Department

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA

WHEREAS, Bayside Community Improvement District filed an application on behalf of the property owner, Dean G. Prevolos Trustee for the Dean G. Prevolos Trust, to amend the Pelican Landing DRI Development Order #1-9293-121; and

WHEREAS, a public hearing was advertised and held on August 16, 2006 before the Lee County Zoning Hearing Examiner, Diana M. Parker, who gave full consideration to the evidence in the record for Case #DRI2005-00001 and DCI2005-00005; and

WHEREAS, a second public hearing was advertised and held on December 4, 2006, before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to:

a. Consider a Notice of Proposed Change (NOPC) to amend the Pelican Landing DRI Development Order and DRI Map H to;

   1. Add a 1.45-acre tract for the purpose of constructing a maintenance facility for Bayside Community Improvement District (BCID); and

   2. Reduce the number of residential dwelling units from 4,400 to 3,912 residential units and change the mix of unit types to allow an increase in single family units from 665 to 930 units and a reduction in multi-family units from 3,735 to 2,982; and

b. Determine whether the proposed changes constitute a substantial deviation from the original development approvals warranting further Development of Regional Impact review; and

c. Rezone 1.45 acres from Residential Single-Family (RS-1) to a Residential Planned Development (RPD) to permit a maintenance facility for Bayside Community Development District (CDD) having a 2,400-square-foot

COPY

maintenance building and an 800 square-foot-office, outdoor material storage, equipment washing area and fuel island.

The property is located in the Outlying Suburban Land Use Category and is legally described in attached Exhibit A. The request is APPROVED, SUBJECT TO the conditions and deviations specified in Sections B and C below.

SECTION B. CONDITIONS:

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

1. The development of this project must be consistent with the 6-page Master Concept Plan labeled:

a.	Sheet 3 of 11	Master Concept Plan
b.	Sheet 7 of 11	Landscape Betterment Plan
c.	Sheet 8 of 11	Planting Plans
d.	Sheet 9 of 11	Landscape Details
e.	Sheet 10 of 11	Entry Details and Notes
f.	Sheet 11 of 11	Buffer Wall Details and Notes

date stamped received on February 16, 2007, last revised December 2006, and attached hereto as Exhibit C, except as modified by the conditions below. This development must comply with all requirements of the Lee County LDC at time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the Master Concept Plan are subsequently pursued, appropriate approvals will be necessary.

The development will be limited to a 2,400-square-foot maintenance building and an 800-square-foot office, outdoor material storage, equipment washing area and fuel island.

2. The following limits apply to the project and uses:

a. **Schedule of Uses**

ACCESSORY USES: BUILDINGS AND STRUCTURES
ADMINISTRATIVE OFFICES
ENTRANCE GATES AND GATE HOUSES
ESSENTIAL SERVICES
FENCES AND WALLS
MAINTENANCE FACILITY (see Condition #4), Limited to:
Equipment washing area
Horticultural Services

Lawn and Garden Services
Outdoor material storage
Self-Service Fuel Pump, limited to one having a maximum storage capacity of 1,000 gallons of gasoline
PARKING LOT, ACCESSORY
SIGNS, in accordance with Chapter 30 of the LDC

b. **Site Development Regulations**

Minimum Lot Area and Dimensions:

Area:	40,000 square feet
Width:	150 feet
Depth:	400 feet

Minimum Setbacks:

Street:		Variable according to the functional classification of the street or road (LDC §34-2191 *et seq.*)
Side:	east side	25 feet
	west side	15 feet
Rear:		25 feet

Maximum Lot Coverage: 50 percent

Maximum Building Height: 18 feet

3. Environmental Conditions

Prior to local development order approval, the development order plans must include a landscape plan in substantial compliance with the "Landscape Betterment Plan" stamped received on July 19, 2006 with the following revisions and clarifications:

a. The east, north and west property line must include buffer plantings of seven trees per 100 linear feet and a double continuous hedge (minimum 3-gallon container size; 24-inch height at planting; shrubs must be allowed to grow to their natural height); and

b. The south property line must include buffer plantings of 12 trees per 100 linear feet (at least 50% being native canopy species) and a double continuous hedge (minimum 3-gallon container size; 24-inch height at planting; shrubs must be allowed to grow to their natural height); and

c. A minimum 8-foot tall wall or wall and berm combination must be provided around the entire property as depicted on the Master Concept Plan, received on July 19, 2006; and

d. The pine trees must be South Florida slash pine (Pinus elliottii densa); and

e. No more than 50% of the buffer trees may be palms; and

f. All pine and oak trees must be a minimum 16-foot height, 4-inch caliper at time of planting; and

g. Firecracker plant (*russelia equisetiformis*) must be replaced with a non-invasive shrub.

h. Prior to issuance of a local development order for the maintenance facility, the applicant must submit a landscape plan to embellish the landscaping on the south side of Coconut Road to protect the second story views of the condos within the Merano development. [This will require landscape embellishment along approximately 300 feet of Coconut Road frontage beginning at the southern prolongation of the western subject property boundary and proceeding east.]

4. Maintenance Facility

a. The maintenance facility must only be used to service the horticultural and lawn and garden service needs of property within the Bayside CDD boundary, which service is further limited to only the common areas and rights-of-way within the Bayside CDD.

b. The regular working hours for the maintenance facility will be from 7:00 a.m. to 3:00 p.m. Monday through Friday. The maintenance facility must be closed on Saturdays, Sundays and holidays. Ancillary activities, such as: cleaning machinery, removing horticultural debris, refueling and routine equipment maintenance and repairs may continue until 5:30 p.m. Monday through Friday, except on holidays, provided the entrance gates remain closed during that time period.

The maintenance facility may remain open after the scheduled hours in emergency situations, such as after a hurricane, major storm event or similar event to clean up debris.

c. The entrance gates to the maintenance facility may remain open during the regular working hours to facilitate the maintenance operation. No equipment or machinery may be visible from Coconut Road while the gates are open during regular business hours. However, the entrance gates must remain closed at all

other times, except when equipment and trucks are actually entering or leaving the property.

d. All routine maintenance and repair work done on machinery and equipment must be carried on entirely within the maintenance building. The overhead doors on the east side of the maintenance building must remain closed when such maintenance work is being performed.

The maintenance building must be insulated with sound attenuating materials to reduce adverse impacts on the adjoining properties.

e. No chipping or shredding of horticultural waste is permitted on the site and all horticultural waste must be stored in the designated location (30 yard roll off pad) on site for later removal. All horticultural waste must be removed at least once a week. Horticultural waste or other material must not be stored higher than eight feet in height.

f. Light standards must be no higher than 15 feet and lighting values must be in accordance with LDC §34-625, Outdoor Lighting Standards.

g. All fertilizer and maintenance liquids (i.e. spray fertilizer, weed killer, insect spray, etc.) must be stored inside the maintenance building.

5. Prior to local development order approval, the existing Joint Access Agreement, with the adjacent parcel to the west (beach parking lot) must be amended or extinguished.

6. Local development order approval must include conditions requiring the design of the entrance gates to be visually and aesthetically pleasing and architecturally consistent with the finished wall.

7. Accessory uses, including accessory parking, must be located on the same tract, lot, parcel or outparcel where a principal use is located. Accessory uses must be incidental and subordinate to the principal use of the tract, lot, parcel or outparcel. This condition is not intended to prohibit a joint parking agreement and the use of the beach parking lot to the west for employee parking, if such a need arises. (See Condition 9 below.)

8. The developer must connect to the Bonita Springs Utilities sewer and potable water system.

9. If additional employee parking spaces are required, the applicant must apply for special exception approval for joint use of parking lots with the beach parking lot on the west boundary.

10. No development blasting is permitted as part of this project.

11. Approval of this rezoning does not constitute a finding that the proposed project meets the concurrency requirements set forth in LDC Chapter 2 and the Lee Plan. The developer is required to demonstrate compliance with all concurrency requirements prior to issuance of a local development order.

12. Approval of this zoning request does not address mitigation of the project's vehicular or pedestrian traffic impacts. Additional conditions consistent with the Lee County LDC may be required to obtain a local development order.

13. Approval of this rezoning does not guarantee local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocation Table, Map 16 and Table 1(b), be reviewed for, and found consistent with the general function, as well as all other Lee Plan provisions.

14. The 1,000-gallon fuel storage container and pumping station must be relocated to the area designated "Dumpster Pad," or similar location, along the west boundary of the site, so as to have it located as far as possible from the adjoining residential properties to the north and east.

SECTION C. DEVIATIONS:

1. Deviation (1) seeks relief from the LDC §10-285(a), Table 1, Connection Separation, requirement to provide a minimum separation of 330 feet on collector streets, to allow a minimum separation of approximately 209 feet from the proposed driveway for the subject parcel to the existing driveway immediately to the east. This deviation is APPROVED.

2. Deviation (2) seeks relief from the LDC §10-416(d)(6) requirement to provide a solid wall or combination berm and solid wall, not less that eight feet in height, that is constructed not less than 25 feet from abutting property, if the project's road, drives, or parking areas are located less than 125 feet from an existing residential subdivision or residential lots, with landscaping between the wall and abutting properties that includes a minimum of five trees and 18 shrubs per 100 linear feet, to allow a wall 7.5 feet from the property lines with enhanced buffer plantings as described on the Landscape Betterment Plan. This deviation is APPROVED, SUBJECT TO Condition 3 above.

SECTION D. EXHIBITS AND STRAP NUMBER:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: Legal description of the property
Exhibit B: Zoning Map (with the subject parcel indicated)
Exhibit C: The Master Concept Plan
Exhibit D: Twelfth Development Order Amendment

The applicant has indicated that the STRAP number for the subject property is: 08-47-25-00-00003.0000.

SECTION E. FINDINGS AND CONCLUSIONS:

1. The applicant has proven entitlement to the rezoning and DRI DO amendment requests, as conditioned, by demonstrating compliance with the Lee Plan, the LDC, Section 380.06 Florida Statutes, and other applicable codes or regulations.

2. The rezoning, as approved:

   a. meets or exceeds all performance and locational standards set forth for the potential uses allowed by the request; and,

   b. is consistent with the densities, intensities and general uses set forth in the Lee Plan; and,

   c. is compatible with existing or planned uses in the surrounding area; and,

   d. will not place an undue burden upon existing transportation or planned infrastructure facilities and will be served by streets with the capacity to carry traffic generated by the development; and,

   e. will not adversely affect environmentally critical areas or natural resources.

3. The rezoning satisfies the following criteria:

   a. the proposed use or mix of uses is appropriate at the subject location; and

   b. the recommended conditions to the concept plan and other applicable regulations provide sufficient safeguard to the public interest; and

   c. the recommended conditions are reasonably related to the impacts on the public interest created by or expected from the proposed development.

4. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

5. The approved deviations, as conditioned, enhance achievement of the planned development objectives, and preserve and promote the general intent of LDC Chapter 34, to protect the public health, safety and welfare.

6. The requests to add land and change the mix of single-family and multi-family dwelling units, as conditioned, do not create new or additional unreviewed regional impacts and do not constitute a Substantial Deviation under F.S. §380.06(19).

Commissioner Judah made a motion to adopt the foregoing resolution, seconded by Commissioner Hall. The vote was as follows:

Robert P. Janes	Aye
A. Brian Bigelow	Aye
Ray Judah	Aye
Tammara Hall	Aye
Franklin B. Mann	Aye

DULY PASSED AND ADOPTED this 4th day of December 2006.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Robert P. Janes, Chair

Approved as to form by:

_____
Dawn E. Perry-Lehnert
County Attorney's Office

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

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2007 MAR 21 PM 1:28

JOHNSON
ENGINEERING

SINCE 1946

May 11, 2004

DCI 2005 00005

DESCRIPTION

A PARCEL LYING IN
SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST
LEE COUNTY, FLORIDA

A tract or parcel of land lying in Section 8, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

From the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8 run S 89° 41' 30" E along the East/West Quarter (E/W-1/4) section line for 513.75 feet to the southwest corner of the lands described in deed recorded in Official Record Book 3354 at Page 3248, Public Records of Lee County, Florida; thence run N 01° 25' 30" W departing said fraction line along the west line of said deed for 40.01 feet to an intersection with the line that is 40 feet north of (as measured on a perpendicular) and parallel with said fraction line, said line being the north maintained right-of-way line of Coconut Road and the Point of Beginning.

From said Point of Beginning continue N 01° 25' 30" W along said deed line for 367.99 feet to an intersection with the south line of Lot 20, Block 17 of unrecorded El Dorado Acres as shown on map as recorded in Official Record Book 291 at Page 898, Public Records of Lee County, Florida; thence run S 89° 41' 30" E along the south line of said block for 171.25 feet to an intersection with the west line of Lot 10, said Block 17; thence run S 01° 25' 30" E along the west line of said Lot 10 and the west line of Lot 6 and Lot 5 of said Block 17 and the east line of said deed for 367.99 feet to an intersection with the north line of said maintained right-of-way line of Coconut Road; thence run N 89° 41' 30" W along said maintained right-of-way line for 171.25 feet to the Point of Beginning.

Parcel contains 1.45 acres, more or less.

Subject to easements, restrictions and reservations of record. Bearings hereinabove mentioned are based on the unrecorded plat of El Dorado Acres wherein the center line of Coconut Road bears S 89° 41' 30" E.

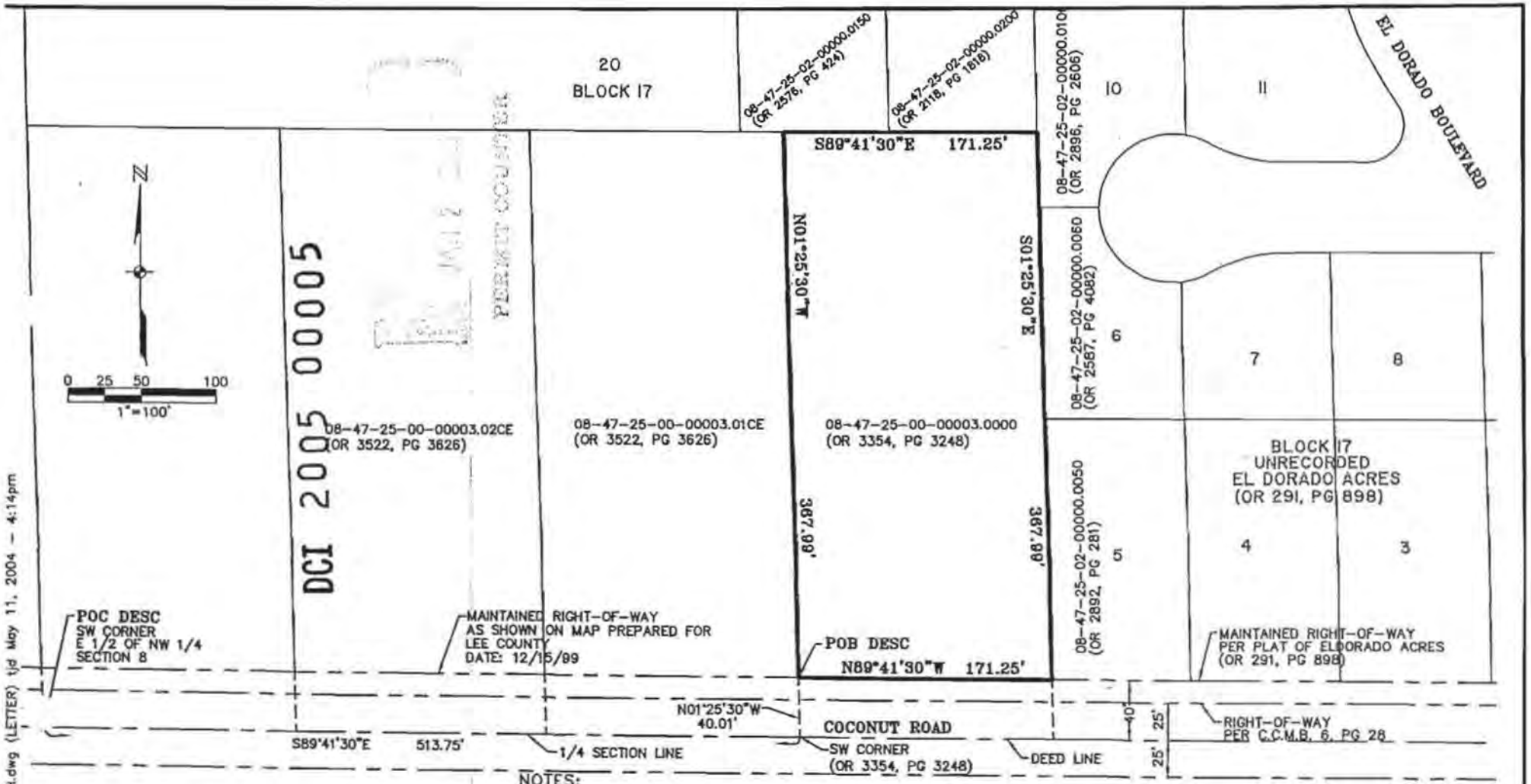
Michael W. Norman

Michael W. Norman (for The Firm LB-642)
Professional Land Surveyor
Florida Certificate No. 4500

20023590 Parcel 051104

EXHIBIT A
Page 1 of 2

2158 Johnson Street ▪ Post Office Box 1550 ▪ Fort Myers, Florida 33902-1550
(239) 334-0046 ▪ Fax (239) 334-3661



S:\023590\023590-SKETCH.dwg (LETTER) tjd May 11, 2004 - 4:14pm

EXHIBIT A
Page 2 of 2

NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE UNRECORDED EL DORADO ACRES PLAT WHEREIN THE CENTERLINE OF COCONUT ROAD BEARS S 89°41'30" E.
2. THIS SKETCH DOES NOT MAKE ANY REPRESENTATION AS TO ZONING OR DEVELOPMENT RESTRICTIONS ON SUBJECT PARCEL.
3. POC = POINT OF COMMENCEMENT.
4. POB = POINT OF BEGINNING
5. OR = OFFICIAL RECORDS BOOK
6. PG = PAGE
7. DESC. = DESCRIPTION
8. DESCRIPTION ATTACHED.
9. C.C.M.B. = COUNTY COMMISSIONERS MINUTES BOOK

THIS IS NOT A SURVEY

MICHAEL W. NORMAN (FOR THE FIRM LB-642)
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 4500

DATE SIGNED: MAY 11 2004

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

PARCEL IN
SECTION 8, TOWNSHIP 47 S, RANGE 25 E
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
LB #642 NO. #642

SKETCH TO ACCOMPANY
DESCRIPTION

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
5/04	0235	08-4		1 OF 1

DCI2005-00005

Zoning Map

8/15/2006

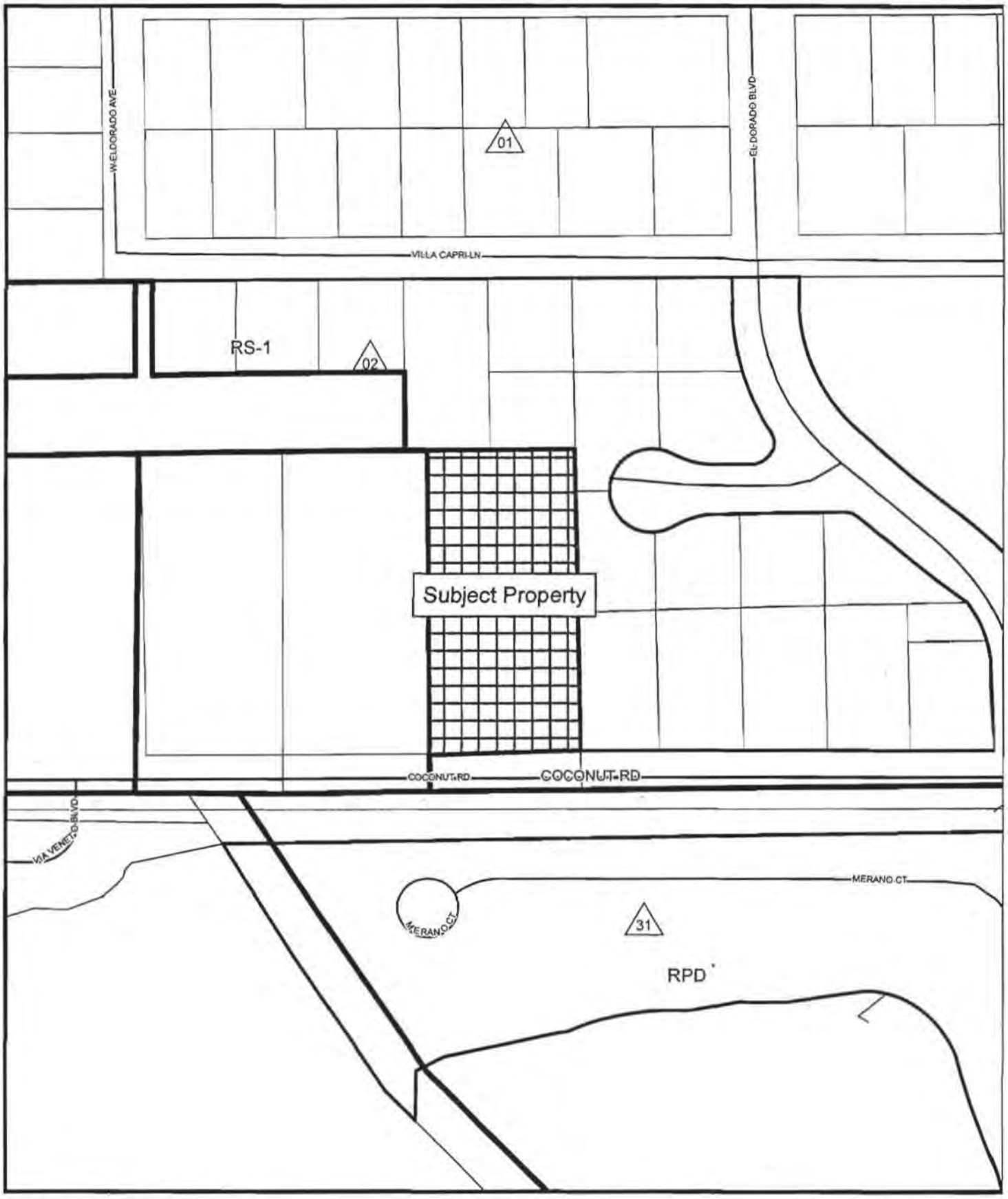
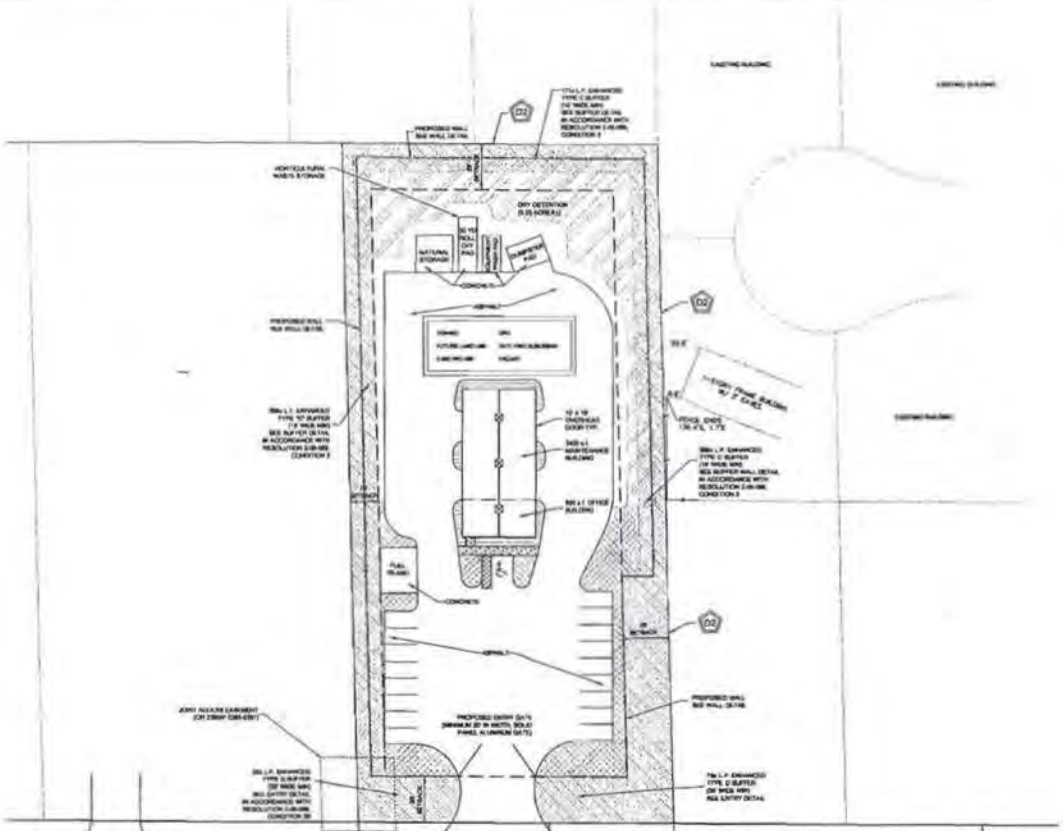


EXHIBIT B

180 90 0 180 360 Feet



PROJECT INFORMATION

SITE INFORMATION:
PARCEL SIZE:
LEE PLAN LAND USE CLASSIFICATION
ZONING REQUEST
DEVELOPMENT PROGRAM:

3200 S.F.	MAINTENANCE BUILDING
200 S.F.	MATERIAL STORAGE BUILDING
1000 S.F.	EQUIPMENT WASH PAD
800 S.F.	FUEL ISLAND
75,024 S.F.	PARKING/DRIVES

REQUIRED DEVELOPMENT CALCULATIONS

OPEN SPACE:
1) TOTAL OPEN SPACE REQUIREMENT MUST EQUAL A MINIMUM OF 30% OF THE TOTAL DEVELOPED SITE.

OPEN SPACE REQUIRED:
TOTAL DEVELOPED AREA
OPEN SPACE REQUIRED (1.40x30%)

OPEN SPACE PROVIDED:
GENERAL OPEN SPACE:
INDIGENOUS OPEN SPACE (SEE NOTE BELOW)
TOTAL OPEN SPACE PROVIDED (44% OF 37,878 S.F.)

DRY DETENTION:
1) DRY DETENTION SPACE REQUIREMENT MUST EQUAL 10% OF THE TOTAL DEVELOPED SITE.
DRY DETENTION REQUIRED
DRY DETENTION PROVIDED

STRUCTURAL LOT COVERAGE NOT TO EXCEED 60% OF SITE

LEGEND

- DRY DETENTION
- REQUIRED TYPE C AND D BUFFERS
- INTERNAL LANDSCAPE AREAS
- BUILDING PERIMETER PLANTINGS
- DEVIATION REFERENCE NUMBER

FEB 15 2007

DCI 2005-00005

Approved as Exhibit C
MCP Page 1 of 6
Resolution # Z-06-069

EXHIBIT C
Page 1 of 6

REVISIONS		
	Revised per Lee Co Sufficiency	
	Comments	5/09/05
	Revised per County BOCC	Dec 06

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FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING
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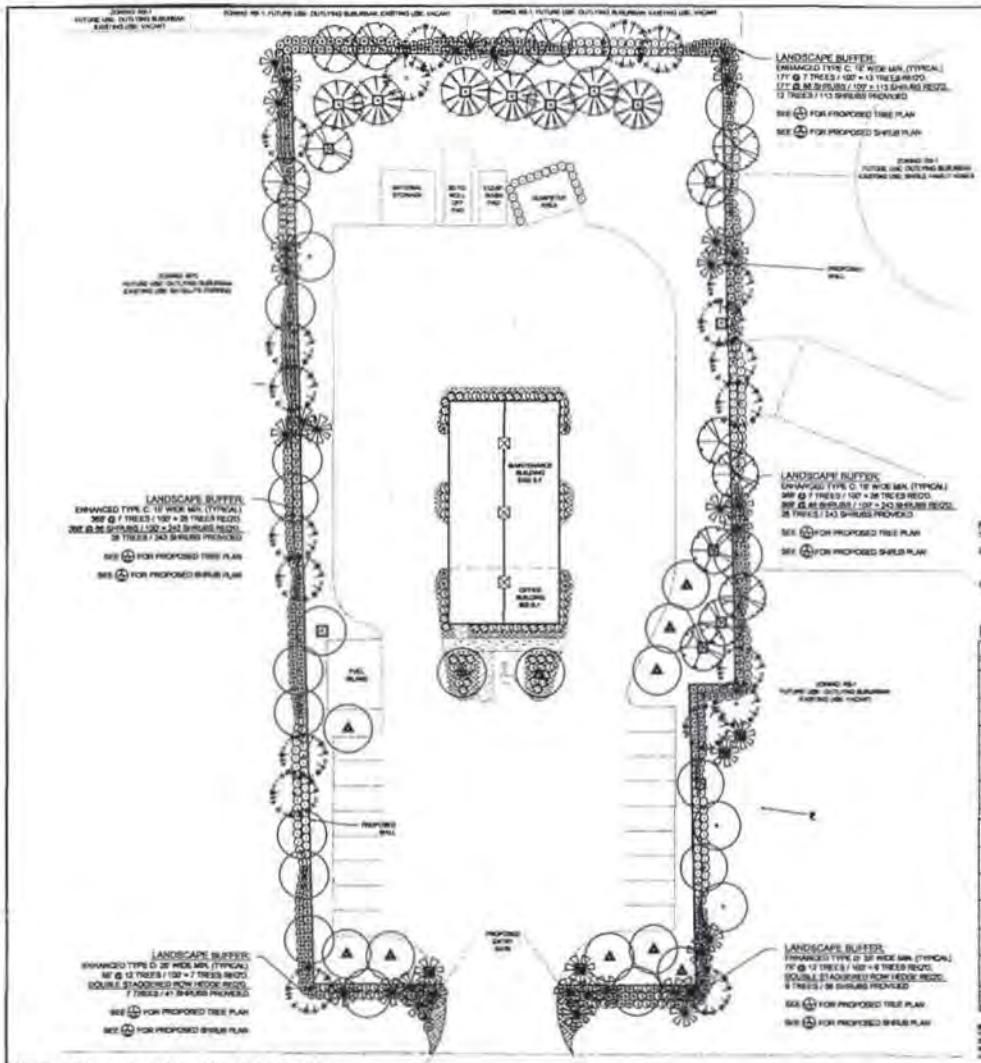
E.B. #642 & L.B. #642

MASTER CONCEPT PLAN

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023040-07		AS SHOWN	3 OF 11



Approved as Exhibit C
MCP Page 2 of 6
Resolution # Z-06-069

REQUIRED DEVELOPMENT CALCULATIONS

OPEN SPACE REQUIREMENT

TOTAL SITE AREA	= 1.45 ACRES +/-
OPEN SPACE REQUIRED (20%)	= 0.29 ACRES +/-
OPEN SPACE PROVIDED (44%)	= 0.64 ACRES +/-

GENERAL LANDSCAPE REQUIREMENT

53,162 SF @ 1 TREE PER 3,500 SF REQUIRED	= 19 TREES
TOTAL GENERAL TREES PROVIDED	= 19 TREES
☐ GENERAL TREES	

NOTES:
1) 50% (7) TREE MUST BE PLANTED OR RETAINED PER 1000 SF OF DEVELOPMENT AREA.
2) NO MORE THAN 50% OF THE REQUIRED TREES MAY BE LOCATED IN THE REAR OF THE LOT.
3) FOR PROGRESS CREDIT, A MINIMUM OF 4 TREES IN PROGRESS AREAS MUST BE SAVED TO RECEIVE CREDIT.
4) TREE REPLACEMENTS MUST BE AT A 4:1 EXTENSIVE TO 1 SCHEDULE RATIO AND MEET LEE COUNTY CODE REQUIREMENTS.

BUILDING PERIMETER LANDSCAPE REQUIREMENT

3,200 SF GROUND LEVEL FLOOR AREA @ 10% REQUIRED	
BUILDING PERIMETER PLANTING AREA	= 320 SF
BUILDING PERIMETER PLANTING AREA PROVIDED	= 797 SF

NOTES:
1) PLANTING BED PLANTINGS AREAS MUST BE A MINIMUM OF SIX FEET WIDE.
2) FOUNDATION PLANTING AREAS MUST CONTAIN SHRUBS AND GROUNDCOVER PLANTS WITH A MINIMUM 50% COVERAGE.
3) TURF SHALL MAKE UP NO MORE THAN 10% OF INTERNAL LANDSCAPE AREAS.

INTERNAL LANDSCAPE AREA REQUIREMENT

TOTAL VEHICLE USE AREA	= 27,531 SF +/-
INTERNAL LANDSCAPE AREA REQUIRED	= 2,754 SF
INTERNAL LANDSCAPE AREA PROVIDED	= 3,467 SF

NOTES:
1) LANDSCAPED AREAS ON THE PARKING AREA PERIMETER OR IN THE INTERNAL ISLANDS MUST EQUAL OR EXCEED A MINIMUM OF 10% (10) PERCENT OF THE TOTAL PARKING SURFACE AREA.
2) LANDSCAPED AREAS REQUIRED FOR FUTURE PARKING SPACES PURSUANT TO SECTION 34-2011(d) MAY NOT BE INCLUDED IN THE CALCULATION.
3) REVEGETATION MAY TAKE PLACE ANY LANDSCAPED AREA BY A MINIMUM OF TWO (2) FEET AS LONG AS THE AREA IS PROTECTED BY A CURB OR MOTOR VEHICLE WHEEL STOPS. THIS OVERHANG MAY BE PART OF THE REQUIRED DEPTH OF THE PROTECTED PARKING SPACE.
4) TURF SHALL MAKE UP NO MORE THAN 10% OF INTERNAL LANDSCAPE AREAS.

INTERNAL LANDSCAPE AREA TREE REQUIREMENT

2,754 SF @ 1 TREE PER 250 SF	= 11 TREES REQUIRED
△ PARKING TREES	= 11 TREES PROVIDED

NOTES:
1) LANDSCAPED AREAS ON THE PARKING AREA PERIMETER OR IN THE INTERNAL ISLANDS MUST EQUAL OR EXCEED A MINIMUM OF TEN (10) PERCENT OF THE TOTAL PARKING SURFACE AREA.
2) ONE (1) TREE MUST BE PLANTED OR RETAINED PER 250 SF OF INTERNAL PARKING AREA.
3) NO PARKING SPACE MAY BE MORE THAN 150 FEET FROM A TREE PLANTED IN A PARKING ISLAND, PERIMETER, OR MEDIAN OF A MINIMUM SIZE.

NATIVE TREE & SHRUB REQUIREMENT

OVERALL SITE:	79% TREES ARE REQUIRED TO BE NATIVE 157 OF 157 REQUIRED TREES ARE NATIVE = 100% NATIVE
OVERALL SITE:	50% SHRUBS ARE REQUIRED TO BE NATIVE 436 OF 317 REQUIRED SHRUBS ARE NATIVE = 85% NATIVE

MATERIALS SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NATIVE
		TREES/PALMS			
	75	[illegible]	FLORIDA SLASH PINE	12' HT, 3" CAL, 45 DIA.	YES
	13	QUERCUS LAURIFOLIA	LAUREL OAK	12' HT, 3" CAL, 45 DIA.	YES
	24	QUERCUS VIRGINIANA	LIVE OAK	12' HT, 3" CAL, 45 DIA.	YES
	87	SABAL PALMETTO	CABBAGE PALM	14' CL, 10' CT MIN. 18' CL, 10' CT MIN. 22' CL, 10' CT MIN.	YES
	15	TAXODIUM DISTICHUM	BALD CYPRESS	12' HT, 3" CAL, 45 DIA.	YES
		SHRUBS/GROUNDCOVER/VINES/GRASSES			
	12	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	YES
	147	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	YES
	264	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	YES
	31	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	NO
	8	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	NO
	31	[illegible]	[illegible]	3 GAL @ 36" O.C. 24" HT, MIN.	YES
	173	TRACHELOSPERMUM ASIATICUM	ASIATIC JASMINE	1 gal @ 24" O.C.	NO

NOTES:
1) ALL SIZES SPECIFIED ARE MINIMUM.
2) LANDSCAPE ARCHITECT RESERVES THE RIGHT TO FIELD VERIFY ALL PLANT MATERIALS.
3) ALL TURF AREAS TO BE BY AUGUSTINE "FLORATAM" UNLESS OTHERWISE NOTED ON THE DRAWINGS.
4) LANDSCAPE ARCHITECT TO APPROVE FINAL LOCATIONS, SIZE, AND SPECIES OF ALL PLANT MATERIALS.

LANDSCAPE BUFFER REQUIREMENT

ENHANCED TYPE "C" LANDSCAPE BUFFER
15' WIDE MINIMUM, APPROXIMATELY 7 NATIVE TREES AND 66 SHRUBS (50% NATIVE MINIMUM) PER 100 LINEAR FEET. A SOLID WALL OR WALL AND BERM COMBINATION IS TO BE INSTALLED AT A MINIMUM HEIGHT OF 8' FROM THE AVERAGE ELEVATION AT THE STREET CENTERLINE ALONG THE ABUTTING ROAD. BUFFER PLANTINGS SHALL BE PLACED ON THE EXTERIOR OF THE WALL. THE WALLS SHALL BE CONSTRUCTED TO ENSURE HISTORIC STORMWATER DRAINAGE PATTERNS.

EASTERN BOUNDARY:

368 LINEAR FEET @ 7 TREES PER 100 FEET	= 26 TREES REQUIRED = 26 TREES PROVIDED
368 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 243 SHRUBS PROVIDED

NORTHERN BOUNDARY:

171 LINEAR FEET @ 7 TREES PER 100 FEET	= 12 TREES REQUIRED = 12 TREES PROVIDED
171 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 113 SHRUBS PROVIDED

WESTERN BOUNDARY:

368 LINEAR FEET @ 7 TREES PER 100 FEET	= 26 TREES REQUIRED = 26 TREES PROVIDED
368 LINEAR FEET @ 66 SHRUBS PER 100 FEET	= 243 SHRUBS PROVIDED

ENHANCED TYPE "D" LANDSCAPE BUFFER
25' WIDE MINIMUM, APPROXIMATELY 12 NATIVE TREES AND A DOUBLE ROW STAGGERED HEDGE (50% NATIVE MINIMUM) PER 100 LINEAR FEET. A SOLID WALL OR WALL AND BERM COMBINATION IS TO BE INSTALLED AT A MINIMUM HEIGHT OF 8' FROM THE AVERAGE ELEVATION AT THE STREET CENTERLINE ALONG THE ABUTTING ROAD. BUFFER PLANTINGS SHALL BE PLACED ON THE EXTERIOR OF THE WALL. THE WALLS SHALL BE CONSTRUCTED TO ENSURE HISTORIC STORMWATER DRAINAGE PATTERNS.

WEST SIDE OF BUILDING ENTRANCE:

75 LINEAR FEET @ 12 TREES PER 100 FEET	= 9 TREES REQUIRED = 9 TREES PROVIDED
DOUBLE ROW STAGGERED HEDGE PROVIDED	= 48 SHRUBS

EAST SIDE OF BUILDING ENTRANCE:

53 LINEAR FEET @ 12 TREES PER 100 FEET	= 7 TREES REQUIRED = 7 TREES PROVIDED
DOUBLE ROW STAGGERED HEDGE PROVIDED	= 33 SHRUBS

NOTES:
1) TREES WITHIN THE R.O.W. SURVIVE MUST BE APPROXIMATELY SPACED IN NATURE TOWARD THAT CONFLICTS WITH OVERHEAD UTILITIES LIGHTING AND SIGNS ARE ANTICIPATED.
2) ALL REQUIRED TREES AND SHRUBS SHALL BE PLANTED ON THE PROPERTY.

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EXHIBIT C
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DCI 2005-00005

REVISIONS	
Revised per County BOCC	Dec 06

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BAYSIDE CDD
MAINTENANCE FACILITY
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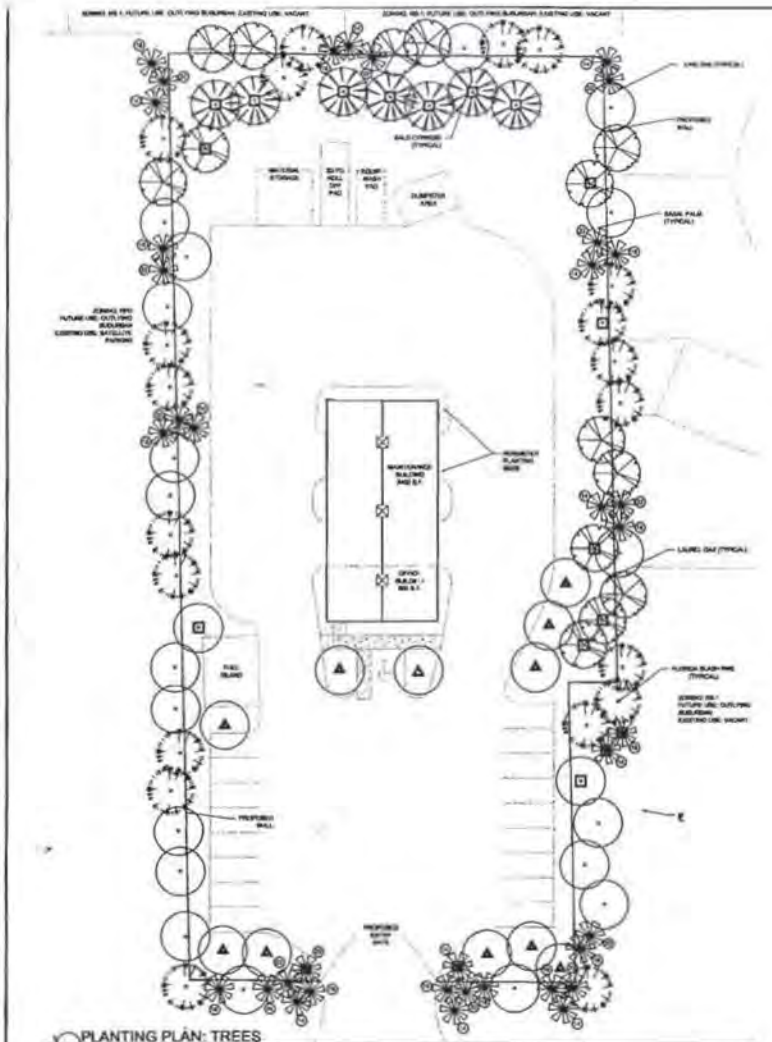
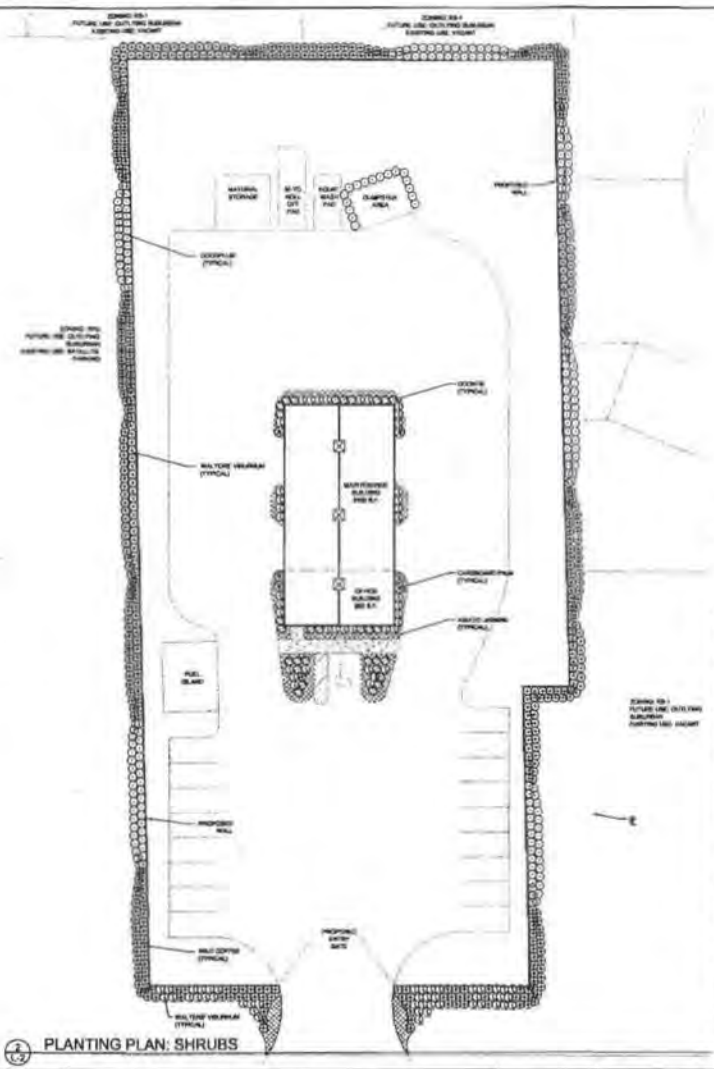
LANDSCAPE BETTERMENT PLAN

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2006	20022590-07		AS SHOWN	7 OF 11



1 PLANTING PLAN: TREES



2 PLANTING PLAN: SHRUBS

N

SCALE IN FEET

Approved as Exhibit C
MCP Page 3 of 6
Resolution # Z-04-064

PLANT LEGEND

SYM		BOTANICAL NAME	COMMON NAME
		TREES/PALMS	
	PE	PINUS ELLIOTTI	SLASH PINE
	QL	QUERCUS LAURIFOLIA	LAURIEL OAK
	QV	QUERCUS VIRGINIANA	LIVE OAK
	SP	SABAL PALMETTO	CABBAGE PALM
	TD	TAXODIUM DISTICHUM	BALD CYPRESS
		SHRUBS/GROUNDCOVER/ORNAMENTALS	
	CI	CHAMEROPS HUMILIS (CACIS)	COCOPLUM
	IF	ILEXNELLIA PATONS	FERGUSON
	PM	PSYCHOTRIA NERVOSA	WILD COFFEE
	VO	VIBURNUM ODORATUM	WALTER'S VIBURNUM
	ZF	ZAMIA FURFURACEA	CARDBOARD PALM
	ZP	ZAMIA PUMILA	COONTIE
	TA	TAXOMBLOS/PERSEAN ABATICUM	ASIATIC JASMINE

△ FASCIND TREES
□ GENERAL TREES

EXHIBIT C
PAGE 3 OF 6

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DCI 2005-00005

REVISIONS	
Revised per County Bocc	Dec 06

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LEE COUNTY, FLORIDA

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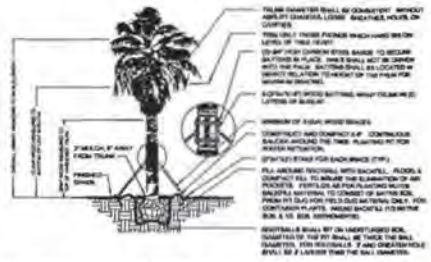
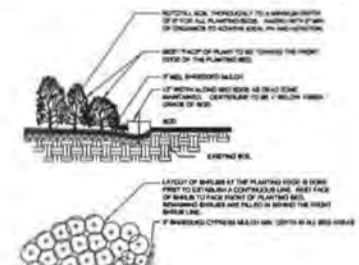
PLANTING PLANS

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	20023590-07		AS SHOWN	8 OF 11

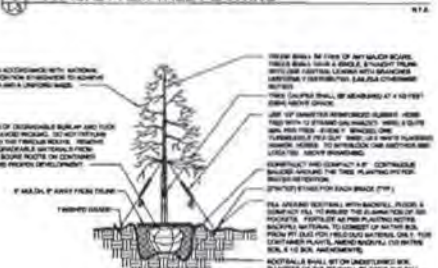
TYPICAL SHRUB PIT PLANTING



TYPICAL PALM TREE PLANTING



TYPICAL SHRUB BED PLANTING



TYPICAL SINGLE TRUNK TREE PLANTING

TYPICAL MULTI-TRUNK TREE PLANTING

SPECIFICATIONS

PLANT MATERIALS: ALL TREES, PALMS, SHRUBS, GROUNDCOVERS, LITTONALE, WATER PLANTS, BOD AND VINES SHALL CONFORM TO THOSE SPECIES AND SIZES INDICATED ON THE DRAWINGS. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS AS DETERMINED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. SPECIMEN MEANS A PLANT THAT IS TRIMMED IN THE DESIRABLE WAY TO POSSESS UNQUESTIONABLE AND OUTSTANDINGLY SUPERIOR IN FORM, BRANCHING, CONTACTNESS AND SYMMETRY. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. SINGLE TRUNK TREES SHALL HAVE A STRAIGHT, CENTRAL LEADER. MULTI-TRUNK TREES ARE TO HAVE 3-5 EQUAL SIZED TRUNKS UNLESS OTHERWISE SPECIFIED. PLANTS WITH WARPED OR BURNED TRUNKS WILL NOT BE ACCEPTED. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY IN ACCORDANCE WITH INTERNATIONAL SOCIETY OF ARBORIST GUIDELINES TO INSURE PROPER HEALTH AND VIGOROUS GROWTH. ALL MATERIALS SHALL BE SUBJECT TO JOHNSON ENGINEERING INC'S APPROVAL.

BALLED & BURLAPPED: ALL BALLED & BURLAPPED STOCK SHALL BE FRESHLY DUG, NEARLY HEALTHY, VIGOROUS, WELL-BRANCHED, FREE FROM DISEASE AND INSECTS, INCLUDE IN THE ROOTBALL AND POSSESS ADEQUATE ROOT SYSTEMS. ALL BURLAP SHALL BE REMOVED FROM THE TOP ONE-THIRD OF THE BALL TO PREVENT WICKING. ANY BURLAP THAT IS NOT BIODEGRADABLE SHALL BE CAREFULLY REMOVED TO PROTECT DAMAGE TO FEEDER ROOTS. BROKEN WOOD SHALL BE REMOVED IN THEIR ENTIRETY. ALL BALLED & BURLAPPED STOCK THAT IS NOT IMMEDIATELY PLANTED, SHALL BE HEALED IN AND THOROUGHLY WATERED UNTIL PLANTING. LIFTING, MOVING, OR ADJUSTING THE PLANT MATERIAL BY THE TRUNK IS PROHIBITED.

CONTAINER GROWN STOCK: ALL CONTAINER GROWN STOCK SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED, NOT ROOT BOUND, AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE 50% OF GOOD QUALITY AND BE IN A HEALTHY GROWING CONDITION. ALL CONTAINER GROWN STOCK THAT IS NOT IMMEDIATELY PLANTED, SHALL BE STORED IN A MANNER TO SHADE THE CONTAINERS FROM DIRECT SUNLIGHT TO MINIMIZE ROOT DAMAGE. ALL CONTAINER STOCK SHALL BE THOROUGHLY WATERED PRIOR TO PLANTING AND DURING STORAGE UNTIL PLANTING. LIFTING AND MOVING OF THIS PLANT MATERIAL SHALL BE BY THE CONTAINER ONLY.

MEASUREMENTS: TREES' HEIGHTS SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS SHALL NOT INCLUDE ANY TERMINAL GROWTH. BURLAP HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE BURLAPPED MASS. MEASUREMENT SHALL NOT INCLUDE ANY TERMINAL GROWTH. PALMS SHALL BE MEASURED BY THREE HEIGHT CLASSIFICATIONS: OVERALL HEIGHT, CLEAR WOOD, AND GRAY WOOD. OVERALL HEIGHT SHALL BE MEASURED FROM THE FROM THE GROUND TO THE AVERAGE FRONO HEIGHT AT TIME OF INSTALLATION. CLEAR WOOD SHALL BE MEASURED FROM THE GROUND AT TIME OF INSTALLATION TO THE BOTTOM OF THE FROND SHEATH. GRAY WOOD SHALL BE MEASURED FROM THE GROUND AT TIME OF INSTALLATION TO THE TOP OF HARDENED WOOD.

PLANTING SOIL AND BACKFILL: PLANTING SOIL FOR USE IN PREPARING BACKFILL FOR PLANT PITS SHALL BE A FERTILE, FRIABLE, NATIVE SOIL WITHOUT MIXTURE OF SUBSOIL MATERIALS. IT SHALL BE FREE FROM HEAVY CLAY, STONES, LIME, LUMPS, PLANTS, ROOTS OR OTHER FOREIGN MATERIALS, NOXIOUS GRASSES OR WEEDS. IT SHALL NOT CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. AMEND MIXES WITH 3" MINIMUM OF ORGANICS TO ACHIEVE OPTIMAL PLANTING AND SOIL AERATION. ROTOTILL TO A DEPTH OF 8" AND INCORPORATE A COMPLETE, SLOW RELEASE FERTILIZER AT A 3:1 RATIO. THE RESULTS OF POST SOIL MODIFICATION TESTING, BASED ON LIKE PLANTING CONDITIONS AND AREA PROXIMITY, SHALL BE SUBMITTED TO JOHNSON ENGINEERING INC'S FOR APPROVAL PRIOR TO PLANTING.

COMMERCIAL FERTILIZER: FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, DRY, AND FREE FLOWING AND DELIVERED TO THE SITE IN ORIGINAL UNOPENED BAGS BEARING ALL THE MANUFACTURER'S LABEL & ANALYSIS. FERTILIZER SHALL BE CLEANED FROM ALL HARDSCAPE SURFACES AND WATERED IN THOROUGHLY PER MANUFACTURER'S SPECIFICATIONS. TREES AND SHRUBS FERTILIZER SHALL CONSIST OF 6 % OR GREATER THE FORMULATION OF 3 PARTS NITROGEN TO 1 PART PHOSPHOROUS TO 2 PARTS POTASSIUM (3-1-2 RATIO). ALL TREES AND SHRUBS SHALL BE FERTILIZED BI-MONTHLY DURING THE GROWING SEASON AT A RATE OF 1-6 LBS. OF N PER 100 SQ. FT. OR MORE TREE DIAMETER OF FORM BASE TO GRADE, OR PER MANUFACTURER'S RECOMMENDATION. SEED FERTILIZER SHALL BE TURF SPECIFIC FOR ESTABLISHING NEW LAWNS AND APPLIED PER MANUFACTURER'S RECOMMENDATION. UPON ESTABLISHMENT, THE TURF SHALL BE FERTILIZED AT A RATE OF 1-5 OF ACTUAL NITROGEN PER 1000 SQ. OR PER MANUFACTURER'S RECOMMENDATION. (NOTE: BAHIA TURF SHALL RECEIVE FERTILIZATION AT A HALF RATE OF THE ABOVE TURF RECOMMENDATIONS.) APPLY A 4-1-2 RATIO OF A HIGH GRADE FERTILIZER (1 PART NITROGEN TO 1 PART POTASSIUM WITH 0.5 PARTS MAGNESIUM FERTILIZER QUARTERLY FOR ALL ESTABLISHED PALMS PER # OF 50 EIGHT OR PER MANUFACTURER'S RECOMMENDATION.

MULCH: MULCH MATERIAL SHALL BE SHREDDED EUCALYPTUS MULCH, FREE FROM WEEDS, WEEDS, AND APPLIED TO A MINIMUM 3" DEPTH.

SOD: ALL SOD SHALL MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETY TYPE, AND FREE FROM WEEDS, INSECTS, AND DISEASES OF ANY KIND. JOINTS SHALL BE STAGGERED AND BUTT TIGHT TO MINIMIZE AIR GAPS. THE GRADE SHALL BE SMOOTH, FREE OF DEBRIS, PLENTIFULLY DRAINED, AND READY TO ACCEPT INSTALLATION. THE SOD SHALL BE ROLLED IN TWO DIRECTIONS PERPENDICULAR FROM (AND ANOTHER AFTER INSTALLATION TO ENSURE PROPER GROUND CONTACT. IN AREAS WHERE A ROLLER CANNOT BE USED, HAND TAMPING SHALL BE REQUIRED. SOD SHALL BE INSTALLED AND WATERED WITHIN 24 HOURS AFTER HARVESTING.

SUBSTITUTIONS: NO SUBSTITUTION OF ANY WATERWAY VARIETIES, GRADES, OR SIZES SHALL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM JOHNSON ENGINEERING INC. ANY / ALL UNAUTHORIZED SUBSTITUTIONS MAY REQUIRE REPAIRING / REPLACING AT THE CONTRACTOR'S EXPENSE AT JOHNSON ENGINEERING, INC'S DISCRETION.

WARRANTY: THE CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP FOR THE PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE FROM THE JOHNSON ENGINEERING INC. ANY DEAD, UNHEALTHY, NON-CONFORMING PLANT MATERIAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHIN 7 DAYS OF NOTICE FROM THE OWNER OR JOHNSON ENGINEERING, INC. THE CONTRACTOR SHALL NOT BE LIABLE FOR VACTS OF GOD AND VANDALISM, NEGLIGENCE AND THEFT BY OTHERS.

QUALITY ASSURANCE: THE CONTRACTOR SHALL PROVIDE SUBSTANTIAL PROOF TO JOHNSON ENGINEERING, INC. THAT HE / SHE HAS A MINIMUM OF 5 YEARS EXPERIENCE IN THE FIELD OF LANDSCAPE CONTRACTING WITH PROJECTS OF SIMILAR SCOPE. THE CONTRACTOR MUST SUPPLY AT ALL TIMES ON SITE WHICH WORK IS BEING PERFORMED A QUALIFIED SUPERVISOR WITH A MINIMUM OF 5 MONTHS FIELD EXPERIENCE. ALCA LANDSCAPE CERTIFICATIONS CAN SUBSTITUTE IN LIEU OF THE EXPERIENCE REQUIRED BY JOHNSON ENGINEERING INC'S DISCRETION.

LANDSCAPE CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES AND SERVICES BOTH UNDERGROUND AND OVERHEAD PRIOR TO THE COMMENCEMENT OF WORK. PROTECTION OF ALL UTILITIES AND SERVICES THROUGHOUT THE DURATION OF WORK IS EXPECTED.
2. ALL LANDSCAPE AREAS (EXCEPT FOR PLANTING BEDS) SHALL BE SODDED UNLESS OTHERWISE INDICATED ON THE DRAWINGS. CONTRACTOR SHALL GET APPROVAL OF FINE GRADING FROM LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF TURF. GRADING FOR LANDSCAPE BEYOND SHOWN ON PLANS AND DETAILS IS APPROXIMATE ONLY. CONTRACTOR SHALL CONFER WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING THIS WORK TO CONFIRM ACTUAL SHAPES AND ELEVATIONS OF THE LANDSCAPE BEDDING. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FINISH GRADE ALL LANDSCAPE AREAS ELIMINATING ALL SLOPES, DEPRESSIONS, ROCKS, STICK, OR OTHER DEBRIS PRIOR TO THE INSTALLATION OF PLANT MATERIAL. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING POSITIVE DIRECT FLOW DRAINAGE AWAY FROM ALL STRUCTURES AND TO ALL DRAINAGE WAYS SHOWN OR IMPLIED ON THE DRAWINGS.
3. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO RELOCATE/REPOSITION ANY PLANTS AS SITE CONDITIONS MAY DICTATE DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL TRADES SO AS TO AVOID ANY CONFLICT WITH THE EXECUTION OF WORK BY OTHERS. OWNER SHALL NOT BE RESPONSIBLE FOR THE DAMAGE TO PLANT MATERIALS CAUSED BY OTHER TRADES OR SUBCONTRACTORS. THE CONDITION OF PLANT MATERIAL SHALL BE IN ACCORDANCE TO THE LANDSCAPE ARCHITECT.
5. INSTALLATION OF INTERLOCKING PAVERS SHALL HAVE A BASE USING ROAD-BASE CRUSHED STONE OR ASTM D2940, COMPACTED TO 98% DENSITY FOR PEDESTRIAN & LIGHT VEHICULAR TRAFFIC, 98% FOR HEAVY VEHICULAR TRAFFIC. PROVIDE PITCH FOR DRAINAGE. ONE INCH PER FOOT PITCH OF PAVING SURFACE, TO BE DONE DURING SUB-GRADE PREPARATION. BEDDING SAND SHOULD BE 1" TO 1 1/2" THICK, USING CONCRETE SAND (ASTM C33). WHEN COMPACTING PAVERS, A RUBBER PAD SHOULD BE ATTACHED TO THE PLATE BOTTOM OF THE MECHANICAL VIBRATING MACHINE. FOR BEST PAVER COMPACTION USE A ROLLER COMPACTOR, FOR PRECISE CUTS, USE A DIAMOND BLADE SAW. A SOFT ROMS MATRIX BLADE IS RECOMMENDED.
6. ALL LANDSCAPE AREAS SHALL BE PROTECTED FROM VEHICULAR ENCROACHMENT BY WHEELSTOPS AND/OR CURBING WHERE IMMEDIATELY ADJACENT TO PAVEMENT.
7. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES ON THE DRAWINGS PRIOR TO BIDDING. ALL QUANTITIES ON THE DRAWINGS ARE PROVIDED FOR CONVENIENCE ONLY.
8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS.

STATUTORY LANDSCAPE NOTES:

1. SITE ENGINEERING PLANS FOR ALL OTHER REQUIRED CALCULATIONS. THE VEGETATION PLAN MEETS MINIMUM EXCEEDS THE MINIMUM REQUIREMENTS OF THE LANDSCAPING SECTION OF THE LEE COUNTY LANDSCAPING CODE.
2. SEVENTY-FIVE PERCENT (75%) OF THE TOTAL NUMBER OF REQUIRED TREES AND FIFTY PERCENT (50%) OF THE TOTAL NUMBER OF REQUIRED SHRUBS USED IN BUFFERS AND LANDSCAPE SHALL BE OF INDIGENOUS NATIVE VARIETIES.
3. ALL REQUIRED TREES AT THE TIME OF INSTALLATION MUST:
   1) BE A MINIMUM OF 10' IN HEIGHT;
   2) HAVE A 2" CALIPER OF TRUNK DIAMETER (AT 12" ABOVE THE GRADE);
   3) HAVE A 4' DIAMETER SPREAD OF CANOPY.
4. PALMS MUST HAVE A MINIMUM OF 12' OF CLEAR TRUNK AT THE TIME OF INSTALLATION.
5. ALL TREES NOT HAVING A MATURE CANOPY OF A TWENTY FEET (20') MINIMUM SHALL BE MASSED TO GENERATE AN EQUIVALENT TWENTY FEET (20') OF CANOPY.
6. ALL TREES ADJACENT TO WALKS, BIKE PATHS, AND RIGHTS-OF-WAY MUST BE MAINTAINED WITH EIGHT FEET OF CLEAR TRUNK.
7. REQUIRED SHRUBS AND HEDGES MUST BE A MINIMUM OF 24" (2') FOR TYPE 2 BUFFERS IN HEIGHT ABOVE THE ON-SITE ADJACENT PAVEMENT SURFACE REQUIRED TO BE BUFFERED AND BE SPACED THREE MEASURED AT THE TIME OF PLANTING. THEY MUST BE A MINIMUM THREE (3) GALLON CONTAINER SIZE, AND SPACED 18" TO 24" ON CENTER. REQUIRED SHRUBS AND HEDGES MUST BE AT LEAST 36" (3') FOR TYPE 1 BUFFERS IN HEIGHT WITHIN 18 MONTHS OF INSTALLATION, EXCEPT FOR VISIBILITY AT INTERSECTIONS AND WHERE PROPERTIES ADJACENT TO PRESERVES. REQUIRED HEDGES MUST BE PLANTED IN DOUBLE STAGGERED ROWS AND MAINTAINED TO FORM CONTINUOUS, UNBROKEN, VISUAL SCREEN WITHIN 12 MONTHS OF INSTALLATION.
8. PLANT MATERIALS SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO 1 OR BETTER AS GIVEN IN TERMINOLOGY AND STANDARDS FOR NURSERY PLANTS" CHAPTER 5 AND 6, DEPARTMENT OF AGRICULTURE, STATE OF FLORIDA (AS AMENDED).
9. ALL TREES INSTALLED IN RESPONSE TO THE REQUIRED INTERNAL LANDSCAPE AREAS, ALSO KNOWN AS INTERNAL CANOPY TREES SHALL BE LOCATED WHERE AND AS SHOWN ON THE DRAWINGS. PALMS MAY BE SUBSTITUTED ON A 3:1 BASIS AND SUBSTITUTED WITH CONSENT OF LANDSCAPE ARCHITECT.
10. PLANTINGS IN EASEMENTS, UTILITY, POWER, OR DRAINAGE EASEMENTS MAY INVOLVE DISCRIMINATE SUFFERING. HOWEVER NO REQUIRED TREES OR SHRUBS MAY BE LOCATED IN ANY UTILITY, POWER, OR STORM EASEMENT OR RIGHT-OF-WAY.
11. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN THROUGH FINAL ACCEPTANCE (CERTIFICATE OF COMPLIANCE) A TREE PROTECTION BARRIER FOR ALL REMOVAL OR MASSED OF INDIGENOUS PLANT MATERIALS BEING CREDITED AND/OR PRESERVED. ANY TREES USED FOR CREDIT THAT ARE DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED AT A 5:1 RATIO FOR TREES AND 5:1 RATIO FOR PALMS.
12. PLANT MATERIAL PROVIDED IN COMPLIANCE TO THE LEE COUNTY LDC MAY ONLY BE PRUNED TO PROMOTE HEALTH, VIGOROUS AND NATURAL GROWTH OF THE SPECIFIC PLAN (EXCEPT WHERE NECESSARY TO PROMOTE PUBLIC HEALTH, SAFETY, AND WELLARE) PRUNING MUST BE IN ACCORDANCE TO AND ACCEPTABLE WITH THE "PRUNING STANDARDS" (LATEST EDITION) ISSUED BY THE NATIONAL ARBORIST ASSOCIATION. NOT PRUNED MEANS DAMAGED TREES MUST BE REPLACED. NAT PRUNING PRACTICES ARE PROHIBITED.
13. THE FOLLOWING EXOTIC SPECIES OF PLANTS SHALL BE REMOVED AND MAINTAINED FROM OPEN SPACES IN PERPETUITY: A. MELALEUCA MIV. (PUNK QUEUT), PAPERTRACK TREE) B. CASUARINA SPP. (AUSTRALIAN PINE) C. SCHINUS SPP. (BRAZILIAN PEPPER, FLORIDA HOLLY) D. ACACIA AURICULIFORMIS (EARLEAF ACACIA), RHODOMYRTUS TOMENTOSA (EXOTIC ROSE MYRTLE) E. ROLMAN VARIUM (CHECKER BOOK APPLE) G. ALBIZIA LEBBECK (MIMOSA TREE) H. BAUHINIA MONANDRA (BAUHINIA OR ORCHID) I. CLITHANCRIS ARACHNOIDEUS (CARCTROOD) J. CALLISTRON SEBIDOD (ROSE WOOD) K. SIDEXOPRIA ALATA (AIR POTATO) L. EUCALYPTUS CAMALDULENSIS (MURRAY RED GUM) M. FICUS CRESTINA (AL CUBAN FIGS) N. FICUS LYRODRAMUM (FIDDLE CLAWING FIGS) O. FICUS WORLD CLAWING FIGS) P. SAPIUM SEBIFERUM (CHINESE TALLOW) Q. PHYTOLLAN UNGUI PLANT, ROSE APPLE) S. THEOPRESA POPULNEA (CROSS TREE) R. WEEPLE.
14. AN AUTOMATIC IRRIGATION SYSTEM COMMAND DRIP, SPRAY HEADS AND BUBBLER AS APPROPRIATE WILL BE INSTALLED TO PROVIDE 100% COVERAGE TO ALL LANDSCAPED AREAS. A MOISTURE RAIN SENSOR WILL BE INCLUDED IN THE IRRIGATION SYSTEM AND LOCATED ON THE SITE SO THAT IT WILL RECEIVE DIRECT RAINFALL, NOT IMPEDED BY OTHER OBJECTS. THE IRRIGATION SYSTEM WILL BE DESIGNED TO ELIMINATE THE APPLICATION OF WATER TO IMPERVIOUS AREAS, INCLUDING ROADS, SIDEWALKS, AND OTHER VEHICLE USE AREAS. THE IRRIGATION SYSTEM WILL BE DESIGNED TO AVOID IMPACTS ON EXISTING NATIVE VEGETATION THAT WILL BE RETAINED ON THE DEVELOPMENT SITE AND NEW VERTICAL ARCHITECTURAL FEATURES.
15. A 3" MINIMUM LAYER OF ORGANIC MULCH, AFTER WATERMARK OR OTHER RECYCLED MATERIALS MUST BE PLACED AND MAINTAINED AROUND ALL NEWLY INSTALLED TREES, SHRUBS AND GROUNDCOVER PLANTINGS. EACH TREE MUST HAVE A RING OF MULCH NO LESS THAN 36" BEYOND ITS TRUNK IN ALL DIRECTIONS.
16. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN SAFE SIGHT DISTANCE TRIANGLES AT ALL INTERSECTIONS AND VEHICLE AT CONNECTIONS SIGHT TRIANGLE MUST BE IN ACCORDANCE WITH THE ROADSIDE RECOVERY AREA PROVISIONS OF FIRST ORDER BOOK. ALL SIGHT TRIANGLES SHALL MAINTAIN A CLEAR ZONE BETWEEN TWENTY SIX (36) INCHES AND EIGHT FEET (8). CONTRACTOR TO VERIFY PRIOR TO FINAL ACCEPTANCE.
17. VEGETATION REMOVAL PERMIT MUST BE OBTAINED FROM LEE COUNTY ENVIRONMENTAL SCIENCES DIVISION PRIOR TO THE COMMENCEMENT OF SITE WORK.

LANDSCAPE IRRIGATION NOTES:

1. SET DRAIN AND CHECK VALVES AS APPROPRIATE PER MANUFACTURER'S RECOMMENDATIONS.
2. GROUP (WHEN PRACTICAL) AND LOCATE VALVES BOXES AND CONTROLLERS IN AN UNOBTRUSIVE / ACCESSIBLE LOCATIONS APPROVED BY JOHNSON ENGINEERING, INC.
3. HEAD SPACINGS, WORKING PRESSURE, AND PIPE SIZES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. USE BUBBLERS, DRIP, DRIPPERS, AND SPRAY HEADS WHEN APPROPRIATE. HEADS SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE TO ALL LANDSCAPED AREAS. A MOISTURE OR RAIN SENSOR SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
5. HEADS SHALL BE INSTALLED TO MINIMIZE OVERSPRAY TO ALL IMPERVIOUS AREAS INCLUDING SIDEWALKS, ROADS, DRIVES AND OTHER VEHICLE USE AREAS. NO OVERSPRAY ON WALLS, COLUMNS OR OTHER VERTICAL ARCHITECTURAL FEATURES SHALL BE ALLOWED.
6. ALL LITTORAL PLANTING AREAS SHALL HAVE INDEPENDENT ZONES TO ENSURE THE FLEXIBILITY OF REDUCING IRRIGATION APPLICATIONS DURING EXTENDED PERIODS OF RAINFALL. CUSTOMIZATION OF THE WATERING SCHEDULING SHALL INCLUDE DAILY, WEEKLY, AND MONTHLY OPTIONS.
7. GROUP PLANT MATERIALS ACCORDING TO BRAND IRRIGATION PRINCIPLES WHEN PRACTICAL.
8. TURFGRASS AREAS AND PLANTING BEDS SHALL HAVE SEPARATE ZONES AND RUN INDEPENDENTLY FROM ONE ANOTHER WHEN PRACTICAL.

Approved as Exhibit C
MCP Page 4 of 6
Resolution # Z-06-069

EXHIBIT C
Design 4 of 6

RECEIVED
FEB 15 2007
LANDSCAPE DETAILS
DCI 2005-00005

REVISIONS		

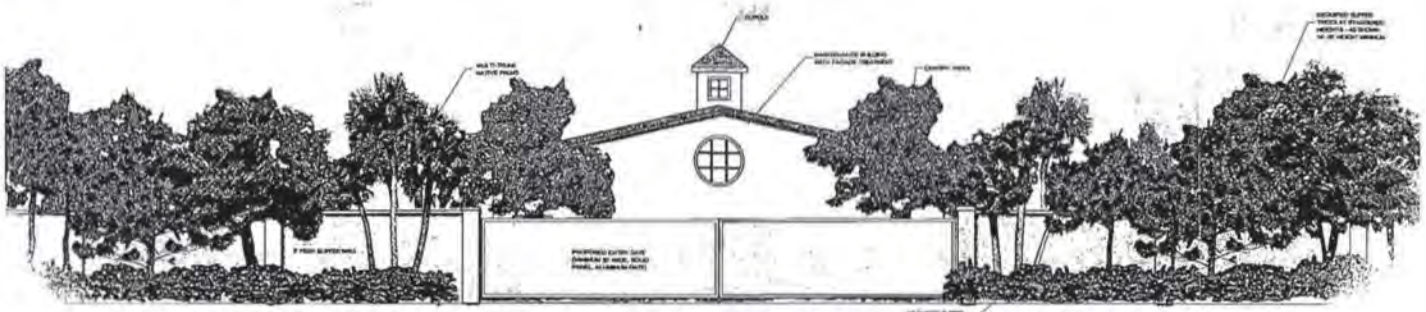
SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

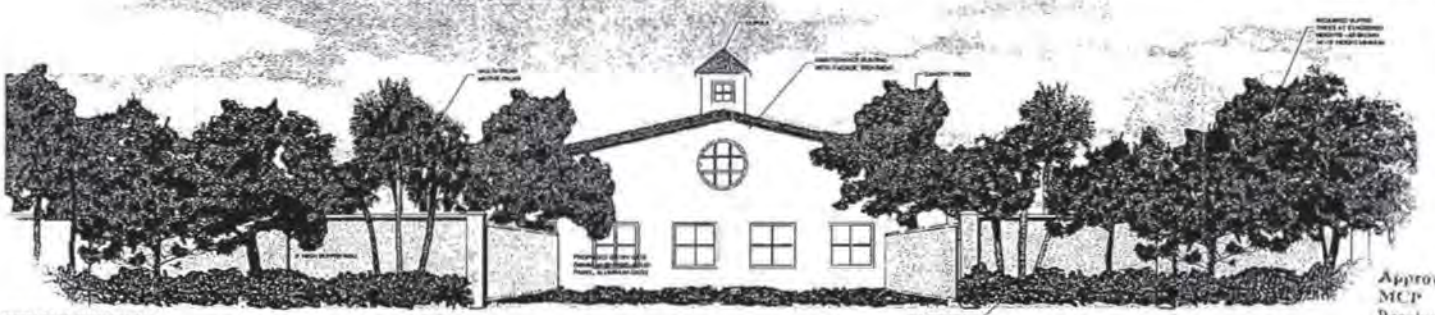
JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
SEPT 2005	30023590-07		AS SHOWN	9 OF 11



CLOSED GATE ENTRY DETAIL 1"=5'



OPEN GATE ENTRY DETAIL 1"=5'

DCI 2005-00005

Approved as Exhibit C
MCP Page 5 of 6
Resolution # Z-06-069

EXHIBIT C
Page 5 of 8

REVISIONS

SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
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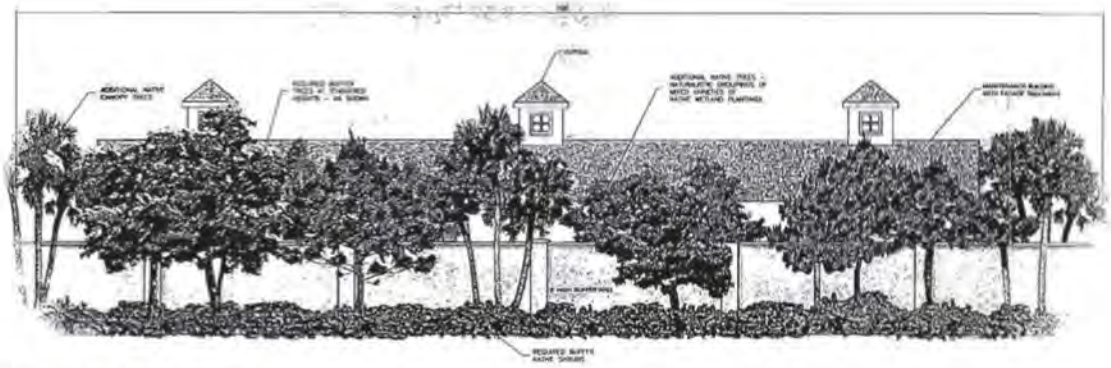
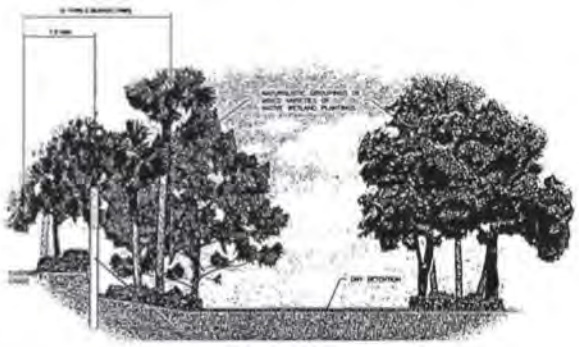
ENTRY DETAILS AND NOTES

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET



BUFFER WALL DETAIL - TYPICAL 100' SECTION 1"=5'



ENHANCED TYPE C BUFFER/DRY DETENTION - TYPICAL 1"=5'

DCI 2005-00005

Approved as Exhibit C
MCP Page 6 **of** 6
Resolution # Z-06-069

EXHIBIT C
Page 6 of 6

REVISIONS		

SEVERN - TRENT
FOR BAYSIDE CDD

BAYSIDE CDD
MAINTENANCE FACILITY
LEE COUNTY, FLORIDA

JOHNSON ENGINEERING

BUFFER DETAILS AND NOTES

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET

EXHIBIT "F"
PELICAN LANDING DRI
DEVELOPMENT PARAMETERS
(updated through ~~3-1-01~~ January 2006)

Land Use	Units[1]	Existing (1998)	Build out Total (2008~~9~~)
Residential	DU	1083	~~4,400~~ 3,912
Single Family	DU	402	~~665~~ 930
Multi Family	DU	596	~~3,735~~ 2,982
Retail[2]	GFA	11,000	300,000
Office[3]	GFA	134,738	475,000
Hotel/Motel	Rooms	0	750
Recreation Uses			
Pelican Nest Golf Course/Clubhouse/ Practice Range	Holes	21	30
Colony Range Club/ Golf Course/ Clubhouse/Practice Range	Holes	19	19
Resort Golf Course/ Clubhouse Practice Range	Holes	0	28
Tennis Center	Courts	12	24
Coconut Marina	Boat Slips Wet	24	48
	Dry	0	150
Redfish Point	GFA	5,000	5,000
	Boat Slips Wet	15	15
Other[4]	Boat Slips Wet	2	2
	Accessory Parking	0	3.2
	CDD's Maintenance Facility		1.45

Footnotes:
1 Units
DU - Dwelling Units
GFA - Square Feet of Gross Floor Area
2 Includes conference center, community center and clubhouse/marina
3 Includes "Foundations"
4 Ancillary Use

RESOLUTION NUMBER Z-19-024

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

WHEREAS, Alexis V. Crespo filed an application on behalf of the property owner, Mark D. Wilson to rezone a 1.44± acre parcel from Residential Single-Family (RS-1) to Commercial Planned Development (CPD) in reference to Bayview II CPD; and

WHEREAS, a public hearing before the Lee County Zoning Hearing Examiner, Donna Marie Collins, was advertised and held on September 12, 2019. At the conclusion of the hearing, the Hearing Examiner left the record open and requested Staff and the Applicant to submit written submissions to her Office on or before October 4, 2019; and

WHEREAS, the Hearing Examiner gave full consideration to the evidence in the record for Case # DCI2019-00002 and recommended APPROVAL WITH CONDITIONS; and

WHEREAS, a second public hearing was advertised and held on December 4, 2019 before the Lee County Board of Commissioners; and,

WHEREAS, the Lee County Board of Commissioners gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to rezone a 1.44± acre parcel from RS-1 to CPD, to permit development of an accessory parking lot.

The property is located in the Outlying Suburban Future Land Use Category and is legally described in attached Exhibit A. The request is APPROVED, SUBJECT TO the conditions and deviations specified in Sections B and C below.

SECTION B. CONDITIONS:

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

1. Development of this project must be consistent with the one-page Master Concept Plan (MCP) entitled "Bayview II CPD," prepared by Waldrop Engineering, date stamped received August 20, 2019, and attached hereto as Exhibit C, except as modified by the conditions below. Development must comply with all requirements of the LDC at time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the MCP are subsequently pursued, appropriate approvals will be necessary.

The development approved herein is as follows: Commercial Parking lot with a maximum of 95 parking spaces.

2. Schedule of Uses and Property Development Regulations

a. Schedule of Uses

Accessory uses and structures
Boat storage, dry: Subject to Condition 5
Excavation, water management
Entrance gate and gatehouses
Parking lot, subject to Condition 3:
- Accessory
- Commercial

Signs

b. Property Development Regulations

Minimum Lot Area:	1.44 acres
Minimum Lot Width:	170 feet
Minimum Lot Depth:	360 feet

Minimum Setbacks (feet)(principal/accessory)

Street:	20/20
Side:	15/10
Rear:	15/15

Minimum Building Separation (feet)

Principal to Principal:	10
Principal to Accessory:	5

Maximum Lot Coverage:	80%
Maximum Building Height:	35 feet

3. Use

Use of the property is limited to accessory parking for Bayview on Estero Bay. Operation of a standalone parking facility or other change of use requires further development approval.

4. Gated Access, Hours of Operation

The parking lot must be gated and access restricted to employees, residents, and guests of Bayview on Estero Bay. Gates may be left open daily between 7:00 a.m. and 10:00 p.m.; access to the lot for guest and boat trailer parking must be restricted to the hours of 7:00 a.m. and 10:00 p.m.

Access for employee parking may be permitted 24 hours a day, 7 days a week.

5. Dry Slip Storage

Developer must submit documentation from the United State Fish and Wildlife Service confirming the number of dry slips, including slip transfers, approved at Bayview on Estero Bay. Developer must specify the number of dry slips allocated to the subject property.

The development order plans must reflect the number of dry slips proposed on the site (boat trailer parking spaces).

6. Design Standards
Commercial buildings and structures must comply with LDC Design Standards and Guidelines for Commercial Buildings and Development.

7. Development Permits
County development permits do not establish a right to obtain permits from state or federal agencies. Further, those county permits do not establish liability on the county if the developer: (a) does not obtain requisite approvals or fulfill obligations imposed by state or federal agencies or (b) undertakes actions resulting in violation of state or federal law.

8. Access from Coconut Road
The developer must submit documentation of the Village of Estero's approval to access Coconut Road with the application for development order approval. If the Village requires improvements as a condition of access, the developer must submit plans for those improvements to County Development Services to ensure the improvements do not adversely affect on-site requirements of unincorporated Lee County.

9. Coconut Road Buffer
The local development order plans must delineate an enhanced right-of-way buffer along Coconut Road. The buffer must be 20 feet wide and contain a three-foot-high berm, a double-staggered hedgerow, and five (5) canopy trees per 100 linear feet. The double-staggered hedgerow must be 24 inches in height at the time of planting and must be maintained at a minimum height of 36 inches within one year after time of planting. Canopy trees must be a minimum of 45 gallons, 12-14 feet in height at the time of planting, with a 6-foot spread and 3-inch caliper.

10. Shuttle
The developer must provide public shuttle service from the Bayview II CPD property to the Bayview on Estero Bay project. Developer must provide the days and hours of the shuttle service at the time of local development order application. Days/hours of operation must be based on project parking needs and fluctuations in demand.

11. Lighting
Light poles cannot exceed 15 feet in height and must comply with LDC requirements for full cutoff and shielded fixtures. Light color (temperature) for LED may not exceed 3000K.

12. Parking
The number of standard vehicle parking spaces and dry boat slips may not exceed 95 spaces. The developer may modify parking space configuration at time of local development order approval without triggering an administrative amendment. The developer may convert standard vehicle parking spaces to dry boat slips and vice-versa, subject to compliance with LDC dimension standards. The dry boat slips developed within the CPD must be transferred from the "Bayview on Estero Bay" project in Bonita Springs.

SECTION C. DEVIATIONS:

1. Connection Separation. Deviation (1) seeks relief from LDC 10-285, which requires a

connection separation of 330 feet for major collector roadways in future suburban areas, to allow connection separation distances of 210 and 255 feet between the proposed site access and access to adjacent properties to the west and east respectively. This deviation is APPROVED, SUBJECT TO Condition 8.

2. Buffer. Deviation (2) seeks relief from LDC 10-416(d)(6), which requires parking areas located less than 125 feet from existing single-family development to be buffered by a 25-foot-wide buffer consisting of an eight-foot-high solid wall or combination berm and solid wall with a minimum of five trees and 18 shrubs per 100 linear feet, or a 30-foot-wide Type F buffer with a hedge planted a minimum 20 feet from the abutting property, to allow a 15-foot-wide buffer consisting of an eight-foot-high solid wall or combination berm and solid wall with a minimum of five trees and 18 shrubs per 100 linear feet. This deviation is APPROVED.

3. Location and Design of Parking. Deviation 3 seeks relief from LDC 34-2015(1), which requires parking spaces to be provided on the same premises and within the same zoning district as the use they serve, or within a zoning district that permits the same use, to allow an off-premises parking lot. This deviation is APPROVED, SUBJECT TO Condition 3.

4. Entrance Gates and Gatehouses. Deviation 4 seeks relief from LDC 34-1748(1)d, which requires entrance gates/gate houses to be located a minimum of 100 feet back from an intersecting street right-of-way/easement and to provide stacking for a minimum of five vehicles, to allow stacking within a right-turn lane in the Coconut Road right of way. This deviation is APPROVED, SUBJECT TO Condition 8.

SECTION D. EXHIBITS:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: Legal description of the property
Exhibit B: Zoning Map (with the subject parcel indicated)
Exhibit C: The Master Concept Plan

SECTION E. FINDINGS AND CONCLUSIONS:

1. The request for CPD zoning is consistent with the Lee Plan. *See* Lee Plan Vision Statement - Paragraph 21 (Estero Planning Community), Goals 4, 6, 77; Objectives 2.1, 2.2 and Policies 1.1.6, 1.7.6, 2.1.2, 5.1.5, 6.1.4; Lee Plan Maps 1 and 16.*

2. As conditioned, the CPD zoning designation:

   a. is consistent with the LDC and other county regulations. *See* LDC 34-411, 34-413, 34-341, 34-491, 34-612(2), 34-931(e), 34-932, 34-934;
   b. is compatible with existing or planned uses in the surrounding area. *See* Lee Plan Goal 5, 6; Objective 2.1, and Policies 5.1.5, 6.1.4; LDC 34-411;
   c. provides access sufficient to support the proposed development intensity. *See* Lee Plan Policy 6.1.1; LDC 34-411(d);
   d. expected impacts on transportation facilities will be addressed by county regulations and conditions of approval;
   e. will not adversely affect environmentally sensitive areas or natural resources.

3. Urban Services are available to serve the property. Lee Plan Policy 2.2.1.

4. The proposed uses are appropriate at the proposed location. *See* Lee Plan 6.1.4.

5. County regulations and recommended conditions of approval sufficiently protect the public interest and reasonably relate to the impacts expected from the proposed development. *See* Lee Plan Policies 5.1.5, 5.2.4, 6.1.4, 6.1.6; LDC 34-411, and 34-932.

6. The requested deviations enhance the planned development and protect public health, safety and welfare. *See* LDC 34-377(a)(4).

SECTION F. SCRIVENER'S ERRORS

The Board intends that this resolution can be renumbered or relettered and typographical errors that do not affect the intent and are consistent with the Board's action can be corrected with the authorization of the County Manager or his designee, without the need for a public hearing.

Commissioner Sandelli made a motion to adopt the foregoing resolution, seconded by Commissioner Manning. The vote was as follows:

Adopted by unanimous consent.

John Manning	Aye
Cecil Pendergrass	Aye
Raymond Sandelli	Aye
Brian Hamman	Aye
Frank Mann	Aye

DULY PASSED AND ADOPTED this 3rd day of December 2019.

ATTEST:
LINDA DOGGETT, CLERK

BY: Joyce Townsend
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

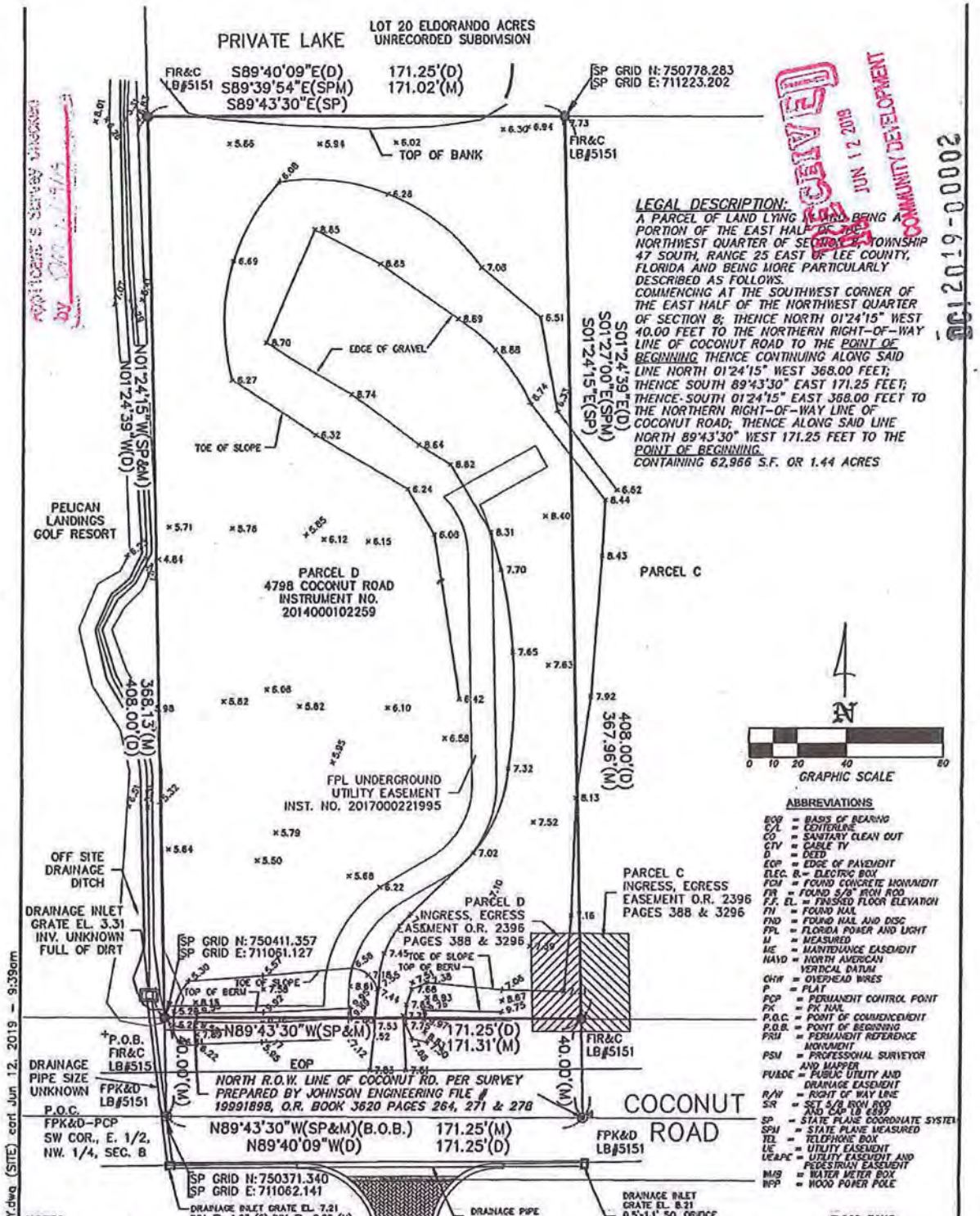
BY: Brian Hamman
Brian Hamman, Chair

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

APPROVED AS TO FORM FOR THE
RELIANCE OF LEE COUNTY ONLY

Amanda L. Swindle
Assistant County Attorney
County Attorney's Office

RECEIVED
MINUTES OFFICE
2019 DEC 11 PM 5:29



LEGAL DESCRIPTION:

A PARCEL OF LAND LYING AND BEING A PORTION OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST OF LEE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS.

COMMENCING AT THE SOUTHWEST CORNER OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 8; THENCE NORTH 01°24'15" WEST 40.00 FEET TO THE NORTHERN RIGHT-OF-WAY LINE OF COCONUT ROAD TO THE POINT OF BEGINNING THENCE CONTINUING ALONG SAID LINE NORTH 01°24'15" WEST 368.00 FEET; THENCE SOUTH 89°43'30" EAST 171.25 FEET; THENCE SOUTH 01°24'15" EAST 368.00 FEET TO THE NORTHERN RIGHT-OF-WAY LINE OF COCONUT ROAD; THENCE ALONG SAID LINE NORTH 89°43'30" WEST 171.25 FEET TO THE POINT OF BEGINNING.

CONTAINING 62,966 S.F. OR 1.44 ACRES

ABBREVIATIONS

BOB = BASIS OF BEARING
C/L = CENTERLINE
CO = SANITARY CLEAN OUT
CTV = CABLE TV
D = DEED
EOP = EDGE OF PAVEMENT
ELEC. B. = ELECTRIC BOX
FCM = FOUND CONCRETE MONUMENT
FIR = FOUND 5/8" IRON ROD
F.F. EL. = FINISHED FLOOR ELEVATION
FN = FOUND NAIL
FND = FOUND NAIL AND DISC
FPL = FLORIDA POWER AND LIGHT
M = MEASURED
ME = MAINTENANCE EASEMENT
NAVD = NORTH AMERICAN VERTICAL DATUM
OHW = OVERHEAD WIRES
P = PLAT
PCP = PERMANENT CONTROL POINT
PK = PK NAIL
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
PRM = PERMANENT REFERENCE MONUMENT
PSM = PROFESSIONAL SURVEYOR AND MAPPER
PU&DE = PUBLIC UTILITY AND DRAINAGE EASEMENT
R/W = RIGHT OF WAY LINE
SIR = SET 5/8 IRON ROD AND CAP LB 6897
SP = STATE PLANE COORDINATE SYSTEM
SPM = STATE PLANE MEASURED
TEL = TELEPHONE BOX
UE = UTILITY EASEMENT
UE&PC = UTILITY EASEMENT AND PEDESTRIAN EASEMENT
WMB = WATER METER BOX
WPP = WOOD POWER POLE

NOTES

1. BEARING SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE ESTABLISHED BY THE NATIONAL GEODETIC SURVEY FOR FLORIDA WEST ZONE, 1983 DATUM WITH 1990 ADJUSTMENT AND REFER TO THE SOUTH LINE OF N.W. 1/4 OF SECTION 8, TWP. 47 S. RGE. 25 E. LEE COUNTY, SAID LINE BEING N 89°43'30" W
2. ELEVATIONS ARE BASED ON NAVD 1988 DATUM UNLESS NOTED.
3. FIELD MEASUREMENTS ARE IN SUBSTANTIAL AGREEMENT WITH PLAT AND/OR DEED CALLS UNLESS NOTED.
4. SUBJECT TO EASEMENTS OF RECORDS.
5. SURVEYORS CERTIFICATION DOES NOT APPLY TO MATTERS OF TITLE, ZONING, OR FREEDOM OF ENCUMBRANCES, AND IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
6. NO UNDERGROUND UTILITIES, FOUNDATIONS OR OTHER UNDERGROUND INSTALLATIONS WERE LOCATED UNLESS SHOWN.
7. NO OTHER PERSONS OR ENTITIES, OTHER THAN SHOWN, MAY RELY ON THIS SURVEY.
8. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.
9. LEGAL DESCRIPTION WAS FURNISHED BY CLIENT.
10. PROPERTY OWNER SHOULD OBTAIN WRITTEN FLOOD ZONE DETERMINATION FROM OUR LOCAL PERMITTING, PLANNING, AND BUILDING DEPARTMENT PRIOR TO ANY CONSTRUCTION PLANNING AND/OR CONSTRUCTION

UPDATED 6-12-19

11 THIS SURVEY PERFORMED WITH BENEFIT OF TITLE OPINION BY LISA VAN DIEN, INSURANCE POLICY FROM FIRST AMERICAN TITLE INSURANCE COMPANY POLICY NO. 5011412-0574044E AND FURTHER SUPPLEMENTED, WITH AN EFFECTIVE DATE OF MARCH 1, 2019.

FLOOD ZONE: ZONE AE EL. 10.00

PANEL NO.: 12071-0589 F

MAP REVISION DATE 8-28-08

CERTIFICATION:
I CERTIFY THAT THIS SURVEY WAS MADE UNDER MY DIRECTION AND THAT IT MEETS THE STANDARD OF PRACTICE SET FORTH BY THE BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17.051 THROUGH 5J-17.053, FLORIDA ADMINISTRATIVE CODE, PURSUANT CHAPTER 472.027, FLORIDA STATUTES.

BY: JOHN SCOTT RHODES, SR. PSM # 5739

RHODES & RHODES LAND SURVEYING, INC.
LICENSE #LB 6897

28100 BONITA GRANDE DRIVE SUITE 107
BONITA SPRINGS, FL 34135
(239) 405-8166 (239) 405-8163 FAX

bk:	pg:	date: MARCH 21, 2019
802	43	
858	01-03	scale: 1" = 40'
1192	50-56 & 60	cogo #: 19-204

BOUNDARY & TOPOGRAPHIC SURVEY

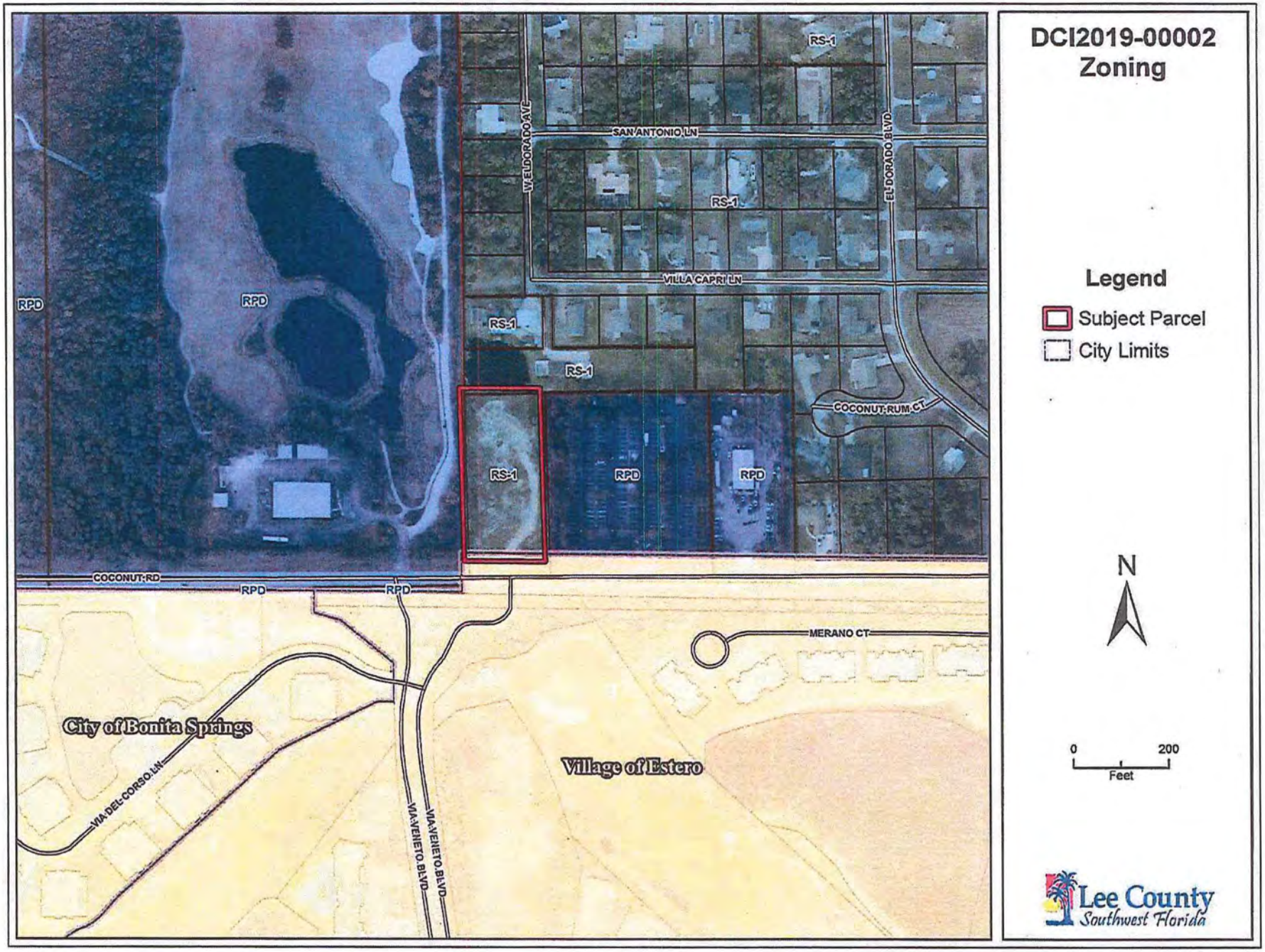
CERTIFIED TO:
LB ESTERO BAY INVESTMENTS, LLC.
LEE COUNTY

drawn: EBC	acad #: 2019-204	project#: 2019-204	sheet#: 1 of 1
checked: JTR	view: SITE	file #: 2019-204	

Z:\Bayview On Estero Bay\2019-204 BNDY TOPO SURVEY.dwg (SITE) cart Jun 12, 2019 - 9:39am

EXHIBIT A

2019-0000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Legend
Subject Parcel
City Limits
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Southwest Florida
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RS-1
RS-1
RS-1
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RPD
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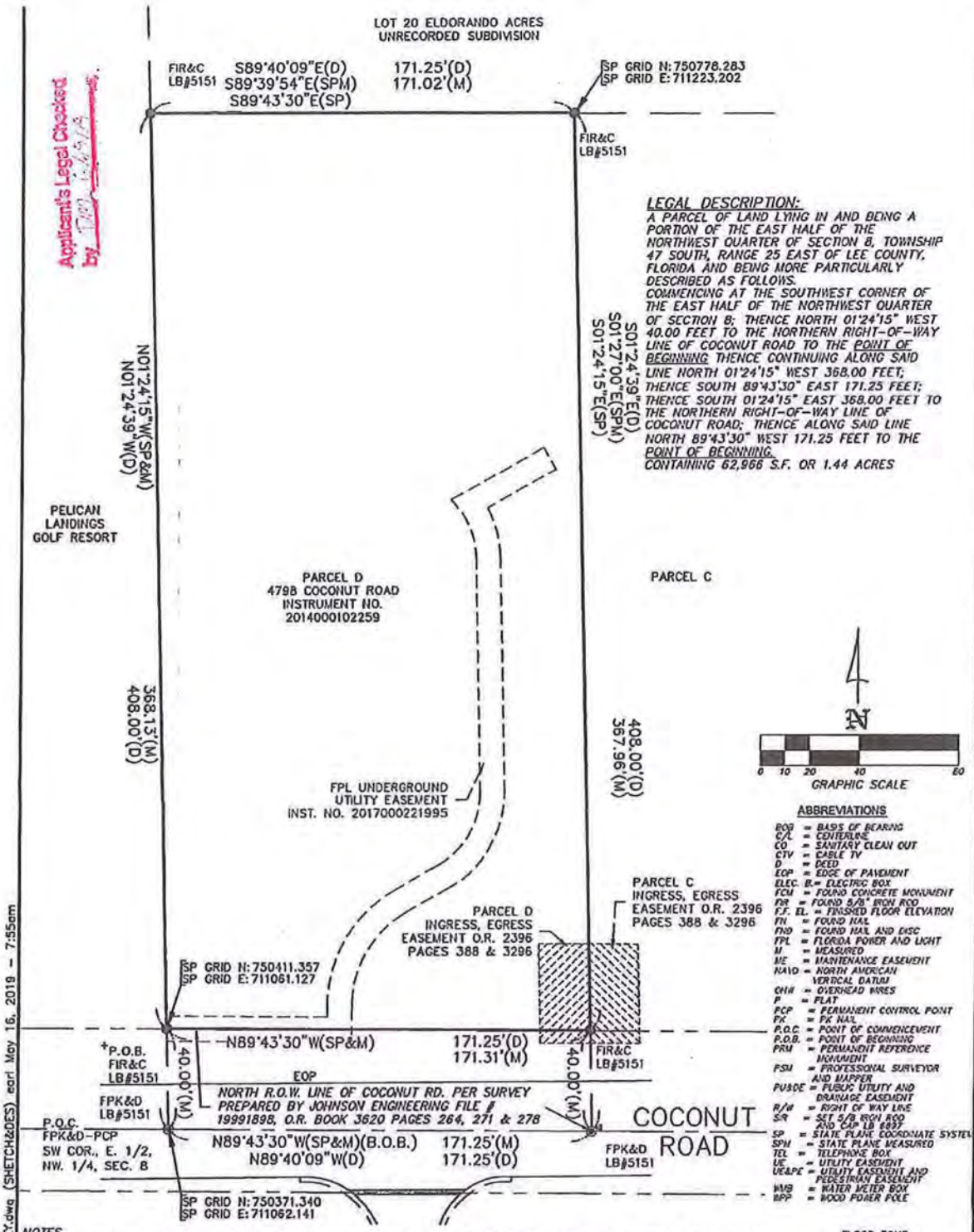
SAN ANTONIO LN
W ELDORADO AVE
EL DORADO BLVD
VILLA CAPRI LN
COCONUT RUM CT
COCONUT RD
MERANO CT
City of Bonita Springs
Village of Estero
VIA DEL CORSO LN
VIA VENETO BLVD
VIA VENETO BLVD

EXHIBIT B



Applicant's Legal Checked by

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CONTAINING 62,966 S.F. OR 1.44 ACRES

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11. THIS SURVEY PERFORMED WITH BENEFIT OF TITLE OPINION BY USA VAN DIEN, INSURANCE POLICY FROM FIRST AMERICAN TITLE INSURANCE COMPANY POLICY NO. 5011412-0574044E AND FURTHER SUPPLEMENTED, WITH AN EFFECTIVE DATE OF MARCH 1, 2019.

FLOOD ZONE:
ZONE AE EL. 10.00
PANEL NO.:
12071-0589 F
MAP REVISION DATE
8-28-08

CERTIFICATION:

I CERTIFY THAT THIS SURVEY WAS MADE UNDER MY DIRECTION AND THAT IT MEETS THE STANDARD OF PRACTICE SET FORTH BY THE BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61-17.051 THROUGH 61-17.053, FLORIDA ADMINISTRATIVE CODE, PURSUANT CHAPTER 472.027, FLORIDA STATUTES.

BY: JOHN SCOTT RHODES, SR. PSM # 5739

RHODES & RHODES
LAND SURVEYING, INC.
LICENSE #LB 6897
28100 BONITA GRANDE DRIVE SUITE 107
BONITA SPRINGS, FL 34135
(239) 405-8166 (239) 405-8163 FAX

bk:	pg:
802	43
858	01-03
1192	50-56 & 60

date: MAY 03, 2010
scale: 1" = 40'
cogo #: 19-204

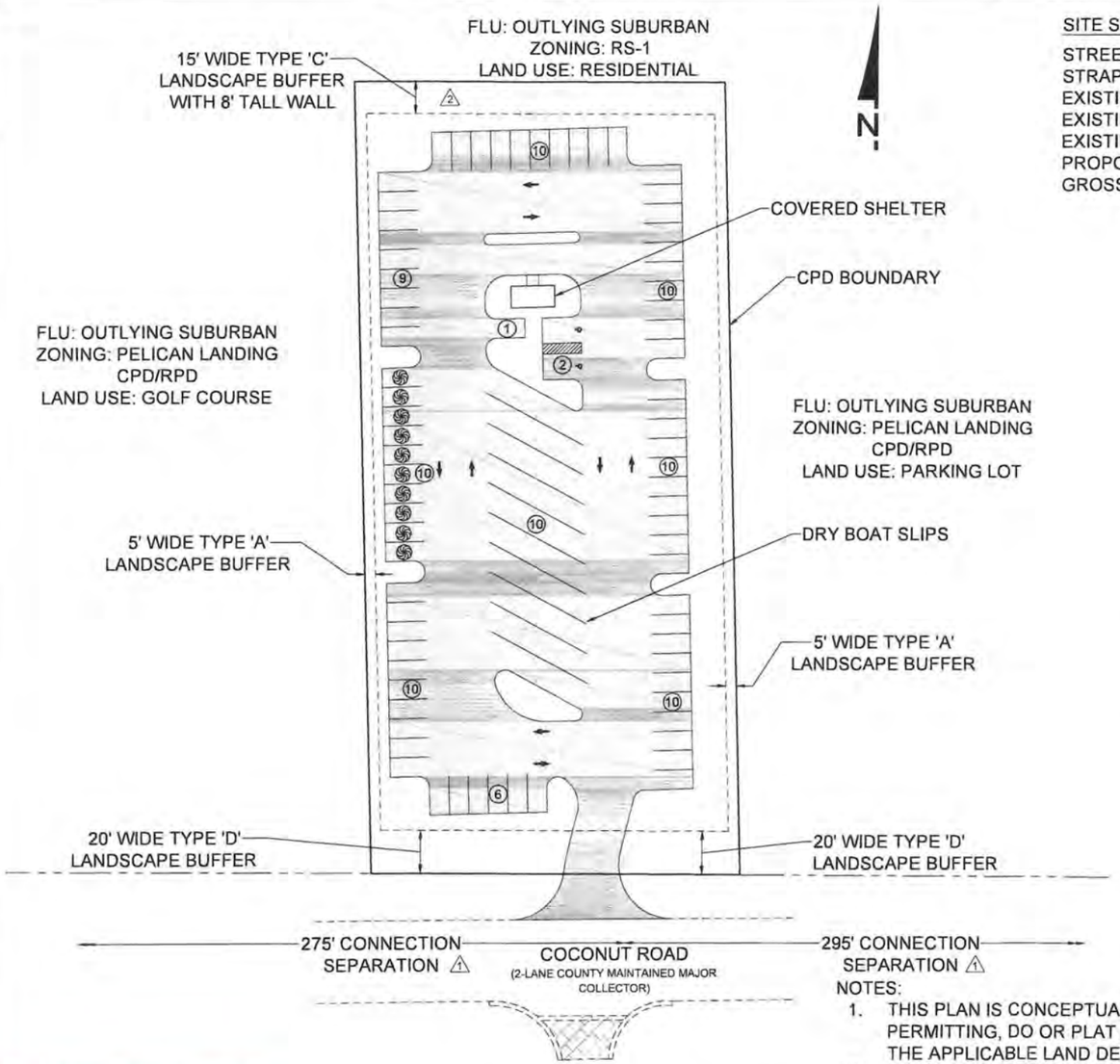
SURVEY SKETCH AND DESCRIPTION

CERTIFIED TO:
LB ESTERO BAY INVESTMENTS, LLC.
LEE COUNTY

drawn:	acad #:	project#:	sheet#:
EBC	2019-204	2019-204	1 of 1
checked: JTR	view: SITE	file #: 2019-204	

Z:\Boyd\0-0-0 Estero (Bay)\079-204\ENDY; TOPO SURVEY.dwg (SHETCH&DES) earl May 16, 2019 - 7:55am

DEVELOPMENT



SITE SUMMARY:

STREET ADDRESS:	4798 COCONUT ROAD
STRAP NUMBER:	08-47-25-00-00003.0030
EXISTING PLAN DESIGNATION:	OUTLYING SUBURBAN
EXISTING ZONING DESIGNATION:	RS-1
EXISTING LAND USE:	VACANT
PROPOSED ZONING DESIGNATION:	CPD, COMMERCIAL PLANNED DEVELOPMENT
GROSS AREA:	1.44 +/- ACRES

INDIGENOUS PRESERVE: N.A.

OPEN SPACE:
REQUIRED:20% (1.44 ACRES X .20 = 0.28)
PROVIDED: 20%

PARKING SPACES*

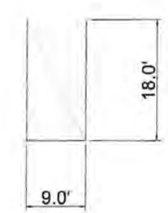
TYPE	NO. OF SPACES
DRY BOAT SLIPS	10
STANDARD	76
HANDICAPPED	2
TOTAL SPACES	88

* SEE NOTE 4

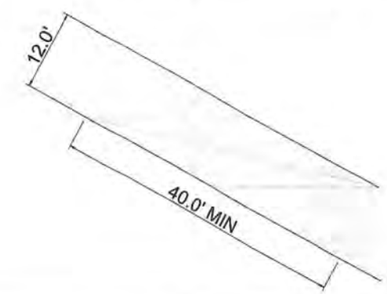
LEGEND

⚠	DEVIATION LOCATION
	EMPLOYEE PARKING

STANDARD PARKING (TYP)



DRY BOAT SLIP SPACE (TYP)



NOTES:

1. THIS PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO THE MODIFICATION AT THE TIME OF AGENCY PERMITTING, DO OR PLAT APPROVAL. HOWEVER, ANY SUCH MODIFICATION SHALL BE IN COMPLIANCE WITH THE APPLICABLE LAND DEVELOPMENT CODE (LDC) DESIGN STANDARDS AND GUIDELINES.
2. ALL ACREAGES ARE APPROXIMATE AND SUBJECT TO MODIFICATION AT THE TIME OF AGENCY PERMITTING, DO OR PLAT APPROVAL IN ACCORDANCE WITH THE LAND DEVELOPMENT CODE (LDC).
3. FUTURE PHASE OF DEVELOPMENT TO INCLUDE PARKING GARAGE STRUCTURE IN ACCORDANCE WITH SCHEDULE OF USES AND PROPERTY DEVELOPMENT REGULATIONS.
4. NUMBER OF STANDARD VEHICLE PARKING SPACES AND DRY BOAT SLIPS SHOWN ON PLAN ARE SUBJECT TO CHANGE BASED UPON MARKET DEMAND. STANDARD VEHICLE PARKING SPACES MAY BE CONVERTED TO DRY BOAT SLIPS AND/OR DRY BOAT SLIPS MAY BE CONVERTED TO STANDARD VEHICLE PARKING SPACES, SUBJECT TO CONFORMANCE WITH ALL DIMENSIONAL STANDARDS IN THE LDC. TOTAL NUMBER OF DRY BOAT SLIPS DEVELOPED WITHIN THE CPD MUST BE TRANSFERRED FROM ESTERO BAY MARINA RESORT CPD AND MAY NO EXCEED 150 SLIPS. PARKING AREA MAY BE RECONFIGURED AT TIME OF DEVELOPMENT ORDER APPROVAL WITHOUT AN ADMINISTRATIVE AMENDMENT.
5. NUMBER AND LOCATION OF EMPLOYEE PARKING IS CONCEPTUAL AND SUBJECT TO CHANGE AT TIME OF DEVELOPMENT ORDER BASED ON DEMAND.

RECEIVED
AUG 20 2019
COMMUNITY DEVELOPMENT

Approved as Exhibit C
MCP Page 1 of 1
Resolution # Z-19-024

WALDROP ENGINEERING
CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTANTS
28100 BONITA GRANDE DRIVE - SUITE 305 BONITA SPRINGS, FL 34135
P: 239-405-7777 F: 239-405-7799 EMAIL: info@waldropengineering.com

BAYVIEW II CPD

CLIENT: LB ESTERO BAY INVESTMENTS, LLC

MASTER CONCEPT PLAN

PLAN REVISIONS
01/15/2019 REVISED PER COUNTY COMMENTS
06/12/2019 REVISED PER COUNTY COMMENTS
08/12/2019 REVISED PER COUNTY COMMENTS

9 15 30 60
SCALE IN FEET

FLORIDA CERTIFICATE OF AUTHORIZATION #6876

SET NUMBER 704-002-E01
SHEET 1

DCI2019-00002

ATTACHMENT O

Pelican Landing MPD

Schedule of Uses, Site Development Regulations

1. PERMITTED DENSITY

Maximum of:
- 729 dwelling units
- 25,000 square feet of office uses
- 27 golf holes
- 318 hotel rooms

2. SCHEDULE OF USES

All Tracts (Except in MF)

Accessory uses, buildings and structures
Accessory Apartment and Accessory Dwelling Unit
Administrative offices
Clubs:
- Private, Country, including sale of wine, beer, and liquor for on premises consumption

Entrance Gates and Gatehouses
Essential Services
Essential Services Facilities – Group I Only
Excavation:
- Water Retention

Excess Spoil Removal (20,000 cubic yards or more in volume)
Fences, Walls
Models:
- Display Center/Sales Center
- Model Home
- Model Unit

Parking Lot, Accessory
Real Estate Sales Office
Recreation Facilities
- Personal
- Private – On-Site

Residential Accessory Uses
Signs in conformance with LDC Chapter 30
Temporary Uses
- Including Temporary Sales Office, Temporary Construction Office, Temporary Construction-Related Storage, Temporary Amenity Structures

MU Tract

Dwelling Units:
- Single-family
- Zero lot line
- Two-family attached
- Townhouse

Multiple-family buildings
Automatic Teller Machine
Banks and Financial Establishments
Business Services, Group I
Cleaning and Maintenance Services
Emergency Operations Center
EMS, Fire or Sheriff's Station
Golf Course Maintenance Facility
Health Care Facilities
Home Occupation, No Outside Help
Insurance Companies
Maintenance Facility (Government)
Mass Transit Depot or Maintenance Facility (government-operated)
Medical Office
Parking Lot, Accessory, Park-and-Ride, Temporary
Place of worship
Post Office
Religious Facilities
Research and Development Laboratories, Group II
Schools, Commercial, Noncommercial
Signs in accordance with Chapter 30
Social Services, Group I
Storage, Indoor (accessory only)
Warehouse:
Hybrid (accessory to residential only)

RES Tract
Dwelling Units:
Single-family
Zero lot line
Two-family attached
Townhouse
Multiple-family buildings
Restaurant, Group I, II, III (in association with golf facilities), including sale of wine, beer, and liquor for on premises consumption

MF Tract
Residential Dwelling Units:
Single-family
Zero lot line
Two-family attached
Townhouse
Multiple-family buildings
Hotel/Convention Center, including sale of wine, beer, and liquor for on premises consumption and for off premises sales as permitted by state law
Consumption on Premises, including sale of wine, beer, and liquor for on premises consumption and for off premises sales as permitted by state law
Care Facilities and Centers, including sale of wine, beer, and liquor for on premises consumption
Assisted Living Facility
Clubs:
Private, Country, including sale of wine, beer, and liquor for on premises consumption

Continuing Care Facilities, including sale of wine, beer, and liquor for on premises consumption
Independent Living Facilities
Health Care Facilities (accessory only to ALF & CCF uses)
Accessory uses, buildings and structures
Accessory Apartment and Accessory Dwelling Unit
Administrative offices
Entrance Gates and Gatehouses
Excavation:
    Water Retention
Excess Spoil Removal (20,000 cubic yards or more in volume)
Fences, Walls
Models:
    Display Center/Sales Center
    Model Home
    Model Unit
Parking Lot, Accessory
Recreation Facilities
    Personal
    Private – On-Site
Residential Accessory Uses
Signs in conformance with LDC Chapter 30
Temporary Uses
    Including Temporary Sales Office, Temporary Construction Office, Temporary Construction-Related Storage, Temporary Amenity Structures

GC Tract

Golf Courses, Golf Course Accessory and Associate Uses, including but not limited to:
    Club house
    Maintenance facility
    Pro shop
    Snack bar at the ninth hole or other appropriate location, including sale of wine, beer, and liquor for on premises consumption
    Ball washers
    Restrooms and other uses which are normal and accessory to the golf course
    Consumption on Premises, including sale of wine, beer, and liquor for on premises consumption and for off premises sales as permitted by state law
Golf Driving Range

Preserves

Uses permitted in the preserve areas are limited to activities which make this area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:
    Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022.

Interface Area

Uses permitted in the Interface area are limited to golf courses, developed in accordance with the "Pelican Landing Golf Course Management Plan," and any related appurtenances or uses, stormwater management; and created wetland marsh and any other created vegetative system or

lake system which will promote wildlife diversity, activities which make this area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, on-going maintenance and removal of invasive exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022.

3. MINIMUM LOT AREA AND DIMENSIONS

	Minimum Lot Size	Width	Depth	Lot Coverage
Single-Family Detached	4,000 SF	40’	100’	60%
Zero Lot Line Units	4,000 SF	40’	100’	65%
Multi-Family	N/A	N/A	N/A	50%
Two-Family Attached and Townhouses	3,000 SF	18’	100’	65%
Non-Residential	10,000 SF	100’	100’	50%

4. MINIMUM SETBACKS

	Street*	Side	Rear***	Waterbody	Building Separation*****	
Single-Family Detached	20’	5’	10’	20’	10’	
Zero Lot Line Units	20’	5/0’	10’	20’	10’	
Multi-Family	20’	10’**/0’****	10’/0’****	20’	Buildings 35 feet or less	10’
					Buildings greater than 35 feet	35% of the sum of the building heights (see Deviation 12)
Two-Family Attached and Townhouses	20’	5/0’	10’	20’	10’	
Nonresidential	20’******	10’	10’	20’	10’ or ½ the building height for buildings over 35’	

*15-foot front setback for a dwelling with side entry garage and 10-foot front setback for secondary front yards on corner lots.

**Zero-foot side setback when the property line is adjacent to other tracts within the Pelican Landing MPD (see Deviation 11).

***5-foot rear yard setback for accessory structures
**** 0-foot side or rear setbacks when adjacent to GC Tract and associated GC uses.
***** When buildings are connected with roofed structures, including but not limited to breezeway, parking structure/garage area, foundation/podium, minimum building separations will not apply, and buildings will be treated as one structure.
****** Minimum 50-foot setback from Coconut Road for hybrid warehouse uses in the MU tract.

5. BUILDING HEIGHT

Tract	Maximum Height*
MU Tract	50 FT
RES Tract	110 FT
GC Tract	50 FT
MF Tract	290 FT

*Measured from the lowest minimum habitable floor elevation for which a building permit may be issued to the highest point of the roof surface of a flat or roof, to the deck line of a mansard roof, or to the mean height level between the eaves and ridge of gable, hip, shed and gambrel roofs per LDC Section 34-2171(b) and subject to resiliency provisions in LDC Section 34-2172 & 34-2174.

Kevin C. Karnes, Lee County Clerk of Circuit Court
INSTR. # 2023000256338, Doc Type EAS, Pages 9, Recorded 7/28/2023 at 1:38 PM, Deputy Clerk CDOUGLAS ERECORD
Rec Fees: $78.00 Deed Doc: $0.70

ATTACHMENT P

This instrument prepared by:

Lisa Van Dien, Esq.
London Bay
2210 Vanderbilt Beach Rd, Suite 1300
Naples, FL 34109
239-592-1400

ACCESS EASEMENT

THIS ACCESS EASEMENT made and entered into this 28th day of July, 2023, and effective as of April 24, 2023, by and between LB Raptor Investments, LLC, a Florida limited liability company (the "Grantor"), whose mailing address is 2210 Vanderbilt Beach Rd, Suite 1300, Naples, FL 34109 and Kersey Smoot Investments, LLC, a Florida limited liability company (the "Grantee").

(Wherever used herein, the terms "Grantor" and "Grantee" include all the parties to this instrument and their respective heirs, legal representatives, successors and assign and are used for singular or plural, as the context requires.)

WHEREAS, the Grantor, for and in consideration of the sum of TEN AND NO/100THS DOLLARS ($10.00) and other good and valuable considerations paid by the Grantee, receipt of which is hereby acknowledged by Grantor, hereby conveys, grants, bargains and sells unto the Grantee, its successors and assigns, a perpetual, non-exclusive easement, license, right and privilege to enter upon, over, and across the following described lands being located in Lee County, Florida, to wit:

See Exhibit "A" attached hereto and incorporated herein by this reference.

TO HAVE AND TO HOLD the same unto the Grantee, for the purpose of ingress and egress to the lands described on Exhibit "B" attached hereto and incorporated herein by this reference. The easement granted herein shall constitute an easement running with the land.

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed the day and year first above written.

[Signatures on following page – remainder of this page intentionally left blank]

Signed, sealed and delivered in our presence:

Witness Name: Lisa Van Dien

Witness Name: Carrie J. Lynn

LB Raptor Investments, LLC
a Florida limited liability company

By: LB Bonita Springs Investments – Raptor, LLC, a Florida limited liability company
Its: Manager

By: _____
Stephen G. Wilson
Its: Manager

STATE OF FLORIDA)
) ss:
COUNTY OF COLLIER)

The foregoing instrument was acknowledged before me this 28th day of July, 2023 by Stephen G. Wilson, as Manager of LB Bonita Springs Investments – Raptor, LLC, a Florida limited liability company, as Manager of LB Ratpor Investments, LLC, a Florida limited liability company, who is personally known to me and who appeared before me by means of physical presence.

[Notary Seal]

LISA VAN DIEN
MY COMMISSION # GG 338921
EXPIRES: July 31, 2023
Bonded Thru Notary Public Underwriters

Notary Public
Printed Name: _____
My Commission Expires: _____

EXHIBIT "A"

WilsonMiller

New Directions In Planning, Design & Engineering

Legal Description
Hyatt Coconut Plantation
Roadway Easement
Being a part of Sections 5,6,7,and 8,
Township 47 South, Range 25 East
Lee County, Florida

All that part of Sections 5,6,7, and 8, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows;
Commencing at the West ¼ corner of said Section 8;
Thence along the west line on said Section 8, North 01°07'45" West 413.40 feet;
Thence leaving said West line North 88°52'15" East 25.00 feet to the Point of Beginning;
Thence North 01°07'45" West 52.73 feet; to a point of curvature;
Thence easterly 18.52 feet along the arc of a circular curve concave northerly having a radius of 28.00 feet through a central angle of 37°53'29" and being subtended by a chord which bears South 73°46'21" East 18.18 feet;
Thence North 87°16'55" East 1.00 feet;
Thence northeasterly and northerly 236.24 feet along the arc of a circular curve concave northwesterly having a radius of 120.00 feet through a central angle of 112°47'45" and being subtended by a chord which bears North 30°53'03" East 199.90 feet to a point of reverse curvature;
Thence northerly 256.44 feet along the arc of a circular curve concave easterly having a radius of 226.00 feet through a central angle of 65°00'49" and being subtended by a chord which bears North 06°59'35" East 242.90 feet;
Thence North 39°29'59" East 34.98 feet;
Thence northerly 141.25 feet along the arc of a circular curve concave westerly having a radius of 216.00 feet through a central angle of 37°28'04" and being subtended by a chord which bears North 20°45'57" East 138.75 feet
Thence North 02°01'55" East 135.15 feet;
Thence northwesterly 247.84 feet along the arc of a circular curve concave southwesterly having a radius of 229.06 feet through a central angle of 61°59'35" and being subtended by a chord which bears North 28°57'52" West 235.93 feet to a point of compound curvature;
Thence northwesterly 44.40 feet along the arc of a circular curve concave southwesterly having a radius of 643.00 feet through a central angle of 03°57'22" and being subtended by a chord which bears North 61°56'21" West 44.39 feet; to a point of reverse curvature;
Thence northerly 925.65 feet along the arc of a circular curve concave easterly having a radius of 642.00 feet through a central angle of 82°36'38" and being subtended by a chord which bears North 22°36'43" West 847.53 feet;
Thence North 18°41'36" East 245.30 feet;
Thence northeasterly 121.08 feet along the arc of a circular curve concave southeasterly having a radius of 407.00 feet through a central angle of 17°02'40" and being subtended by a chord which bears North 27°12'56" East 120.63 feet to a point of reverse curvature;
Thence northerly 304.64 feet along the arc of a circular curve concave westerly having a radius of 243.00 feet through a central angle of 71°49'49" and being subtended by a chord which bears North 00°10'38" West 285.08 feet;
Thence North 36°05'33" West 105.05 feet;
Thence northwesterly 139.98 feet along the arc of a circular curve concave northeasterly having a radius of 757.00 feet through a central angle of 10°35'41" and being subtended by a chord which bears North 30°47'42" West 139.78 feet
Thence along non-tangential line North 60°31'34" East 28.07 feet;
Thence South 25°27'38" East 1.47 feet;

Official Records BK 02878 PG 4512

4/4/2022- 108610 Ver. 01h DRAWCS
CAD43
F02250-042-302- - 0

Naples Fort Myers Sarasota Bradenton Tampa Tallahassee
3200 Bailey Lane, Suite 200 Naples, Florida 34105-8507 941-649-4040 941-643-5716
www.wilsonmiller.com
WilsonMiller,Inc. — FL Lic.# LC-C000170 CA 43

WilsonMiller

New Directions in Planning, Design & Engineering

Thence southeasterly 135.28 feet along the arc of a circular curve concave northeasterly having a radius of 729.00 feet through a central angle of 10°37'55" and being subtended by a chord which bears South 30°46'36" East 135.08 feet
Thence South 36°05'33" East 105.05 feet;
Thence southerly 339.75 feet along the arc of a circular curve concave westerly having a radius of 271.00 feet through a central angle of 71°49'49" and being subtended by a chord which bears South 00°10'38" East 317.93 feet to a point of reverse curvature;
Thence southwesterly 112.75 feet along the arc of a circular curve concave southeasterly having a radius of 379.00 feet through a central angle of 17°02'40" and being subtended by a chord which bears South 27°12'56" West 112.33 feet;
Thence South 18°41'36" West 245.30 feet;
Thence southerly 885.28 feet along the arc of a circular curve concave easterly having a radius of 614.00 feet through a central angle of 82°36'38" and being subtended by a chord which bears South 22°36'43" East 810.57 feet to a point of reverse curvature;
Thence southeasterly 46.33 feet along the arc of a circular curve concave southwesterly having a radius of 671.00 feet through a central angle of 03°57'22" and being subtended by a chord which bears South 61°56'21" East 46.32 feet; to a point of compound curvature;
Thence southeasterly 278.13 feet along the arc of a circular curve concave southwesterly having a radius of 257.06 feet through a central angle of 61°59'35" and being subtended by a chord which bears South 28°57'52" East 264.76 feet;
Thence South 02°01'55" West 135.15 feet;
Thence southerly 159.56 feet along the arc of a circular curve concave westerly having a radius of 244.00 feet through a central angle of 37°28'04" and being subtended by a chord which bears South 20°45'57" West 156.73 feet
Thence South 39°29'59" West 34.98 feet;
Thence southerly 228.75 feet along the arc of a circular curve concave easterly having a radius of 198.00 feet through a central angle of 66°11'41" and being subtended by a chord which bears South 06°24'09" West 216.24 feet to a point of reverse curvature;
Thence southerly and southwesterly 284.20 feet along the arc of a circular curve concave northwesterly having a radius of 152.00 feet through a central angle of 107°07'40" and being subtended by a chord which bears South 26°52'08" West 244.57 feet;
Thence South 80°25'58" West 24.51 feet;
Thence westerly 13.65 feet along the arc of a circular curve concave southerly having a radius of 28.00 feet through a central angle of 27°55'22" and being subtended by a chord which bears South 66°28'17" West 13.51 feet to the Point of Beginning;
Subject to easement and restriction of record
Bearings are assumed and based on the West line of Section 8 North 01°07'45" West.

Certificate of authorization #LB-43.

WilsonMiller, Inc.
Registered Engineers and Land Surveyors

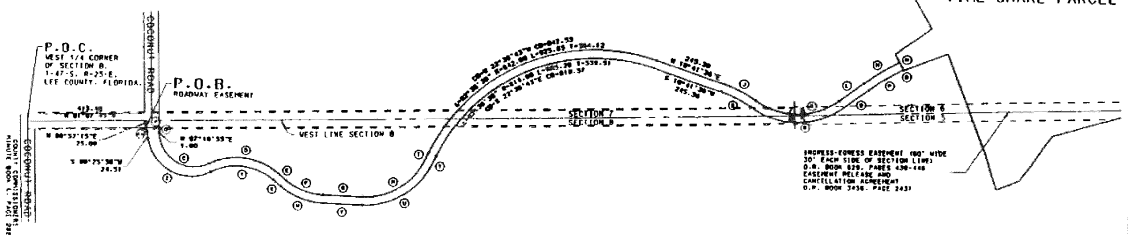
By: John P. Maloney Date 4-03-02
John P. Maloney, P.S.M. #4493
Ref. 2K-257 Sheet 2
Not valid unless embossed with the Professional's seal.

Official Records BK 03878 PG 4513

4/4/2002- 109819 Ver: 01- DRAMOS
CARD
F0250-042-502- - 0

GENERAL NOTES:

1. BEARINGS ARE BASED ON THE WEST LINE OF SECTION 8, BEING NORTH 01°08'22" WEST.
2. DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
3. DIMENSIONS ALONG CURVES ARE AS FOLLOWS: Δ = DELTA, R= RADIUS T = TANGENT, L = ARC LENGTH, CB CHORD BEARING, CD = CHORD DISTANCE
4. P.O.B. = POINT OF BEGINNING
5. P.O.C. = POINT OF COMMENCEMENT
6. SEE ATTACHMENT FOR LEGAL DESCRIPTION.



DATA

	DELTA/BEARING	RADIUS	LEN./DIST.	TANGENT	CHORD BEARING	CHORD DIST.
1	N 01°07'45"W		32.73			
2	27°53'29"	20.00	10.52	5.61	S 73°46'24"E	10.18
3	112°47'45"	120.00	236.24	100.06	N 30°53'03"E	199.90
4	69°08'49"	209.00	252.44	144.82	N 06°38'35"E	242.98
5	N 39°29'59"E		34.08			
6	37°28'04"	210.00	141.25	73.29	N 20°45'57"E	138.73
7	N 02°01'55"E		175.15			
8	61°38'35"	229.00	247.84	137.61	N 28°52'52"W	235.83
9	3°57'23"	643.00	44.40	22.21	N 61°38'21"W	44.39
10	17°02'48"	407.00	121.00	60.90	N 37°12'36"W	120.63
11	71°48'49"	243.00	304.64	178.00	N 08°10'38"W	285.80
12	N 36°05'33"W		195.95			
13	16°35'41"	757.00	139.98	70.38	N 30°47'42"W	139.78
14	N 60°31'34"E		78.07			
15	S 25°27'38"E		9.67			

DATA

	DELTA/BEARING	RADIUS	LEN./DIST.	TANGENT	CHORD BEARING	CHORD DIST.
16	60°27'33"	129.00	135.38	67.03	S 30°40'38"E	129.08
17	S 36°05'33"E		195.95			
18	71°48'49"	271.00	339.73	198.20	S 08°10'38"E	317.93
19	17°02'48"	370.00	112.73	56.70	S 37°12'36"E	112.33
20	3°57'23"	671.00	46.33	23.17	S 61°38'21"E	46.32
21	61°38'35"	257.00	276.13	154.44	S 28°52'52"E	264.78
22	S 02°01'55"W		175.15			
23	37°28'04"	244.00	159.56	82.73	S 20°45'57"W	156.73
24	S 39°29'59"W		34.08			
25	69°08'49"	180.00	216.73	128.06	S 06°38'35"W	204.24
26	109°02'48"	152.00	289.20	205.90	S 36°52'36"W	246.57
27	27°53'29"	20.00	10.63	5.46	S 06°26'17"W	10.51

*** NOT A SURVEY ***

SCALE: 1" = 250'

0 125 250 500

SCALE IN FEET

ACTIVITY	INITIALS	EMP. #	MO.	DAY	YR.
RESEARCH					
FIELD WORK-CREW CHIEF					
DRAFTED	LMT	453	03	29	02
CHECKED BY	JPM	275	03	29	02
FIELD BOOK/PAGE					

APPROVED:

JOHN P. MALONEY, P.S.M. #LS-4493

WILSONMILLER, INC.

ENGINEERS • SURVEYORS • PLANNERS • ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS • TRANSPORTATION CONSULTANTS
WILSON PROFESSIONAL CENTER
3200 PAILEY LANE at AIRPORT ROAD, SUITE 200
NAPLES, FLORIDA 34105 (941) 649-4040 FAX (941) 643-5726

DATE: 03/02
SCALE: 1"=250'

CLIENT: PELICAN LANDING TIMESHARE VENTURES, L.P.
DESCRIPTION: SKETCH OF DESCRIPTION
ROADWAY EASEMENT
BEING A PART OF SECTIONS 5, 8, 7 AND 9,
TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA.

CROSS REF. FILE NO.: | PROJECT NO. & WORK ORDER NO.: F0250-042-502-GCS00 | SHEET NUMBER: 2 OF | FILE NO.: 2K-257

[P] SK/DESC ROAD EASEMENT TO TIMESHARE 45X(0.100)PF: F0250 1088 04-Apr-02 08:47 AM / 22194.00000-453

Official Records BK 02879 PG 4511

EXHIBIT "B"

RHODES & RHODES LAND SURVEYING, INC.
28100 BONITA GRANDE DRIVE, SUITE 107
BONITA SPRINGS, FL 34135
PHONE (239) 405-8166 FAX (239) 405-8163

LEGAL DESCRIPTION
TRACT "A"

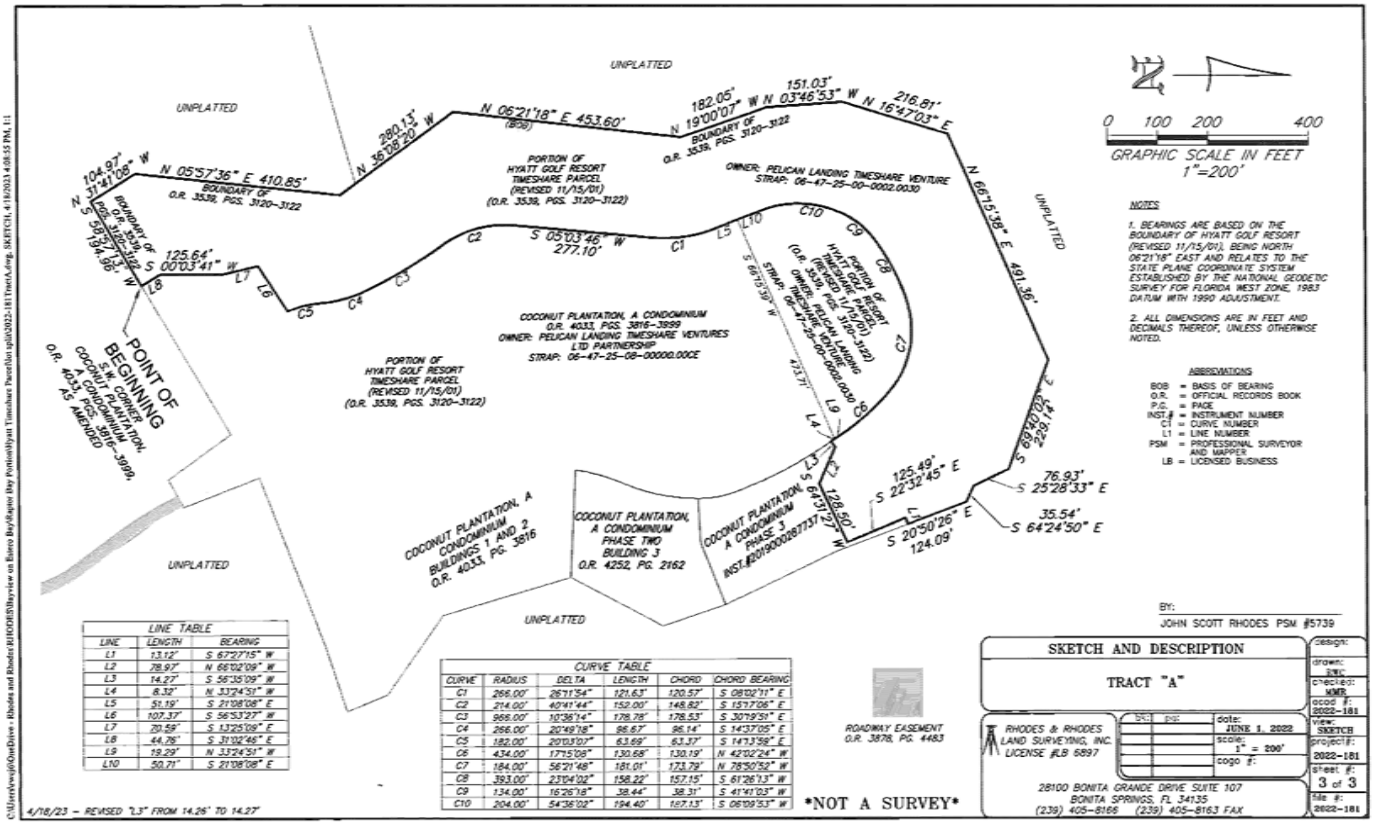
BEING A PORTION OF THOSE LANDS DESCRIBED IN QUIT CLAIM DEED FOR HYATT GOLF RESORT TIMESHARE PARCEL (REVISED 11/15/01), AS RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3120 THROUGH 3122 (INCLUSIVE), LOCATED IN SECTION 6, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THOSE CERTAIN LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED, THE SAME BEING A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED IN QUIT CLAIM DEED FOR HYATT GOLF RESORT TIMESHARE PARCEL (REVISED 11/15/01), AS RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3120 THROUGH 3122 (INCLUSIVE), ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THIRTEEN (13) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 58°57'13" WEST, 194.96 FEET; COURSE NO. 2: NORTH 31°41'08" WEST, 104.97 FEET; COURSE NO. 3: NORTH 05°57'36" EAST, 410.85 FEET; COURSE NO. 4: NORTH 36°08'20" WEST, 280.13 FEET; COURSE NO. 5: NORTH 06°21'18" EAST, 453.60 FEET; COURSE NO. 6: NORTH 19°00'07" WEST, 182.05 FEET; COURSE NO. 7: NORTH 03°46'53" WEST, 151.03 FEET; COURSE NO. 8: NORTH 16°47'03" EAST, 216.81 FEET; COURSE NO. 9: NORTH 66°15'38" EAST, 491.36 FEET; COURSE NO. 10: SOUTH 69°40'02" EAST, 229.14 FEET; COURSE NO. 11: SOUTH 25°28'33" EAST, 76.93 FEET; COURSE NO. 12: SOUTH 64°24'50" EAST, 35.54 FEET; COURSE NO. 13: SOUTH 20°50'26" EAST, 124.09 FEET TO A POINT ON THE BOUNDARY OF SAID LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED; THENCE RUN THE FOLLOWING SIX (6) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 67°27'15" WEST, 13.12 FEET; COURSE NO. 2: SOUTH 22°32'45" EAST, 125.49 FEET; COURSE NO. 3: SOUTH 64°31'27" WEST, 128.50 FEET; COURSE NO. 4: NORTH 66°02'09" WEST, 78.97 FEET; COURSE NO. 5: SOUTH 56°35'09" WEST, 14.27 FEET; COURSE NO. 6: NORTH 33°24'51" WEST, 8.32; THENCE CONTINUE NORTH 33°24'51" WEST, 19.29 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY, 130.68 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 434.00 FEET, THROUGH A CENTRAL ANGLE OF 17°15'08" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 42°02'24" WEST, 130.19 FEET TO A POINT OF COMPOUND CURVATURE; THENCE WESTERLY, 181.01 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 184.00 FEET, THROUGH A CENTRAL ANGLE OF 56°21'48" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 78°50'52" WEST, 173.79 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHWESTERLY, 158.22 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 393.00 FEET, THROUGH A CENTRAL ANGLE OF 23°04'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 61°26'13" WEST, 157.15 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHWESTERLY, 38.44 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 134.00 FEET, THROUGH A CENTRAL ANGLE OF 16°26'18" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 41°41'03" WEST, 38.31 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHERLY, 194.40 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 204.00 FEET, THROUGH A CENTRAL ANGLE OF 54°36'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 06°09'53" WEST, 187.13 FEET; THENCE SOUTH 21°08'08" EAST, A DISTANCE OF 50.71 FEET TO A POINT ON THE BOUNDARY OF SAID LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED; THENCE RUN THE FOLLOWING ELEVEN (11) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 21°08'08" EAST, 51.19 FEET TO A

RHODES & RHODES LAND SURVEYING, INC.
28100 BONITA GRANDE DRIVE, SUITE 107
BONITA SPRINGS, FL 34135
PHONE (239) 405-8166 FAX (239) 405-8163

POINT OF CURVATURE; COURSE NO. 2: SOUTHERLY, 121.63 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 26°11'54" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 08°02'11" EAST, 120.57 FEET; COURSE NO. 3: SOUTH 05°03'46" WEST, 277.10 FEET TO A POINT OF CURVATURE; COURSE NO. 4: SOUTHERLY, 152.00 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 214.00 FEET, THROUGH A CENTRAL ANGLE OF 40°41'44" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 15°17'06" EAST, 148.82 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 5: SOUTHEASTERLY, 178.78 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 966.00 FEET, THROUGH A CENTRAL ANGLE OF 10°36'14" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 30°19'51" EAST, 178.53 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 6: SOUTHERLY, 96.67 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 20°49'18" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 14°37'05" EAST, 96.14 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 7: SOUTHERLY, 63.69 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 182.00 FEET, THROUGH A CENTRAL ANGLE OF 20°03'07" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 14°13'59" EAST, 63.37 FEET; COURSE NO. 8: SOUTH 56°53'27" WEST, 107.37 FEET; COURSE NO. 9: SOUTH 13°25'09" EAST, 70.59 FEET; COURSE NO. 10: SOUTH 00°03'41" WEST, 125.64 FEET; COURSE NO. 11: SOUTH 31°02'46" EAST, 44.76 FEET TO THE POINT OF BEGINNING.

CONTAINING 521,026 SQUARE FEET OR 11.961 ACRES, MORE OR LESS.



LINE TABLE

LINE	LENGTH	BEARING
L1	13.12'	S 67°27'15" W
L2	78.97'	N 66°02'09" W
L3	14.27'	S 56°35'09" W
L4	8.32'	N 33°24'51" W
L5	51.19'	S 21°08'08" E
L6	107.37'	S 56°53'27" W
L7	20.59'	S 13°25'09" E
L8	44.76'	S 31°02'46" E
L9	19.29'	N 33°24'51" W
L10	50.71'	S 21°08'08" E

CURVE TABLE

CURVE	RADIUS	DELTA	LENGTH	CHORD	CHORD BEARING
C1	266.00'	26°11'54"	121.63'	120.57'	S 08°02'11" E
C2	214.00'	40°41'44"	152.00'	148.82'	S 15°17'06" E
C3	966.00'	10°36'14"	178.78'	178.53'	S 30°19'51" E
C4	266.00'	20°49'18"	96.67'	96.14'	S 14°37'05" E
C5	182.00'	20°03'07"	63.69'	63.37'	S 14°13'58" E
C6	434.00'	17°15'08"	130.68'	130.19'	N 42°02'24" W
C7	184.00'	56°21'48"	181.01'	173.79'	N 78°50'52" W
C8	393.00'	23°04'02"	158.22'	157.15'	S 61°26'13" W
C9	134.00'	16°26'18"	38.44'	38.31'	S 41°41'03" W
C10	204.00'	54°36'02"	194.40'	187.13'	S 06°09'53" W

C:\UserViews\OneDrive - Rhodes and Rhodes\RHODES\Review on Estero Bay\Engine Bay Portion\Hyatt Timeshare Parcel\lan\sp\2022-181\Tract A.dwg, SKETCH, 4/18/2023 4:08:55 PM, 1:1

Mortgagee Joinder, Consent, and Subordination

For Ten Dollars ($10.00) and other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, First Horizon Bank ("Mortgagee"), the owner and holder of a mortgage given by LB Raptor Investments, LLC, a Florida limited liability company ("Mortgagor") to Lake Michigan Credit Union recorded in Instrument #2020000311408, as assigned to Mortgagee by Non-Recourse Assignment of Note and Mortgage recorded in Instrument #2022000352995, and modified by Mortgage Modification Agreement recorded in Instrument #2022000352996, and as further modified by Amended and Restated Mortgage, Assignment of Rents and Lease, Security Agreement, and Fixture Filing recorded in Instrument #2022000352997, hereby joins in, consents to and subordinates the lien of its Mortgage, as it has been, and as it may be, modified, amended and assigned from time to time, to the Access Easement to which this Joinder and Consent is attached.

IN WITNESS WHEREOF, this Mortgagee Joinder, Consent, and Subordination is made this 28 day of July, 2023.

First Horizon Bank

By: _____
Name: Geoff Cross
Its: SVP

STATE OF FLORIDA
COUNTY OF Collier

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization this 28th day of July, 2023, by Geoff Cross as VP of First Horizon Bank. He is ☒ personally known to me or ☐ has produced _____ as identification.

_____
Notary Public
Name: Judith Gangi Santos
My Commission Expires: 5-8-27

Judith Gangi Santos
NOTARY PUBLIC - STATE OF FLORIDA
MY COMMISSION EXPIRES MAY 8, 2027
COMMISSION NO. HH 367398

Kevin C. Karnes, Lee County Clerk of Circuit Court
INSTR. # 2023000146468, Doc Type ASG, Pages 10, Recorded 4/25/2023 at 11:15 AM, Deputy Clerk NFERGUSON ERECORD
Rec Fees: $86.50

ATTACHMENT P

(4)

THIS INSTRUMENT PREPARED BY AND SHOULD BE RETURNED TO:

Lisa Van Dien, Esq.
London Bay
2210 Vanderbilt Beach Rd.
Naples, FL 34109
239-592-1400

PARTIAL NON-EXCLUSIVE ASSIGNMENT OF EASEMENT

THIS PARTIAL NON-EXCLUSIVE ASSIGNMENT OF EASEMENTS ("Assignment") is made and executed this 24th day of April, 2023, by **PELICAN LANDING TIMESHARE VENTURES LP,** a Delaware limited partnership whose address is 9002 San Marco Court, Orlando, FL 32819 (hereinafter referred to as the "Assignor"), to **KERSEY SMOOT INVESTMENTS, LLC**, a Florida limited liability company ("Assignee"), whose address is 2210 Vanderbilt Beach Rd., Naples, FL 34109.

RECITALS

A. Assignor, in its capacity of Declarant thereunder (as defined therein), executed that certain Master Declaration of Covenants, Conditions and Restrictions of Hyatt Coconut Plantation dated August 18, 2003, and recorded on August 21, 2003, in Official Records Book 04033, Page 3793 (the "Master Declaration"), setting forth certain covenants, conditions, restrictions and easements applicable to the real property more particularly described therein.

B. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such capitalized terms in the Master Declaration.

C. Pursuant to Section III.C.1 of the Master Declaration, Assignor reserved unto itself non-exclusive use and access rights over, upon, under and across the Master Property (together with the right to assign all or any portion of such rights).

D. As of even date herewith, Assignor conveyed fee simple title to that certain real property described on Exhibit "A-1" attached hereto and incorporated herein by this reference (the "Conveyed Property") to Assignee.

E. LB Raptor Investments, LLC, a Florida limited liability company and an affiliate of Assignee, holds fee simple title to certain real property which is depicted as the cross-hatched

property on Exhibit "A-2" attached hereto and incorporated herein by this reference (the "Golf Course Property", and, together with the Conveyed Property, the "Benefitted Property").

F. The parties now desire that Assignor assign to Assignee, on a non-exclusive basis, certain of the easements and other rights reserved by Assignor under the Master Declaration, as more specifically set forth below.

ASSIGNMENT

NOW THEREFORE, in consideration of the sum of Ten ($10.00) Dollars and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending legally to be bound, hereby covenant and agree as follows:

1. Recitals. The foregoing Recitals are hereby incorporated by reference herein and made a substantive part hereof.

2. Assignment/Assumption. To the maximum extent permitted thereunder, Assignor hereby assigns to Assignee and Assignee hereby accepts and assumes from Assignor, on a non-exclusive basis, an easement over, upon and across that portion of the Streets and Roadways depicted on Exhibit "B" attached hereto for the limited purpose of access, ingress, and egress to and from the Benefitted Property (the "Assigned Easement"); provided, however, that such use shall not exceed the equivalencies for 241 timeshare units based on the trip conversion matrix attached hereto as Exhibit "C".

3. Assignee to Share Maintenance Costs of Assigned Easement. Subject to the party that is obligated to maintain the applicable portion of the Streets and Roadways providing Assignee with (i) an invoice for Assignee's Share (as hereinafter defined) on a quarterly basis, and (ii) such back-up relating to such invoice as reasonably requested by Assignee, Assignee shall pay 35.6% ("Assignee's Share") of the maintenance costs for the portion of the Streets and Roadways depicted on Exhibit "B", calculated as follows: (241 allocated units of density / 339 as set forth in Section IV.B.1 of the Master Declaration) x 50%. Assignee shall pay all invoices within 30 days after receipt of each invoice. This obligation may be assigned to a homeowners or condominium association created in connection with some or all of the Benefitted Property by Assignee.

4. Assignor to Retain Rights. The parties hereby acknowledge that, following the date of this Assignment, Assignor shall continue to be able to exercise and enjoy all of the easements and rights reserved to Assignor under the Master Declaration (including, without limitation, the right to assign such easements and rights to third parties).

5. Indemnification. Assignee hereby agrees to protect, indemnify, defend and hold Assignor harmless from and against any and all claims, damages, losses, liabilities, costs and expenses (including reasonable attorneys' fees at all levels) with reference to the time period occurring and acts required in connection with the exercise by Assignee of its rights under this Assignment from and after the date hereof.

6. Counterparts. This Assignment may be executed and delivered in any number of counterparts, each of which so executed and delivered shall be deemed to be an original and all of which shall constitute one and the same instrument.

7. Governing Law. This Assignment shall be governed by and construed in accordance with the laws of the State of Florida, without regard to the conflicts of law principles thereof.

8. Survival and Binding Agreement. This Assignment shall run with the land and shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, personal representatives, successors and assigns.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, the parties have signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the Presence of the following witnesses:

Signature of Witness

JANET L. COPE

Printed Name of Witness

Signature of Witness

CAROL FUGGI

Printed Name of Witness

"**ASSIGNOR**"

PELICAN LANDING TIMESHARE VENTURES LP, a Delaware limited partnership

BY: **HTS-COCONUT POINT, INC.,** its general partner

By: _____
John E. Geller, Jr., Executive Vice President

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this _____ day of April, 2023, by John E. Geller, Jr., Executive Vice President of HTS-Coconut Point, Inc., general partner of Pelican Landing Timeshare Ventures LP, on behalf of said limited partnership. He is personally known to me and appeared before me by means of physical presence.

(NOTARY SEAL)

Notary Public State of Florida
Carol L Fuggi
My Commission
HH 166711
Exp. 8/19/2025

Notary Public Signature

CAROL FUGGI

(Name typed, printed or stamped)
Notary Public, State of FL
Commission No.: HH 166711
My Commission Expires: 8/19/25

Signed, sealed and delivered in the
Presence of the following witnesses:

Signature of Witness

Lisa Van Dien

Printed Name of Witness

Signature of Witness

Anna Murphy

Printed Name of Witness

"ASSIGNEE"

KERSEY SMOOT INVESTMENTS, LLC,
a Florida limited liability company

By: _____
Stephen G. Wilson, Manager

STATE OF FLORIDA
COUNTY OF Collier

The foregoing instrument was acknowledged before me this 21st day of April, 2023, by Stephen G. Wilson, as Manager of Kersey Smoot Investments, LLC, a Florida limited liability company. He is personally known to me or has produced _____ as identification, and ✓ appeared before me by means of physical presence or ___ online notarization.

(NOTARY SEAL)

LISA VAN DIEN
MY COMMISSION # GG 338921
EXPIRES: July 31, 2023
Bonded Thru Notary Public Underwriters

Notary Public Signature

(Name typed, printed or stamped)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

EXHIBIT "A-1"

CONVEYED PROPERTY

BEING A PORTION OF THOSE LANDS DESCRIBED IN QUIT CLAIM DEED FOR HYATT GOLF RESORT TIMESHARE PARCEL (REVISED 11/15/01), AS RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3120 THROUGH 3122 (INCLUSIVE), LOCATED IN SECTION 6, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THOSE CERTAIN LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED, THE SAME BEING A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED IN QUIT CLAIM DEED FOR HYATT GOLF RESORT TIMESHARE PARCEL (REVISED 11/15/01), AS RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3120 THROUGH 3122 (INCLUSIVE), ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THIRTEEN (13) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 58°57'13" WEST, 194.96 FEET; COURSE NO. 2: NORTH 31°41'08" WEST, 104.97 FEET; COURSE NO. 3: NORTH 05°57'36" EAST, 410.85 FEET; COURSE NO. 4: NORTH 36°08'20" WEST, 280.13 FEET; COURSE NO. 5: NORTH 06°21'18" EAST, 453.60 FEET; COURSE NO. 6: NORTH 19°00'07" WEST, 182.05 FEET; COURSE NO. 7: NORTH 03°46'53" WEST, 151.03 FEET; COURSE NO. 8: NORTH 16°47'03" EAST, 216.81 FEET; COURSE NO. 9: NORTH 66°15'38" EAST, 491.36 FEET; COURSE NO. 10: SOUTH 69°40'02" EAST, 229.14 FEET; COURSE NO. 11: SOUTH 25°28'33" EAST, 76.93 FEET; COURSE NO. 12: SOUTH 64°24'50" EAST, 35.54 FEET; COURSE NO. 13: SOUTH 20°50'26" EAST, 124.09 FEET TO A POINT ON THE BOUNDARY OF SAID LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED; THENCE RUN THE FOLLOWING SIX (6) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 67°27'15" WEST, 13.12 FEET; COURSE NO. 2: SOUTH 22°32'45" EAST, 125.49 FEET; COURSE NO. 3: SOUTH 64°31'27" WEST, 128.50 FEET; COURSE NO. 4: NORTH 66°02'09" WEST, 78.97 FEET; COURSE NO. 5: SOUTH 56°35'09" WEST, 14.27 FEET; COURSE NO. 6: NORTH 33°24'51" WEST, 8.32; THENCE CONTINUE NORTH 33°24'51" WEST, 19.29 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY, 130.68 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 434.00 FEET, THROUGH A CENTRAL ANGLE OF 17°15'08" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 42°02'24" WEST, 130.19 FEET TO A POINT OF COMPOUND CURVATURE; THENCE WESTERLY, 181.01 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 184.00 FEET, THROUGH A CENTRAL ANGLE OF 56°21'48" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 78°50'52" WEST, 173.79 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHWESTERLY, 158.22 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 393.00 FEET, THROUGH A CENTRAL ANGLE OF 23°04'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 61°26'13" WEST, 157.15 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHWESTERLY, 38.44 FEET ALONG THE ARC OF A

CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 134.00 FEET, THROUGH A CENTRAL ANGLE OF 16°26'18" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 41°41'03" WEST, 38.31 FEET TO A POINT OF COMPOUND CURVATURE; THENCE SOUTHERLY, 194.40 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 204.00 FEET, THROUGH A CENTRAL ANGLE OF 54°36'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 06°09'53" WEST, 187.13 FEET; THENCE SOUTH 21°08'08" EAST, A DISTANCE OF 50.71 FEET TO A POINT ON THE BOUNDARY OF SAID LANDS DESCRIBED AS COCONUT PLANTATION, A CONDOMINIUM, RECORDED IN OFFICIAL RECORDS BOOK 4033, PAGES 3816 THROUGH 3999 (INCLUSIVE), AS AMENDED; THENCE RUN THE FOLLOWING ELEVEN (11) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 21°08'08" EAST, 51.19 FEET TO A POINT OF CURVATURE; COURSE NO. 2: SOUTHERLY, 121.63 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 26°11'54" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 08°02'11" EAST, 120.57 FEET; COURSE NO. 3: SOUTH 05°03'46" WEST, 277.10 FEET TO A POINT OF CURVATURE; COURSE NO. 4: SOUTHERLY, 152.00 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 214.00 FEET, THROUGH A CENTRAL ANGLE OF 40°41'44" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 15°17'06" EAST, 148.82 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 5: SOUTHEASTERLY, 178.78 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 966.00 FEET, THROUGH A CENTRAL ANGLE OF 10°36'14" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 30°19'51" EAST, 178.53 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 6: SOUTHERLY, 96.67 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 20°49'18" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 14°37'05" EAST, 96.14 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 7: SOUTHERLY, 63.69 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 182.00 FEET, THROUGH A CENTRAL ANGLE OF 20°03'07" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 14°13'59" EAST, 63.37 FEET; COURSE NO. 8: SOUTH 56°53'27" WEST, 107.37 FEET; COURSE NO. 9: SOUTH 13°25'09" EAST, 70.59 FEET; COURSE NO. 10: SOUTH 00°03'41" WEST, 125.64 FEET; COURSE NO. 11: SOUTH 31°02'46" EAST, 44.76 FEET TO THE POINT OF BEGINNING.

CONTAINING 521,026 SQUARE FEET OR 11.961 ACRES, MORE OR LESS.

EXHIBIT "A-2"

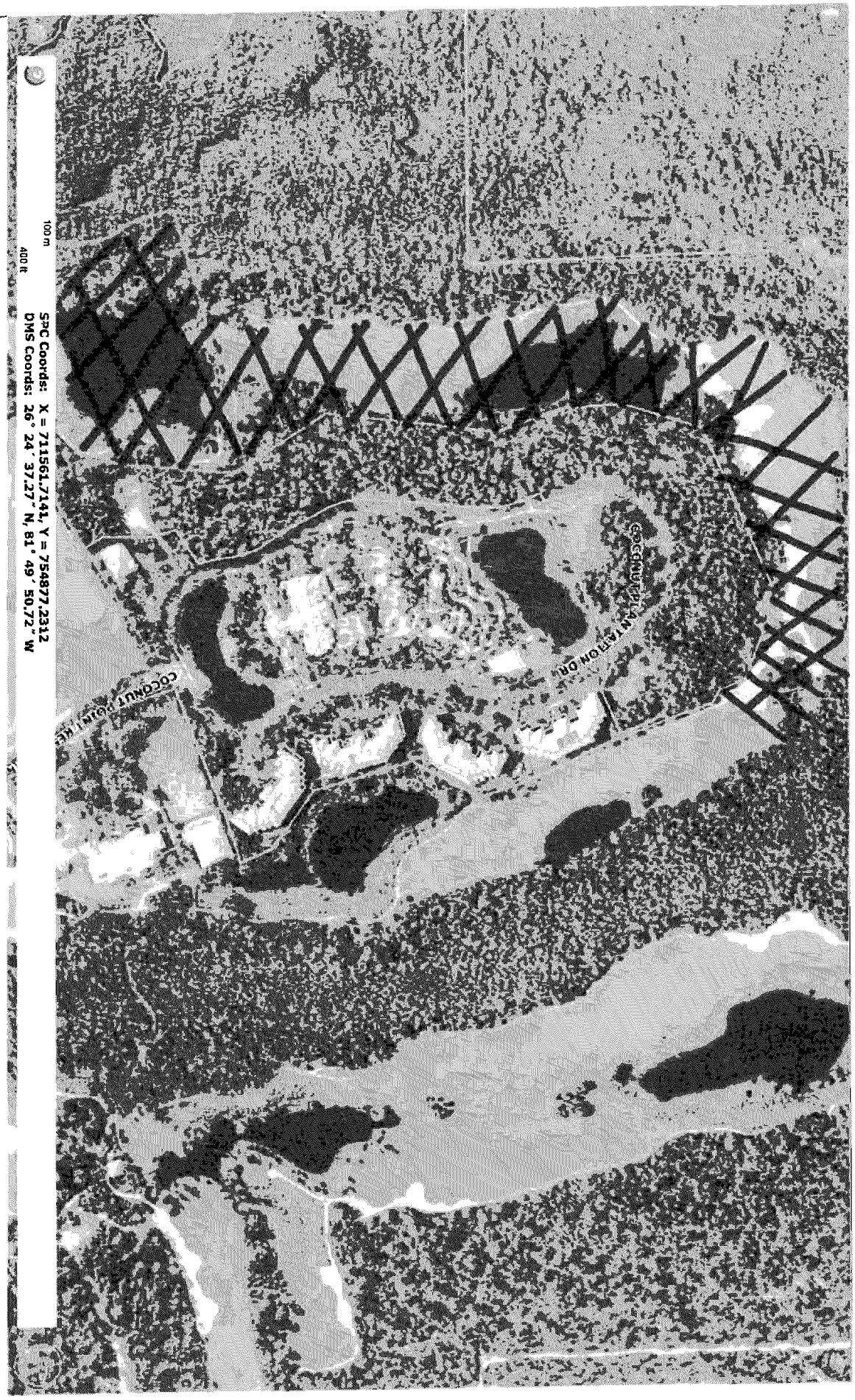

COCONUT PLA
N VASTON DR
COCONUT POINT RE
100 m
400 ft
SPC Coords: X = 711561.7141, Y = 754877.2312
DMS Coords: 26° 24' 37.27" N, 81° 49' 50.72" W

EXHIBIT "B"

STREETS AND ROADWAYS EASEMENT PARCEL

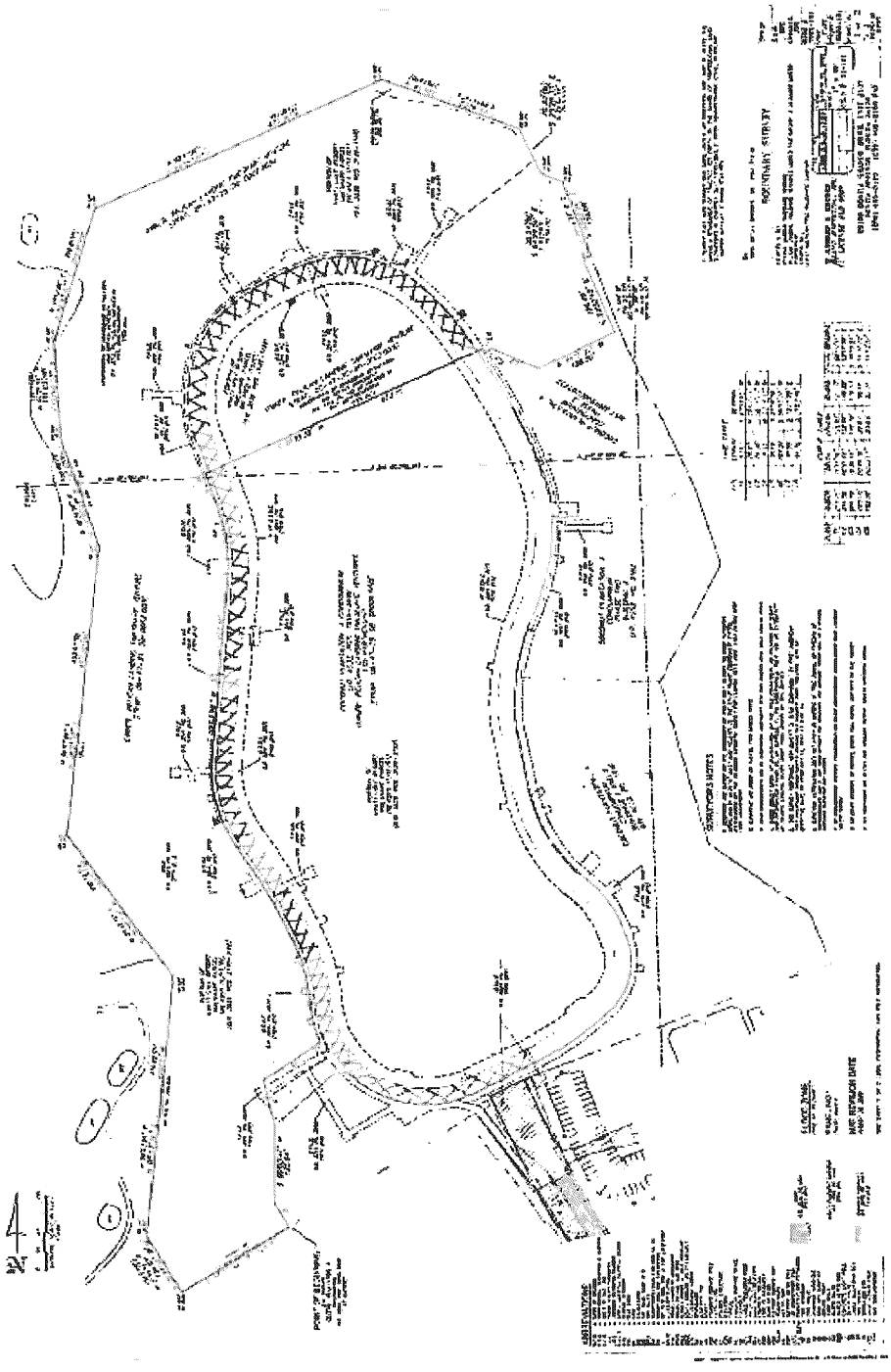


EXHIBIT "C"

TRIP CONVERSION MATRIX BASED ON THE WEEKDAY PM PEAK HOUR TRIP RATE FROM THE ITE *TRIP GENERATION REPORT*, 11TH EDITION

Time Share (LUC 265) = 0.63 trips/unit

1 TS = 0.80 MF DU (Low-Rise – LUC 220 1-3 floors)

1 TS = 0.61 MF DU (Mid-Rise – LUC 221 4 – 10 floors)

1 TS = 0.51 MF DU (Hi-Rise – LUC 222 11+ floors)

1 TS = 0.30 CCRC DU (LUC 255)

1 TS = 0.94 Hotel Rooms (LUC 310)

Conversions:

241 TS Units converted to Low-Rise Units

241/0.80 = 301 Dwelling units would be equivalent

241 TS Units converted to Mid-Rise Units

241/0.61 = 395 Dwelling units would be equivalent

241 TS units converted to Hi-Rise Units

241/0.51 = 472 Dwelling Units would be the equivalent.

241 TS Units converted to CCRC Units

241/0.30 = 803 Dwelling units would be equivalent

241 TS Units converted to Hotel Rooms

241/0.94 = 256 Rooms would be equivalent

TS = timeshare unit
MF DU = multi-family dwelling unit
CCRC DU = continuing care retirement community independent living unit

Bonita Springs Utilities, Inc.

July 26, 2022

Jeremy Arnold, P.E.
Atwell, LLC
28100 Bonita Grande Dr.
Bonita Springs, FL 34135

Sent via e-mail: cleos@atwell-group.com

Re: Bayview-Raptor Bay

Dear Jeremy Arnold,

You have requested potable water, sewer and irrigation service for the project referenced above. Plant capacities are adequate; however, the Developer is required to install all off-site and on-site utility line extensions necessary to provide service to the project in accordance with Bonita Springs Utilities, Inc. specifications. No construction submittals have been received, reviewed or approved as of this date. This letter expires in one year.

You have estimated the usage to be 301,400 gallons per day. Bonita Springs Utilities, Inc. has the capacity to provide the above estimated gallonage from its 17.56 million gallon per day Water Treatment Plant. The Water Reclamation Facilities have the capacity to treat the above estimated gallonage from the plants currently rated at 11.0 million gallon per day.

Potable water is available for irrigation use as no reuse water is available in proximity to the subject property at this time.

This letter should not be construed as a commitment or guarantee to serve nor as approval for construction, but only as to the availability of potable water, sewer and reuse at this time. Bonita Springs Utilities, Inc. may commit to reserve plant capacity if available, at such time that ANC (Aid-to-New Construction) fees are paid for each unit of required capacity.

If there are any proposed utility infrastructure installations, then the appropriate meetings and submittals per the Bonita Springs Utilities specifications shall be required.

Respectfully,
Bonita Springs Utilities, Inc.

Kim Hoskins, P.E.
Director of Engineering

Pelican Landing MPD

Inventory of Existing Conditions

The following is a listing of all Lee County zoning conditions applicable to the Pelican Landing CPD/RPD and the Kersey Smoot RPD. Justifications are provided for proposed changes where appropriate.

Please note:

Words ~~struck through~~ are deleted
Words underlined are added
Words double-underlined are relocated from other resolutions

The following Proposed Conditions recreate and amend all conditions found in Resolution Z-94-014 (Pelican Landing CPD/RPD), as amended.

1. The development of the subject property shall be in accordance with the three-page Master Concept Plan for Pelican landing ~~RPD/CPD~~ MPD, stamped received on ~~May 16, 1994~~ April 25, 2024, except as modified by the conditions herein. Unless specifically approved as part of this rezoning, development shall be in accordance with all applicable local development regulations, including the Pelican Landing Development of Regional Impact Development Order. No deviations from the Land Development Code are granted unless specifically identified herein.

   ~~As a prerequisite to approval of any local Development Order for property located within the Commercial Planned Development and Residential Planned Development, approval of a Final Zoning Plan must be received which specifies the type, intensity and configuration of development for the particular site. The objective of the process is to ensure compliance with the DRI Development Order, Zoning Resolution, and Land Development Code, to allow detailed review of deviations conceptually approved herein, while allowing the development flexibility to respond to changing conditions. Application materials shall be the same as for an Administrative Amendment supplemented per Condition 18.b. Any substantial change in the type, intensity, or configuration of development within the RPD/CPD will require further review through a public hearing. The necessity of said review shall be determined by the Director of Community Development.~~

   JUSTIFICATION: This condition is updated to reflect the approval of the Pelican Landing MPD. The second paragraph is outdated, and the current development order process incorporates all elements.

~~2. Permitted uses in CPD land development Area A: Marina~~

   ~~Administrative Offices~~
   ~~Bait and Tackle Shop~~
   ~~Boat Parts Store~~
   ~~Cocktail Lounge, only in conjunction with a restaurant~~
   ~~Club, Private~~
   ~~Consumption on Premises, only in conjunction with a restaurant~~
   ~~Food Store, Group I~~
   ~~Fishhouse~~
   ~~Specialty Retail, Group I~~

~~Marina (df) including those uses defined with a maximum of 150 space dry boat storage building and 48 wet slips~~
~~Rental and Charter Facilities for Boats, limited to residents and guests in Pelican Landing~~
~~Restaurants, Standard~~
~~Sale of Fuel and Lubricants~~
~~School, Commercial~~
~~Limited to sailing, water safety and other marine oriented schools~~
~~Shower and Restroom Facilities~~

~~The following property development regulations shall apply to CPD land development Area A: Marina~~

~~a. Minimum building setbacks for all Marina/Commercial District uses:~~

~~Street~~	~~-~~	~~1/2 right-of-way plus 20 feet~~
~~Side~~	~~-~~	~~10 feet~~
~~Water Body~~	~~-~~	~~0 feet~~
~~Wetlands~~	~~-~~	~~20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings~~	~~-~~	~~10 feet~~
~~Multiple story buildings~~	~~-~~	~~20 feet~~
~~Multiple story buildings with sprinkler systems~~	~~-~~	~~15 feet~~

~~c. Maximum building height - 45 feet above minimum flood elevation~~

~~d. Dry boat storage shall be limited to a height of 45 feet.~~

~~e. Prior to any local Development Order for the marina, a parking plan shall be submitted which demonstrates location and adequacy of parking and methods of vehicular and pedestrian movement. County staff shall ensure protection of public safety and compliance with applicable standards. Should vacation of a portion of Coconut Road not occur, developer shall be restricted accordingly.~~

~~f. Live-aboards (defined by Ordinance 85-21, as amended) and personal watercraft (defined by Ordinance 90-15, as amended) are prohibited.~~

~~g. Marina sanitation facilities are required.~~

~~3. Permitted uses in CPD land development Area B:~~

~~Hotel/Convention Center (per Ord.):~~

~~Hotel or Motel, Convention~~
~~Hotel or Motel Accessory Uses – including, but not limited to:~~
- ~~Tennis Courts~~
- ~~Swimming Pools~~
- ~~Bar or Cocktail Lounge~~

- ~~ATM within the Hotel or Other Building~~
- ~~Consumption on Premises and~~
- ~~Package Store within the Hotel or Motel~~
- ~~Conference Meeting Rooms~~

~~Club, Private~~
~~Resort~~
~~Restaurant, Standard – Groups I, II and III with Consumption on Premises~~
~~Specialty Retail Shops – Groups I and II~~
~~Business Services – Group I (excluding blood banks, blood donor stations, bail bonding, check exchange, detective agencies)~~
~~Studios~~
~~Dwelling Units, including but not limited to:~~

- ~~Two Family Attached~~
- ~~Townhouse~~
- ~~Duplex~~
- ~~Multiple Family Building~~

~~Residential Accessory Uses, including but not limited to:~~

- ~~Private garages, carports and parking areas~~
- ~~Private swimming pools and enclosures~~
- ~~Private tennis courts~~

~~Model Homes, Model Units and Model Display Center – limited to residential uses within Pelican Landing~~
~~Home Occupation~~
~~Entrance Gates and Gatehouses~~

~~The following property development regulations shall apply to CPD land development Area B: Hotel and Conference Center~~

~~a. Minimum building setbacks:~~

~~Street~~	~~-~~	~~1/2 right-of-way plus 20 feet~~
~~Side~~	~~-~~	~~0 feet or 10 feet for an interior lot and 15 feet for a corner lot~~
~~Water Body~~	~~-~~	~~20 feet~~
~~Wetlands~~	~~-~~	~~20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings~~	~~-~~	~~10 feet~~
~~Multiple story buildings~~	~~-~~	~~20 feet~~
~~Multiple story buildings with sprinkler systems~~	~~-~~	~~15 feet~~

~~c. Maximum building height - no more than 20 habitable floors~~

~~d. Development of CPD Area B for Hotel and Conference Center shall comply with Condition 12 (High Rise Development Regulations).~~

~~4. Permitted Uses in CPD land development Area C: Office~~

~~Administrative Offices~~

~~Bank and Financial Establishments – Group I and II~~
~~Day Care (child/adult)~~
~~Food and Beverage Service~~
~~Insurance Companies~~
~~Library~~
~~Medical Office~~
~~Business Services – Group II (no outdoor storage of vehicles or equipment is permitted)~~
~~Contractors and Builders – Group I (no storage facilities permitted)~~
~~Cultural Facilities, limited to Art Gallery or Museum~~
~~Health Care Facilities – Group III~~
~~Personal Services – Group II (health club or beauty spa only)~~
~~Commercial School, limited to:~~

- ~~Art School~~
- ~~Business School~~
- ~~Clerical~~
- ~~Computer Drafting~~
- ~~Law~~
- ~~Real Estate~~
- ~~Aerobics~~

~~Social Services – Group I (limited to family and marriage counseling or nutritionists counseling)~~

~~The following property development regulations shall apply to CPD land development Area C: Office~~

~~a. Minimum building setbacks:~~

~~Street~~	~~-~~	~~1/2 right-of-way plus 20 feet~~
~~Side~~	~~-~~	~~0 feet or 10 feet for an interior lot and 15 feet for a corner lot~~
~~Water Body~~	~~-~~	~~25 feet~~
~~Wetlands~~	~~-~~	~~20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings~~	~~-~~	~~10 feet~~
~~Multiple story buildings~~	~~-~~	~~20 feet~~
~~Multiple story buildings with sprinkler systems~~	~~-~~	~~15 feet~~

~~c. Maximum building height - 95 feet above minimum flood elevation, with no more than 8 habitable floors~~

~~5. Permitted Uses in CPD land development Area D: Mixed Use Commercial~~

~~Administrative Offices~~
~~Business Services – Group I (excluding blood banks, blood donor stations, bail bonding, check exchange, detective agencies)~~
~~Business Services – Group II (no outdoor storage of vehicles or equipment)~~
~~Banks and Financial Establishments – Groups I and II with drive-thru~~
~~Broadcasting Studio~~
~~Commercial Radio and Television~~

~~Place of Worship~~
~~Religious Facilities~~
~~Private Club~~
~~Food Store – Group I~~
~~Repair Shops – Groups I and II~~
~~Restaurant, Standard – Groups I, II and III with consumption on premises~~
~~Specialty Retail Shops – Groups I, II and III~~
~~Used Merchandise Shops – Group I~~
~~Pharmacy and Drug Stores~~
~~Commercial School~~
~~Social Services – Group I (excluding Public Welfare Centers)~~
~~Studios~~
~~Health Care Facilities – Group III~~
~~Adult Congregate Living Facilities~~
~~Insurance Companies~~
~~Medical Office~~
~~Standard Offices~~
~~Cocktail Lounge~~
~~Consumption on Premises~~
~~Package Store~~
~~Automobile Service Station~~
~~Self-Service Fuel Pumps~~
~~Convenience Food and Beverage Store~~
~~Residential Uses, including but not limited to:~~
- ~~Two Family Attached~~
- ~~Townhouse~~
- ~~Duplex~~
- ~~Multiple Family Building~~

~~Residential Accessory Uses, including~~
- ~~Private garages, carports and parking areas~~
- ~~Swimming pools, tennis courts~~
- ~~Home Occupation~~

~~Clothing Stores, General~~
~~Contractors and Builders – Group I (no outdoor storage of heavy equipment)~~
~~Cultural Facilities (limited to Art Galleries, Museums)~~
~~Hobby, Toy, Game Shops~~
~~Household/Office Furnishings – Groups I and II~~
~~Personal Services – Group I~~
~~(excluding coin operated laundries-Laundromat)~~
~~Personal Services – Group II (limited to hearing aids, optical supplies and other similar health related devices (excluding massage establishments, massage parlors, steam or Turkish baths)~~
~~Personal Services – Group IV (limited to debt counseling, portrait copying, and tax return service)~~
~~Recreation, Commercial (limited to Health Club~~
~~Theatres~~

~~The following property development regulations shall apply to CPD Area D: Mixed Use Commercial~~

~~a. Minimum building setbacks:~~

~~Street - 1/2 right-of-way plus 20 feet~~
~~Side - 0 feet or 10 feet for an interior lot and~~
~~15 feet for a corner lot~~
~~Water Body - 20 feet (0 feet for seawalled/bulkheaded, manmade water bodies)~~
~~Wetlands - 20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings - 10 feet~~
~~Multiple story buildings - 20 feet~~
~~Multiple story buildings~~
~~with sprinkler systems - 15 feet~~

~~c. Maximum building height - 95 feet above minimum flood elevation, with no more than 8 habitable floors~~

~~6. Permitted uses in CPD land development Area E: Retail~~

~~Administrative Offices~~
~~Club, Private~~
~~Food Store – Group I~~
~~Personal Services – Groups I (limited to ATM, beauty shop only) and II (limited to Health Club only)~~
~~Restaurant, Standard – Groups I, II and III with consumption on premises~~
~~Specialty Retail Shops – Groups I, II and III~~
~~Studios~~
~~Cocktail Lounge, only in conjunction with a restaurant~~
~~Multiple Family Residential Uses, including but not limited to:~~
~~- Two Family Attached~~
~~- Townhouse~~
~~- Duplex~~
~~- Multiple Family Building~~
~~Residential Accessory Uses, including but not limited to:~~
~~- Private garages, carports and parking areas~~
~~- Private swimming pools and enclosures~~
~~- Private tennis courts~~
~~Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing~~
~~Home Occupation~~
~~Entrance Gates and Gatehouses~~
~~Used Merchandise, Group I, excluding Pawn Shops~~

~~The following property development regulations shall apply to CPD Area E:~~

~~a. Minimum building setbacks:~~

~~Street - 1/2 right-of-way plus 20 feet~~
~~Side - 0 feet or 10 feet for an interior lot and~~
~~15 feet for a corner lot~~
~~Water Body - 20 feet (0 feet for seawalled/bulkheaded, manmade water bodies)~~

~~Wetlands - 20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings - 10 feet~~
~~Multiple story buildings - 20 feet~~
~~Multiple story buildings~~
~~with sprinkler systems - 15 feet~~

~~c. Maximum building height - 75 feet above minimum flood elevation~~

~~7. The following property development regulations apply to residential uses permitted in CPD Areas B, D, and E:~~

~~The Residential Uses in the CPD land development areas shall be permitted only when in conjunction with at least 50,000 square feet or more of commercial uses.~~

~~a. Minimum building setbacks:~~

~~Street - 1/2 right-of-way plus 20 feet~~
~~Side - 0 feet or 10 feet for an interior lot and~~
~~15 feet for a corner lot~~
~~Water Body - 20 feet~~
~~Wetlands - 20 feet~~

~~b. Minimum distance between buildings:~~

~~Single story buildings - 10 feet~~
~~Multiple story buildings - 20 feet~~
~~Multiple story buildings~~
~~with sprinkler systems - 15 feet~~

~~c. Maximum building height - 75 feet above minimum flood elevation in CP Areas B & E;~~
~~95 feet above minimum flood elevation in CPD Area D~~

~~Residential Planned Development~~

~~8. Permitted uses in RPD land development Area A:~~

~~Zero lot line, Single-Family, Two-Family Attached~~
~~Residential Accessory Uses, including but not limited to:~~
- ~~Private garages, carports and parking areas~~
- ~~Private swimming pools and enclosures~~
- ~~Private tennis courts~~

~~Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing~~
~~Speculative Home~~
~~Temporary Sales and/or Construction Office~~
~~Administrative Offices~~

~~Home Occupation~~
~~Entrance Gates and Gate Houses~~
~~Public and Private Parks, Playgrounds, Tot Lots, Community Swimming Pools, Tennis Courts or other community recreational amenity, Playfields and Commonly Owned Open Space~~
~~Essential Services~~
~~Signs~~

~~9. Permitted uses in RPD land development Area A:~~

~~Residential Uses, including but not limited to:~~
- ~~Zero lot line~~
- ~~Two family attached~~
- ~~Townhouse~~
- ~~Duplex~~
- ~~Single family~~
- ~~Multiple family buildings~~

~~Residential Accessory Uses, including but not limited to:~~
- ~~Private garages, carports and parking areas~~
- ~~Private swimming pools and enclosures~~
- ~~Private tennis courts~~
- ~~Private boat docks (where permitted by DRI Development Order)~~

~~Model Homes, Model Units and Model Display Center, limited to residential uses within Pelican Landing~~
~~Temporary Sales and/or Construction Office~~
~~Administrative Offices~~
~~Golf Courses, Golf Course Accessory and Associate Uses, including but not limited to:~~
- ~~Club house~~
- ~~Maintenance facility~~
- ~~Pro shop~~
- ~~Alcoholic beverage consumption in the club house~~
- ~~Snack bar at the ninth hole or other appropriate location~~
- ~~Ball washers~~
- ~~Restrooms and other uses which are normal and accessory to the golf course~~

~~Club, country~~
~~Club, private~~
~~Home Occupation~~
~~Entrance Gates and Gate Houses~~
~~Public and Private Parks~~
~~Playgrounds, Tot Lots,~~
~~Community Swimming Pools, Tennis Courts or other community recreational amenity,~~
~~Playfields~~
~~Essential Services~~
~~Essential Service Facilities~~
~~Signs~~
~~Excavation-water retention~~

~~10. Permitted uses in RPD land development Area E:~~

~~Residential Uses, including but not limited to:~~
- ~~Zero lot line~~

- ~~Two Family~~
- ~~Town House~~
- ~~Duplex~~
- ~~Single family~~
- ~~Multiple family buildings~~

~~Residential Accessory Uses, including but not limited to:~~

- ~~Private garages, carports and parking areas~~
- ~~Private swimming pools and enclosures~~
- ~~Private tennis courts~~

~~Private Parks, Playgrounds, Tot Lots~~
~~Playgrounds, Tot Lots,~~
~~Community Swimming Pools~~
~~Tennis Courts or other community recreational amenity~~
~~Playfields~~
~~Essential Services~~
~~Signs~~

~~11. The following property development regulations shall apply to RPD Areas A, B, D and E:~~

~~a. Minimum building setbacks:~~

~~Zero Lot Line Units~~
~~Area = 5,000 square feet~~
~~Width = 40 feet~~
~~Depth = 100 feet~~

~~Single Family Units~~
~~Area = 5,000 square feet~~
~~Width = 40 feet~~
~~Depth = 100 feet~~

~~Multi-Family~~
~~Area = 2,000 square feet per dwelling unit~~
~~Width = 100 feet~~
~~Depth = 100 feet~~

~~Two-Family Attached and Townhouse~~
~~Area = 4,000 square feet per dwelling unit~~
~~Width = 32 feet~~
~~Depth = 100 feet~~

~~Duplex~~
~~Area = 14,000 square feet~~
~~Width = 90 feet~~
~~Depth = 100 feet~~

~~b. Minimum Setbacks~~ [this section amended by Z-95-061]

~~Zero Lot Line Units~~
~~Street = 20 feet or 15 feet for side entry garages~~
~~Side = 10 feet on one side, 0 feet on opposite site~~
~~Rear = 15 feet for building, 3 feet for pool, deck and enclosure~~
~~Waterbody = 20 feet~~

~~Single-Family Units~~
~~Street = 15 feet~~

~~Side = 5 feet~~
~~Rear = 15 feet for building~~
~~0 feet for pool, deck and enclosure~~
~~Waterbody = 20 feet~~

~~Multi-Family~~
~~Street = 20 feet~~
~~Side = 20 feet~~
~~Rear = 20 feet~~
~~Waterbody = 20 feet~~

~~Two-Family Attached and Townhouse~~
~~Street = 20 feet~~
~~Side = 5 feet (no side setback required from common side lot line)~~
~~Rear = 15 feet~~
~~Waterbody = 20 feet~~

~~Duplex~~
~~Street = 1/2 ROW + 20 feet~~
~~(except for cul-de-sac 1/2 ROW + 15)~~
~~Side = 7 feet (no side setback required from common side lot line)~~
~~Rear = 20 feet~~
~~Waterbody = 20 feet~~

~~c. Building heights:~~ [this section amended by Z-95-061]

~~RPD Areas B and D located in the outlying Suburban land use category shall have a maximum building height of 75 feet above minimum flood elevation with no more than 6 habitable stories.~~

~~RPD Areas A and D located in the Urban Community land use category shall have maximum building height of 95 feet above minimum flood elevation with no more than 8 habitable stories.~~

~~RPD Area E located in the Outlying Suburban land use category shall have a maximum building height of 75 feet above minimum flood elevation with no more than 6 habitable floors.~~

2. Schedule of Permitted Uses and Property Development Regulations

[See the attached Proposed Land Uses and Development Standards and Proposed Deviations]

JUSTIFICATION: Conditions 2-11 are replaced by the attached Proposed Schedule of Uses, Development Standards and Schedule of Deviations.

~~12. Deviation (12) is approved for RPD Area F, and CPD Area B. These areas may be developed with a maximum building height exceeding 75 feet above minimum flood elevation only if in compliance with the following development regulations. All buildings 45 feet in height or less shall comply with normal setbacks required of conventional multi-family zoning districts. All buildings over 45 feet shall provide on foot of setback from the Pelican Landing perimeter property line for every foot of elevation. In recognition of the wetlands north of Coconut Road,~~

~~the setback for structures in excess of 75 feet in CPD Area B and the RPD Area F that is adjacent to Coconut Road may be per LDC Section 34-2174.~~

~~The regulations set forth below in 12.a through 12.e apply to the development of buildings greater than 75 feet above minimum flood elevation:~~

~~a. Minimum Lot Area and Dimensions:~~

~~Lot Size~~	~~10,000 square feet~~
~~Lot Area per Unit~~	~~1,000 square feet~~
~~Width~~	~~100 feet~~
~~Depth~~	~~100 feet~~

~~b. Minimum Setbacks~~

~~Private Road~~	~~25 feet~~
~~Side Yard~~	~~50 feet~~
~~Rear Yard~~	~~10 feet~~
~~Waterbody~~	~~20 feet~~

~~c. A minimum building separation of 125 feet shall be provided between those buildings above 75 feet.~~

~~d. A maximum of 8 residential buildings and one hotel building with a height of greater than 75 feet, above minimum flood elevation may be permitted. Such buildings may be located within RPD Area F (residential) and CPD Area B (Hotel).~~

~~e. A minimum of 15% open space shall be provided for each multi-family building site that is or exceeds 75 feet in height.~~

JUSTIFICATION: Condition 12 is proposed to be deleted as all deviations are replaced by the attached Proposed Deviations.

3. ECO-PARK

The following conditions address Eco-Park issues:

a. The development order plans for the golf course phase that includes the golf cart path/bridge crossing Eco-Park must include a typical cross-section for the path and bridge indicating the width of the area to be impacted by structures. The width of the cleared area may not exceed 22 feet. The width of the golf cart path/bridge may not exceed 15 feet.

i. A temporary construction access road ("access road") may be constructed crossing the Eco-Park in the approximate location of the golf cart path/bridge crossing as shown in MCP Exhibit C-1: Deviation Location Map. The combined width of the cleared area for the golf cart path and access road may not exceed 50 feet. The width of the access road may not exceed 23 feet. Temporary impacts to preserve vegetation associated with the construction access must be restored consistent with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan and the MCP Exhibit C-2: Access Road Cross-section. The construction access road will cease usage and all restoration

must be complete prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137). The temporary construction access road must be consistent with the typical cross-section for the access road as shown in MCP Exhibit C-2: Access Road Cross-section.

~~13.~~b. Permitted Uses in Eco-Park (RPD Area G):

Uses permitted in the Eco-Park District are limited to activities which make this area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, on-going maintenance and removal of invasive exotic vegetation and compliance with management plan required per FGFWFC.

c. The developer must locate the golf cart path/bridge so as to avoid existing large native trees and preserve existing native vegetation to the greatest extent possible. Accordingly, prior to the county issuing a vegetation removal permit to clear for the installation of the golf cart path/bridge, the developer must field locate the proposed path/bridge and identify the limits of the clearing for field verification purposes.

d. The "Proposed Reconfiguration of the Pelican Landing DRI Eco-Park," prepared by Wilson Miller, Inc., dated September 30,1999, revised March 6,2000, and as further supplemented by the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022, attached hereto as **[EXHIBIT NUMBER]**, is hereby adopted with the following condition:

Invasive exotic removal methods other than hand clearing are subject to the Division of Planning/Environmental Sciences Staff review and approval.

e. The developer must submit a recorded Conservation Easement, complete with Official Records Book and Page numbers, to the Division of Planning/Environmental Sciences and the County Attorney's Office, prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order.

f. Bald Eagle Management Plan: The document entitled "Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Nest LE-28A," prepared by Passarella & Associates, Inc. dated July 2022, is hereby incorporated as a condition of this zoning approval. [*Condition amended by ADD2022-0162*]

g. Prior to the development order plans for the golf course phase that includes the golf cart path/bridge crossing, the developer must demonstrate through the use of a HEC-2 model (HEC - Hydrologic Engineering Center), that the proposed Halfway Creek bridge crossing creates no rise to the base flood.

JUSTIFICATION: No substantive changes are proposed to this condition, however, requirements from Resolution Z-00-044 - Condition #5-7, as amended by ADD2020-00190A, have been relocated here to consolidate all Eco-Park conditions in one location.

4. INTERFACE AREA

~~14.~~a. Permitted Uses in the Interface Area:

Uses permitted in the Interface Area are limited to golf courses, developed to the guidelines similar to the New York Audubon Society Standards and any related appurtenances or uses, stormwater management; and created wetland marsh and any other created vegetative system or lake system which will promote wildlife diversity, activities which make this area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, on-going maintenance and removal of invasive exotic vegetation and compliance with the wildlife diversity monitoring plan prepared in conjunction with the Lee County School Board Development of Environmental Education.

b. ~~The Zoning Master Concept Plan shall be adjusted, including revisions to the legal description. The changes shall reflect the terms of this condition and be consistent with the exhibit entitles "Pelican Landing Interface Area Illustration," stamped received August 26, 1994. The shifts in the zoning Master Concept Plan will allow for the Interface Area described above.~~ The western boundary of the Interface Area is the jurisdictional mangrove wetland line. The interface area is 100 feet in width at the north and south ends of the property~~, and it is approximately 500 feet in width elsewhere~~. ~~The creation of the Interface Area will cause Residential Development Area F to shift to the east. RPD Area F will begin at the eastern boundary line of the Interface area. The CPD Area B (the hotel use) will shift to the west to the present location of the CPD Area E/RPD Area E and RPD Area B on the May 16, 1994, Zoning Master Concept Plan, and shall be a third alternative development scenario for that property. RPD Area D, located west of Spring Creek Drive, will be reduced in size due to the relocation of RPD Area F. That portion of the former CPD Area B that does not become the Interface Area will become an RPD Area F. The internal traffic circulation will be adjusted to accommodate the revised design. The southern upland area (proposed RPD Area E) bounded by the south property line, with estuarine wetlands and upland buffers to the west, and the oak hammock to the east shall be redesignated Residential Development Area E. No development can occur within CPD Areas E or B, or RPD Areas E, F, or D until a final zoning plan approval is obtained through the final administrative review process which properly reflects the Interface Area as described herein.~~

~~c.~~ The Interface Area will serve two purposes. First it allows for a buffer area or interface between the residential high-rise development areas and the jurisdictional mangrove wetlands to the west. The buffering function will also extend to some of the interior wetland and upland systems. ~~Residential units within Residential Development Area F shall be located a minimum of 500 feet from the jurisdictional mangrove area, except for the RPD Area F located at the site of the former CPD Area B (hotel site).~~ No golf course uses shall be located any closer to the jurisdictional mangrove system than 100 feet. Secondly, the Interface Area will provide habitat and a vegetative corridor which will enable wildlife to safely access the onsite interior wetland systems.

JUSTIFICATION: Portions of conditions 14.b and c that are proposed to be deleted have previously been implemented or are not related to the subject property. The remaining portions of these conditions are proposed to be combined.

~~d.~~c. All invasive exotic vegetation shall be removed from the Interface Area. The invasive exotic removal process shall coincide with the construction of a surface water management system within the Interface Area.

~~e.~~d. Where necessary, a vegetation restoration program shall commence subsequent to the removal of the invasive exotics. The program should commence subsequent to the removal of the invasive exotics. The program should facilitate diversity in wildlife. The revegetation shall commence within six months of invasive exotic removal. Vegetation to facilitate wildlife diversity shall be used in the restorative planting.

~~f.~~e. Where appropriate, and subject to permitting approval, the developer will construct "kidney filter" marshes for additional water quality treatment prior to final outfall. These marshes will most likely be located in areas currently infested with invasive exotic vegetation, and will be replanted with plant species such as juncus and spartina grass, cabbage palms and slash pines.

~~g.~~f. The developer has volunteered to monitor the Interface Area to assess its effectiveness in facilitating wildlife diversity. Information on flora and fauna produced for the DRI shall be the baseline data for the monitoring. The database shall be updated through a program of Winter/Summer monitoring. The monitoring shall generally consist of looking for, and reporting on, evidence of foraging, nesting, scat, and other territorial markings. This monitoring program shall be for a period of five years from the commencement of development activity in the Interface Area. The information gathered through the monitoring program shall be provided to the Lee County Division of Natural Resources Management and the Lee County Schools, Department of Environmental Education.

~~h.~~g. Subject to permitting approval, the treated stormwater from the Residential and Commercial Development Areas will be conveyed across the Interface Area via a series of excavated lakes and created marsh areas that will emphasize both the water management function and the improvement of wildlife diversity within the Interface Area. The lakes will be designed and located to mimic natural flows and to enhance wildlife values.

~~i. The access to the southern segmented ridge has been shifted to the south to the location previously approved by the BOCC in Resolution #Z-88-193. There are less wetland impacts with the southerly access.~~

JUSTIFICATION: This condition is proposed to be deleted as it is related to site conditions in and around the Pelican's Nest community and not related to the subject property.

~~GENERAL/ADMINISTRATION~~

~~15.~~5. All conditions relating to the Development of Regional Impact Development Order are hereby incorporated in this action. If conflicting conditions exist between this approval and the DRI Development Order, the more restrictive shall apply.

~~16. Transportation mitigation shall be provided as outlined in the Development of Regional Impact Development Order. However, site related improvements may be required at the time of local Development Oder in accordance with the provisions of the Land Development Code. Also a Traffic Impact Statement (TIS) shall be submitted with each application for a local Development Order. The TIS must include:~~

~~a. The trip generation data for the type of development being proposed using the trip generation rates in the latest edition of ITE, Trip Generation or those of the Lee County FSUTMS.~~

~~b. The distribution of traffic at the entrance(s) to that specific area to be developed.~~

~~c. An analysis of the need for turn lanes or other site related improvements at the entrance(s) to that specific area to be developed based upon the projected future volume of traffic on the street being accessed. Projected future volume represents volumes at buildout of the DRI.~~

~~d. An analysis of each intersection of a minor collector with the same or higher functionally classified road internally to Pelican Landing that is influenced by traffic from that proposed development. Influence is measured as project traffic as 5% or more of Level of Service D service volume. That analysis to be based on existing traffic counts, plus traffic from the specific development.~~

~~e. A table showing each segment of minor collectors and higher classified roads influenced by the proposed development, traffic volumes with specific development, and the capacity of the road segment at LOS E.~~

~~f. A table showing the cumulative development parameters for the entire Pelican Landing DRI. Development parameters to be categorized consistent with the categories identified in the original DRI.~~

JUSTIFICATION: This condition is outdated and not necessary as the proposed MPD is required to comply with transportation review requirements.

~~17. The development shall comply with the Lee Plan's 2010 Overlay as it may be amended, and pursuant to DRI Development Order Condition III.14.~~

JUSTIFICATION: This condition is outdated and not necessary as the proposed MPD is required to comply with both the Lee Plan and all conditions in the Pelican Landing DRI.

~~18.a. Prior to any development within that area legally described as Pelican Landing RPD/CPD (that property rezoned as a result of this action) the applicant must revise the MCP to reflect the final decision by the Lee County Board of County Commissioners regarding this rezoning and DRI approval.~~

~~b. Prior to any local development within the land development areas delineated on the MCP as revised, pursuant to the final decision by the Lee County Board of County Commissioners, the developer must receive approval of a Final Zoning Plan.~~

~~The following information shall be provided:~~

- ~~Uses: type and amount, i.e. number of dwelling units or square feet of commercial use~~
- ~~Access~~
- ~~Location and dimensions of internal roadways~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated and the current development order process incorporates all requirements.

~~19. The density of the residential units within both the RPD and CPD districts approved by this rezoning shall be flexible regarding the distribution of the residential dwelling units as long as they do not exceed the following parameters:~~

~~a. Those lands located within the Urban Community land use category per the Lee Plan shall be permitted a maximum of 350 residential units.~~
~~b. Those lands located within the Outlying Suburban land use category per the Lee Plan shall be permitted a maximum of 2,266 residential units.~~

JUSTIFICATION: This condition is proposed to be deleted as the current Lee Plan allows for density to be located across the entire site. The proposed MCP concentrates all development in three tracts. Restricting 350 units to the Urban Community would be contrary to the goal of creating a compact development footprint. Furthermore, via Policy 5.1.10 densities can be clustered within a PD zoning district in Future Urban areas where environmental protection is provided for.

~~20. The maximum amount of commercial square footage within the RPD and CPD districts approved by this rezoning shall be as stated below:~~

~~a. Those lands located within the Urban Community land use category per the Lee Plan shall be permitted a maximum of 390,000 square feet of floor area of retail use and 125,000 square feet of office use.~~
~~b. Those lands located within the Outlying Suburban land use category per the Lee Plan shall be permitted a maximum of 110,000 of floor area of retail use and 45,000 square feet of office use. Of the retail uses, up to 20,000 square feet may be permitted if ancillary to the marina and up to 30,000 square feet may be permitted if ancillary to the hotel. Up to 60,000 square feet may be developed within CPD Areas E. Prior to approval of any Administrative Amendment for commercial use ancillary to the marina or hotel, the developer shall demonstrate that the retail is in fact ancillary to the principal use.~~

JUSTIFICATION: This condition is proposed to be deleted as the proposed rezoning eliminates commercial uses and is limited to 25,000 square feet of office uses, therefore this condition is no longer necessary.

6. ENVIRONMENTAL

~~21.~~a. Open space commitments shall be consistent with the open space table on the Master Concept Plan as restated below:

~~Indigenous Open Space in Preserve:~~
~~Upland Preserve 86.43± acres~~ [*Condition amended by Z-95-061*]
~~(Eco-Park, Indian Mound, Northern & Southern Upland "Islands" and Historical Cemetery)~~
~~Wetland Preserve 342.89± acres~~ [*Condition amended by Z-95-061*]

~~(Freshwater and Saltwater)~~

~~Golf Course Open Space:~~
~~Golf course 100.00± acres minimum~~
~~(To include extra indigenous preservation where possible)~~

~~Commercial Non-residential Open Space to be Provided by Percentage:~~

~~All Commercial (except Marina Parcel)~~	~~20% minimum on each lot, tract or outparcel~~
~~Marina Parcel~~	~~10% of tract~~

~~Residential Private Open Space to be Provided by Percentage:~~

~~All Single-Family lots~~	~~10% minimum~~
~~Multi-Family Parcels~~	~~15% minimum~~

Required Open Space by Tract:

Residential	16.8 acres (40%)
Mixed Use and Non-Residential	48.86 acres (30%)
Total	65.66 acres

Provided Open Space

Preserve	204.19 acres
Lakes (25% Max Required)	5.46 acres
Total	209.65 acres

JUSTIFICATION: This condition is proposed to be updated to reflect the revised open space conditions and remove portions that are not relevant to the subject property.

~~22.~~b. If a proposed bald eagle management plan includes development within 750 feet of an eagle's nest, the plan must be submitted to the Lee Conty Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.

~~23.~~c. As a condition of approval, the County and FGFWFC shall review and approve the results of all studies and surveys required for implementation of a Final Management Plan required by the preliminary management plan approved as part of local Development Order 90-10-003.00D. These approvals shall be obtained prior to Certificate of Compliance for local Development Order #90-10-003.00D, or new/amended local Development Orders on the beach park.

~~24.~~d. The area identified as the Pelican Landing Eco-Park on the Master Concept Plan will be set aside as a 78+ acre Preserve area of xeric scrub and pine flatwoods to mitigate the impacts to gopher tortoise habitat.

~~25.~~e. The developer shall obtain an Incidental Take Permit prior to development within any gopher tortoise habitat areas. The gopher tortoises addressed by the Incidental Take Permit must be relocated as identified in the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan, attached hereto as EXHIBIT "D". [Condition amended by ADD2021-00190A]

~~26.~~f. Should any orchids, wild pine air plants, Florida Coontie, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, then best efforts must be used to relocate these plants to open space and landscaped areas.

~~27.~~g. All areas designated as Preserve on the adopted Master Concept Plan and the DRI Map H must remain undeveloped and be owned, maintained, and managed by a Uniform Community Improvement District or other similar legal entity. No lot lines shall be allowed within any Preserve area. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks. Trimming of mangroves for visual access to Estero Bay shall be prohibited ~~in wetland areas #14 and 21 (as identified in DRI ADA) and Bay Cedar Phase II (along Spring Creek)~~.

JUSTIFICATION: This condition is updated to remove portions not relevant to the subject property only.

~~28.~~h. Boardwalk location and alignment within "Preserve Areas" shall be submitted to and approved by the Division of Natural Resources Management prior to construction. The maximum width must be limited to that which is adequate for pedestrian and handicap access. With the exception of wheelchairs, motorized vehicle use is prohibited. ~~Nothing herein prohibits the developer from seeking permits in the future to establish a tramway via an alignment which proceeds as directly as feasible from the hotel to Coconut Point.~~

JUSTIFICATION: This condition is updated to remove portions not relevant to the subject property only.

~~29. As part of local Development Order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the Division of Natural Resources Management for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic-reinvasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local Development Orders are obtained.~~

JUSTIFICATION: This condition is proposed to be removed as the wetland and upland preserve lands on the project site were previously restored and are currently in the exotic vegetation maintenance phase. As such, no additional indigenous vegetation restoration activities are anticipated on the project site.

~~30. The developer must incorporate native vegetation into the design of future golf holes, open space and landscaped areas, where feasible.~~

JUSTIFICATION: This condition is proposed to be replaced by Proposed Condition #6.l below, which was originally associated with Resolution Z-00-044 Condition #4.c.

~~31. The developer must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.~~

JUSTIFICATION: This condition is proposed to be replaced by Proposed Condition #6.n below, which was originally located in Resolution Z-00-044 Condition #4.e.

i. Prior to local development order approval, an invasive exotic removal plan must be submitted for the Division of Planning/ Environmental Sciences staff review and approval. The plan must identify the species to be removed, the method of removal, and delineate sections of the development with completion dates for the exotic removal by section. The developer may submit the exotic removal plan prior to local development order review to expedite the removal process, if desired.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #4.a to consolidate all environmental conditions in one location. This condition is also updated to remove outdated tract references.

j. The developer must survey the areas within the GC and Preserve Tracts where nest-like structures were observed for the presence of Big Cypress fox squirrels, in accordance with LDC § 10-473 prior to local development order approval on that tract. The developer must observe the nest-like areas for five days during the early morning and evening hours to confirm whether there is any squirrel activity. If active nests or utilization of the site is confirmed, the developer must submit a protected species management plan meeting the requirements of LDC § 10-474 for review and approval by County Staff prior to issuance of the local development order.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #4.b to consolidate all environmental conditions in one location. This condition is also updated to remove outdated tract references.

k. The golf course must be designed to incorporate:

i. the preservation of native vegetation between fairways where possible. However, this condition will not be interpreted in a manner that will hinder good golf course design; and

ii. filter marshes within the surface water management system.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #4.c to consolidate all environmental conditions in one location.

l. The golf course operation must be in compliance with the approved "Pelican Landing Golf Course Management Plan."

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #4.d to consolidate all environmental conditions in one location.

m. The developer must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner which forces the applicant to jeopardize the health and viability of the golf course.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #4.e to consolidate all environmental conditions in one location.

n. The Developer must employ management practices to prevent pesticide/chemical pollution of groundwater and surface water receiving areas, including, but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development, use and operation of a golf course and water management areas.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-00-044 Condition #5 to consolidate all environmental conditions in one location.

o. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and the pollution is caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, then the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDCA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-98-066 Condition #3.q to consolidate all environmental conditions in one location.

p. The design for the golf course and residential areas must incorporate the retention of large slash pines for utilization as perch trees for bald eagles. This requirement will not be interpreted in a manner that will impair good golf course and residential design.

q. No more than five acres of wetlands may be filled in conjunction with this project. These five acres is part of the total 19.23± acres of wetland impacts allowed for the entire Pelican landing DRI project. Mitigation for the wetland impacts will be determined at the time of final permitting, but the mitigation should include the removal of invasive exotic vegetation, the restoration of historic hydroperiods, and a total of not more than 10 acres of littoral zone plantings.

JUSTIFICATION: These conditions are proposed to be relocated and renumbered from Z-98-066 Condition #3.k-l to consolidate all environmental conditions in one location. Additionally, wetland impacts are increased to reflect previously permitted wetland impacts and the current proposal.

r. The mangrove line is off set 50 feet to over 250 feet west of the wetland jurisdictional line delineated along the entire western (Estero Bay) side of the property. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the property. This includes both saltwater and freshwater wetlands contained within the boundary of this wetland jurisdictional line. The proposed golf course fairways, tees, and greens must be set back a minimum of 25 feet from the wetland jurisdictional line on the Kersey-Smoot parcel, except where wetland impacts are permitted by the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE). Water management facilities permitted by the SFWMD and the

removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot parcel.

JUSTIFICATION: This condition is proposed to be incorporated and renumbered from Z-98-066 Condition #3.r to consolidate all environmental conditions in one location. Additionally, references to golf courses located along the mangrove line and to the "Kersey-Smoot" parcel are removed or updated.

~~32. Areas identified as saltern (FLUCCS Designation 720) must be preserved and protected from human activity through the installation of signage or other or other measures. Areas identified as Cabbage Palm Hammock (FLUCCS 428, also included in areas identified as 433) may be developed using techniques designed to avoid impacts and retain the native vegetative community as much as possible.~~

JUSTIFICATION: This condition is proposed to be deleted as FLUCCS codes 720, 428, and 433 do not exist on the subject property, as demonstrated in the attached Aerial with FLUCFCS and Wetlands.

[Condition 33 (Deviations) omitted – to be removed and replaced by attached Proposed Schedule of Deviations]

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The following Proposed Conditions recreate and amend all conditions found in Resolution Z-00-031 (Pelican Landing (CPD/RPD), as amended.

~~1. The development of this project must be consistent witin the one-page Master Concept Plan (MCP) entitled "Pelican Landing RPD/CPD Master Concept Plan," as prepared by Watermark Communities, Inc., dated February 1, 1999, last revised January 20, 1999, and stamped received at the Zoning Counter on February 25, 2000, except as modified by the conditions below. This development must comply with all requirements of the LDC at time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the MCP are subsequently pursued, appropriate approvals will be necessary.~~

JUSTIFICATION: This condition is proposed to be deleted as it will be consolidated in Proposed Condition #1 and is no longer needed as a separate condition.

~~2. The following limits apply to the project and uses:~~

~~a. Schedule of Uses~~

~~Essential Services~~
~~Essential Service Facilities, Group I~~
~~Golf Course~~
~~Accessory uses including but not limited to:~~
~~Snack Bar~~
~~Restrooms, halfway house, shelters and other similar uses which are accessory to the golf course.~~
~~Tennis courts, swimming pools, parks, playgrounds, canoe park and similar recreational amenities~~
~~Signs, in compliance with Chapter 30~~

~~b. Site Development Regulations~~

~~Minimum Setbacks - Accessory Structures~~

~~Street: 20 feet~~
~~Development Perimeter: 25 feet~~
~~Waterbody: 25 feet~~

JUSTIFICATION: This condition is replaced by the attached Proposed Schedule of Uses and Development Standards.

~~3. All terms and conditions of Resolution Z-94-014, and any amending resolutions, remain in full force and effect except as modified by the conditions herein.~~

JUSTIFICATION: This condition is proposed to be removed as it is no longer necessary as the Pelican Landing MPD will be a stand-alone zoning approval and all relevant conditions from previous zoning resolutions will be incorporated into the new MPD.

~~4. The development of this project must be in compliance with the Pelican Landing DRI Development Order #1-9293-121, as amended, and DRI Map H, dated January 7,1999, last revised July 7, 1999, and. stamped received at the zoning counter on October 7, 1999.~~

JUSTIFICATION: This condition is proposed to be removed as it is outdated and the current development order process incorporates all elements.

~~5. The Developer must employ management practices to prevent pesticide/chemical pollution of groundwater and surface water receiving areas, including, but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development, use and operation of a golf course and water management areas.~~

JUSTIFICATION: This condition is proposed to be relocated to consolidate all environmental conditions within Proposed Condition #6.o.

~~6.~~7. The management practices that the Developer must follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water run-off or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS (United States Department of Agriculture-Soil Conservation Service) Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to run-off depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce run-off and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer run-off into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

~~7. The Developer must amend the existing Pelican Landing DRI management plan for the application of herbicides, pesticides, and fertilizers to the golf course to include Parcel E. The plan must include Parcel E prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended plan must:~~

~~a. include a groundwater and surface water monitoring plan;~~

~~b. provide for testing to assess whether there is degradation of surface or groundwater quality;~~

~~c. identify the locations for the groundwater monitoring and testing on a map(s); and d. set forth the testing and reporting requirements.~~

~~The Developer must continue to submit the test reports to the County with the annual monitoring report. The surface and groundwater monitoring program must be established and operated at the expense of the Developer, the Bayside Improvement Community Development District, or other comparable legal entity charged with the legal responsibility of managing the golf course as stated in an approved surface and groundwater monitoring plan. This plan must be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.~~

JUSTIFICATION: This condition is proposed to be removed as it is satisfied the current Management Plan.

~~8. The Developer must submit an amendment to the existing surface and groundwater quality management plan as approved by Lee County and Florida Department of Community Affairs (FDCA). The amended plan must be approved by FDCA prior to the application of chemicals to the proposed golf course.~~

~~a. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDCA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.~~

~~b. The golf course within Parcel E must be set back a minimum of 100 feet (on average) from any saltwater wetlands. There will be no point where this setback is less than 75 feet in width. Water management facilities permitted by the South Florida Water Management District (SFWMD) and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the parcel.~~

~~c. The water management system for the golf course must be designed so untreated run-off is directed away from the saltwater wetland system. Any treated run-off to be discharged into the saltwater wetland system must utilize spreader swales with multiple outfalls, or other technology such as a filter marsh system, to evenly distribute the treated discharge. Lee County Environmental Sciences' Staff agrees that Applicants proposed system with outfall into the freshwater canal and then into the mangrove forest system, if approved by SFWMD, meets the intent of this condition.~~

JUSTIFICATION: This condition is proposed to be deleted as the requirements were satisfied by previous permitting and DOS2021-00137. Additionally, the proposed MCP does not include any golf course areas within 100 feet of any saltwater wetlands, therefore this condition is no longer necessary.

~~9. Transportation mitigation must be provided as outlined in the DRI Development Order. However, site-related improvements and additional conditions may be required at the time of local development order in accordance with the provisions of the LDC.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated and the current development order process incorporates all elements.

~~10. Approval of this rezoning does not guarantee local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocation Table, Map 16 and Table 1 (b); however, nothing in this condition alters the County's obligation to reserve acreage pursuant to Condition 111.14, Pelican Landing DRI Development Order.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated and the current development order process incorporates all elements.

~~11. This development must comply with all of the requirements of the LDC at the time of local development order approval, except as may be granted by deviations approved as part of this planned development.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated and the current development order process incorporates all elements.

* * * * * * * * * * * * * *

The following Proposed Conditions recreate and amend all conditions found in Resolution Z-00-044 (Pelican Landing CPD/RPD), as amended.

~~1. The development of this project must be consistent with the 1-page Master Concept Plan (MCP) entitled "Pelican Landing RPD/CPD," prepared by Watermark Communities, Inc., stamped "Received June 20, 2000 Zoning Counter," last revised 06/14/00, except as modified by the conditions below. This development must comply with all requirements of the Lee County LDC at~~

~~time of local development order approval, except as may be granted by deviation as part of this planned development. If changes to the MCP are subsequently pursued, appropriate approvals will be necessary.~~

JUSTIFICATION: This condition will be consolidated in Proposed Condition #1 and is no longer needed as a separate condition.

~~2. The following limits apply to the project and uses:~~

~~a. Schedule of Uses~~

~~Land Development Area B~~

~~The list of uses approved by Resolution Z-94-014 is amended to limit the uses permitted on Land Development Area B, commonly referred to as the Skebe parcel, as follows:~~

~~Accessory Buildings and Structures, associated with the golf course~~
~~Ball Washers~~
~~Boardwalks~~
~~Essential Services~~
~~Essential Service Facilities, Group I~~
~~Excavation: water retention, only~~
~~Food and Beverage Services, Limited~~
~~Golf Course~~
~~Pump House~~
~~Recreational activities, outdoor only, to include passive recreation and active recreation requiring little or no facilities, capital investment or alteration of the natural landscape~~
~~Restrooms and Other Uses which are accessory to the golf course (location to be approved by the Department of Community Development)~~
~~Signs, in compliance with LDC Chapter 30~~
~~Snack Bar, limited to one, at the ninth hole or at another appropriate location, with consumption on premises (location to be approved by the Department of Community Development)~~
~~Temporary Construction Office and Construction Roads~~

~~b. Site Development Regulations~~

~~The property development regulations approved by Resolution Z-94-014 are amended to specify the site development regulations for Land Development Area B, commonly referred to as the Skebe parcel, as follows:~~

~~Minimum Building Setbacks~~

~~Water Body: 20 feet from the control elevation~~
~~Wetlands: 20 feet~~

JUSTIFICATION: This condition is replaced by the attached Proposed Land Uses and Development Standards and Proposed Deviations.

~~3. Residential uses are prohibited within Land Development Area B located east of RPD Area G (Eco-Park). The use of this area must remain as open space and for golf course uses.~~

JUSTIFICATION: This condition is proposed to be deleted as it is duplicative of Proposed Condition #3.b above.

~~4. The following conditions address environmental issues:~~

~~a. Prior to local development order approval for Land Development Area B (Skebe Tract), an invasive exotic removal plan must be submitted for the Division of Planning/ Environmental Sciences staff review and approval. The plan must identify the species to be removed, the method of removal, and delineate sections of the development with completion dates for the exotic removal by section. The developer may submit the exotic removal plan prior to local development order review to expedite the removal process, if desired.~~

~~b. The developer must survey the areas within the Skebe Tract where nest-like structures were observed for the presence of Big Cypress fox squirrels, in accordance with LDC § 10-473 prior to local development order approval on that tract. The developer must observe the nest-like areas for five days during the early morning and evening hours to confirm whether there is any squirrel activity. If active nests or utilization of the site is confirmed, the developer must submit a protected species management plan meeting the requirements of LDC § 10-474 for review and approval by County Staff prior to issuance of the local development order.~~

~~c. The golf course must be designed to incorporate:~~

~~i. the preservation of native vegetation between fairways where possible. However, this condition will not be interpreted in a manner that will hinder good golf course design; and~~

~~ii. filter marshes within the surface water management system.~~

~~d. The golf course operation must be in compliance with the approved "Pelican Landing Golf Course Management Plan."~~

JUSTIFICATION: This condition is proposed to be updated to remove outdated tract references, to incorporate language from Resolution Z-94-014 Condition #30 and Resolution Z-00-031 Condition #5 and is relocated to Proposed Condition #6 to consolidate all golf course related conditions.

~~5. The following conditions address Eco-Park issues:~~

~~a. The development order plans for the golf course phase that includes the golf cart path/bridge crossing Eco-Park must include a typical cross-section for the path and bridge indicating the width of the area to be impacted by structures. The width of the cleared area may not exceed 22 feet. The width of the golf cart path/bridge may not exceed 15 feet.~~

~~i. A temporary construction access road ('access road") may be constructed crossing the Eco-Park in the approximate location of the golf cart path/bridge crossing as shown in MCP Exhibit C-1: Deviation Location Map. The combined width of the cleared area for the golf cart path and access road may not exceed 50 feet. The~~

~~width of the access road may not exceed 23 feet. Temporary impacts to preserve vegetation associated with the construction access must be restored consistent with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan and the MCP Exhibit C-2: Access Road Cross-section. The construction access road will cease usage and all restoration must be complete prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137). The temporary construction access road must be consistent with the typical cross-section for the access road as shown in MCP Exhibit C-2: Access Road Cross-section. [*Condition added by ADD2020-00190A*]~~

~~b. The developer must locate the golf cart path/bridge so as to avoid existing large native trees and preserve existing native vegetation to the greatest extent possible. Accordingly, prior to the county issuing a vegetation removal permit to clear for the installation of the golf cart path/bridge, the developer must field locate the proposed path/bridge and identify the limits of the clearing for field verification purposes.~~

~~c. The "Proposed Reconfiguration of the Pelican Landing DRI Eco-Park," prepared by Wilson Miller, Inc., dated September 30,1999, revised March 6,2000, and as further supplemented by the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022, attached hereto as EXHIBIT "D", is hereby adopted with the following condition:~~

~~Invasive exotic removal methods other than hand clearing are subject to the Division of Planning/Environmental Sciences Staff review and approval. [*Condition amended by ADD2020-00190A*]~~

~~d. The developer must submit a recorded Conservation Easement, complete with Official Records Book and Page numbers, to the Division of Planning/Environmental Sciences and the County Attorney's Office, prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order.~~

JUSTIFICATION: No changes are proposed to this condition, but it is relocated to consolidate all Eco-Park conditions in Proposed Condition #3, above.

~~6. Bald Eagle Management Plan: The document entitled "Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Nest LE-28A," prepared by Passarella & Associates, Inc. dated July 2022, is hereby incorporated as a condition of this zoning approval.~~ [*Condition amended by ADD2022-0162*]

JUSTIFICATION: No changes are proposed to this condition, but it is reorganized to consolidate all Eco-Park conditions and now found in Condition #3, above.

~~7. Prior to the development order plans for the golf course phase that includes the golf cart path/bridge crossing, the developer must demonstrate through the use of a HEC-2 model (HEC - Hydrologic Engineering Center), that the proposed Halfway Creek bridge crossing creates no rise to the base flood.~~

JUSTIFICATION: No changes are proposed to this condition, but it is reorganized to consolidate all Eco-Park conditions and now found in Condition #3, above.

8. ~~All material excavated as part of the use Excavation, Water Retention must remain on-site. No excavated material is permitted to be removed from the site as part of this planned development approval.~~

JUSTIFICATION: This condition is proposed to be removed as all uses are replaced by the Proposed Schedule of Uses and Development Standards.

9. ~~All deviations and conditions approved by Resolution Z-94-014, and amendments thereto, except as specifically modified herein and by the amended MCP, will remain in full force and effect.~~

JUSTIFICATION: This condition is proposed to be removed as all uses are replaced by the Proposed Schedule Deviations.

10. ~~Transportation mitigation must be provided as outlined in the DRI Development Order. However, site-related improvements and additional conditions may be required at the time of local development order in accordance with the provisions of the LDC.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated and the current development order process incorporates all elements.

11. ~~Approval of this rezoning does not guarantee local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocation Table, Map 16 and Table 1(b); however, nothing in this condition alters the County's obligation to reserve acreage pursuant to Condition III.14, Pelican Landing DRI Development Order.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated, and the current development order process incorporates all elements.

12. ~~This development must comply with the LDC at the time of local development order approval, except as may be granted by deviations approved as part of this planned development.~~

JUSTIFICATION: This condition is proposed to be deleted as it is outdated, and the current development order process incorporates all elements.

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The following Proposed Conditions recreate and amend all conditions found in Resolution Z-98-066 (Kersey-Smoot RPD), as amended.

1. ~~Deleted by Hearing Examiner.~~

2. ~~Deleted by Hearing Examiner.~~

3. ~~The following conditions apply to Request 3., the Kersey-Smoot RPD rezoning:~~

   a. ~~The development of this project must comply with the one-page MCP entitled "Kersey-Smoot RPD," as prepared by WCI Communities, dated May 25, 1998, last revised July 29, 1998 and stamped received at the Permit Counter on July 31, 1998, the Pelican Landing DRI D.O. #1-9293-121, as amended, and DRI Map H last revised March 1,1998 and stamped received at the Permit Counter on June 17, 1998.~~

JUSTIFICATION: This condition will be consolidated in Proposed Condition #1 and is no longer needed as a separate condition.

b. [Condition b (schedule of uses and development standards) omitted – to be removed and replaced by attached Proposed Schedule of Deviations]

~~d. This development must comply with all requirements of the LDC at the time of local development order approval, except as may be granted by deviation as part of this planned development.~~

~~e. An administrative approval will be required to determine the number and location of the model homes, model units, and model display center.~~

~~f. An administrative approval will be required to determine the number and location of the temporary sales and/or construction office.~~

~~g. The temporary sales and/or construction office will be limited to sales for the Pelican Landing Development. The sales office and model unit are limited as temporary uses to a 10-year period that commenced on November 22, 2001 (date the Certificate of Occupancy was issued for the sales center). The time limitations imposed on the sales center and model unit in ADD2000-00218 and ADD2001-00166 are superseded by this zoning approval.~~ [*Condition amended by Resolution Z-03-029*]

JUSTIFICATION: Conditions 3.b-g are replaced by the attached Proposed Land Uses and Development Standards and Proposed Deviations.

~~h. As a prerequisite to approval of any local development order for vertical construction on property located within the Planned Development, approval of a Final Zoning Plan must be received which specifies the type, intensity and configuration of development for the particular tract. The objective of the process is to ensure compliance with the DRI development order, Zoning Resolution, and LDC; to allow detailed review of deviations conceptually approved herein; while allowing the development flexibility to respond to changing conditions. Application materials will be the same as for an Administrative Amendment supplemented as outiined below. Any substantial change in the type, intensity, or configuration of development within the RPD will require further review through a public hearing. The necessity of said review will be determined by the Director of Community Development.~~

~~The following information must be provided with the submittal for Final Zoning Plan Approval:~~

~~-Uses: types and amount, i.e., number of dwelling units or square feet of commercial use.~~
~~-Access: location and dimension~~
~~-Location and dimension of internal roadways~~
~~-Location and dimension of buildings/structures~~
~~-Boundary of development tract~~
~~-Adjacent zoning and land uses~~
~~-Master Concept Plan~~

~~- A cumulative analysis of the total number of dwelling units, hotel units, commercial square footage, dry storage slips and marina development that have received local development order approval (to be compared to the amount of development approved pursuant to the DRI and this rezoning)~~

JUSTIFICATION: This condition is proposed to be removed as it is outdated, and the current development order process incorporates all elements.

~~i. Should any orchids, wild pine air plants, Florida Coonties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns be located within development areas, reasonable efforts will be used to relocate these plants to open space and landscaped areas.~~

JUSTIFICATION: This condition is proposed to be deleted as it is duplicative of Proposed Condition #6.f.

~~j. The "Kersey/Smoot Property Environmental Management Plan", counter stamped June 15, 1998, must be implemented. Immediately prior to the commencement of construction activities, all occupied gopher tortoise burrows must be excavated and any resident gopher tortoises and commensal species must be relocated into appropriate open space areas (excluding golf holes) within Pelican Landing DRI. These areas must be fenced with gopher tortoise fencing prior to relocation to help prevent tortoises from entering construction areas.~~

JUSTIFICATION: This condition is proposed to be deleted as it is addressed in Proposed Condition #6.d-e.

~~k. The design for the golf course and residential areas must incorporate the retention of large slash pines for utilization as perch trees for bald eagles. This requirement will not be interpreted in a manner that will impair good golf course and residential design.~~

~~l. No more than five acres of wetlands may be filled in conjunction with this project. This five acres is part of the total 13 acres of wetland impacts allowed for the entire Pelican landing DRI project. Mitigation for the wetlands impacts will be determined at the time of final permitting, but the mitigation should include the removal of invasive exotic vegetation, the restoration of historic hydroperiods, and a total of not more than 10 acres of littoral zone plantings.~~

JUSTIFICATION: These conditions are proposed to be relocated and consolidated with the environmental conditions in Proposed Conditions #3.p-q. Additionally, wetland impacts are increased to reflect previously permitted wetland impacts and the current proposal.

~~m. The Developer must employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management areas within 500 feet of the mangrove fringe of Estero Bay.~~

JUSTIFICATION: This condition is proposed to be removed as it is addressed in Proposed Conditions #7.

~~n. The management practices that the Developer must follow are:~~

~~1) The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.~~

~~2) The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.~~

~~3) The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.~~

~~4) The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.~~

~~5) The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.~~

JUSTIFICATION: This condition is proposed to be deleted as it is duplicative of Proposed Condition #7.

~~o. The Developer must amend the existing Pelican Landing DRI management plan to include the Kersey-Smoot parcel for the application of herbicides, pesticides, and fertilizers on the proposed golf course adjacent to the mangrove fringe of Estero Bay. This plan must be amended to include the Kersey-Smoot parcel prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended plan must continue to include: guidelines for the application of any herbicides, pesticides and fertilizers to the proposed golf course; an amended groundwater and surface water monitoring plan; to provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; to identify the locations for the groundwater monitoring and testing on a map(s); and set forth the testing and reporting requirements. The Developer must continue to submit the test reports with the annual monitoring report. The monitoring program must continue to be operated at the expense of the Developer, the Bayside Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course. This amended plan must continue to be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.~~

~~p. The Developer must amend the existing surface and groundwater quality management plan as approved by Lee County and Florida Department of Community Affairs (FDCA). The amended plan must be approved by FDCA prior to the application of chemicals to the proposed golf course.~~

JUSTIFICATION: These conditions are proposed to be removed as the attached Indigenous Preserve and Protected Species Management Plan, referenced in Proposed Condition #3.d, addresses all requirements.

~~q. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and the pollution is caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, then the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDCA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.~~

JUSTIFICATION: This condition is proposed to be relocated and consolidated with the environmental conditions in Proposed Conditions #3.o.

~~r. The mangrove line for the Kersey-Smoot parcel is off set 50 feet to over 250 feet west of the wetland jurisdictional line delineated along the entire western (Estero Bay) side of the Kersey-Smoot parcel. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcel. This includes both saltwater and freshwater wetlands contained within the boundary of this wetland jurisdictional line. The proposed golf course fairways, tees, and greens must be set back a minimum of 25 feet from the wetland jurisdictional line on the Kersey-Smoot parcel, except where wetland impacts are permitted by the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE). Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot parcel.~~

JUSTIFICATION: This condition is proposed to be relocated and consolidated with the environmental conditions in Proposed Conditions #3.r. Additionally, references to golf courses located along the mangrove line and to the "Kersey-Smoot" parcel are removed or updated.

~~s. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot parcels.~~

JUSTIFICATION: This condition is proposed to be removed as it is a duplicate of Proposed Condition #6.g.

~~t. A minimum of 99 acres of wetland preservation must be provided within the added 204 acres. A minimum of 10 percent open space must be provided within the individual development parcels.~~

JUSTIFICATION: This condition is proposed to be removed as open space requirements are addressed in Proposed Condition #6.a.

~~u. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The Applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the Applicant will continue to incorporate native vegetation into the open space and landscaped areas.~~

JUSTIFICATION: This condition is proposed to be removed as it is a duplicate of Proposed Condition #6.l.

~~v. Transportation mitigation will be provided as outlined in the DRI development order. However, site related improvements may be required at the time of local development order in accordance with the provisions of the LDC. Also, a Traffic Impact Statement (TIS) must be submitted with each application for a development order. The TIS must include:~~

~~1) The trip generation data for the type of development being proposed, using the trip generation rates in the latest edition of ITE, Trip Generation Manual or those of the Lee County Florida Standard Urban Transportation Model Structure (FSUTMS).~~

~~2) The distribution of traffic at the entrance(s) to that specific area to be developed.~~

~~3) An analysis of the need for turn lanes or other site related improvements at the entrance(s) to that specific area to be developed based upon the projected future volume of traffic on the street being accessed. Projected future volume represents volumes at build out of the DRI.~~

~~4) An analysis of each intersection of a minor collector with the same or higher functionally classified road, internal to Pelican Landing, that is influenced by traffic from that proposed development. Influence is measured as project traffic that is five percent or more of Level of Services D (LOS D) service volume. The analysis to be based on existing traffic counts, plus traffic from the specific development.~~

~~5) A table showing each segment of minor collectors and higher classification roads influenced by the proposed development, traffic volumes with specific development, and the capacity of the road segment at LOS E.~~

~~6) A table showing the cumulative development parameters for the entire Pelican Landing DRI. Development parameters to be categorized consistent with the categories identified in the original DRI.~~

JUSTIFICATION: This condition is outdated and not necessary as the proposed MPD is required to comply with transportation review requirements.

~~w. All conditions relating to the DRI development order are hereby incorporated by this action. If conflicting conditions exist between this approval and the DRI development order, the more restrictive will apply.~~

JUSTIFICATION: This condition is proposed to be deleted as it is duplicative of Proposed Condition #5.

x. Prior to any development within the area legally described as Kersey-Smoot RPD, the Applicant must revise the MCP to reflect the final decision by the Lee County Board of County Commissioners (BOCC) regarding this rezoning and DRI approval.

JUSTIFICATION: This condition is outdated and not necessary as the proposed MPD is required to comply with transportation review requirements.

y. Approval of this rezoning does not give the developer the undeniable right to receive local development order approval. Future development order approvals must satisfy the requirements of the Lee Plan Planning Communities Map and Acreage Allocations Table, Map 16 and Table l(b).

JUSTIFICATION: This condition is outdated and not necessary as the proposed MPD is required to comply with transportation review requirements.

~~z. Development blasting is prohibited unless approved at a public hearing as an amendment to the planned development.~~ [*Condition added by Resolution Z-07-031*]

~~4. The combined area of the convenience food and beverage store, package store, and specialty retail shop, Group I, is limited to a maximum of 15% of total floor area of the Hyatt Vacation Club Coconut Plantation Clubhouse. Further, the convenience food and beverage store, package store, and specialty retail shop are only to be available to the residents and guests of the Hyatt Vacation Club Coconut Plantation development.~~ [*Condition added by Resolution Z-03-029*]

JUSTIFICATION: These conditions are proposed to be removed as all proposed uses are replaced by the attached Schedule of Uses and Development Standards.

~~5. Environmental Conditions:~~

~~a. The requirements of Section II.E.1. of the Pelican Landing DRI Development Order pertaining to vegetation and wildlife/wetlands are included herein as a condition.~~

~~b. Prior to a local development order approval, the developer must incorporate a Southern Bald Eagle Habitat Management Plan approved by Lee County into the development order plans. The Eagle Management Plan, approved by Lee County, must include, at a minimum, the conservation measures in the US Fish and Wildlife Service Biological Opinion, dated December 15, 2006, and the Conservation Measures Addendum, dated July 14, 2006, attached hereto as Exhibit E, along with the following conditions:~~

~~i. Prior to local development order approval, the development order plans must delineate the location of the eagle nest (LE-028C) and habitat preserve, as shown in the Conservation Easement Map, attached hereto as Exhibit F, and,~~

~~ii. Prior to local development order approval, the developer must submit a draft conservation easement over the eagle protection zone, whose legally described boundaries must encompass the existing native vegetation area within the residential tract as approximately shown on the conservation Easement Map, for County review and approval. The conservation easement must be recorded in the Public Records of Lee County, Florida, and must include language that the 75-foot building height is contingent upon the grant of the conservation easement. The developer must submit a copy of the recorded conservation easement to the Division on Environmental Sciences staff prior to issuance of a Vegetation Removal Permit; and,~~

~~iii. During the nesting season, exterior construction is prohibited within 660 feet of the eagle nest tree. Cranes or other Temporary vertical structures must be dismantled by October 1st; and,~~

~~iv. The development order plans must delineate a minimum four-foot high fence or native hedge maintained at a minimum four-foot height to prevent human activities in the area, as depicted in Exhibit G, attached hereto; and,~~

~~v. If the southern bald eagle nest is abandoned, as defined in LDC §14-111, and if the abandonment is prior to the construction of any buildings exceeding 45 feet in height, the conservation easement will not be require to be recorded in the public records of Lee County, Florida. A public hearing will be required if the developer wishes to pursue the placement of buildings within the area defined in the legal description of the conservation easement.~~ [*Condition added by Z-07-031*]

JUSTIFICATION: This condition is proposed to be deleted as it is duplicative of Proposed Condition #3.f.

~~6. The side and rear setbacks for the multi-family district, adjacent to the golf course, may be reduced subject to an administrative amendment for buildings one, two, and five, as set forth on the Residential Development Area Plan (Exhibit D).~~ [*Condition added by Z-07-031*]

JUSTIFICATION: These conditions are proposed to be removed as all proposed uses are replaced by the attached Schedule of Uses and Development Standards.

ATTACHMENT S

TR TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

TRAFFIC IMPACT STATEMENT

FOR

PELICAN LANDING LONDON BAY MPD

(PROJECT NO. F2305.07)

PREPARED BY:
TR Transportation Consultants, Inc.
Certificate of Authorization Number: 27003
2726 Oak Ridge Court, Suite 503
Fort Myers, Florida 33901-9356
(239) 278-3090

December 6, 2023

TRANSPORTATION CONSULTANTS, INC

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I. INTRODUCTION

II. EXISTING CONDITIONS

III. PROPOSED DEVELOPMENT

IV. TRIP GENERATION

V. COCONUT ROAD LEVEL OF SERVICE ANALYSIS

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I. INTRODUCTION

TR Transportation Consultants, Inc. has conducted a traffic impact statement to fulfill requirements set forth by Lee County Community Development for projects seeking rezoning approval. The subject site is located north of Coconut Road and West of US 41 adjacent to the City of Bonita Springs and the Village of Estero in unincorporated Lee County, Florida.

Kersey Smoot Investments, LLC. ("Applicant") requests to rezone 430+/- acres of land from Pelican Landing CPD/RPD and Kersey-Smoot RPD to a unified Mixed Use Planned Development (MPD) zoning district to allow for the development of a residential and resort community on the Estero Bay. All lands proposed for rezoning are within the Pelican Landing Development of Regional Impact (DRI), and a companion DRI Development Order (DO) will be submitted concurrent with this zoning request.

The proposed MPD will consolidate the remaining development entitlements associated with lands owned by the Applicant within the Pelican Landing DRI, to allow for development under a unified site plan. The Applicant proposes to eliminate unused non-residential entitlements associated with their property, including 147,000 square feet of commercial retail uses and 100,389 square feet of office uses to allow for increased residential and resort-oriented uses that are appropriate considering the Property's waterfront locale and surrounding residential and recreational land uses. The request ensures the proposed MPD amendment does not increase the net external vehicle trips generated beyond those vested by the Pelican Landing DRI approval.

The lands owned by the Applicant are entitled for the following densities and intensities per the underlying Planned Developments and DRI:

- 241 Residential dwelling units
- 125,389 square feet of Office Uses
- 147,000 square feet of Commercial Retail uses
- 86 Hotel Rooms
- 28 Golf holes

The Applicant is requesting approval to develop the following list of entitlements within the MPD:

- 729 Dwelling Units
- 25,000 Square Feet of Office Uses
- 318 Resort Hotel Rooms
- 27 Golf Holes

It is the intent of this zoning amendment to remain trip generation "neutral", meaning the uses that are proposed for the amendment will not increase the peak hour trip generation that is currently approved in the DRI.

Access to the site will continue to be maintained from Coconut Road with the main points of ingress and egress from Coconut Point Resort Drive and Coconut Plantation Drive.

The following report will demonstrate that the conversion of uses will not generate any additional weekday PM peak hour external trips than what has been previously approved by the DRI and the impacts to Coconut Road between U.S. 41 and the project will not be exacerbated by the additional uses that are being proposed within the MPD.

II. EXISTING CONDITIONS

The site is currently occupied by the Raptor Bay Golf course and the Hyatt Plantation Timeshare Resort property. The site is bordered by Estero Bay to the west, Pelican Landing DRI to the east, the Bayview on Estero Bay CPD/RPD to the south and West Bay Club to the north.

Coconut Road is a two-lane undivided collector roadway that serves as the primary access to the subject site. Coconut Road is classified as a major collector roadway between the Coconut Hyatt Regency Resort entrance and US 41. Coconut Road has a posted speed limit of 40 mph and is under the jurisdiction of the Lee County Department of Transportation to the west of Via Veneto Boulevard and under the jurisdiction of the Village of Estero to the east of Via Veneto Boulevard.

III. PROPOSED DEVELOPMENT

The proposed MPD will consolidate the remaining development entitlements associated with lands owned by the Applicant within the Pelican Landing DRI, to allow for development under a unified site plan. The Applicant proposes to eliminate unused non-residential entitlements associated with their property, including 147,000 SF of commercial retail uses and 100,389 SF of office uses to allow for increased residential and resort-oriented uses that are appropriate considering the Property's waterfront locale and surrounding residential and recreational land uses. The proposal has been carefully crafted to ensure the proposed MPD does not increase external vehicular trips beyond those vested by the Pelican Landing DRI approval. Table 1 illustrates the currently approved DRI parameters and the changes proposed with this amendment.

Table 1
Land Uses
Pelican Landing DRI

Land Use	Approved Uses in DRI	Total Unbuilt Entitlements Assigned to Applicant	Proposed Uses in MPD	Proposed Decrease/Increase
Residential Dwelling Units	3,912	241	4,400	+ 488 Units
Commercial Retail	300,000 Sq. Ft.	147,000 Sq. Ft.	0 Sq. Ft.	-147,000 Sq. Ft.
Office	475,000 Sq. Ft.	125,839 Sq. Ft.	25,000 Sq. Ft.	-100,839 Sq. Ft.
Restaurant	5,000 Sq. Ft.	0	0	0
Marina	41 Slips 150 Dry Slips	0	0	0
Hotel	750 Rooms	86 Rooms	318 Rooms	+250 Rooms
Golf	77 Holes	28 Holes	27 Holes	-1 Hole

IV. TRIP GENERATION

Consistent with previous traffic studies conducted for the Pelican Landing DRI, the trip generation of the overall DRI was conducted and internal capture calculations were calculated to determine the overall external trip generation of the project. The methodology of the internal trip generation calculations was consistent with previous traffic studies and the methodology as described in the Institute of Transportation Engineer's ***Trip Generation Report***, 11th Edition. The calculations of the internal trip capture are included in the Appendix of this report for reference for both the weekday PM peak hour based on the Approved uses and the Proposed uses reflected in Table 1.

Table 2 reflects the weekday PM peak hour trip generation of the overall Pelican Landing DRI as currently approved with the internal trip capture calculations accounted for in the analysis.

Table 2
Trip Generation – As Approved
Pelican Landing DRI – W/Internal Trip Capture

Land Use	Weekday P.M. Peak Hour		
	In	Out	Total
External Trips	2,158	2,044	4,202

Table 3
Trip Generation - Proposed
Pelican Landing DRI – W/Internal Trip Capture

Land Use	Weekday P.M. Peak Hour		
	In	Out	Total
External Trips	2,072	1,885	3,985

For the overall DRI, there will be no significant change in the trip generation due to the requested change in the zoning. The weekday PM peak hour trip generation will less than what was previously analyzed and approved for the overall DRI. The off-site transportation mitigation impacts for this DRI have been met and no further analysis is required for the off-site mitigation analysis.

V. COCONUT ROAD LEVEL OF SERVICE ANALYSIS

Further analysis was completed in order to evaluate the projected Level of Service of Coconut Road between U.S. 41 and Spring Creek Road with the requested amendment based on the recent history of zoning amendments in the area to assure that there would be capacity remaining on this 2-lane segment of Collector roadway. The analysis collected recent traffic data from Lee County as well as the Village of Estero and other sources to complete the updated Level of Service analysis for Coconut Road between U.S. 41 and the Hyatt Resort. Lee County maintains a short stretch of this section of Cocoonut Road near the western terminus of Coconut Road, with the majority of Coconut Road being under the control of the Village of Estero from approximately the entrance to

The Colony at Pelican Landing (Via Veneto Boulevard) east through the U.S. 41 intersection.

The trips that will be generated from the land uses that will ultimately are being requested on the Pelican Landing London Bay MPD parcel were added to the traffic volumes in both directions on Coconut Road based on the traffic report data collected by the Village of Estero along this segment of Coconut Road. The traffic study conducted for the Woodfield Village Estero Planned Development was also reviewed and traffic data from that report was included in this analysis.

Table 4 illustrates the land uses that the Pelican Landing London Bay MPD is entitled to build as well as 241 additional residential dwelling units that are vested within that area of the development. It was assumed that there would be a total of 100 Single Family detached dwelling units and a total of 629 mid-rise multi-family dwelling units in the residential portion of the community. The 25,000 square feet of office uses and 318 Resort Hotel rooms are also illustrated as they are assumed on this parcel as well. The golf holes are not included since they are existing on-site and already generating trips.

Table 4
Trip Generation
Pelican Landing London Bay MPD

Land Use	Weekday P.M. Peak Hour		
	In	Out	Total
Single Family Dwelling Units (100 Units)	63	36	99
Multi-Family Dwelling Unit (629 Dwelling Units)	150	96	246
Office (25,000 Sq. Ft.)	9	44	53
Resort Hotel (318 Rooms)	47	63	110
Total Trips	269	239	508

LUC 210 used for Single Family
LUC 221 used for Multi-Family
LUC 710 used for Office
LUC 330 used for Resort Hotel

Tracking the previous traffic studies and counts for Coconut Road, the projected volume and Level of Service analysis for the 2-lane segment of Coconut Road was completed based on the following assumptions:

The capacity of Coconut Road is 860 vehicles in the Peak Hour, Peak direction based on the Lee County Service volume tables for Collector Roads. From the most recent Village of Estero ***2023 Traffic Count Report***, dated May 2023, traffic data for Coconut Road was obtained for both eastbound and westbound directions of travel for the two-lane segment of Coconut Road. The report includes data collected on Coconut Road just west of Walden Center Drive. The data in the report was collected on Tuesday through Thursday, February 28th through March 2nd, 2023. The Weekday PM peak hour (5:00 to 6:00 PM) volumes were averaged for the three days surveyed to obtain the eastbound and westbound peak hour volumes. This data is contained in the Appendix of the report for reference and the entire Count Repot is available on the Village of Estero website for review.

The eastbound peak hour volume is 441 vehicles, and the westbound peak hour volume is 363 vehicles. In order to account for the nominal amount of background traffic growth that may occur along this section of Coconut Road due to other projects not associated with those that are directly addressed in this report, a one-percent (1%) annual growth rate (AGR), compounded annually, was applied to this segment of Coconut Road to obtain the projected 2028 background volumes. It should be noted that when reviewing the historical traffic count data on the Lee County Traffic Count Database System (TCDS) website for Count Station 495, there has been little to no growth on this segment of Coconut Road, so a 1% AGR is a conservative growth rate to apply to this roadway segment.

Table 5 then outlines the projected 2028 volumes on Coconut Road, in both the eastbound and westbound directions, based on the traffic data available. The traffic data for the Bayview on Estero Bay was taken from the Traffic Impact Study prepared for that

in 2021project by TR Transportation Consultants for the rezoning application with the City of Bonita Springs and a copy of the relevant pages of that study are included in the Appendix of this report for reference. The relevant pages of the traffic study for the Woodfield Village EPD traffic study are also attached for reference.

Table 5
Coconut Road Volume & Level of Service
Pelican Landing London Bay MPD

	Eastbound	Westbound
2023 Volume [1]	441	363
Projected 2028 Volume [2]	463	382
Bayview on Estero Bay [3]	66	117
Woodfield [4]	17	17
Pelican Bay London Bay MPD [5]	239	269
Total Volume & LOS	785 – LOS "D"	768 – LOS "D"
Coconut Road Capacity	860	860
Remaining Capacity	75	92

[1] Village of Estero Traffic Count Report
[2] Increase 2023 Volume by 1% AGR for 5 years
[3] From Bayview on Estero Bay Zoning TIS prepared by TR Transportation Consultants
[4] From Woodfield Village EPD TIS prepared by Fehr & Peers
[5] Based on trip generation of proposed Pelican Bay London Bay MPD amendment

Based on the recent traffic data collected by the Village of Estero and the trip generation anticipated by the proposed zoning amendment proposed with the Pelican Landing London Bay MPD, including trips associated with the approved Bayview on Estero Bay as well as the recently approved Woodfield Village EPD in the Village of Estero, Coconut Road between Spring Creek Road and U.S. 41 is projected to operate at LOS "D" in 2028 with the project trips from the Pelican Landing London Bay MPD project.

VI. CONCLUSION

The Applicant is proposing to eliminate unused non-residential entitlements associated within the DRI to allow for increased residential and a resort-oriented hotel in this area of the Pelican Landing project. The analysis conducted as part of this report concluded that the overall trip generation of the DRI does not increase and the transportation impacts of the DRI have not been increased from what was originally approved and mitigated.

The requested amendment adds 488 "new" dwelling units to the properties within the Pelican Landing London Bay MPD, supported by a proportionate reduction of commercial square footage to ensure that there are no impacts to transportation facilities that were not already contemplated and approved in the DRI. Specifically, to off-set the traffic impacts of the additional density and hotel rooms, the Applicant is proposing to eliminate all remaining retail square footage and reduce the office uses by over 100,000 square feet.

Utilizing 2023 traffic data collected by the Village of Estero and including future developments yet to be constructed, the projected traffic volumes along Corkscrew Road between Spring Creek Road and U.S. 41 indicated that Coconut Road will operate at a Level of Service "D" in 2028 with the build-out of the Pelican Landing London Bay MPD project.

APPENDIX

SITE LOCATION

RVi
28100 Bonita Grande Drive
Suite 305
Bonita Springs, FL 34135
Tel: 239.405.7777
www.rviplanning.com

PELICAN LANDING LONDON BAY • **PARCEL ID MAP**

- Lee County
- 5/2/2023
- # 2300XXXX
- LB Raptor Investments LLC

0 1,000 2,000
Feet

Information furnished regarding this property is from sources deemed reliable. RVi has not made an independent investigation of these sources and no warranty is made as to their accuracy or completeness. This plan is conceptual, subject to change, and does not represent any regulatory

LEE COUNTY LEVEL OF SERVICE THRESHOLD VOLUMES FOR COCONUT ROAD

LINK-SPECIFIC SERVICE VOLUMES ON ARTERIALS IN LEE COUNTY (2015 DATA)

ROAD SEGMENT	FROM	TO	TRAFFIC DISTRIC	LENGTH (MILE)	ROAD TYPE	SERVICE VOLUMES (PEAK HOUR PEAK DIRECTION)					SERVICE VOLUMES (PEAK HOUR--BOTH DIRECTIONS)				
						A	B	C	D	E	A	B	C	D	E
VETERANS MEM. PKWY	McGREGOR BLVD	DEL PRADO BLVD	1 & 5	3.5	4LB	1,120	1,900	2,680	3,440	4,000	1,880	3,170	4,460	5,720	6,680
	DEL PRADO BLVD	SANTA BARBARA BLVD	5	2.0	6LD	2,190	3,080	3,080	3,080	3,080	3,660	5,150	5,150	5,150	5,150
	SANTA BARBARA BLVD	SKYLINE BLVD	5	1.0	6LD	2,190	3,080	3,080	3,080	3,080	3,660	5,150	5,150	5,150	5,150
	SKYLINE BLVD	SR 78	5	3.5	4LD	1,400	2,040	2,040	2,040	2,040	2,340	3,420	3,420	3,420	3,420
WINKLER RD	SUMMERLIN RD	GLADIOLUS DR	4	0.4	4LD	0	0	590	1,520	1,520	0	0	990	2,530	2,530
	GLADIOLUS DR	BRANDYWINE CIR	4	0.9	2LN	0	750	880	880	880	0	1,260	1,460	1,460	1,460
	BRANDYWINE CIR	CYPRESS LAKE DR	4	0.9	2LN	0	750	880	880	880	0	1,260	1,460	1,460	1,460
	CYPRESS LAKE DR	COLLEGE PKWY	4	0.7	4LD	0	0	610	1,780	1,780	0	0	1,020	2,960	2,960
	COLLEGE PKWY	SUNSET VISTA	4	0.5	2LN	0	770	800	800	800	0	1,290	1,330	1,330	1,330
	SUNSET VISTA	McGREGOR BLVD	4	0.8	2LN	0	770	800	800	800	0	1,290	1,330	1,330	1,330

SERVICE VOLUMES ON COLLECTORS IN LEE COUNTY (2015 DATA)

ROAD SEGMENT	FROM	TO	TRAFFIC DISTRIC	LENGTH (MILE)	ROAD TYPE	SERVICE VOLUMES (PEAK HOUR PEAK DIRECTION)					SERVICE VOLUMES (PEAK HOUR--BOTH DIRECTIONS)				
						A	B	C	D	E	A	B	C	D	E
COLLECTORS					2LU	0	0	550	860	860	0	0	990	1,530	1,530
					2LD	0	0	580	910	910	0	0	1,040	1,610	1,610
					4LU	0	0	1,240	1,700	1,700	0	0	2,200	3,030	3,030
					4LD	0	0	1,310	1,790	1,790	0	0	2,340	3,190	3,190

OVERALL DRI TRIP GENERATION AND INTERNAL TRIP CALCULATIONS

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Pelican Landing MPD	**Organization:**	TR Transportation Consultants
Project Location:	Lee County	**Performed By:**	TBT
Scenario Description:	As Currently Approved	**Date:**	9/29/2023
Analysis Year:	Build-Out Conditions	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[2]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	475		605	103	502
Retail	820	300		1,245	597	648
Restaurant	932	5		45	28	17
Cinema/Entertainment				0		
Residential	210/220	3,912		1,971	1,219	752
Hotel	330	750		256	185	71
All Other Land Uses[2]				80	26	54
				4,202	2,158	2,044

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		48	1	0	10	0
Retail	13		8	0	168	31
Restaurant	1	7		0	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	30	60	4	0		22
Hotel	0	11	1	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	4,202	2,158	2,044
Internal Capture Percentage	20%	19%	20%
External Vehicle-Trips[5]	3,364	1,739	1,625
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	43%	12%
Retail	21%	34%
Restaurant	50%	71%
Cinema/Entertainment	N/A	N/A
Residential	15%	15%
Hotel	29%	17%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Pelican Landing MPD	**Organization:**	TR Transportation Consultants
Project Location:	Lee County	**Performed By:**	TBT
Scenario Description:	Proposed Uses	**Date:**	9/29/2023
Analysis Year:	Build-Out Conditions	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	475		605	103	502
Retail	820	153		767	368	399
Restaurant	932	5		45	28	17
Cinema/Entertainment				0		
Residential	210/220	4,400		2,205	1,363	842
Hotel	330	750		256	185	71
All Other Land Uses[2]				80	26	54
				3,958	2,073	1,885

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		29	1	0	10	0
Retail	8		8	0	104	20
Restaurant	1	7		0	3	1
Cinema/Entertainment	0	0	0		0	0
Residential	34	37	4	0		22
Hotel	0	7	1	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,958	2,073	1,885
Internal Capture Percentage	15%	14%	16%
External Vehicle-Trips[5]	3,364	1,776	1,588
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	42%	8%
Retail	22%	35%
Restaurant	50%	71%
Cinema/Entertainment	N/A	N/A
Residential	9%	12%
Hotel	23%	11%

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

VILLAGE OF ESTERO TRAFFIC COUNT REPORT COCONUT ROAD

THE VILLAGE OF ESTERO

2023 TRAFFIC COUNTS

MAY 2023

Prepared for:

Village of ESTERO

9401 Corkscrew Palms Circle
Estero, Florida 33928

Prepared by:

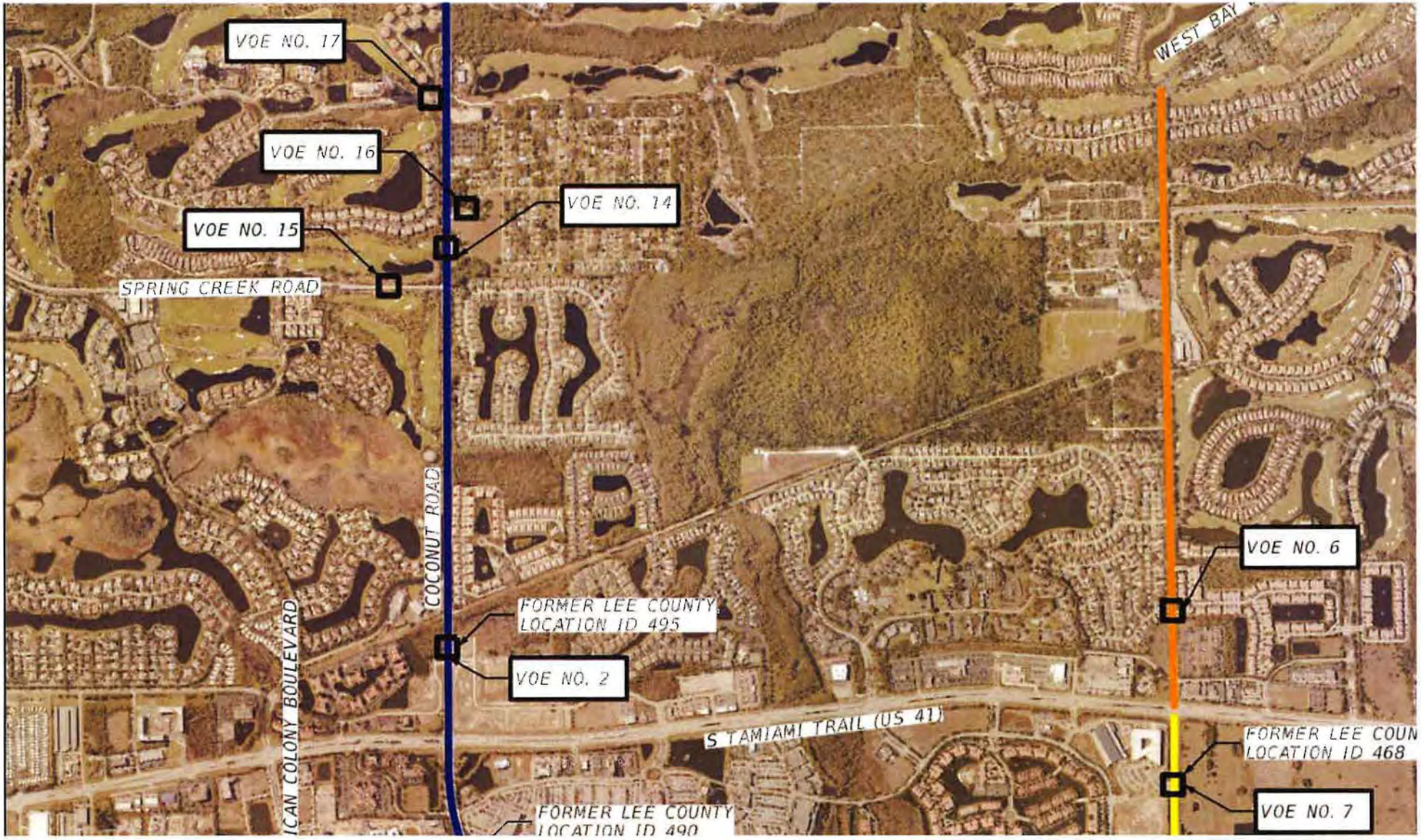
JOHNSON ENGINEERING
2122 Johnson Street
Fort Myers, Florida 33901
(239) 334-0046
EB 642

Leah M. Holmes, P.E.
Florida License No. 85359

Date
This item has been digitally signed and sealed by Leah M. Holmes on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

20225140-003


VOE NO. 17
VOE NO. 16
VOE NO. 15
VOE NO. 14
SPRING CREEK ROAD
COCONUT ROAD
ICAN COLONY BOULEVARD
FORMER LEE COUNTY
LOCATION ID 495
VOE NO. 2
S TAMIAMI TRAIL (US 41)
FORMER LEE COUNTY
LOCATION ID 490
WEST BAY
VOE NO. 6
FORMER LEE COUN
LOCATION ID 468
VOE NO. 7

Village of Estero, Village Location ID No. 2

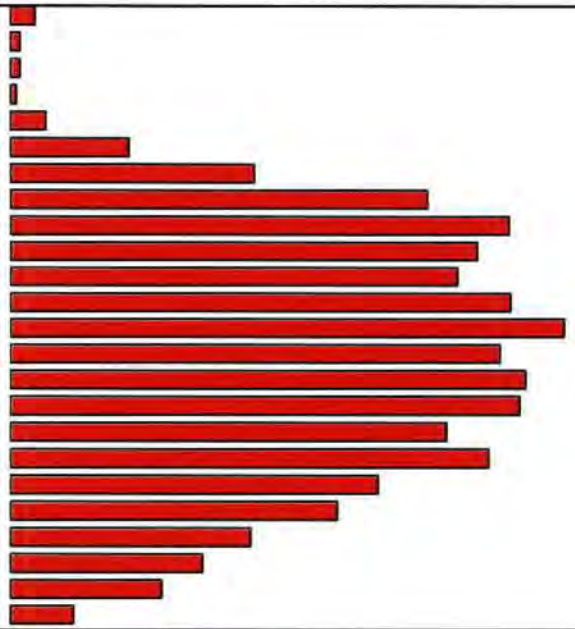
Coconut Road between Spring Creek Road and Tamiami Trail (U.S. 41)

Village of Estero
Location: VOE 2
Coconut Road

JOHNSON ENGINEERING

Start Date: 2/28/2023
End Date: 3/6/2023

Time	2/28/2023 Tuesday	Westbound	Eastbound	Combined Total
12:00 AM		15	28	43
01:00		6	12	18
02:00		7	10	17
03:00		3	8	11
04:00		24	38	62
05:00		95	117	212
06:00		179	257	436
07:00		318	430	748
08:00		350	542	892
09:00		376	460	836
10:00		355	446	801
11:00		398	498	896
12:00 PM		494	497	991
01:00		398	476	874
02:00		420	500	920
03:00		390	523	913
04:00		342	438	780
05:00		376	479	855
06:00		284	374	658
07:00		244	342	586
08:00		200	228	428
09:00		160	182	342
10:00		106	164	270
11:00		44	67	111
Total		5584	7116	12700
Percent		44.0%	56.0%	

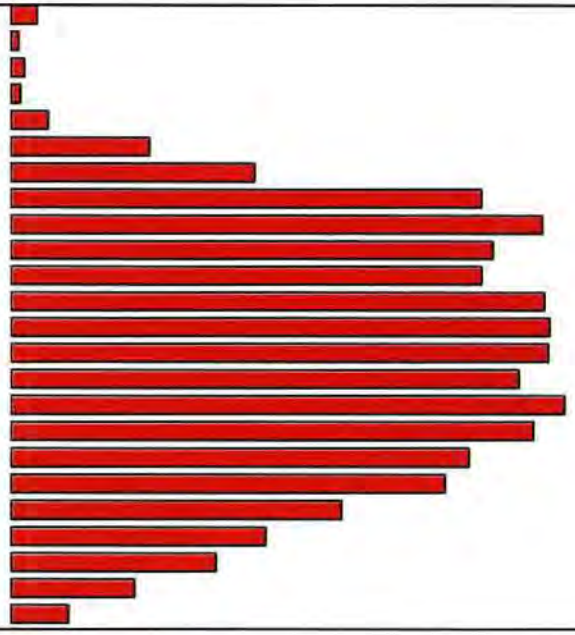


Village of Estero
Location: VOE 2
Coconut Road

JOHNSON ENGINEERING

Start Date: 2/28/2023
End Date: 3/6/2023

Time	3/1/2023 Wednesday	Westbound	Eastbound	Combined Total
12:00 AM		18	26	44
01:00		6	8	14
02:00		9	12	21
03:00		4	12	16
04:00		28	34	62
05:00		102	134	236
06:00		177	240	417
07:00		336	472	808
08:00		388	524	912
09:00		366	462	828
10:00		340	468	808
11:00		367	548	915
12:00 PM		375	549	924
01:00		405	517	922
02:00		374	496	870
03:00		372	578	950
04:00		366	530	896
05:00		360	424	784
06:00		320	424	744
07:00		236	332	568
08:00		206	231	437
09:00		161	190	351
10:00		88	125	213
11:00		38	60	98
Total		5442	7396	12838
Percent		42.4%	57.6%	

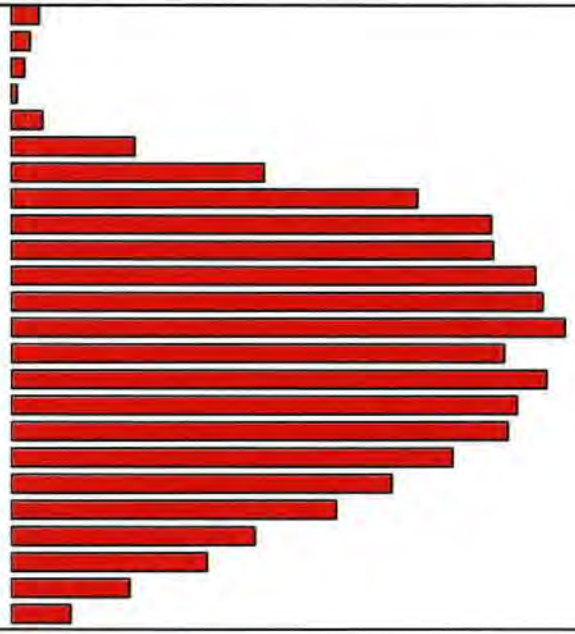


Village of Estero
Location: VOE 2
Coconut Road

JOHNSON ENGINEERING

Start Date: 2/28/2023
End Date: 3/6/2023

Time	3/2/2023 Thursday	Westbound	Eastbound	Combined Total
12:00 AM		20	30	50
01:00		11	20	31
02:00		8	14	22
03:00		4	5	9
04:00		20	35	55
05:00		89	129	218
06:00		165	280	445
07:00		286	427	713
08:00		360	484	844
09:00		372	474	846
10:00		362	560	922
11:00		396	538	934
12:00 PM		420	554	974
01:00		388	480	868
02:00		433	510	943
03:00		382	508	890
04:00		366	508	874
05:00		353	422	775
06:00		324	346	670
07:00		243	328	571
08:00		194	235	429
09:00		145	198	343
10:00		76	132	208
11:00		30	74	104
Total		5447	7291	12738
Percent		42.8%	57.2%	



LEE COUNTY TRAFFIC COUNT

DATA

STATION 495

COCONUT ROAD W. OF US 41

Location Info	
Location ID	495_WB
Type	I-SECTION
Functional Class	-
Located On	Coconut Rd
WEST OF	US-41
Direction	WB
Community	-
MPO_ID	
HPMS ID	
Agency	Lee County

Count Data Info	
Start Date	2/16/2021
End Date	2/17/2021
Start Time	12:00 AM
End Time	12:00 AM
Direction	
Notes	lee
Count Source	495
File Name	D021621.495.PRN
Weather	
Study	
Owner	LeeAuto
QC Status	Accepted

Interval: 60 mins

Time	Hourly Count
00:00 - 01:00	6
01:00 - 02:00	2
02:00 - 03:00	6
03:00 - 04:00	4
04:00 - 05:00	18
05:00 - 06:00	50
06:00 - 07:00	146
07:00 - 08:00	272
08:00 - 09:00	350
09:00 - 10:00	377
10:00 - 11:00	352
11:00 - 12:00	407
12:00 - 13:00	422
13:00 - 14:00	350
14:00 - 15:00	392
15:00 - 16:00	403
16:00 - 17:00	384
17:00 - 18:00	368
18:00 - 19:00	288
19:00 - 20:00	153
20:00 - 21:00	87
21:00 - 22:00	65
22:00 - 23:00	46
23:00 - 24:00	32
TOTAL	4980

Location Info	
Location ID	495_WB
Type	I-SECTION
Functional Class	-
Located On	Coconut Rd
WEST OF	US-41
Direction	WB
Community	-
MPO_ID	
HPMS ID	
Agency	Lee County

Count Data Info	
Start Date	2/17/2021
End Date	2/18/2021
Start Time	12:00 AM
End Time	12:00 AM
Direction	
Notes	lee
Count Source	495
File Name	D021721.495.PRN
Weather	
Study	
Owner	LeeAuto
QC Status	Accepted

Interval: 60 mins

Time	Hourly Count
00:00 - 01:00	14
01:00 - 02:00	3
02:00 - 03:00	2
03:00 - 04:00	2
04:00 - 05:00	11
05:00 - 06:00	49
06:00 - 07:00	160
07:00 - 08:00	262
08:00 - 09:00	354
09:00 - 10:00	340
10:00 - 11:00	393
11:00 - 12:00	400
12:00 - 13:00	400
13:00 - 14:00	370
14:00 - 15:00	404
15:00 - 16:00	420
16:00 - 17:00	402
17:00 - 18:00	353
18:00 - 19:00	284
19:00 - 20:00	180
20:00 - 21:00	107
21:00 - 22:00	59
22:00 - 23:00	42
23:00 - 24:00	46
TOTAL	5057

Location Info	
Location ID	495_EB
Type	I-SECTION
Functional Class	-
Located On	Coconut Rd
WEST OF	US-41
Direction	EB
Community	-
MPO_ID	
HPMS ID	
Agency	Lee County

Count Data Info	
Start Date	2/16/2021
End Date	2/17/2021
Start Time	12:00 AM
End Time	12:00 AM
Direction	
Notes	lee
Count Source	495
File Name	D021621.495.PRN
Weather	
Study	
Owner	LeeAuto
QC Status	Accepted

Interval: 60 mins

Time	Hourly Count
00:00 - 01:00	11
01:00 - 02:00	10
02:00 - 03:00	2
03:00 - 04:00	2
04:00 - 05:00	10
05:00 - 06:00	46
06:00 - 07:00	124
07:00 - 08:00	200
08:00 - 09:00	274
09:00 - 10:00	283
10:00 - 11:00	292
11:00 - 12:00	338
12:00 - 13:00	389
13:00 - 14:00	366
14:00 - 15:00	370
15:00 - 16:00	370
16:00 - 17:00	360
17:00 - 18:00	328
18:00 - 19:00	250
19:00 - 20:00	214
20:00 - 21:00	193
21:00 - 22:00	121
22:00 - 23:00	67
23:00 - 24:00	31
TOTAL	4651

Location Info	
Location ID	495_EB
Type	I-SECTION
Functional Class	-
Located On	Coconut Rd
WEST OF	US-41
Direction	EB
Community	-
MPO_ID	
HPMS ID	
Agency	Lee County

Count Data Info	
Start Date	2/17/2021
End Date	2/18/2021
Start Time	12:00 AM
End Time	12:00 AM
Direction	
Notes	lee
Count Source	495
File Name	D021721.495.PRN
Weather	
Study	
Owner	LeeAuto
QC Status	Accepted

Interval: 60 mins

Time	Hourly Count
00:00 - 01:00	9
01:00 - 02:00	6
02:00 - 03:00	1
03:00 - 04:00	5
04:00 - 05:00	6
05:00 - 06:00	44
06:00 - 07:00	110
07:00 - 08:00	204
08:00 - 09:00	322
09:00 - 10:00	286
10:00 - 11:00	324
11:00 - 12:00	347
12:00 - 13:00	328
13:00 - 14:00	386
14:00 - 15:00	354
15:00 - 16:00	358
16:00 - 17:00	364
17:00 - 18:00	326
18:00 - 19:00	278
19:00 - 20:00	230
20:00 - 21:00	161
21:00 - 22:00	133
22:00 - 23:00	75
23:00 - 24:00	39
TOTAL	4696

WOODFIELD VILLAGE TIS

FEHR & PEERS

Woodfield EPD

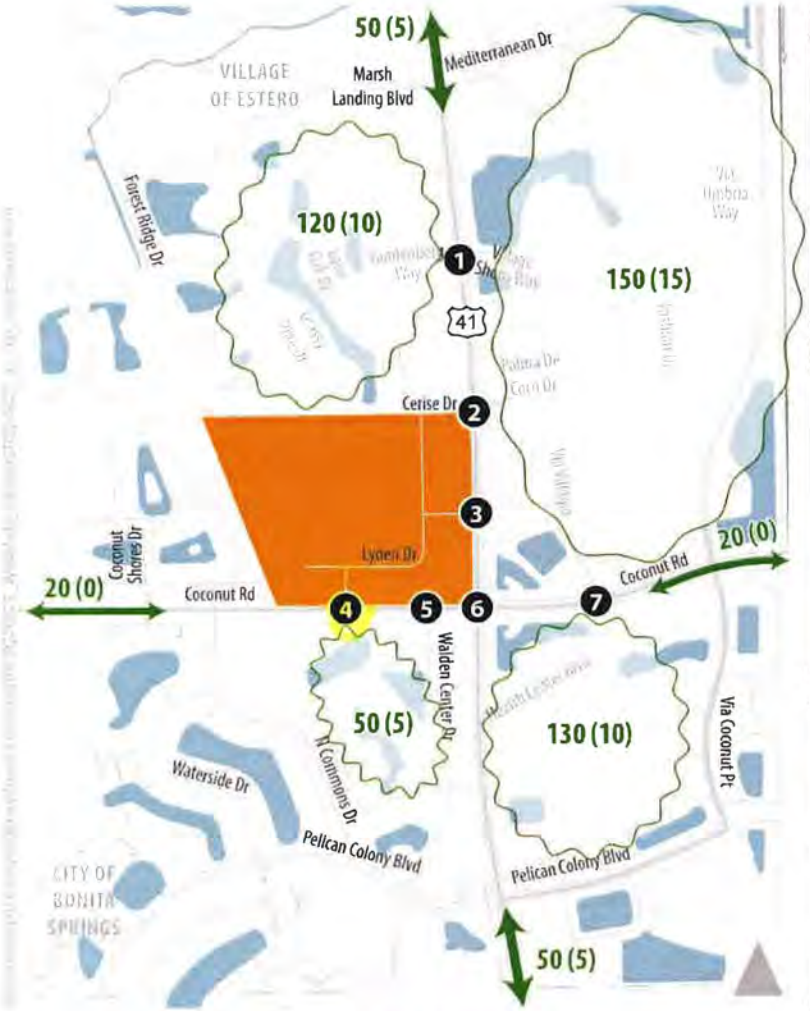
Transportation Assessment

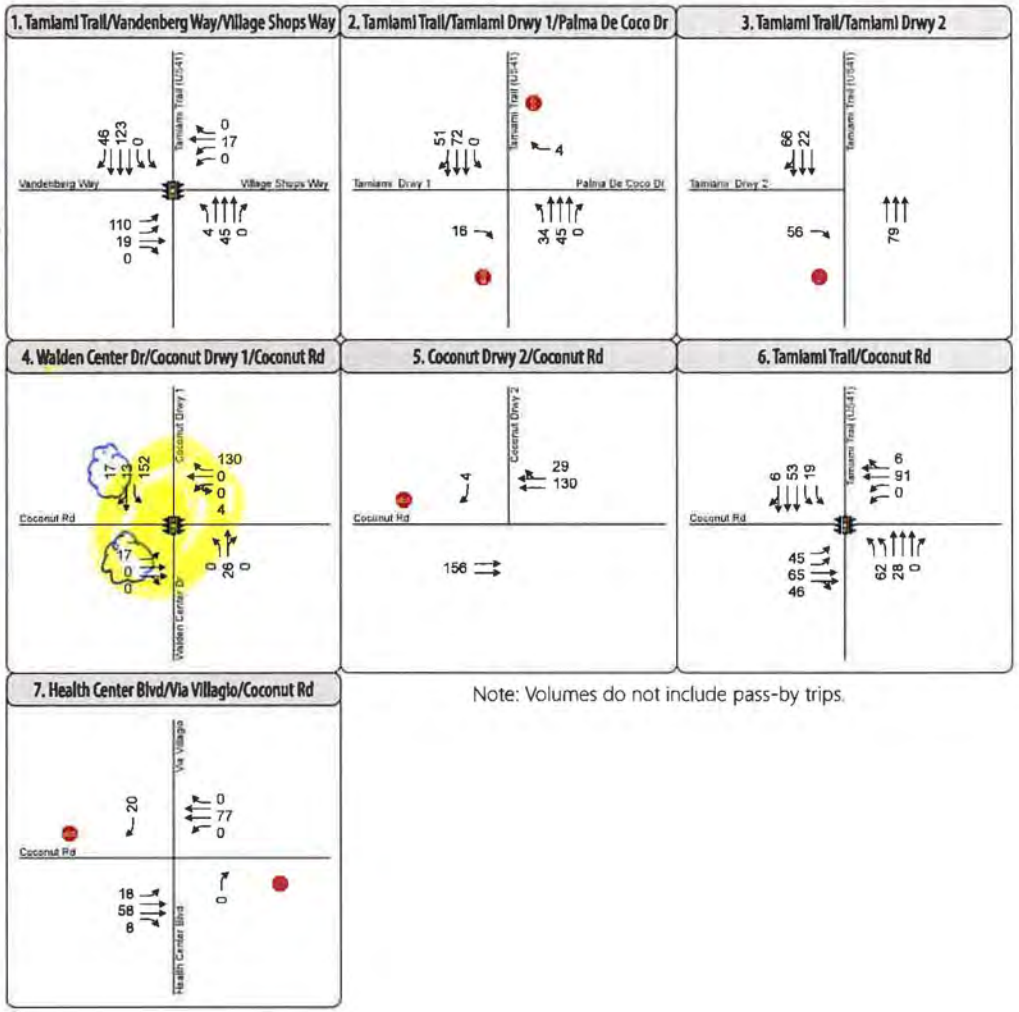
Prepared for:
Woodfield EPD
Woodfield Acquisitions, LLC

April 2023

OR22-0027

FEHR PEERS





Note: Volumes do not include pass-by trips.

Project Site

Study Intersection Locations

Daily (PM Peak Hour) Number of People Bicycling, Walking or Walking to/from Site

Turn Lane

PM Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 6

Project Trip Assignment

BAYVIEW ON ESTERO BAY

ZONING TIS

TR TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

TRAFFIC IMPACT STATEMENT

FOR

BAYVIEW ON ESTERO BAY REZONING

(PROJECT NO. F2104.15)

PREPARED BY:
TR Transportation Consultants, Inc.
Certificate of Authorization Number: 27003
2726 Oak Ridge Court, Suite 503
Fort Myers, Florida 33901-9356
(239) 278-3090

REVISESD:
June 18, 2021

Table 1 summarizes the land uses that were utilized to complete the trip generation for the proposed rezone application.

Table 1
Land Uses – Rezoning Application
Bayview on Estero Bay

Land Use	Size
Multi-Family Residential **Or** Continuing Care Facility (CCF)	300 MF Units **Or** 300 ILF + 75 ALF Units
Quality Restaurant	7,500 Square Feet
Marina	97 Slips (72 Wet Slips & 25 Dry Slips*)

Trip Generation

The trip generation for the proposed rezoning application was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation Manual***, 10th Edition. As analyzed in the previous zoning approval, the "worst case" trip generation for the Multi-Family use was utilized, which is based on the site being developed with the 300 traditional multi-family units.

As previously analyzed, the trip generation for the residential multi-family uses was based on LUC 221 and LUC 222 since the traditional multi-family units will be in buildings between 3 and 10 floors as well as buildings over 10 floors. This analysis, consistent with the analysis conducted in the previous traffic study, assumed that there would be 144 dwelling units in the Mid-Rise buildings and the remaining 156 units in the High-Rise buildings. As the Development Program is fine tuned, there may be more units allocated to the High Rise buildings and less units to the Mid-Rise buildings. Since the Mid-Rise buildings generate more P.M. peak hour trips than the High-Rise buildings, this analysis will be the "worst case" analysis. Land Use Code 931 (Quality Restaurant) was utilized for the trip generation of the proposed restaurant use. The trip generation equations are in the Appendix for reference.

Table 2 outlines the anticipated weekday A.M. and P.M. peak hour and daily trip generation as currently proposed for the rezoning application.

Table 2
Trip Generation – Rezoning Application
Bayview on Estero Bay

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily
	In	Out	Total	In	Out	Total	(2-way)
Multi-Family (144 Units LUC 221)	13	36	49	38	25	63	783
Multi-Family (156 Units LUC 222)	14	43	57	38	24	62	826
Restaurant (7,500 Square Feet)	4	1	5	40	19	59	629
Marina (97 Slips)	2	5	7	12	8	20	234
Total	**33**	**85**	**118**	**128**	**76**	**204**	**2,472**

Since the weekday P.M. peak hour trip generation is significantly higher than the weekday A.M. peak hour trip generation and the proposed restaurant will add an insignificant amount of trips in the A.M. peak hour (5 total trips), the remainder of this analysis will focus on the impacts of the project during the weekday P.M. peak hour.

The total trips generated by the project will not all be new trips added to the adjacent roadway system. With mixed use projects, ITE estimates that there will be a certain amount of interaction between uses that will reduce the overall trip generation of the proposed RPD/CPD. This interaction is called "internal capture". In other words, trips that would normally come from external sources would come from uses that are within the project, thus reducing the overall external impact the development has on the surrounding roadways. ITE, in conjunction with a study conducted by the NCHRP (National Cooperative Highway Research Program), has summarized the internal trip capture reductions between various land uses. For uses shown in Table 2, there is data in the ITE report for interaction between the residential and restaurant uses.

An internal capture calculation was completed consistent with the methodologies in the NCHRP Report and published in the ITE ***Trip Generation Handbook***, 3rd Edition. The

resultant analysis indicates that with the approved RPD/CPD scenario there will be an internal trip capture reduction of ten percent (10%) in the P.M. peak hour between the residential and restaurant uses. The summary sheets utilized to calculate these internal capture rates for the weekday PM peak hour are included in the Appendix of this report for reference.

Table 3 indicates the total external trips of the subject site based on the proposed RPD/CPD

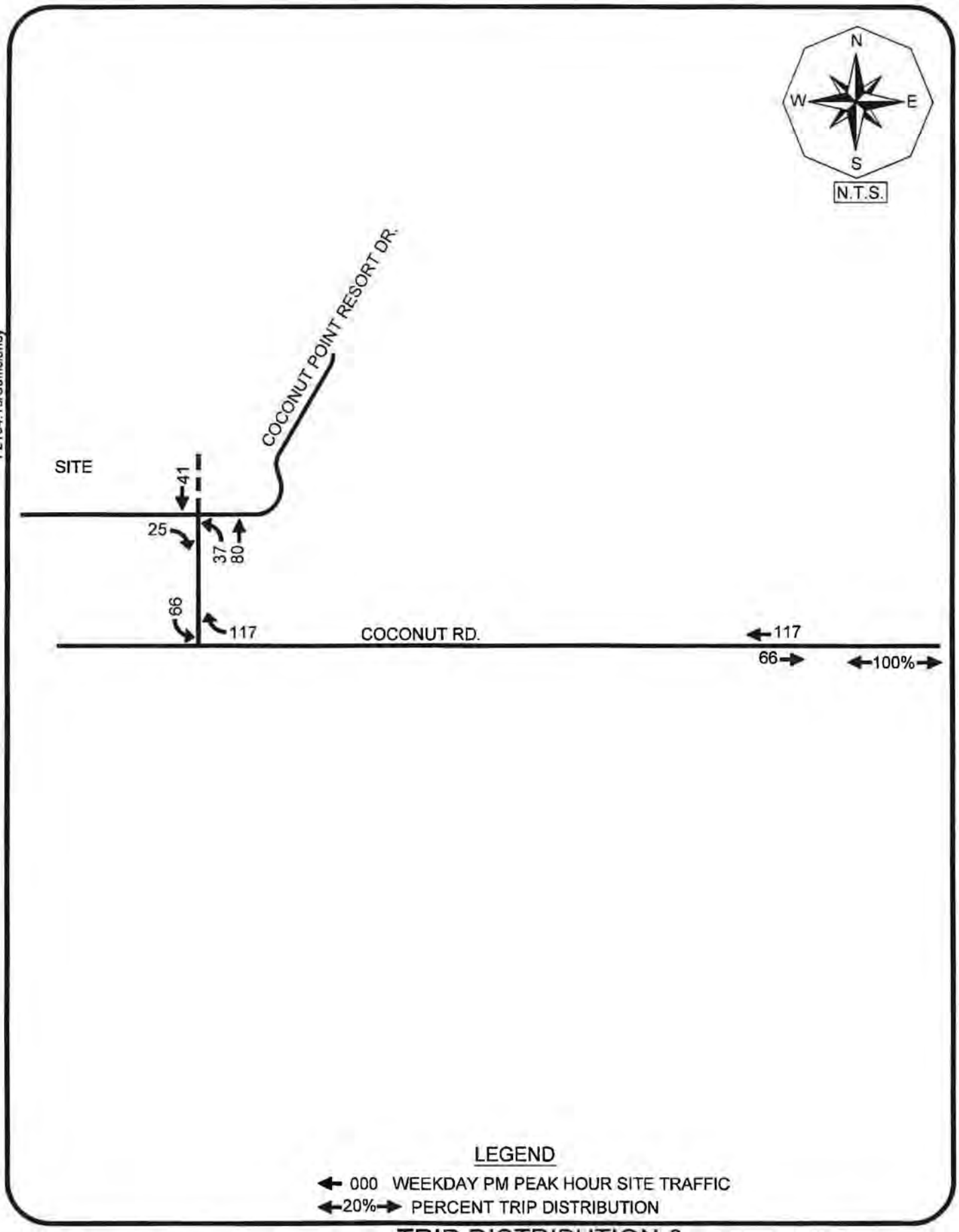
Table 3
Trip Generation – Net New Trips of Approved Uses
Bayview on Estero Bay

Land Use	Weekday P.M. Peak Hour		
	In	Out	Total
Total Trips	128	76	204
Less Internal Capture 10% PM	-11	-10	-21
Total Trips (Less Internal Capture)	**117**	**66**	**183**

A comparison was made to the trip generation shown in Table 3 to the trip generation that was analyzed as part of the previous Zoning approval (Ordinance 20-06). Again, the only change in uses is the addition of the 7,500 square foot restaurant that will be open to the public. **Table 4** illustrates the comparison of the weekday P.M. peak hour trip generation between the previous approved zoning in 2020 and the requested zoning to RPD/CPD with this application.

Table 4
Trip Generation Comparison– Existing Zoning vs. Requested Zoning
Bayview On Estero Bay

Land Use	Weekday P.M. Peak Hour		
	In	Out	Total
Proposed Zoning	117	66	183
Approved Zoning	-88	-57	-145
Trip Change	**29**	**9**	**38**



F2104.15/Sufficiency

TRANSPORTATION CONSULTANTS, INC

TRIP DISTRIBUTION &
SITE TRAFFIC ASSIGNMENT
BAYVIEW ON ESTERO RPD/CPD

Figure 2
REVISED 6/18/21

TRIP GENERATION EQUATIONS

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

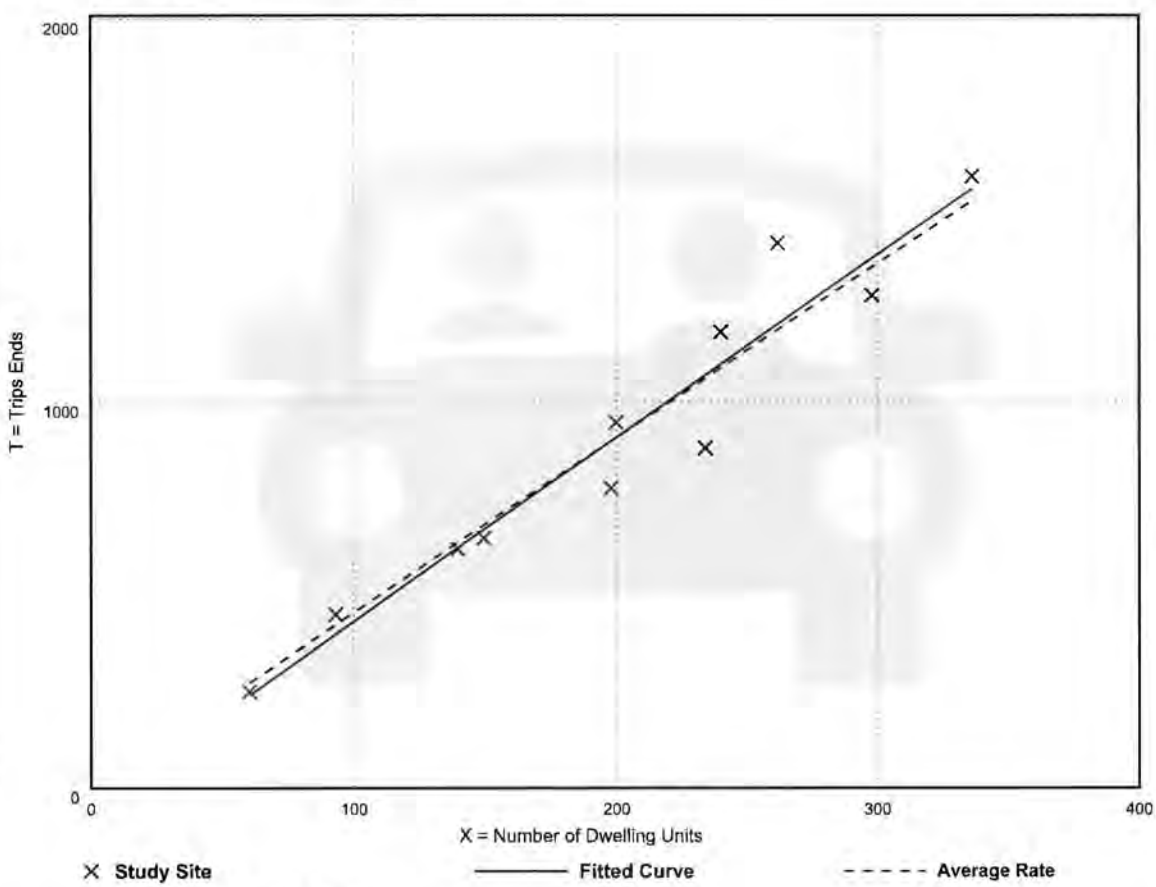
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



Fitted Curve Equation: T = 4.77(X) - 46.46

R^2= 0.93

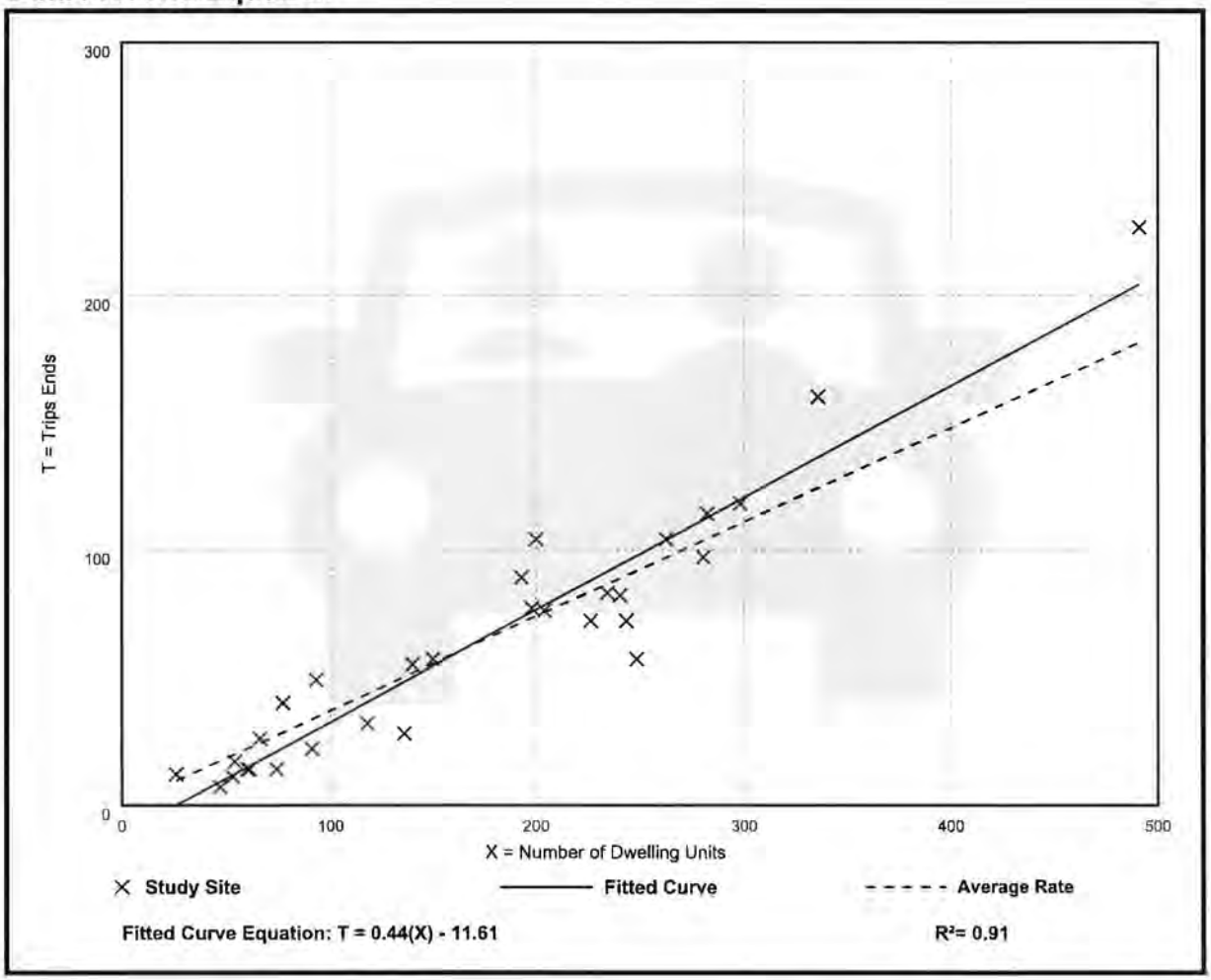
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



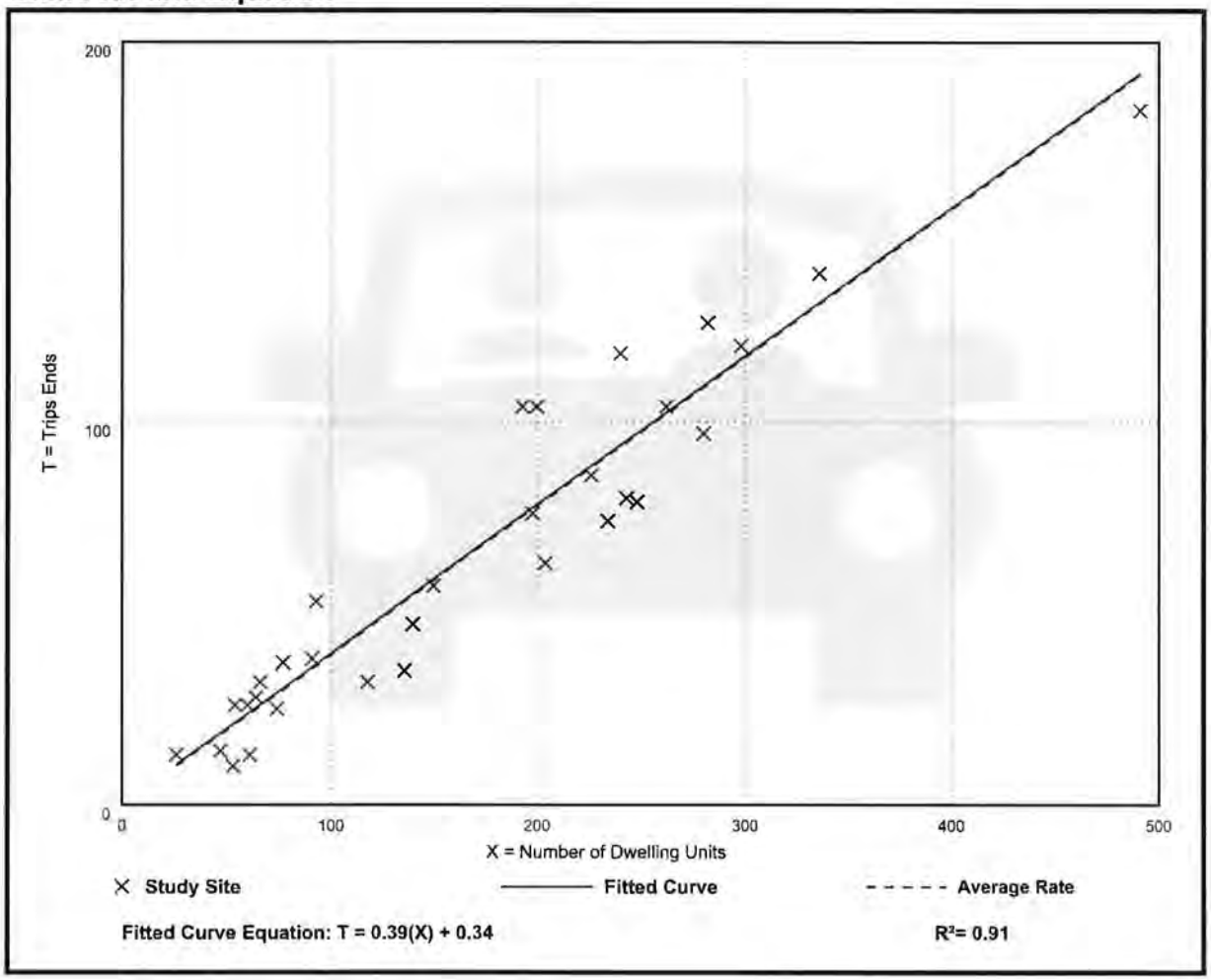
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



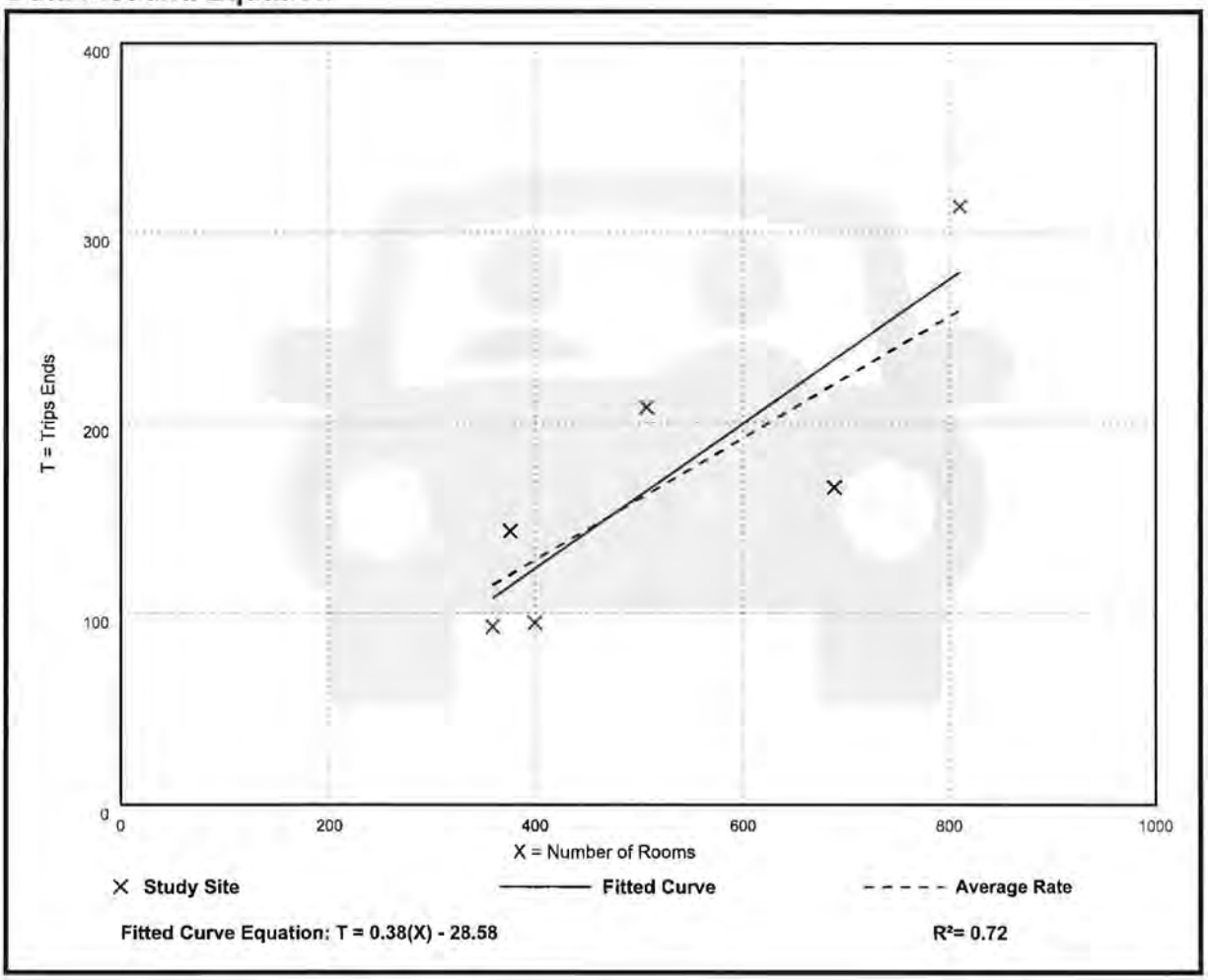
Resort Hotel
(330)

Vehicle Trip Ends vs: Rooms
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Rooms: 524
Directional Distribution: 72% entering, 28% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.32	0.24 - 0.41	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.38(X) - 28.58

R^2= 0.72

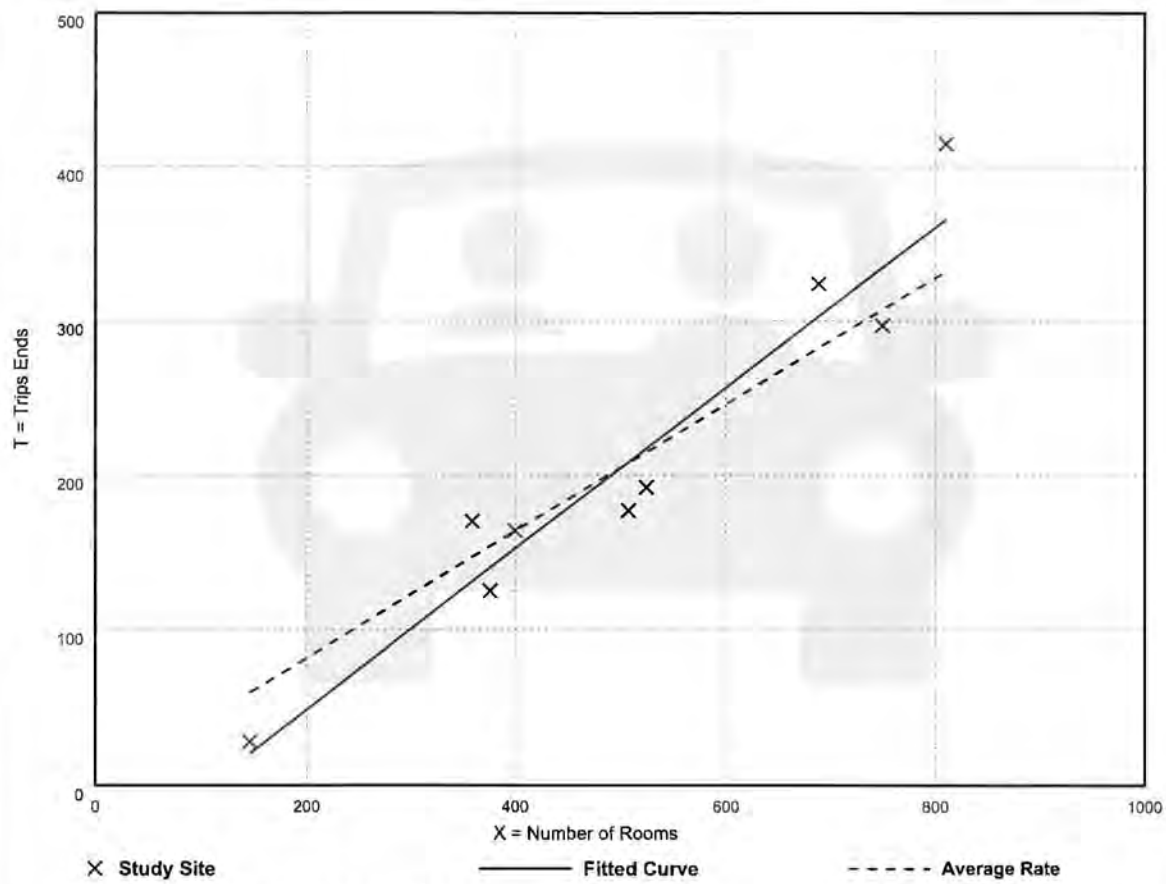
Resort Hotel
(330)

Vehicle Trip Ends vs: Rooms
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 9
Avg. Num. of Rooms: 507
Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.41	0.19 - 0.51	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.52(X) - 55.42

R^2= 0.93

Resort Hotel
(330)

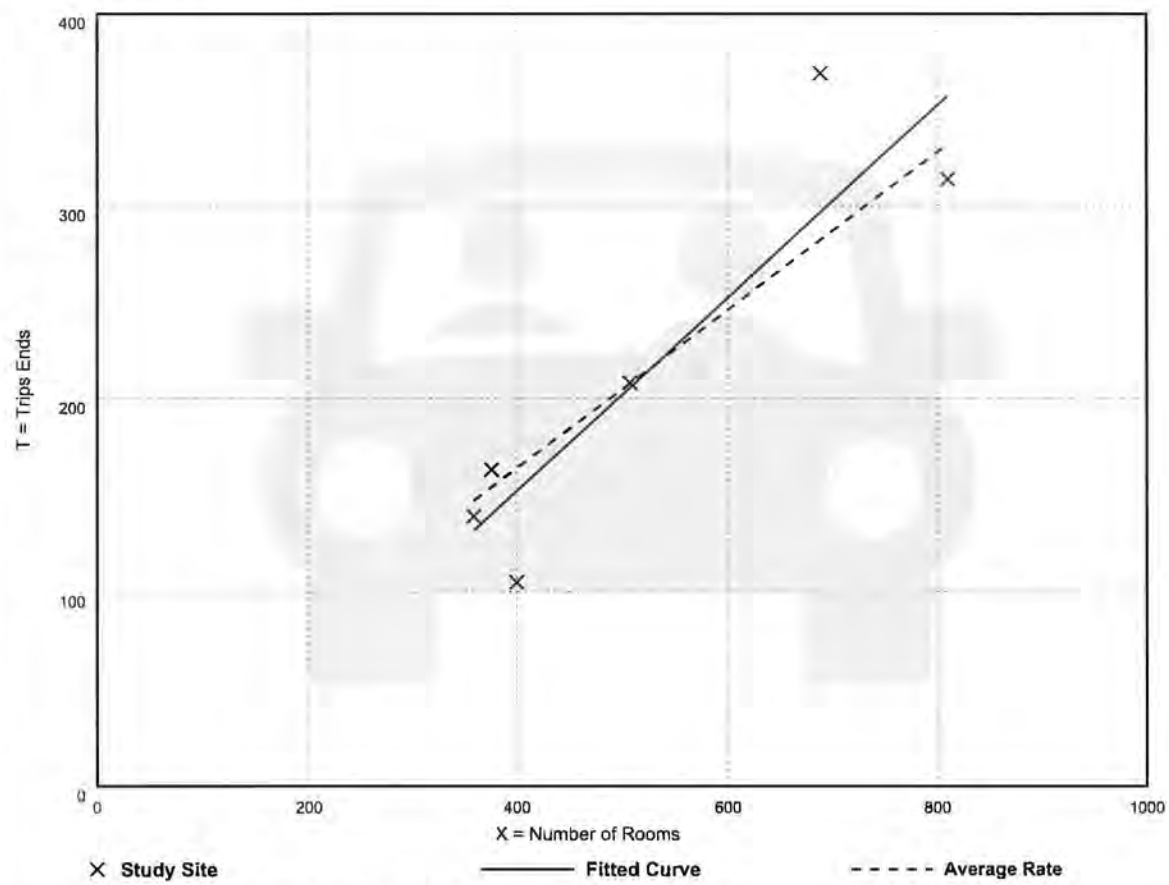
Vehicle Trip Ends vs: Rooms
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 6
Avg. Num. of Rooms: 524
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.41	0.26 - 0.54	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.50(X) - 47.88

R^2= 0.82

General Office Building
(710)

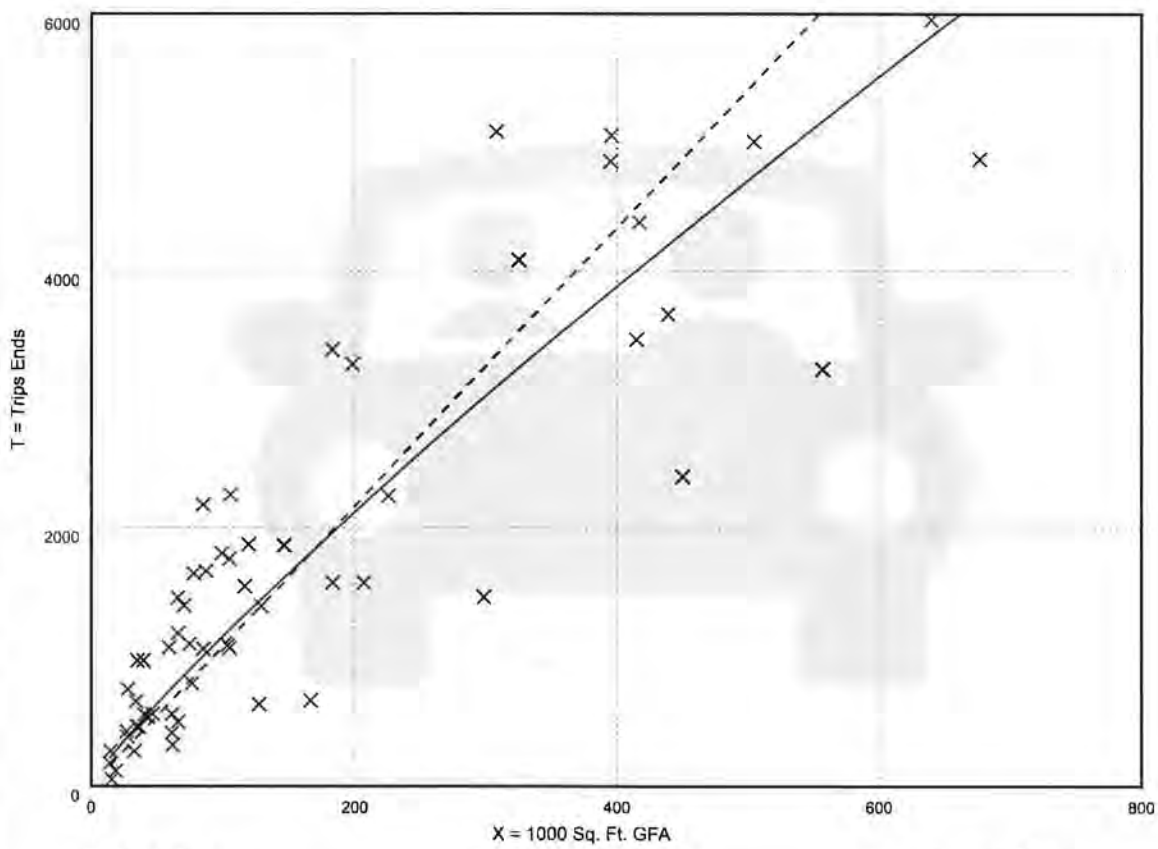
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. 1000 Sq. Ft. GFA: 163
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.84	3.27 - 27.56	4.76

Data Plot and Equation



× Study Site ——— Fitted Curve - - - - - Average Rate

Fitted Curve Equation: Ln(T) = 0.87 Ln(X) + 3.05 **R^2= 0.78**

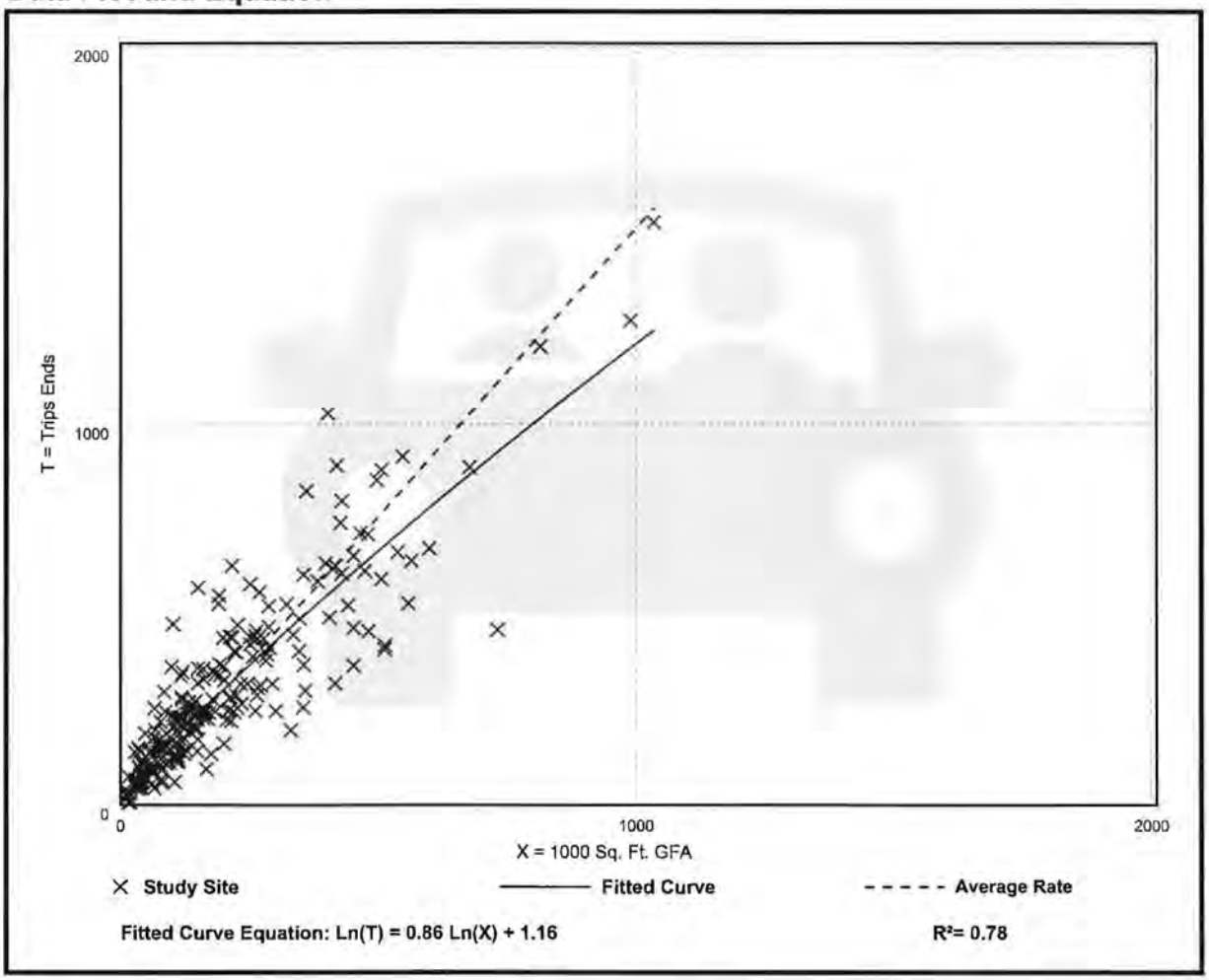
General Office Building
(710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 221
Avg. 1000 Sq. Ft. GFA: 201
Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.86 Ln(X) + 1.16 **R^2= 0.78**

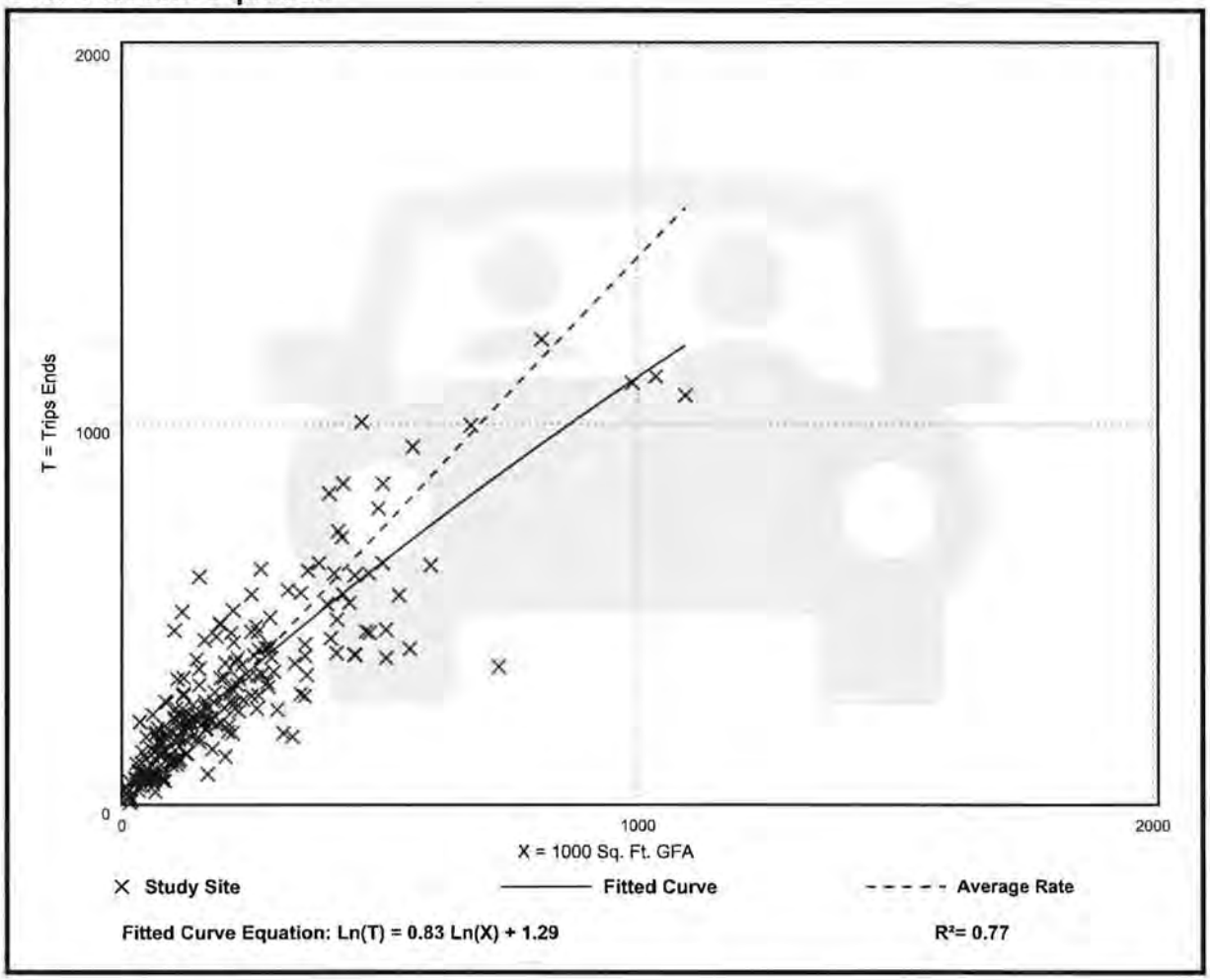
General Office Building
(710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 232
Avg. 1000 Sq. Ft. GFA: 199
Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Pelican Landing London Bay MPD
Preliminary Density/Intensity Calculation

REVISED April 2024

Pelican Landing DRI/MPD Density/Intensity Summary

Land Use	Total Approved per DRI/PUDs	Total Unbuilt Entitlements Assigned to Applicant	Total Proposed per MPD	Proposed Increase/Decrease
Residential (DUs)	3,912 DU	241 DU	729 DU	+488 DU
Office (SF)	475,000 SF	125,839 SF	25,000 SF	-100,839 SF
Retail (SF)	300,000 SF	147,000 SF	0 SF	-147,000 SF
Restaurant (SF)	5,000	0 SF	0 SF	N/A
Golf (holes)	77	28 holes	27 holes	-1 hole
Hotel (rooms)	750	86 rooms	318 rooms	+232 rooms
Marina				
Wet Slips	65 slips	0 slips	0 slips	N/A
Dry Slips	150 slips	0 slips	0 slips	N/A

Allowable Density Calculation per FLU

Future Land Use	Acres	Allowable Density	Allowable Dwelling Units
Suburban	**95.83 AC**		
Residential (Preserved Uplands)	18.03 AC	6 DU/AC	**108.18 DU**
Non-Residential Area (Upland)	77.80 AC	0 DU/AC	**0 DU**
Outlying Suburban	**190.27 AC**		
Residential (Uplands)	90.78 AC	3 DU/AC	**272.34 DU**
Non-Residential Area (Uplands)	99.49 AC	0 DU/AC	**0 DU**
Wetlands	**144 AC**		
Saltwater Wetland	6.5 AC	1 DU/20 AC	**0.33 DU**
Impacted Freshwater Wetland	2.76 AC	1 DU/20 AC	**0.14 DU**
Preserved Freshwater Wetland (within Outlying Suburban)	121.11 AC	3 DU/AC	**363.33 DU**
Preserved Freshwater Wetlands (within Suburban)	13.63 AC	6 DU/AC	**81.78 DU**
TOTAL	**430±**		**826.1 DU**

ATTACHMENT U

Date: March 3, 2025
To: Beth Workman, Principal Planner
From: Nic DeFilippo, Senior Environmental Planner
239.533.8983
ndefilippo@leegov.com
Subject: DCI2023-00052
Natural Resources Staff Report for Pelican Landing MPD

The request is to rezone ±430 acres of land from Kersey-Smoot RPD and Pelican Landing CPD/RPD to a unified Mixed Use Planned Development (MPD) to allow for the development of a residential and resort community. The request will allow the development of 729 dwelling units, 25,000 sq. ft. of office uses, 27 golf course holes, and 318 hotel rooms. The proposed development will connect to central water and sewer provided by Bonita Springs Utilities and maintains existing preserve areas and protects onsite wetlands, including the Eco-Park and Interface Areas.

Bald Eagle Nest

Historically, bald eagle nesting has occurred within the Pelican Landing DRI boundaries. Bald eagle nest LE-028A, first observed in 1987, has historically been located within the Eco-Park which is under a conservation easement preserving wetlands and gopher tortoise habitat. A Bald Eagle Management Plan prepared by Wilson Miller, Inc, dated March 7, 2000 was incorporated as a condition of Z-00-044 approval. As part of the golf course renovation activities approved by DOS2021-00137 the attached Bald Eagle Management Plan, dated July 2022, was reviewed and approved by the Lee County Board of County Commissioners on September 20, 2022. The July 2022 BEMP replaced the March 2000 BEMP and updated the eagle nest protection zones to be consistent with the 660' buffer currently accepted by Lee County and the U.S. Fish and Wildlife Service. ADD2022-00162 amended Condition 6 of Z-00-044 to reflect the new July 2022 BEMP. As outlined in LDC 14-119(C)(2), a new or revised Bald Eagle Management Plan is required if a subsequent development or a change in use is proposed that is inconsistent with the previously approved Bald Eagle Management Plan. The proposed MPD is not proposing any changes in uses within 660' of the bald eagle nest, therefore staff finds the proposal is consistent with LDC 14-119. Staff recommends the amended condition adopted by ADD2022-0162 below be carried forward as proposed by the applicant in the "Inventory of Existing Conditions" document.

Over the years the eagles used an alternate nesting site known as bald eagle nest LE-028C located within the Kersey-Smoot RPD boundary. Zoning resolution Z-07-031 included a condition to ensure compliance with a Bald Eagle Management Plan and protection of the eagle nest. This nest location was declared Abandoned by the Eagle Technical Advisory Committee on November 13, 2018 (Attachment 2). The Abandonment of nest LE-028C was documented in the approval of ADD2020-00095.

Additionally, Z-94-014 condition 22 reads as follows:

> *If a proposed bald eagle management plan includes development within 750 feet of an eagle's nest, the plan must be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FGFWFC and USFWS.*

Staff recommends that this condition be deleted as it is outdated and the attached July 2022 BEMP addresses compliance with LDC 14-119 and Lee Plan Objective 123.6. In addition, LE-028C was declared abandoned in 2018.

Eco-Park, Interface Area, Golf Course Conditions

The applicant is proposing to consolidate and carry forward Eco-Park conditions from various zoning actions as detailed in the "Inventory of Existing Conditions" document. Staff agrees with the applicant's proposed consolidation of conditions.

The Interface Area was previously delineated to serve as a buffer area between high rise development and the jurisdictional mangrove wetlands to the west. Several conditions regarding the Interface Area were adopted by Zoning Resolution Z-94-014. The applicant is proposing some minor revisions to these conditions as outlined in the "Inventory of Existing Conditions" document because the language is related to other portions of the DRI and not related to the subject property. Staff agrees with the applicant's proposed revisions.

There are several conditions from Z-98-066, Z-00-044, Z-00-031 to address golf course design, management and water quality. The applicant complied these conditions within the "Inventory of Existing Conditions" document prepared by RVI Planning and Landscape Architecture. The applicant has proposed that many of the conditions be carried forward and staff agrees. The applicant is proposing to delete the two conditions outlined below:

Z-00-031 Condition 7

> *The Developer must amend the existing Pelican Landing DRI management plan for the application of herbicides, pesticides, and fertilizers to the golf course to include Parcel E. The plan must include Parcel E prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The amended plan must:*
>
> a. *include a groundwater and surface water monitoring plan;*
> b. *provide for testing to assess whether there is degradation of surface or groundwater quality;*
> c. *identify the locations for the groundwater monitoring and testing on a map(s); and*
> d. *set forth the testing and reporting requirements. The Developer must continue to submit the test reports to the County with the annual monitoring report. The surface and groundwater monitoring program must be established and operated at the expense of the Developer, the Bayside Improvement Community Development District, or other comparable legal entity charged with the legal responsibility of managing the golf course as stated in an approved surface and groundwater monitoring plan. This plan must be evaluated in accordance with the directives of Chapter 17-302, F.A.C., Water Quality Standards.*

The applicant's justification for deleting this condition is that it's addressed by the attached Golf Course Management Plan which was included in the DOS2021-00137 approval.

Z-00-031 Condition 8

The Developer must submit an amendment to the existing surface and groundwater quality management plan as approved by Lee County and Florida Department of Community Affairs (FDCA). The amended plan must be approved by FDCA prior to the application of chemicals to the proposed golf course.

> a. *If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for*

the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDCA will be implemented by the developer. The mitigation plan must be based on rules and regulations in effect at the time the plan is reviewed and approved.

b. *The golf course within Parcel E must be set back a minimum of 100 feet (on average) from any saltwater wetlands. There will be no point where this setback is less than 75 feet in width. Water management facilities permitted by the South Florida Water Management District (SFWMD) and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the parcel.*

c. *The water management system for the golf course must be designed so untreated run-off is directed away from the saltwater wetland system. Any treated run-off to be discharged into the saltwater wetland system must utilize spreader swales with multiple outfalls, or other technology such as a filter marsh system, to evenly distribute the treated discharge. Lee County Environmental Sciences' Staff agrees that Applicants proposed system with outfall into the freshwater canal and then into the mangrove forest system, if approved by SFWMD, meets the intent of this condition.*

The applicant's justification for deleting this condition is that the requirements have been satisfied by previous permitting, specifically DOS2021-00137. In addition, the proposed MCP does not include any golf course areas within 100 feet of any saltwater wetlands.

Staff agrees with the applicant that the Pelican Landing Golf Course Management Plan (Attachment 3) and the location of the golf course address compliance with the Z-00-031 Condition 7 and Condition 8. Staff recommends that Z-00-044 Condition 4(D) remain to ensure golf course operation complies with the attached Management Plan.

Attachments:

1. Bald Eagle Management Plan, dated July 2022
2. Eagle Technical Advisory Committee LE-028C Abandonment Determination Letter
3. Pelican Landing Golf Course Management Plan

RAPTOR BAY GOLF COURSE RENOVATION
BALD EAGLE MANAGEMENT PLAN
FOR BALD EAGLE NEST LE-28A
LEE COUNTY, FLORIDA

July 2022

Prepared For:

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2210 Vanderbilt Beach Road, Suite 1300
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Project No. 20LBR3290

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7.0 References 7

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Exhibit 2. Bald Eagle Management Plan for Nest LE-28A (March 2000).....E2-1

Exhibit 3. Aerial with FLUCFCS and Bald Eagle Nest E3-1

Exhibit 4. Aerial with Proposed Site Plan, Bald Eagle Nest, Conservation Area, and Surrounding Land Uses E4-1

1.0 INTRODUCTION

This Bald Eagle Management Plan (BEMP) has been prepared for Bald Eagle (*Haliaeetus leucocephalus*) Nest LE-28A located on the Raptor Bay Golf Course Renovation project (Project). The Project site is located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Exhibit 1). The Project site totals 306.89± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41 and 2.28± miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by a Florida Power & Light (FPL) easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club.

A BEMP was previously prepared by Wilson Miller, Inc. on March 7, 2000 for Nest LE-28A which depicted the eagle nest tree and two protection zones (Exhibit 2). The two zones consisted of the Primary Protection Zone (PPZ), which ranged from 750 feet to 1,200 feet from the nest tree and the Secondary Protection Zone (SPZ), which ranged from 750 feet to 1,300 feet from the PPZ.

This BEMP has been prepared to update the PPZ and SPZ for Nest LE-28A to 330 and 660 feet, respectively, as currently accepted by Lee County the U.S. Fish and Wildlife Service (USFWS), and the Florida Fish and Wildlife Conservation Commission (FWCC). Additionally, this BEMP is intended to facilitate construction of the Project (i.e., golf course renovation activities) while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles. The golf course renovation activities are currently underway in accordance with Lee County Development Order (DO) No. DOS2021-00137.

Nest LE-28A and its proposed protection zones (i.e., 330 and 660 feet) are contained entirely within the Project's conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. Approval of this BEMP will allow the Project's golf course renovation activities to continue throughout the year, as needed.

2.0 HABITAT INVENTORY AND MAPPING

Vegetation and land cover mapping for the Project was updated by Passarella & Associates, Inc. (PAI) in August 2021 using a Lee County 2021 rectified aerial. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial with FLUCFCS and SFWMD wetlands is included as Exhibit 3. According to the FLUCFCS map, the on-site land uses and vegetation communities consist primarily of golf course, pine flatwoods, pine, scrubby flatwoods, melaleuca, shallow ponds, cypress, mixed wetland forest, and freshwater marsh.

A total of 22 land use types were identified on the Project site and are described below.

Golf Course (FLUCFCS Code 182)
This land use type includes the existing Raptor Bay golf course.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)
The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm (*Sabal palmetto*) and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine grapevine (*Vitis rotundifolia*), cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)
This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)
This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)
The canopy of this habitat type is similar to FLUCFCS Code 4119 E3 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)
The canopy of this habitat type contains slash pine and scattered earleaf acacia and melaleuca. The sub-canopy contains slash pine, melaleuca, earleaf acacia, and carrotwood (*Cupaniopsis anacardioides*). The ground cover contains bracken fern (*Pteridium aquilinum*), deer-tongue (*Carphephorus paniculatus*), muscadine grapevine, and bushy bluestem (*Andropogon glomeratus*).

Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)
This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and earleaf acacia in the canopy and sub-canopy and cogongrass (*Imperata cylindrica*) in the ground cover.

Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)
This habitat type is similar to FLUCFCS Code 4159 E2 but contains 50 to 75 percent Brazilian pepper in the sub-canopy and scattered caesarweed (*Urena lobata*) and spermacoce (*Spermacoce verticillata*) in the ground cover.

Scrubby Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)
The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia*

fruticosa), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4169 E2)
This habitat type is similar to FLUCFCS Code 4169 E1 but contains 25 to 49 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)
The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)
The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)
The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Shallow Pond (FLUCFCS Code 525)
The canopy, sub-canopy, and ground cover of this land use type are mostly open, with the edges containing spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)
The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Exotics Wetland Hardwoods (FLUCFCS Code 619)
The canopy and sub-canopy of this habitat type contain Brazilian pepper, cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)
The canopy of this habitat type includes bald cypress, scattered cabbage palm, and widely scattered melaleuca. The sub-canopy contains bald cypress, wax myrtle, buttonbush, pond apple, and scattered Brazilian pepper. The ground cover contains swamp fern, sawgrass (*Cladium*

jamaicense), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)
This habitat type is similar to FLUCFCS Code 6219 E1 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)
The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
This habitat type is similar to FLUCFCS Code 6309 E2 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)
The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)
The canopy of this habitat type includes Brazilian pepper, cabbage palm, buttonwood (*Conocarpus erectus*), Norfolk Island pine (*Araucaria heterophylla*), and scattered earleaf acacia and slash pine. The sub-canopy contains slash pine, cabbage palm, Brazilian pepper, buttonwood, earleaf acacia, Guinea grass (*Panicum maximum*), Norfolk Island pine, false willow (*Baccharis angustifolia*), castor-bean (*Ricinus communis*), and widely scattered saw palmetto. The ground cover contains areas of open sand with dog fennel (*Eupatorium capillifolium*), rustweed (*Polypremum procumbens*), jointweed (*Polygonella polygama*), caesarweed, rosemary, slash pine, bermudagrass (*Cynodon dactylon*), cogongrass, limpograss (*Hemarthria altissima*), wild bush bean (*Macroptilium lathyroides*), wedelia (*Sphagneticola trilobata*), sweetbroom (*Scoparia dulcis*), beggarticks (*Bidens alba*), ragweed (*Ambrosia artemisiifolia*), bushy bluestem, water pennywort (*Hydrocotyle umbellata*), peppervine (*Nekemias arborea*), saltgrass (*Distichlis spicata*), and scattered saw palmetto.

3.0 BALD EAGLE BIOLOGY AND PROTECTION

The following information on the biology of the bald eagle is excerpted from the South Florida Multi-Species Recovery Plan (U.S. Fish and Wildlife Service (USFWS) 1999).

Bald eagles are considered a water-dependent species typically found near estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats (Robards and King 1966, King *et al*. 1972, Weekes 1974, Whitfield *et al*. 1974, Gerrard *et al*. 1975, Grier 1977, Anthony and Isaacs 1989, Wood *et al*. 1989). Their distribution is influenced by the availability of suitable nest and perch

sites near large and open water bodies, typically with high amounts of water-to-land edge. Bald eagles demonstrate a remarkable ability to tolerate perturbations to their habitat throughout their range.

Their adaptability to a variety of habitat conditions makes any generalizations about habitat requirements and nesting behavior difficult. Though variable, eagles have basic habitat requirements that must be met in order to successfully reproduce and survive during the winter or non-nesting season. Florida bald eagle nests are constructed in dominant or co-dominant living pines (*Pinus* spp.) or bald cypress (*Taxodium distichum*) and are often located in the ecotone between forest and marsh or water (McEwan and Hirth 1979). Approximately ten percent of eagle nests are located in dead pine trees, while two to three percent occur in other species such as Australian pine (*Casuarina equisetifolia*) and live oak (*Quercus virginiana*). The stature of nest trees decreases from north to south (Wood 1987, Wood *et al*. 1989); and in extreme Southwest Florida, eagles nest in black mangroves (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), half of which are snags (Curnutt and Robertson 1994). Nest trees in South Florida are smaller and shorter than reported elsewhere; however, comparatively they are the largest trees available (Wood *et al.* 1989, Hardesty 1991). The small size of nest trees in South Florida relative to other nest sites throughout the eagle's range is due to the naturally smaller stature of slash pine (*Pinus elliotti*), loblolly pine (*P. taeda*), longleaf pine (*P. palustris*), and sand pine (*P. clausa*) in South Florida and to the lack of pines in extreme Southern Florida.

Bald eagles are monogamous, and annual courtship behavior reinforces pair bonds (Palmer 1988). Pair bond formation includes dramatic pursuit flights, high soaring, talon locking, and cartwheeling (Johnsgard 1990). Eagles may also fly around the perimeter of their nesting areas, visually communicating their presence and further establishing their territories. Pair bond behavior, as well as territory establishment and defense, probably occur concurrently throughout much of the eagle's range. Successful pair bond ultimately leads to nest site selection and nest construction for newly formed pairs or established pairs without nests. Pairs that have previously nested may repair established nests or construct an alternate nest concurrent with copulation.

Nesting activities generally begin in early September in South Florida, with egg-laying occurring as early as late October and peaking in the latter part of December. Incubation may be initiated from as early as October through as late as March, depending upon latitude. Clutches usually consist of one or two eggs, but occasionally three or four are laid. Incubation takes approximately 35 days and fledging occurs within 10 to 12 weeks of hatching. Parental care may extend 4 to 6 weeks after fledging, even though young eagles are fully developed and may not remain at the nest after fledging (USFWS 1989).

The Florida Fish and Wildlife Conservation Commission (FWCC) documented 88 active bald eagle nesting territories in Florida during their initial surveys of this species in 1973; by 1987, that number had increased to 391 active territories when the USFWS implemented the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (Guidelines) (USFWS 1987). By 1999, the 1,000-breeding pair recovery goal for Florida had been achieved and had increased to 1,511 breeding pairs by 2012 (Brush *et al.* 2012). Peterson and Robertson (1978) reported that historic numbers of breeding pairs of bald eagles in Florida were likely "in excess of 1,000 breeding pairs."

The bald eagle was a federally and state listed "threatened" species that had been protected since the mid-1970s under the Endangered Species Act of 1973 and Chapter 68A-27.004, Florida Administrative Code. Management and recovery efforts for the species generally have included actions to improve reproductive success and survival by 1) reducing levels of persistent organochlorine pesticides, such as Dichlorodiphenyltrichloroethane (i.e., DDT), occurring in the environment; and 2) habitat protection. Habitat protection measures in Florida primarily have focused on the protection of nesting territories through the implementation of the 1987 Guidelines. Recovery goals for the bald eagle have been achieved as a result of these and related management actions throughout the United States, and the USFWS subsequently published a proposed rule in July 1999 to remove the bald eagle in the lower 48 states from the list of threatened or endangered wildlife. The bald eagle was subsequently delisted by the federal government in August 2007 and by the State of Florida in April 2008. The Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act provide continued federal protection for bald eagles. State Rule 68A-16.002 establishes rules for the continued protection and conservation of eagles in Florida.

4.0 DESCRIPTION OF LE-28A

4.1 Location and Landscape Information

Nest LE-28A is located in a large slash pine tree immediately west of Halfway Creek (Exhibit 3). The nest tree is surrounded by dense scrub oak and forested wetland habitats with varying degrees of exotic infestation. Both the nest tree and protection zones (330 and 660 feet) are located within the proposed conservation area (Exhibit 4). The proposed conservation area contains an abundance of trees that could potentially be utilized for perching and/or nesting by bald eagles.

The site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by an FPL easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club. The location of Nest LE-28A, the eagle nest protection zones, and the surrounding land uses are depicted on Exhibit 4.

4.2 Nesting History

Based on Wilson Miller's 2000 BEMP, Nest LE-28A was first observed in 1987 and served to replace Nest LE-28, which was last used during the 1986-1987 nesting season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992-1993 nesting season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997-1998 nesting season identified Nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

Site observations conducted by PAI in February and March 2022 confirmed that Nest LE-28A was inactive.

5.0 PROPOSED SITE PLAN AND EAGLE PROTECTION ZONES

The Project's site plan consists of the reconfiguration of the existing golf course with associated parking and infrastructure. The site plan is depicted on Exhibit 4.

The USFWS and FWCC recognize 330- and 660-foot protection zones around an active eagle nest (Exhibit 4). Additionally, Lee County's Eagle Ordinance (08-25) states that no construction (structures or site work) may occur within 660 feet of an eagle nest without an approved BEMP. Both the 330- and 660-foot protection zones of Nest LE-28A are within the proposed conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. However, DO No. DOS2021-00137 requires that the Project's conservation areas be maintained free of exotic vegetation. This includes the conservation areas within the 330- and 660-foot eagle protection zones.

6.0 BALD EAGLE MANAGEMENT PLAN

This BEMP serves to revise the existing plan prepared by Wilson Miller in 2000, to reduce the protection zones to the current Lee County, USFWS, and FWCC standards (i.e., 330 and 660 feet). Additionally, this BEMP is intended to facilitate construction of the Project while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles that could occur as a result of the proposed development activities. As a management instrument, the BEMP is only applicable to the Project. It is the responsibility of the property owner to retain and implement this plan for as long as it is required, including educating others (e.g., contractors, future owners, tenants, etc.) about the specific requirements of this BEMP and the state and federal eagle protection laws. Any amendment to this management plan shall require review and approval by the Eagle Technical Advisory Committee or any successor body.

Specific elements of the BEMP are as follows:

1. Exotic vegetation removal within 660 feet of the nest tree shall be completed during the non-nesting season (i.e., May 16 through September 30).
2. The use of chemicals which are known to be toxic to wildlife shall be prohibited at all times in close proximity to the nest tree and within the on-site preserve areas. Chemicals used for the purpose of controlling invasive exotic plants shall be prohibited around the base of the nest tree.

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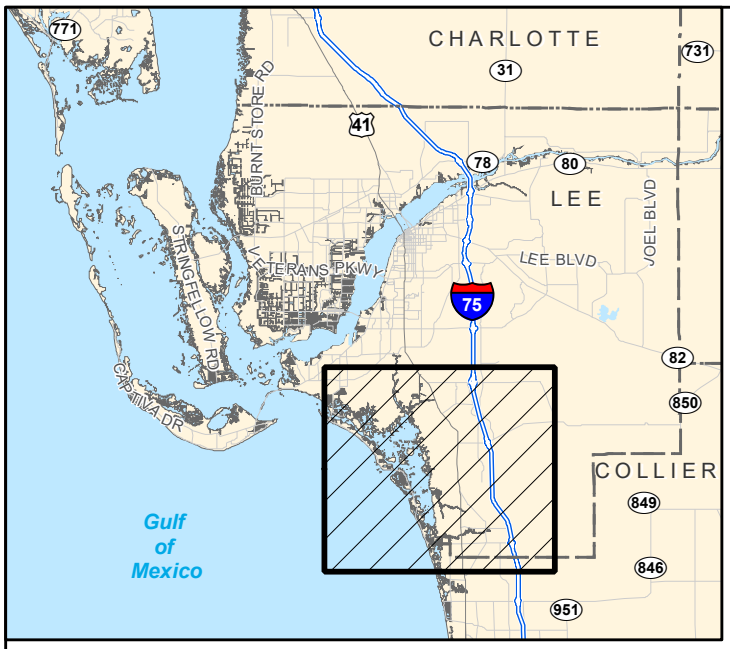
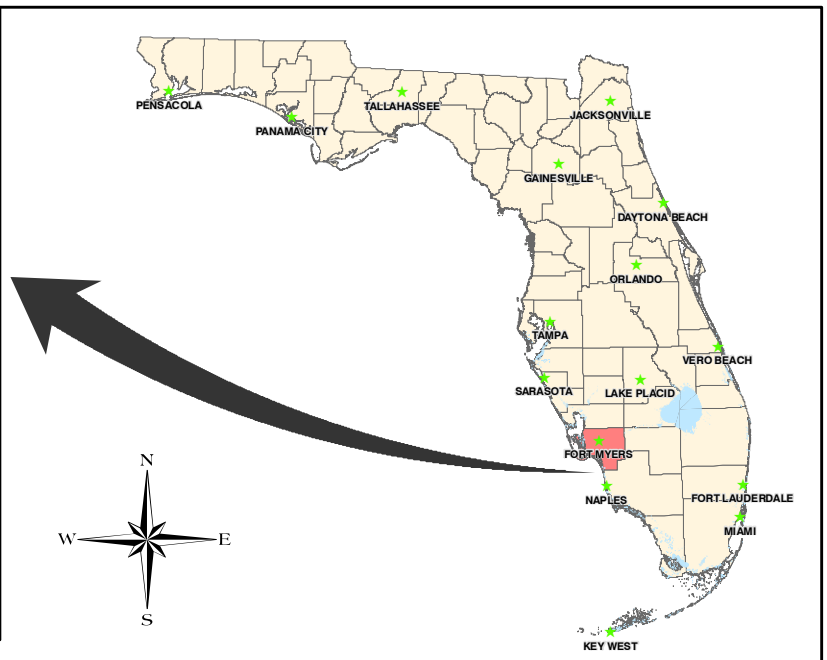
EXHIBIT 1

PROJECT LOCATION MAP





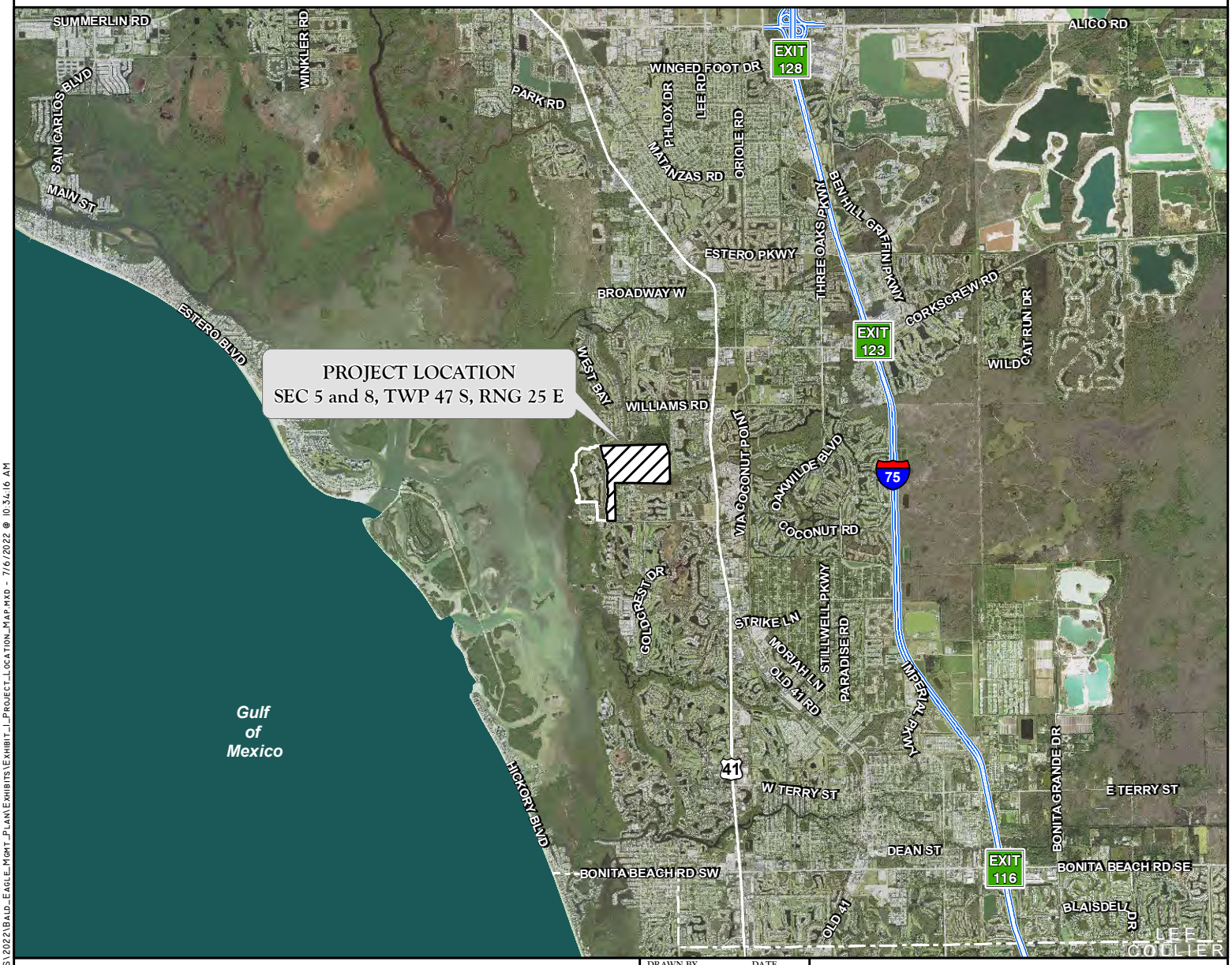


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EXHIBIT 1. PROJECT LOCATION MAP
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
P.F.	09/22/21
REVIEWED BY	DATE
S.J.	09/22/21
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

EXHIBIT 2

BALD EAGLE MANAGEMENT PLAN BY WILSON MILLER, INC.
MARCH 2000

WilsonMiller

BALD EAGLE MANAGEMENT PLAN
FOR NEST LE-28A

Pelican Landing DRI
Section 5, Township 47 South, Range 25 East
Lee County, Florida

Prepared for:

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MAR 15 2000
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Submitted to:

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March 7, 2000

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FOR NEST LE-28A

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F0250-024-006-VLSS-23814

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1.0. Introduction and Project History

Pelican Landings is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Pelican Landing DRI contains a 78-acre xeric scrub/pine flatwood upland preservation area known as the "Eco-Park". Figure 1 provides a location map for the Pelican Landing Eco-Park. The Eco-Park was established pursuant to a gopher tortoise incidental take permit issued by the Florida Game and Fresh Water Fish Commission (Permit #Lee-9 issued August 28,1995) to mitigate for impacts to the gopher tortoise and xeric scrub habitat located within the Pelican Landing DRI. It was strategically chosen since at that time it contained the majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. A conservation easement for the 78-acre tract was granted to the Florida Game and Fresh Water Fish Commission and was recorded in the public records of Lee County on October 18, 1995. The incidental take permit contains provisions for perpetual management of the Eco-Park to maintain appropriate vegetative density and composition. Condition #5 of the permit addresses conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities. An active bald eagle's nest is present in the Eco-Park of the Pelican Landing DRI. The eagle nest is recognized by U.S. Fish and Wildlife Service (USFWS) as nest #LE-28A. Conditions of the Development Order for the Pelican Landing DRI require that a management plan be implemented for this nest.

A bald eagle management plan (BEMP) was drafted for nest LE-28A in 1994 (Heald and Associates, Inc. 1994a; Appendix A) and was submitted to the USFWS for review, comment, and approval. The original plan proposed a 1,300-foot setback between the nest and any proposed construction and a 2,500-foot secondary protection zone where construction would be seasonally restricted. Under the 1994 plan, the closest proposed construction was a two-lane road west of the nest that would terminate near the northern property boundary of the project site, and single-story single-family homes on large lots to the west of the road. Via a letter from David Ferrell (USFWS) to Dan Trescott (Southwest Florida Regional Planning Council) dated January 31, 1994, the USFWS made a preliminary determination that 1,300 and 2,500 feet represented adequate primary and secondary protection zones for Nest LE-28A. Prior to making a final determination, the USFWS requested that a study be conducted during the nesting season to determine flight lines and identify any trees frequently used for roosting. The study was conducted by Eric Heald & Associates (Heald, 1994b) during the period of January through May, 1994 and indicated that 84% of all flights recorded inbound or outbound fell within the northern (n=15 of 44), northwestern (n=13), and western (n=9) quadrants.

On August 8, 1995, a meeting was held with Jane Tutton (USFWS) and a revised BEMP was submitted to the USFWS. In consideration of the density of site vegetation and effective visual screening of the eagle's nest, a Primary Protection Zone (PPZ) of 500 feet and a Secondary Protection Zone (SPZ) ranging from 1,200 feet on the southwest to 2,175 feet on the south was proposed. An August 16, 1995 letter from Craig Johnson (USFWS) to Tim Durham (WilsonMiller) indicated the USFWS's concurrence that the revised plan was adequate and appropriate for the nest. A subsequent letter dated October 11, 1995, sent by Craig Johnson (USFWS) to Tim Durham (WilsonMiller) for clarification purposes, superseded the August 16, 1995 letter and indicated that a PPZ of 1,200 feet and an SPZ of 2,500 feet would be required.

The purpose of this document is to provide a revised management plan for eagle nest LE-28A (hereafter referred to as the "Plan") and request technical assistance from the USFWS for review, comment, and approval of the revised Plan. The previous management plan was based on the original configuration of the Eco-Park, the boundary of which was determined by property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. (WCI) has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Proposed revisions have been made to the original Plan due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. WilsonMiller is currently coordinating with the Florida Fish and Wildlife Conservation Commission (FFWCC) to gain approval for the proposed reconfiguration of the Eco-Park boundary as described herein. Thus, we are requesting that the USFWS provide approval of the Plan pending approval of the Eco-Park boundary configuration by the FFWCC. Upon approval by the USFWS, the revised Plan would supersede the 1994 plan in its entirety.

The revised plan is consistent with existing USFWS management guidelines for the bald eagle as well as the original 1994 plan. The proposed plan maintains a PPZ of 1,200 feet and an SPZ of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ) in accordance with bald eagle management guidelines. It should be noted that the revised plan results in a numerous benefits to the eagle compared to the original plan. Details regarding these benefits are provided in Section 4.4 of this report.

2.0 Nest Location/History

Figure 2 shows the location of nest LE-28A with respect to the existing boundary of the Pelican Landing Eco-Park. Nest LE-28A is located on the northwest side of a large slash pine (*Pinus elliottii*) tree immediately west of Halfway Creek. From most angles, the nest is effectively screened from view beyond a distance of 200 to 600 feet by pines, dense scrub oak, and tall fetterbush (*Lyonia* spp.). Heald (1994b) indicated that the primary perch tree for the eagles is located approximately 400 feet west of the nest tree.

Nest LE-28A was first observed in 1987 and served to replace nest LE-28, which was last used during the 1986/1987 breeding season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992/1993 breeding season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997/1998 breeding season identified nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

3.0 Results of Flight Pattern Surveys

At the request of the USFWS, a flight pattern study of eagles nesting in LE-28A was conducted from January to May 1994. A report summarizing the results of this study (Heald, 1994b) is provided in Appendix A. The study concluded that 34%, 30%, and 20% of recorded flights were to or from the northern, northwestern, or western directions, respectively. Based on the flight study, it is presumed that the eagles feed primarily in Estero Bay. Other research conducted KBN Engineering and Applied Sciences, Inc. (1995) indicated that the eagle pair utilizing nest LE-28A were frequently seen perching

on trees next to homes and roads along Kings Road and Williams Road, foraging in sewage treatment ponds of the Fountain Lakes development, feeding on road kills along U.S. 41, and perching in trees in the vicinity of the Coconut Point fish camp. Thus, it appears that the eagles are opportunistic feeders and have become accustomed to human activity.

4.0 Habitat Management/Nest Protection Strategies

4.1 Objectives

The overall objectives of the Plan are as follows:

- To protect the integrity of the bald eagle nest LE-28A.
- To minimize detrimental human-related impacts on the bald eagles utilizing nest LE-28A, particularly during the nesting season (generally from October 1 through May 15 but specific to individual nests depending on the time of commencement of mating and fledging of young).
- To define compatible land uses and development in areas in close proximity to the active nest.

These objectives, and the methods proposed to attain them, are consistent with the guidelines issued by the USFWS Southeast Region as found in *"Habitat Management Guidelines for the Bald Eagle in the Southeast Region"* (USFWS, 1987). These guidelines recommend the establishment of primary and secondary protection/management zones around eagle nest trees. The following methods and management techniques are hereby proposed for each of these zones in order to achieve Plan objectives.

4.2 Primary Protection Zone (PPZ)

The PPZ will extend outward radially from the nest tree a distance ranging from 750' to 1,200'. Figure 3 shows the configuration of the PPZ and the habitat types present. The purpose of the PPZ will be to provide a natural zone in the immediate vicinity of the nest tree that will remain free of development, and where passive activities potentially detrimental to nesting will be restricted.

The following activities will be prohibited within the PPZ:

- Residential, commercial, and industrial development
- Tree cutting, except as absolutely needed to construct the golf cart bridge across Halfway Creek and golf cart paths leading to the bridge.
- Logging, mining, filling, and excavation.
- Use of non-approved chemicals toxic to wildlife.
- Habitat management practices during the active nesting season, including burning.
- Unauthorized human activities potentially detrimental to bald eagle nesting.
- Passive recreational use of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge, during the eagle nesting season, except for uses related strictly to golfing.

The following activities will not be considered detrimental when conducted in the PPZ during the non-nesting season:

- Construction or use of passive recreational facilities, including benches, jogging/hiking trails, or similar uses consistent with the Eco-Park management plan. In accordance with the Eco-Park habitat management plan, passive recreational facilities will be located no closer than 500' from nest LE-28A.
- Construction of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge.

- Habitat management activities, including removal of exotic and nuisance vegetation and prescribed burning. Prior to any prescribed burning, the nest tree and perch trees will be protected by hand raking or clearing to minimize fuel in the vicinity of the tree.

Habitat management in the PPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the PPZ will occur only during the non-nesting season.

4.3 Secondary Protection Zone (SPZ)

The SPZ will extend a distance varying from 750' to 1,300' outward from the PPZ and will serve to provide a buffer for the PPZ. Figure 3 shows the configuration of the PPZ and the habitat types present. Development in the SPZ will be consistent with USFWS guidelines so as to minimize activities potentially detrimental to the PPZ. The majority of development in the SPZ will be golf course to be constructed during the non-nesting season. A relatively small portion (2 acres) of the outer zone of the SPZ in the western region of the site (Figure 3) is proposed for timeshare units that will have a maximum height of 45' above flood elevation. Considering that: a) this height is below the height of the existing tree canopy of this region of the site, b) the timeshare units are at least 2,370' removed from the nest tree, and c) the preserved freshwater slough and other native vegetation to be retained to the east will provide an effective visual screen, it is unlikely that the timeshare units will affect eagle nesting or foraging behavior. At its closest point the golf course is 1,250' from the nest tree, which is well beyond the line of sight distance of the tree and should also not affect eagle behavior.

The following activities will be prohibited within the SPZ unless otherwise approved by the USFWS:

- Development of commercial and industrial sites.
- Development of high density housing and multi-story buildings.
- Road or canal construction that would facilitate access to the nest.
- Use of non-approved chemicals toxic to wildlife.
- Heavy construction during the nesting season, including operation of heavy machinery, land clearing, earthmoving, blasting, excavation, installation of major utilities, and burning.

The following activities will not be considered detrimental when conducted in the SPZ during the nesting season:

- Normal habitat management practices, excluding prescribed burning.
- Passive pedestrian recreational use (*e.g.*, hiking, bird watching, fishing, etc.).
- Construction of pedestrian pathways using non-motorized equipment, and erecting interpretive/educational signage.
- Golfing activity and operation of golf carts in golf course areas.
- Activities normally associated with golf course maintenance operations, except as noted in the above prohibitions.
- Finishing work (*i.e.*, all interior work, hanging windows and doors, stucco-ing exterior walls, and activities of similar nature) on those portions of the two timeshare units located in the SPZ, provided that the vertical construction of the units (*i.e.*, construction of exterior walls and roof) is conducted during the non-nesting season.

Habitat management in the SPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the SPZ can occur at any

time of the year, with the exception that prescribed burning and methods involving excessive noise will be restricted during the active nesting season.

4.4 Other Management/Protection Strategies Benefiting the Eagle

Other management/protection strategies that will be used as measures to protect eagle nest LE-28A, provide a net benefit to eagles utilizing nest LE-28A, and provide a net benefit to eagle conservation in general will include the following:

4.4.1 Increased Size of Pelican Landing DRI Eco-Park: The size of the Pelican Landing Eco-Park, within which nest LE-28A is located, is proposed to be substantially increased by the proposed project. Changes to the Eco-Park from its current configuration incorporate an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes all of that portion of Halfway Creek located in the project area and thereby serves to provide a buffer to the east of nest LE-28A that was not previously under ownership. The proposed changes will increase the size of the Eco-Park by approximately 84% (66-acre± net increase) and insure the continued protection and success of nest LE-28A.

4.4.2 Preservation of Habitat in Secondary Protection Zone: The project has incorporated a significant amount of habitat preservation in the SPZ to insure the continued success of eagles utilizing nest LE-28A. Of the land located in the SPZ, 102 of 159 acres (64%) will remain in a natural state (SPZ areas in Eco-Park) or mostly-natural state (golf course rough and inter-hole areas where selectively removal of vegetation will occur but where majority of canopy will be retained). On a site-wide basis, a total of 56% of the existing habitat will be retained in a natural or semi-natural state, the majority of which will be enhanced via the removal of exotic vegetation. Figure 3 shows the location of areas to be preserved in the project.

4.4.3 Creation of Foraging Habitat: As part of the project, foraging habitat for the eagle, as well as wading birds, will be created both within and outside of the SPZ by excavating surface water management lakes and creating freshwater marshes (Figure 3). Created lakes and marshes within the SPZ occupy 11 acres or 7% of the SPZ, and on a site-wide basis occupy 9% of the land area. Many of the marshes to be created are located adjacent to the lakes and will serve to establish a more natural appearance to, and function of, the lakes. The marshes also serve as pretreatment areas to 'polish' surface water runoff prior to entering the lake. Such pretreatment is not required by existing SFWMD regulations, but is being incorporated into the site design to enhance the quality of the created systems. In most areas, the marshes are separated from golf course areas by upland areas that will remain in a mostly-natural state, providing additional pretreatment of runoff and further mimicking a natural lake system.

4.4.4 Restoration of Freshwater Slough: The north-south trending freshwater slough located in the western region of the project (Figure 3) will be enhanced as part of this project. Approximately one-third of this slough is located in the SPZ. The slough is currently dominated (>75% coverage) by exotic and nuisance species. Exotic/nuisance species will be removed from the slough, thus increasing habitat quality. In many areas of the slough, planting of native wetland species will occur to further enhance the quality of this area. Preservation and enhancement of the slough will also serve to provide a buffer between the eagle nest and development to the west of the slough.

4.4.5 Retaining Canopy, Perch, and Roost Trees: The site design incorporates the retainage of a substantial amount of the existing canopy. Areas that will remain natural or mostly-natural and thus will retain the majority of their existing canopy comprise 64% of the SPZ and 56% of the overall project site. Preservation of the existing canopy of the site will insure the continued presence of suitable perch and roost trees, as well as provide for suitable screening between the eagle nest and land uses

in the SPZ. In golf course and other development areas, potential perch/roost trees that are of specimen value (*e.g.*, largest trees in stand, trees with open crowns and stout lateral limbs) will be field located/flagged and incorporated into the field design whenever possible. The shores of excavated lakes will also be meandered where necessary to preserve individual canopy trees of moderate to high value, as well as to provide a more natural character to the lake system.

4.4.6 Minimization of Number of Buildings in Secondary Protection Zone: The existing BEMP for nest LE-28A provides for single-family residential units and an associated access road in a portion of the SPZ. As part of the revised site plan proposed herein, these residential units have been eliminated and replaced with golf course, a land use more compatible with eagle nest protection. Under the proposed site plan, only two buildings of substantial size (excluding minor buildings such as golf course halfway houses) occur in the SPZ. These units are timeshare buildings that are approximately 2,370' removed from the eagle nest and comprise only 1% of the SPZ. Minimization of buildings in the SPZ will serve to further enhance the success of eagles utilizing nest LE-28A.

4.4.7 Minimization of Building Height Outside of Secondary Protection Zone: In the western region of the project between the SPZ and the western property line, building heights will be limited to a maximum height of 45' above flood elevation. This height is below the height of the existing tree canopy of this area and thus will not affect eagle nesting or foraging behavior. Although such height restrictions are not mandatory based on past USFWS determinations regarding nest LE-28A, they will be instituted as a measure to insure that the degree of access that the eagles' currently have to their primary foraging destination, Estero Bay, is maintained and is not hindered by the project.

4.4.8 Establishment of Educational Programs: Educational programs will be established for local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park). The objectives of such programs will be to :a) inform citizens of local, state, and federal laws protecting eagles and other wildlife, b) identify ways for citizens to protect eagles from disturbance, and c) inform citizens of the habitat management plan for the Pelican Landing Eco-Park.

4.5 Proposed Post-Development Conditions and Eco-Park Configuration

Figure 3 shows the proposed post-development conditions and configuration of the Pelican Landing Eco-Park. It should be noted that the Eco-Park boundary has been modified (on paper only) compared to the 1994 BEMP . The boundary reconfiguration is due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in configuring the Eco-Park. *[All of the preceding moved to Section 4.1.1]*

WilsonMiller is currently coordinating with the FFWCC to gain approval for the proposed reconfiguration of the Eco-Park boundary. Also, the parcel located to the east of the existing Eco-Park ("Skebe" parcel) is currently under contract but has not yet been acquired. Thus, post-development conditions proposed herein are tentative pending approval of the reconfiguration by the FFWCC and the subsequent acquisition of the Skebe parcel. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC, the existing conservation easement for the Eco-Park will be revised to conform to the new boundary.

WCI Communities, Inc. reserves the right to modify the Plan, consistent with USFWS management recommendations and upon concurrence by the USFWS, as the needs of the project change, and as the location or status of the nest changes.

5.0 References

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

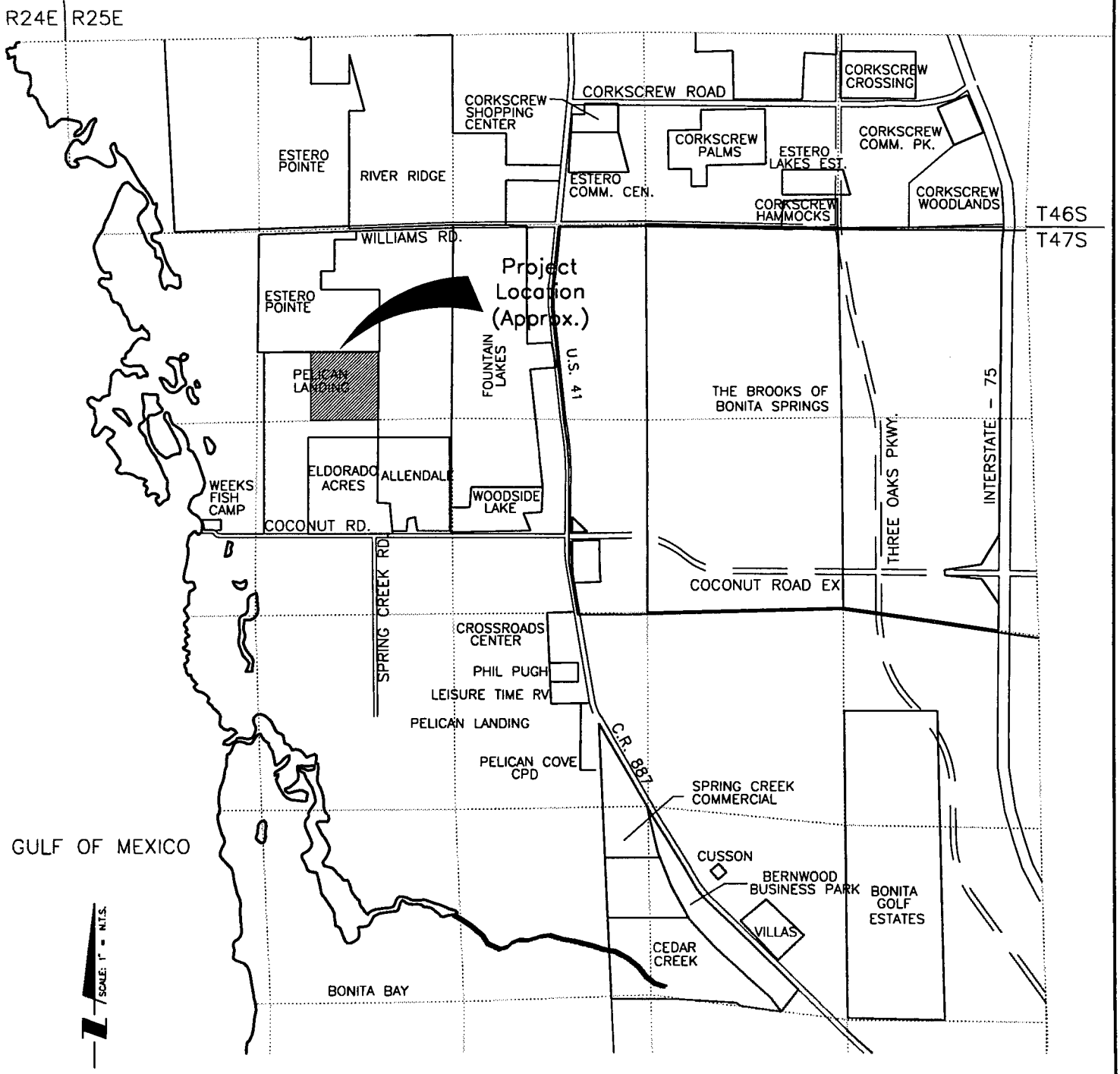
Heald and Associates, Inc., 1994a. Management Plan for the Southern Bald Eagle in the Vicinity of the Pelican Landing DRI, Lee County, Florida. 3 p. + attachments.

Heald and Associates, Inc., 1994b. Observations from January-May 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida. 7 p.

KBN Engineering and Applied Sciences, Inc., 1995. Bald Eagle Management Plan for Nest LE-28A; Estero Pointe Project. 20 p.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeastern Region. U. S. Department of the Interior. 9 pp.

LOCATION MAP



PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller

WilsonMiller, Inc. - FL Lic.# LC-C000070

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FLA. REG. #	
COUNTY: LEE	DATE: Sept. 21, '99
SEC: 4,5,8,9 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-006	FILE NO: C-0250-31
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 1 OF 4

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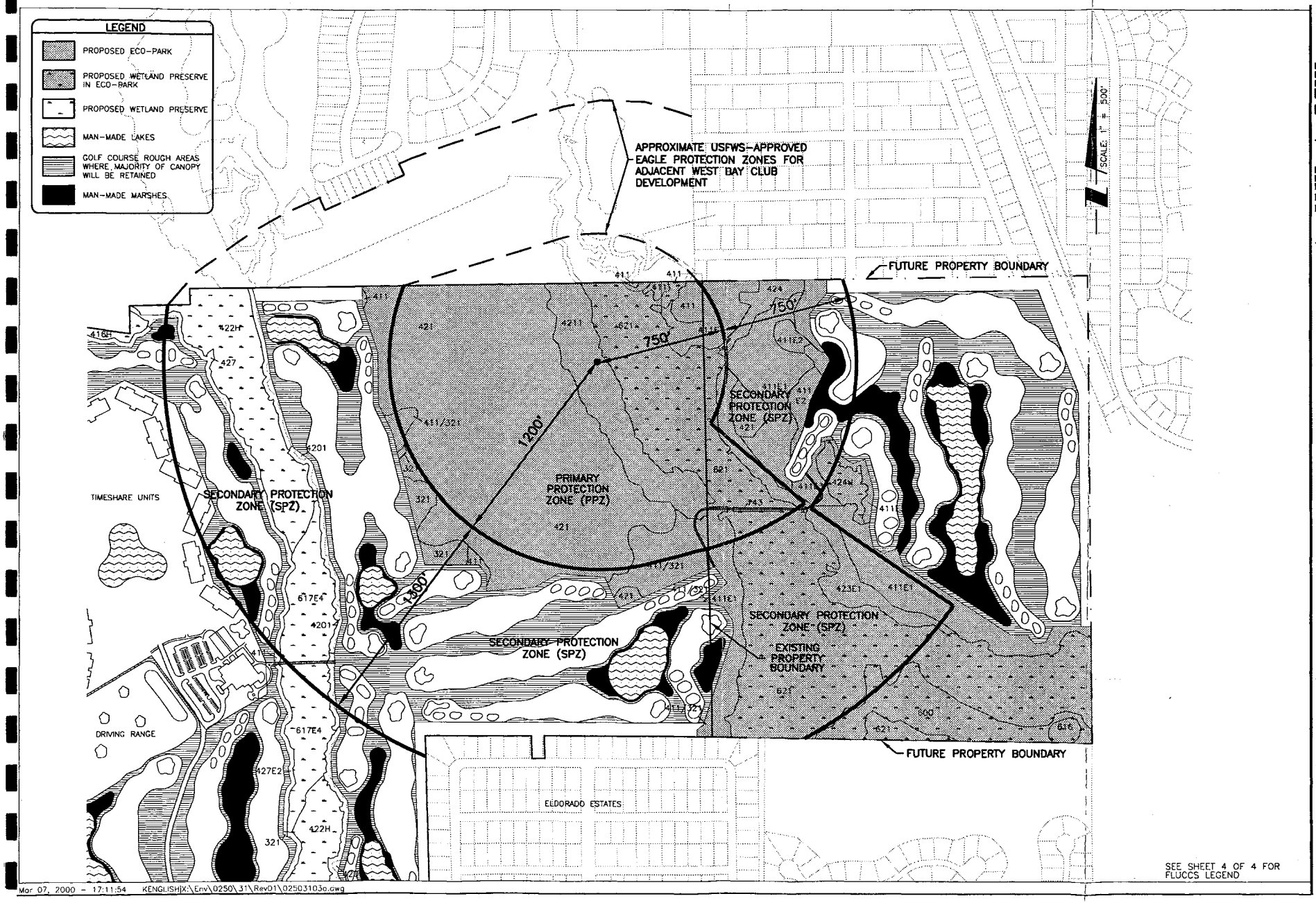
FIGURE 2
Existing Eco-Park
and Associated Habitats

SEC 5 TWP 47S RGE 25E
Designed by:
Drawn by: M.W.L./1260
Checked by:
Approved by:
Date: Sept. 21, '99
Scale: 1" = 500'
PIN: F0250-024-006-FPVOQ
File #: C-0250-31
Sheet 2 of 4



SEE SHEET 4 OF 4 FOR FLUCCS LEGEND

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FIGURE 3
Proposed Configuration of Eco-Park, Eagle Protection Zones, And Adjacent Development

REV. 1, 1/4/00 – UPDATE EAGLE PROTECTION ZONE LAND PLAN, AND ECO-PARK BOUNDARY

WilsonMiller, Inc. - FL Lic.# LC-C000009

SEC 5 TWP 47S RGE 25E	
Designed by:	
Drawn by:	K.L.E./865
Checked by:	
Approved by:	
Date:	Sept. 21, '99
Scale:	1" = 500'
PIN: F0250-024-006-FPVOO	
File #:	C-0250-31

Sheet 3 of 4

Pelican Landing Eco-Park
FLUCCS Legend

FLUCCS	FLUCCS Description
321	Palmetto prairie
411	Pine flatwoods
411E1	Pine flatwoods, 10-24% exotics
411E2	Pine flatwoods, 25-49% exotics
411E3	Pine flatwoods, 50-75% exotics
411/321	Pine flatwoods/Palmetto prairie
415	Scrubby flatwoods
416H	Pine flatwoods/Graminoid understory-hydric
421	Xeric oak
4201	Mesic oak, high density shrub layer
4211	Xeric oak, high density shrub layer
422	Brazilian pepper
422H	Brazilian pepper-hydric
423E1	Pine-cabbage palm-oaks, 10-24% exotics
424	Melaleuca
424H	Melaleuca-hydric
427	Live oak
427E2	Live oak, 25-49% exotics
427E3	Live oak, 50-75% exotics
428E3	Cabbage palm, 50-75% exotics
513	Ditch
524	Lakes less than 10 acres which are dominent features
600	Shrub wetland
616	Inland pond
617E4	Mixed wetland hardwoods
621	Cypress
6412	Cattail
643	Wet prairie
740	Disturbed land
743	Spoil area

PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller, Inc. - FL Lic# LC-C000070

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FLA. REG. #	
COUNTY: LEE	DATE: Sept. 21, '99
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PROJECT NO. F0250-024-006	FILE NO: C-0250-006
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 4 OF 4

APPENDIX A

1994 Version of Bald Eagle Management Plan (Heald, 1994a, 1994b)

Heald and Associates, Inc.

7550 S.W. 136 Street
Miami, Florida 33156
305-253-5343

Management Plan for the Southern Bald Eagle in the Vicinity of The Pelican Landing DRI, Lee County, Florida

(Revised to Reflect Renewed Nesting Activity)

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

Nest-building by bald eagles is known to have occurred at 5 locations (trees) within or in the vicinity of the Pelican Landing DRI project boundaries over the past decade. Some confusion has existed in connection with the locations and official designations of these (see sections of ADA, ADA Sufficiency Response, and pertinent correspondence appended to Draft Management Plan, June 1993).

The nest trees (sites, territories) are listed by Florida Game and Fish Commission (FGFC) as follows, and their current status is described:

LE 08

The nest no longer exists, having disintegrated over the past several years. The nest tree, a cypress, remains, and a pair of eagles was sighted at the tree during a December 3, 1992 overflight by FGFC.

LE 08A

This nest is no longer in existence (FGFC, Dec., 1993). It was occupied by great-horned owls during the 1991-1992 and 1992-1993 breeding seasons. It is addressed in a Lee County Rezoning Resolution (#Z-88-034) for San Marino Pines (March 18, 1988) in which a 900' buffer zone was established in a semi-circle to the west of the nest tree.

LE 28

Only a few twigs remain. It has been unoccupied since the 1986/1987 breeding season.

LE28A

The nest is located in a large pine tree on the western margin of Half-way Creek. It was occupied during the 1990-1991 breeding season, and was reported by Mr. Paul Schultz (FGFC) as occupied in December, 1993. A field representative of United States Fish and Wildlife Services (USFWS) inspected the preserve area and the newly-occupied nest tree (LE-28A) in January, 1994. On January 31, 1994 USFWS signified approval of the Management Plan (see enclosed letter from Mr. Peter Plage to Mr. Dan Trescott), and requested a study to determine flight lines during the current nesting season. This has been conducted (copy appended).

LE-28B

This recently constructed nest was occupied during the 1992-1993 breeding season and contained an unfledged eaglet at the time of FGFC overflight on March 14, 1993. The eaglet was no longer in evidence on overflights conducted by Heald and Associates on May 3

and May 20, 1993. It was not used during the 1993-1994 breeding season (Schultz, FGFC, Pers. Comm.).

Management Strategies

Nest tree ('territory') 28A on the western margin of Half-way Creek lies within approximately 120 contiguous acres of upland and wetland communities to be preserved within the Pelican Landing Development. It is located almost at the northern boundary of the project. A proposed two lane access road to single family homesites lies, at its closest point, approximately 1300' from the tree. The nest tree, and other potential nest, roost, or perch trees in close proximity within the preserve, will remain available for any future nesting activities. The birds presumably feed primarily in the Estero Bay system which they reach either by flying over the proposed single-road alignment of single family residences and the existing fish camp, or by flying over undeveloped uplands and wetlands immediately north and northwest of the nest tree (see appended copy of recorded flight patterns).

USFWS has determined that the primary zone should be established at a radius of ±1300' from the nest tree. Human activities within the preserve will be limited to pedestrian pathways, with interpretive/educational signage. Pathways will not impinge upon a 750' radius around the nest tree, which is well-screened by dense oaks. The nest tree and all other potential nest trees within the preserve will be monitored twice a month from October through April for a period of five years to determine if nesting is occurring. If the nest is occupied, access to all pathways within the ±1300' primary zone will be prohibited until nesting activities are reliably reported to have ceased. Appropriate signs will be installed at the barricaded path entrances. No habitat management activities, such as selective clearing or prescribed burning, will be conducted during the active nesting season and no construction of road or residences will be permitted within a 2500' radius of the nest tree during this period.

Bayside Improvement District will own the preserve area, known as the Pelican Landing Eco-Park, and will be responsible for all management and maintenance, in accordance with the approved Development Order.

Nest tree 28B lies off the property, approximately 1800-2000' west of the northwest boundary of the project. The birds feed primarily in the extensive Estero Bay system to the west of the nest tree. Approximately 80 acres of uplands plus approximately 42 acres of freshwater wetlands within the northwestern portion of the project will be preserved; and are thus available as potential additional feeding sites. Scattered large pines within the upland preserve will also remain available as potential nesting sites. Since applicant does not own the nest tree site or the lands surrounding it, further management practices are not feasible. Monitoring of potential nest trees within the preserve area will be

conducted as described above (28A), and appropriate measures will be taken to comply as far as practical with established guidelines if the birds relocate onto the subject property.

The remaining nest trees or territories (28, 08 and 08A) are located north and east of the project site. The birds, should they resume residence or nesting, will be unaffected by project activities. Extensive wetland areas preserved to the south within the project will remain available as potential feeding areas. Florida Game and Fish Commission and U.S. fish and Wildlife Service will be consulted on appropriate actions if the eagles are reported to relocate to trees closer to the project than at present.

Attachments

Observations From January - May, 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

As an integral part of a Development of Regional Impact (DRI), Westinghouse Bayside communities (WBC) in 1992 designated a contiguous area of ±120 acres, including ±78 acres of xeric oak scrub and pine flatwoods, for preservation. This area, known as the "L&L Tract" and latterly as the "Pelican Landing Eco-Park", lies north of Coconut Road in Southern Lee County and constitutes a portion of the Planned Community of Pelican Landing (Figure 1). The preserved tract includes several large slash pines, one of which contains the nest of a southern bald eagle. The nest tree, designated LE-28A by Florida Game and Fish Commission (FGFC) was occupied during the breeding season of 1990-1991 and was not used during the subsequent two seasons.

In accordance with requests by several regulatory agencies during the Application for Development Approval review process, a Management Plan for the southern bald eagle was prepared and submitted for review to U.S. Fish and Wildlife Service (USFWS) in June 1993. While the Management Plan was under review the nest was reported by FGFC in December, 1993 to be occupied by a pair of eagles (Paul Schultz, FGFC; Pers. Comm.). It is assumed, though not confirmed, that the eagle pair currently occupying this nest utilized nest LE 28B during the 192-1993 breeding season. In January 1994, USFWS, while approving the Management Plan as submitted, requested that prevalent flight patterns of the birds occupying nest LE-28A be documented to assist further review. At the request of WBC, Dr. Eric Heald of Heald and Associates (H&A) conducted the field observations reported below.

Methods

The slash pine containing the nest stands immediately adjacent to the western margin of Halfway Creek (Figure 2) and from most angles is effectively screened from view beyond a distance of 200' to 600' by pines, dense scrub oak and tall Lyonia spp. During mid-late January, 1994 several potential observation stations were tried before a satisfactory station (see Figure 2) was chosen. With the exception of two flights recorded on January 19, 1994 all observations were conducted from this station. Observations were conducted on 25 separate days between January 19 and May 19. Table 1 gives dates, hours of observation, basic climatic conditions and miscellaneous observations.

Activities at or in the immediate vicinity of the nest were observed through binocular field-glasses. Outbound flights were monitored with or without field-glasses until visual contact was lost. The efficacy of tracking varied according to pattern of flight on departure from nest tree, direction of flight, and altitude assumed by the bird during flight. Inbound flights (returns) were sometimes not detected until the bird was within 200' of the nest tree, and are thus considered a less reliable indication of flight patterns.

FIGURE 1
Location of the "L&L Tract".

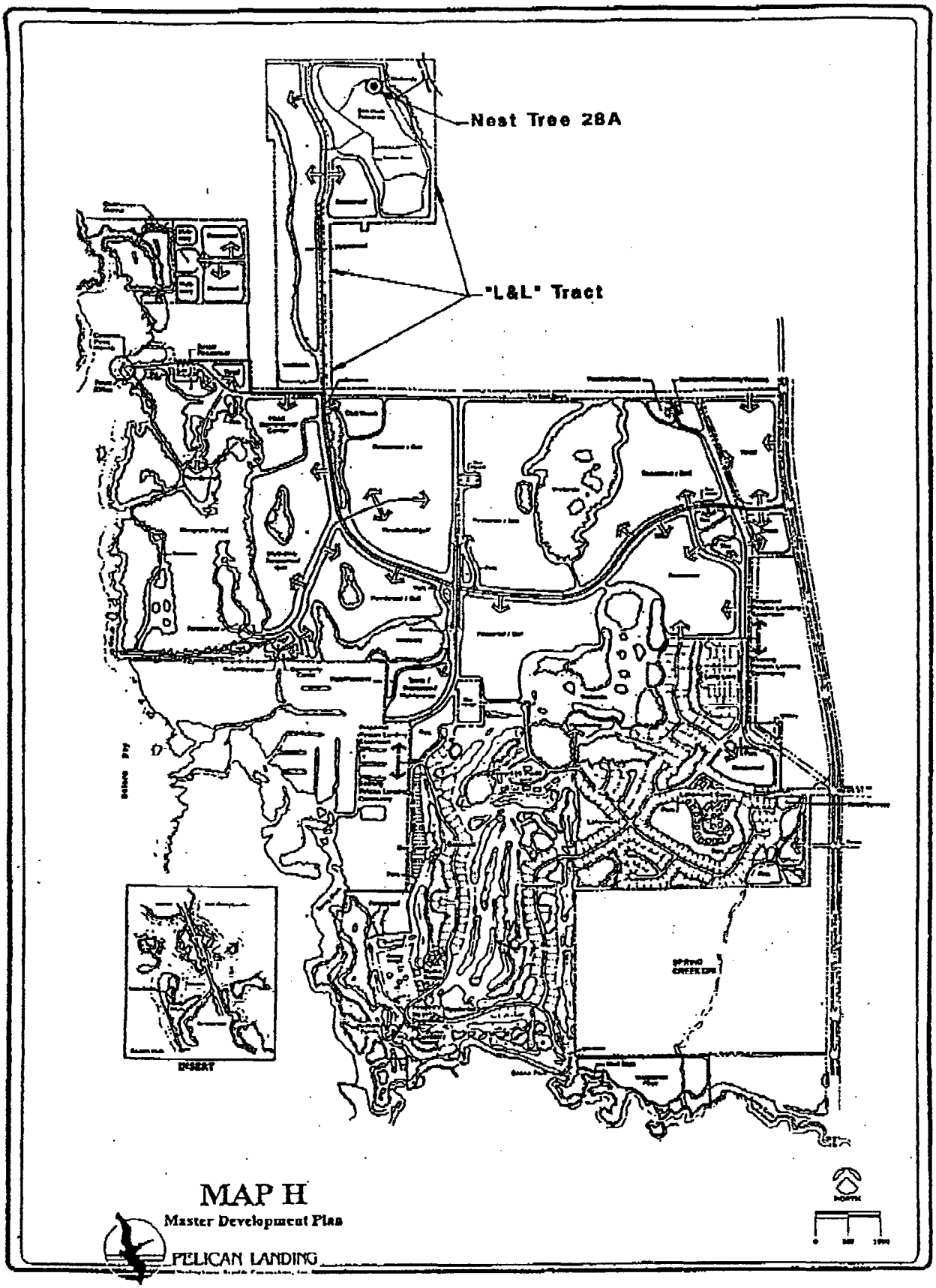
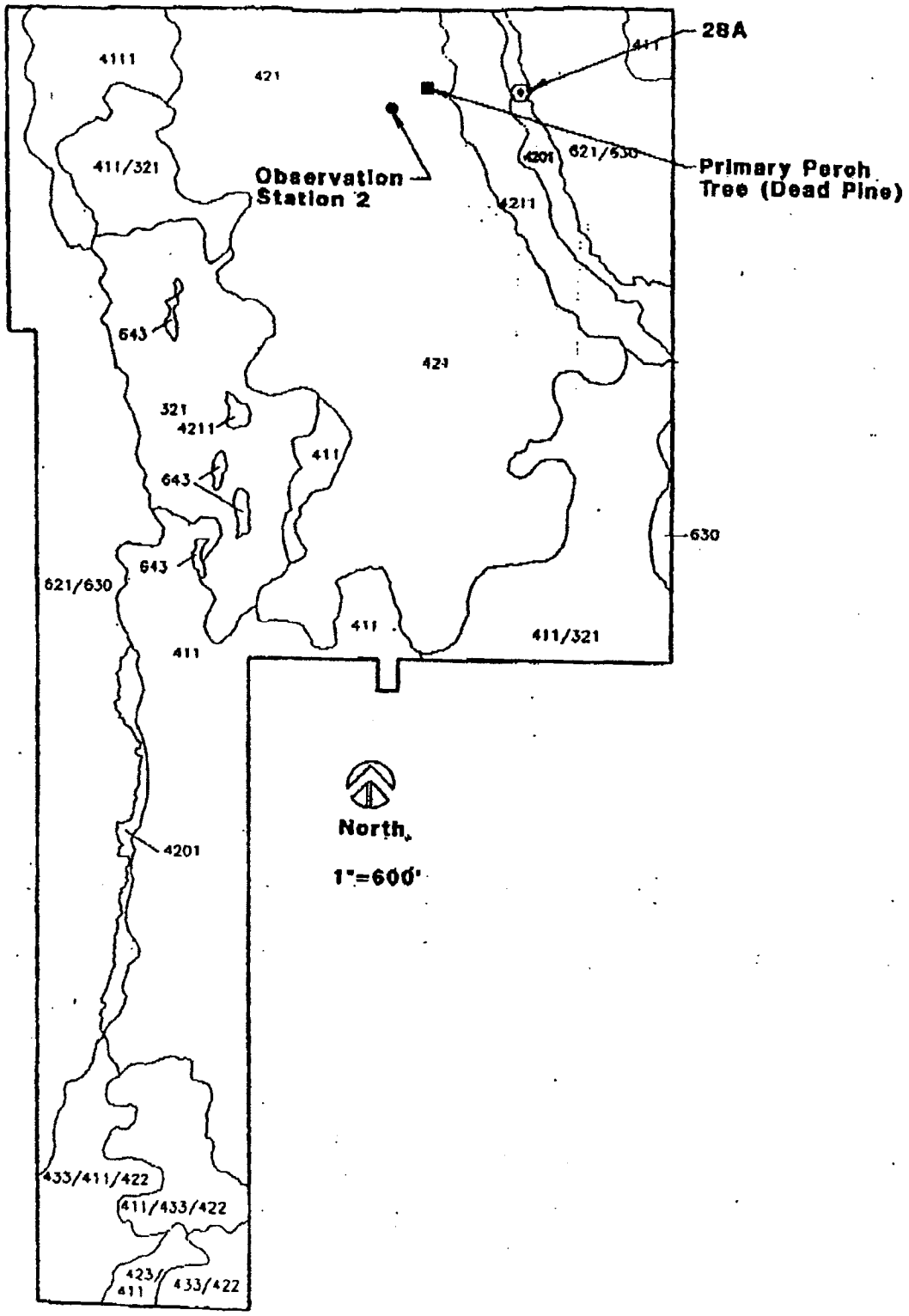


TABLE I. Observations January 19 to May 19 1994

DATE	TIME ARR	TIME DEP	FLIGHTS OUT	FLIGHTS IN**	SKY	APPROX TEMP	WIND DIR	(approx) MPH	COMMENTS
1/19	930	1630	2	–	Clear	70	NE	<5	4 stations occupied
1/31	1420	1730	1	–	Pt. Cloudy	70	ENE	<5	Station on Figure 2
2/01	0800	1140	2	1	Pt. Cloudy	65	E	5	–
2/01	1425	1720	1	1	Cloudy	65	E	<5	–
2/02	1300	1700	–	–	Cloudy	50	NE	<5	Drizzle/rain
2/03	1030	1515	1	1	Clear	50	SE	10	Cold
2/08	1600	1800	1	1	Pt. Cloudy	75	SW	10	–
2/09	0800	1540	1	–	Clear	75	SW	15	–
2/10	0730	1005	–	1	Clear	70	SE	0–10	Gusty Winds
2/16	1410	1615	1	–	Cloudy	65	ENE	10	–
2/17	0800	1000	–	–	Pt. Cloudy	70	E	20	Very windy
2/22	1550	1705	–	–	Pt. Cloudy	75	SE	5	–
2/23	1520	1900	2	1	Clear	80	SW	5–20	Gusty winds; eaglet observed
2/24	0800	1730	2	2	Cloudy	70	NONE	NONE	Eaglet observed
3/08	1100	1330	1	–	Pt. Cloudy	80	NE	5	Eaglet observed
3/09	0700	1100	–	–	Pt. Cloudy	75	ENE	5–10	–
3/12	1600	1745	4	2	Clear	75	E	10–15	Eaglet observed
3/13	1130	1610	4	2	Clear	80	SE	<5	Eaglet exercising wings
3/14	1000	1250	4	2	Cloudy	75	NONE	NONE	Eaglet on edge of nest
3/15	1130	1520	1	2	Clear	80	E	<5	Eaglet–edge of nest; exercising wings
3/28	1300	1435	–	–	Clear	80	NE	15–20	Eaglet on adjacent branch
4/01	1500	1755	1	–	Clear	80	SW	5	Eaglet–edge of nest; exercising wings
4/07	1600	1735	–	–	Clear	75	W	<5	Eaglet in nest
4/13	1215	1430	–	–	Pt. Cloudy	80	WSW	15	Eaglet moving between branches
5/18	1605	1755	–	–	Clear	85	SE	<5	No birds at nest
5/19	0940	1130	–	–	Pt. Cloudy		ESE	<5	No birds at nest

** If sighted further than approximately 500' from nest tree

FIGURE 2
FLUCCS Vegetation Map Showing Location of Nest Tree LE 28A, Observation Station, and Perch Tree.



Observations

Figure 3 and Table II reflect behavior on 44 observed flights between January 19 and May 19. Flight directions in Figure 3 are portrayed within 45° compass quadrants centered upon N, NW, NE, etc. The observed number of flights in either direction within a specific quadrant is indicated along each vector arrow. Inbound flights are only recorded if the bird was sighted and tracked from sufficient distance from the nest tree to be considered a reliable indicator of the direction of approach.

Although no distinction is made in Figure 3 between the flight patterns of male and female birds, the detailed flight patterns of the two sexes differed significantly. The larger bird, presumably the male, frequently flew to an almost dead pine approximately 400' WNW of the nest tree (Figure 2) and there remained for 1-5 minutes before departing westward or northward. The (smaller) female was never observed to do this. Further, all 6 flights recorded in the northeast to south quadrants were made by the female bird.

Flight activity observed form January 19th to May 19th comprised 44 events/flights. A single chick hatched in mid-February, at which point flight activity increased significantly. Although increased in frequency, flights from mid-February onward did not deviate appreciably from previously observed directional patterns.

From mid-March to mid-April, the eaglet was frequently observed exercising wing muscles and hopping between branches, but was never observed in flight. The nest was not visited from mid-April to mid-May, by which time it appeared empty.

As Table II shows, 84% of all flights recorded inbound or outbound fell within the northern, northwestern and western quadrants. The single flight to the southwest was in pursuit of a black vulture or a turkey vulture by the male bird. The female initially gave chase but returned to the nest tree from approximately ¼ mile out.

Conclusions

Almost 85% of all recorded flights were to or from the northwest quadrant. Only 6% lay within quadrants which would lead to existing or proposed Pelican Landing development. The findings thus support the USFWS conclusion that the proposed development would have no appreciable impact on nesting activities at nest tree LE-28A.

FIGURE 3
Recorded Flights to and from Nest Tree. Number of Flights Depicted on each Vector Arrow.

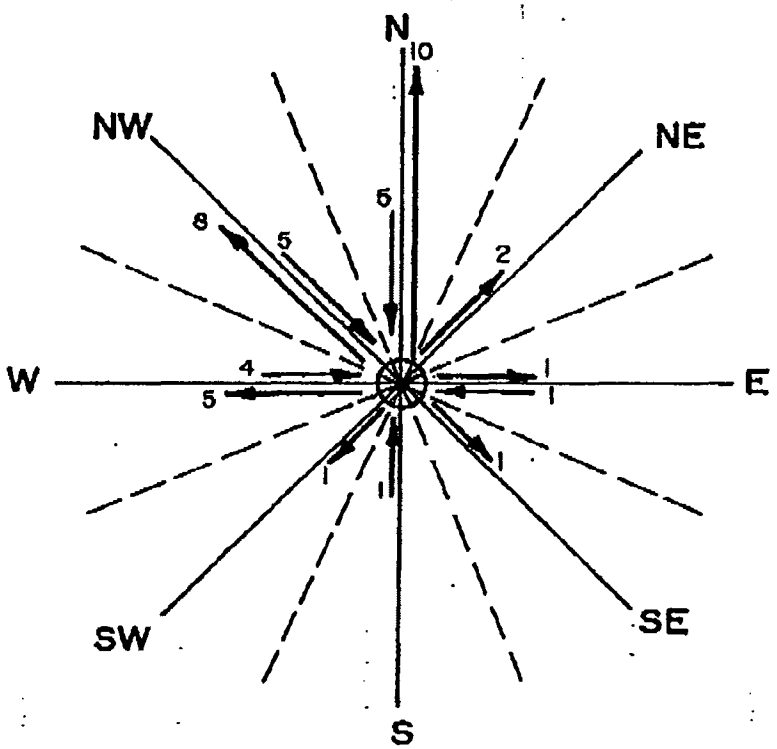


TABLE II. Summation of Observed Flight Directions, Jan. 19–May 19, 1994

DIRECTION	NO. OF FLIGHTS OUT	IN**	TOTAL	% OF TOTAL
N	10	5	15	34.1
NE	2	–	2	4.6
E	1	1	2	4.5
SE	1	–	1	2.3
S	–	1	1	2.3
SW	1	–	1	2.3
W	5	4	9	20.5
NW	8	5	13	29.5

** If sighted further than 500' from nest tree.

APPENDIX B

Pelican Landing DRI Eco-Park Habitat Management Methods

PELICAN LANDING DRI
ECO-PARK HABITAT MANAGEMENT METHODS

Introduction

The (existing) Pelican Landing DRI "Eco-Park" encompasses approximately 78 acres in the northeast corner of the DRI property. The Eco-Park consists of 65 acres of high quality xeric oak/scrub habitat and 13 acres of pine flatwoods and was established primarily as a gopher tortoise (*Gopherus polyphemus*) preserve. A bald eagle's nest (nest #LE-28A) is present near the northeast corner of the Eco-Park. The majority of the Eco-Park lies within protection zones surrounding this nest and special consideration has been given to minimize disturbance to the nest from habitat management practices.

The Eco-Park is bordered by a cypress/hardwood wetland system (Halfway Creek) to the east, native uplands and wetlands to the west, and residential subdivisions to the north and south. The Eco-Park has been placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission (now the Florida Fish and Wildlife Conservation Commission - FFWCC) and is managed as outlined below.

Maintenance of the Eco-Park is acknowledged to be an important component of assuring the long term viability of scrub habitat, the existing gopher tortoise population, and the bald eagle's nest. The legal entity responsible for the maintenance of the Eco-Park will be WCI Communities, Inc., or its assignee.

Management Methods

The following is a summary of the management methods to be employed in the Eco-Park:

1. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise activity). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level, except in the Primary Protection Zone of the bald eagle nest. No maintenance activities will be conducted within the Primary Protection Zone of eagle nest LE-28A during the active nesting season.

   Preferred maintenance practices per habitat type are as follows.

   A. Xeric Scrub

   - Hand-trim to a height of 6-9 feet at 5-year intervals or as deemed necessary.
   - Excessive layers of shrubby growth will be removed by hand at 3-year intervals if necessary.
   - Prescribed burns may be conducted at 8-year intervals if judged feasible and necessary. Any burning will be conducted by an experienced control-burn contractor. Burning will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry. Steps taken to protect the eagle nest or perch trees will include hand raking or clearing to minimize fuel in the vicinity of the tree prior to burning.

- No mowing or raking will be performed in xeric scrub areas.
- No burning will take place during the eagle nesting season in either the Primary or Secondary Protection Zones surrounding the eagle nest.

B. *Pine Flatwoods and Other Upland Habitat Types*

- Bush hogging and/or mowing at 3-year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- Prescribed burning will be conducted as in xeric scrub habitat, but at an approximate 3-year interval if judged feasible and necessary.
- Exotic/nuisance plant species will be removed by hand.

C. *Wetland Habitats*

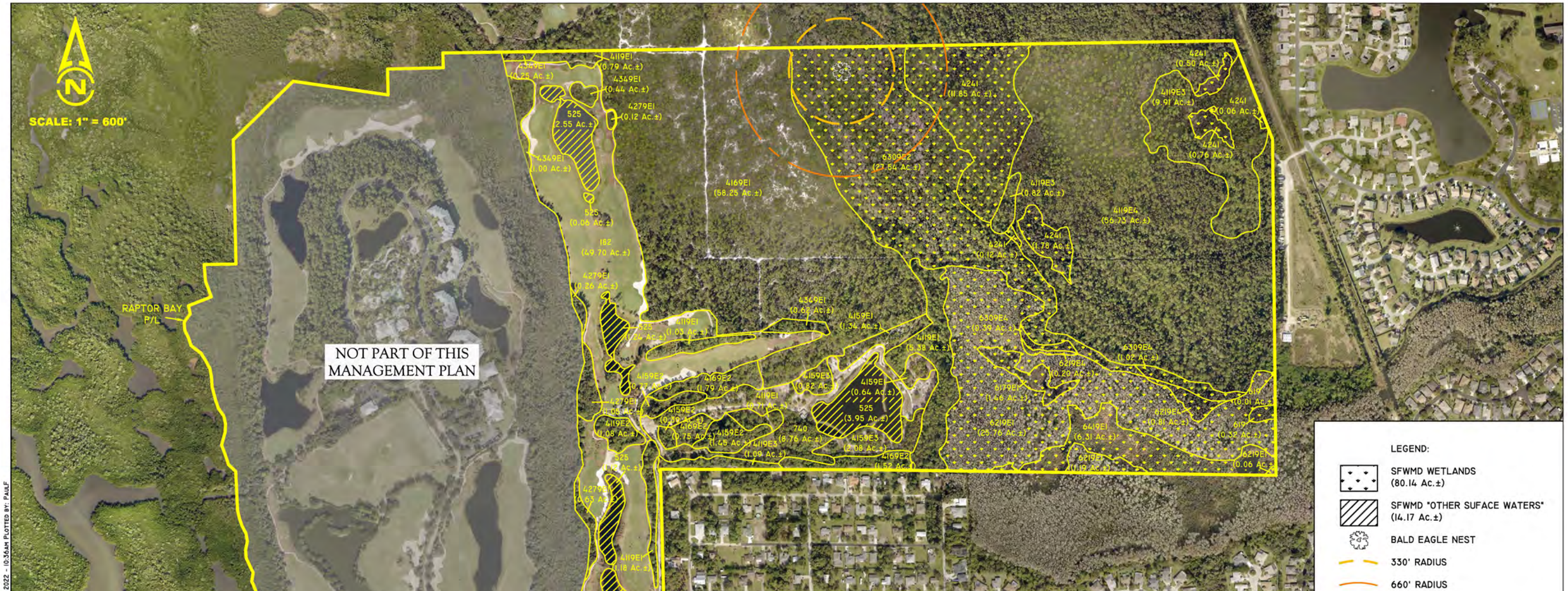
- Wetland habitats will be initially maintained by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Hand removal will be utilized whenever feasible. In certain areas of heavy infestation, mechanical clearing may be necessary. Any mechanical clearing will first be approved by the FFWCC and will be conducted so as to minimize disturbance to eagles during the active nesting season.
- Following initial removal of exotic/nuisance species, wetland habitats will be maintained in perpetuity to suppress re-infestation and maintain exotic/nuisance plant species abundance at low levels. Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (*e.g.*, installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

2. Maintenance activities will be initiated upon recording of the conservation easement for the Eco-Park and every other year thereafter.
3. A locally based nuisance-wildlife expert will be engaged as necessary to remove feral hogs from the Eco-Park.
4. If deemed necessary by FFWCC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.
5. Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.
6. Brochures containing information on gopher tortoise and bald eagle habitat, behavior and protection measures will be developed and made available to local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park).

7. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FFWCC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FFWCC. Educational signage will be placed along the trails.
8. Human access will be restricted by appropriate signage within the primary zone of the eagle nest during the nesting season. During the non-nesting season, pedestrian trails or other human use will be restricted to a minimum of 500' from the nest tree. The trail will be barricaded off by a cable across the path.
9. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed from protection areas in perpetuity.

EXHIBIT 3

AERIAL WITH FLUCFCS AND BALD EAGLE NEST



LEGEND:

- SFWMD WETLANDS (80.14 Ac.±)
- SFWMD "OTHER SUFACE WATERS" (14.17 Ac.±)
- BALD EAGLE NEST
- 330' RADIUS
- 660' RADIUS

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS ESTIMATED PER SFWMD ERP NO. 36-03813-P AND EXISTING SITE CONDITIONS.

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
182	GOLF COURSE	49.70 Ac.±	16.2%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	10.11 Ac.±	3.3%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	1.08 Ac.±	0.4%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	11.82 Ac.±	3.9%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	56.73 Ac.±	18.5%
4159 E1	PINE, DISTURBED (0-24% EXOTICS)	1.98 Ac.±	0.6%
4159 E2	PINE, DISTURBED (25-49% EXOTICS)	2.52 Ac.±	0.8%
4159 E3	PINE, DISTURBED (50-75% EXOTICS)	2.90 Ac.±	0.9%
4169 E1	SCRUBBY FLATWOODS, DISTURBED (0-24% EXOTICS)	58.25 Ac.±	19.0%
4169 E2	SCRUBBY FLATWOODS, DISTURBED (25-49% EXOTICS)	4.06 Ac.±	1.3%
4241	MELALEUCA, HYDRIC	15.07 Ac.±	4.9%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	2.06 Ac.±	0.7%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	2.31 Ac.±	0.8%
525	SHALLOW POND	14.17 Ac.±	4.6%
6179 E1	MIXED WETLAND HARDWOODS, DISTURBED (0-24% EXOTICS)	1.46 Ac.±	0.5%
619	EXOTIC WETLAND HARDWOODS	0.33 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	27.01 Ac.±	8.8%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	1.01 Ac.±	0.3%
6309 E2	MIXED WETLAND FOREST, DISTURBED (25-49% EXOTICS)	27.54 Ac.±	9.0%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	1.41 Ac.±	0.5%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	6.31 Ac.±	2.1%
740	DISTURBED LAND	9.06 Ac.±	3.0%
	TOTAL	306.89 Ac.±	100.0%

J:\2020\20LBR3290\2022\BALD EAGLE MGMT PLAN\EXHIBIT 3 AERIAL WITH FLUCFCS AND BALD EAGLE NEST.DWG TAB: 17X11-C JUL 06, 2022 - 10:36AM PLOTTED BY: PAULF

REVISIONS	DATE

DRAWN BY R.F.	DATE 06/29/22	
DESIGNED BY B.T.	DATE 06/29/22	
REVIEWED BY S.J.	DATE 06/29/22	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

RAPTOR BAY GOLF COURSE RENOVATION

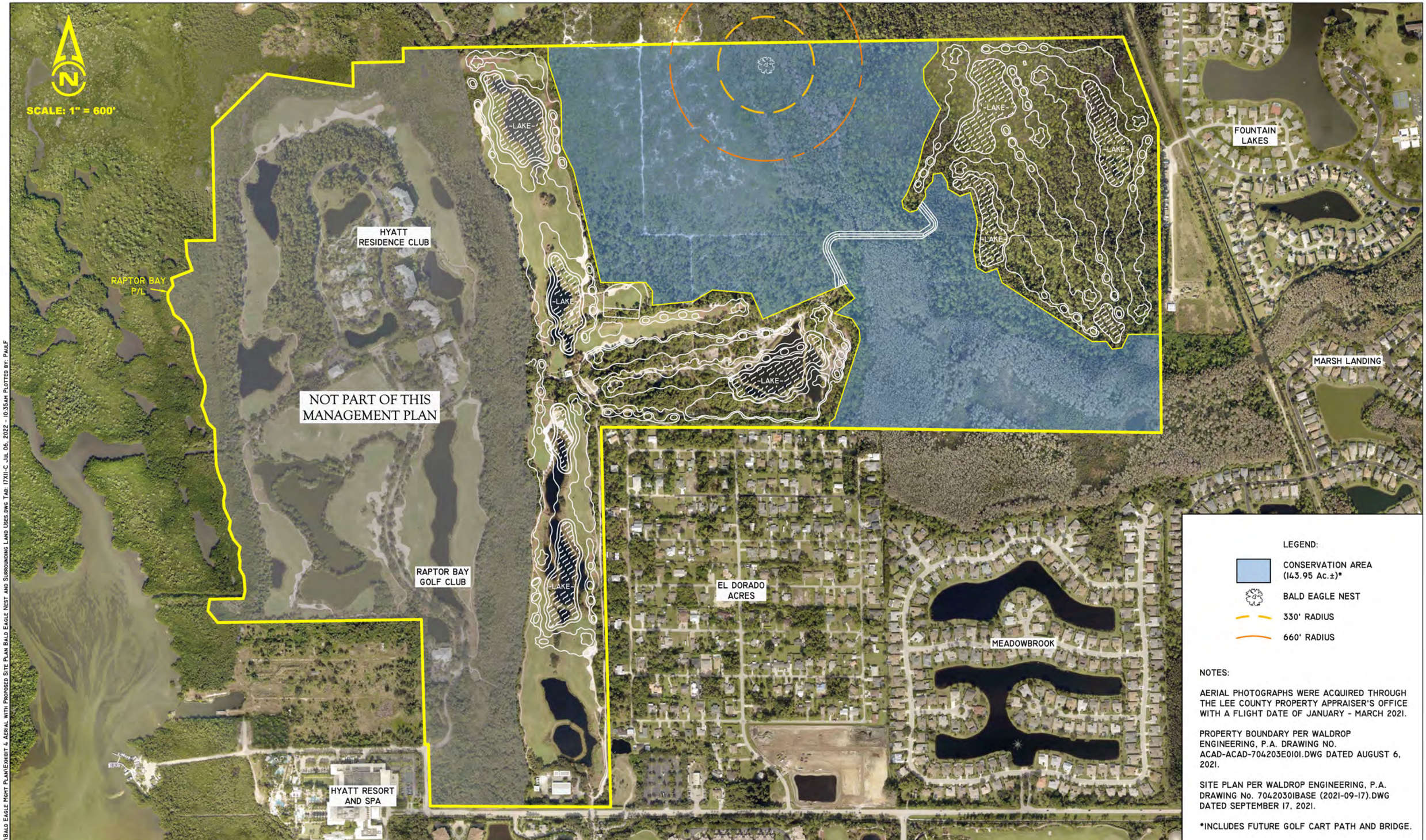
AERIAL WITH FLUCFCS AND BALD EAGLE NEST

DRAWING No. 20LBR3290

SHEET No. EXHIBIT 3

EXHIBIT 4

AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES



NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING No. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.

*INCLUDES FUTURE GOLF CART PATH AND BRIDGE.

J:\2020\20LBR3290\2022\BALD EAGLE MGMT PLAN\EXHIBIT & AERIAL WITH PROPOSED SITE PLAN BALD EAGLE NEST AND SURROUNDING LAND USES.DWG TAB: 17XII-C JUL 06, 2022 - 10:35AM PLOTTED BY: PAULF

REVISIONS	DATE	DRAWN BY	DATE
		R.F.	06/29/22
		DESIGNED BY	DATE
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		S.J.	06/29/22

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Consulting Ecologists
PASSARELLA & ASSOCIATES INC

RAPTOR BAY GOLF COURSE RENOVATION

AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES

DRAWING No. 20LBR3290

SHEET No. EXHIBIT 4

ADD2020-00095 Lee County ePlan

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

John Manning
District One

Cecil L Pendergrass
District Two

Larry Kiker
District Three

Brian Hamman
District Four

Frank Mann
District Five

Roger Desjarlais
County Manager

Richard Wm. Wesch
County Attorney

Donna Marie Collins
Hearing Examiner

May 28, 2019

Mr. Steve Lewis ***(via email transmittal)***
Lewis, Longman and Walker
315 South Calhoun Street
Suite 830
Tallahassee, FL 32301

RE: Abandoned Nest for Bald Eagle Nest LE-028C
STRAP # 06-47-25-00-00002.0030

Mr. Steve Lewis:

On November 13, 2018 the Eagle Technical Advisory Committee (ETAC) recommended to declare Nest LE-028C Lost in accordance with Lee County Land Development Code (LDC) Chapter 14. If no nesting activity occured by February 15, 2019 then the nest would be declared abandoned per LDC 14-119. According to LDC 14-114 abandoned nest means a nest that is intact or partially intact but has been inactive through five or more consecutive nesting seasons. Available information concerning Nest LE-28C indicates the following:

1. According to ETAC monitoring reports Nest LE-028C was last occupied by an eagle pair during the 2013-2014 nesting season.
2. The nest was declared lost on November 13, 2018.
3. No nest activity occurred during the 2018-2019 nesting season.

The information outlined above indicates that an eagle pair has not occupied Nest LE-28C since the 2013-2014 nesting season. Therefore, under Chapter 14 of the LDC, Nest LE-28C is determined as an abandoned territory. Please note this letter does not relieve the property owner from any requirements of the state or federal governments.

If you have any questions, please contact me at rsweigert@leegov.com or by phone at 239-533-8552.

Sincerely,

Becky Sweigert
Principal Environmental Planner

cc. Ulgonda Kirkpatrick, USFWS Migratory Bird Division (email only)

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1.0. INTRODUCTION

WCI Communities, Inc. is building a resort-class, championship golf course development with residential timeshare units and associated amenities in Estero, Lee County, FL. This 510 acre development will have a total of 27 holes of golf along with a club house, driving range and maintenance facility. The timeshare area will provide residential units with related amenities (tennis, swimming, recreation center, and so forth).

This management plan has been developed to detail how the Hyatt Resort golf course design, construction, and most importantly how planned maintenance will protect environmentally sensitive areas such as wetlands, ponds, wildlife habitat, and meet WCI, Inc., public and regulatory agency environmental objectives. Implementation of the programs contained in this plan promote an environmentally sensitive approach to golf course management.

1.1 MANAGEMENT APPROACHES AT THE HYATT GOLF RESORT

Development and management of the Hyatt Resort Golf facility focuses on sustainable resource management and application of scientifically based environmental decisions in design, construction, and management. This proactive approach to development of this facility integrates environmental and agronomic practices and promotes managing golf courses as an integrated and connected part of the ecosystem. On a practical level, this Natural Resource Management Plan for the Club integrates golf course design, golf course cultural practices, Best Management Practices, Integrated Pest Management, environmental monitoring, and maintenance facility planing and operations. The result is a thoughtfully designed and carefully operated course in which there is integration between cultural practices and the environment, and protection of resources.

The focus of the Natural Resource Management Plan for the Club is on the following:

- Prevention of environmental problems by incorporating Best Management Practices into the design of the golf course and maintenance facility, and the use of Integrated Pest Management to control pests;

- Controlling potential problems at the source through appropriate turfgrass cultural practices including the judicious use of fertilizers and pesticides, selection of pesticides specifically for the Hyatt Golf Resort facility based on an ecological risk assessment, an effective irrigation management program, and identification of management zones within the golf course area; and

- Conducting an environmental monitoring program that evaluates the effectiveness of the management program.

1.1.1 Prevention

The first step in preventing environmental problems is to design the Hyatt Golf Resort facility with an understanding of the ecological systems at the site, and incorporate Best Management Practices (BMPs) throughout the golf course and development. Best Management Practices (BMPs) are integrated into the golf course design and will be implemented during construction and maintenance operations. Examples of BMPs which incorporate this approach are given below in Section 1.2, and are provided in detail in Section 2.2.

An Integrated Pest Management (IPM) program will be instituted for The Hyatt Golf Resort. The IPM program is the cornerstone of the day-to-day management of the course and it integrates turf cultural practices, turf pests, and environmental conditions. IPM uses information about turfgrass pest problems including environmental conditions which may precipitate these problems, and integrates these with turfgrass cultural practices and pest control measures to prevent or control unacceptable levels of pest damage.

1.1.2 Control

Control means providing appropriate management of materials and systems at the Hyatt Golf Resort so that environmental problems do not occur. Three of the main issues involving golf courses focus on the use of fertilizers and pesticides in the management program, and operations at the maintenance facility. In order to protect sensitive environmental areas at the Hyatt Golf Resort, this management program will ensure that materials used to maintain the turf, the location of fertilizer and pesticide storage and mixing, equipment washing, and any drainage from these areas is are not detrimental to natural resources.

The Hyatt Golf Resort facility, like other well run golf course operations, will rely on a combination of cultural programs. Primary cultural practices include mowing, fertilization, and irrigation, cultivation (primarily vertical mowing and core aerification), topdressing and other mechanical practices. Many turfgrass cultural practices could have an impact on the environment. Erroneously, many people assume that when fertilizers or pesticides are used they either move off-site or downward to the groundwater in response to irrigation or rainfall and create environmental problems, particularly to surface waters. While there is a potential for movement occurring, this possibility is greatly reduced at the Hyatt Golf Resort by developing low risk irrigation, fertilization and pesticide programs and ensuring these programs are administered on a day-to-day basis by a qualified golf course superintendent.

At the Hyatt Golf Resort, the IPM program is coupled with an ecological risk assessment to determine the chemicals that can safely be used at the golf course. Management zones are also established, so that the course will be managed differently at different locations.

1.1.3 Detection

Detection provides a means to measure the success of the design, construction and operations of the golf course through an environmental monitoring program that strives to detect environmental problems. The monitoring program also will evaluate the effectiveness of the management program. This will encompass sampling groundwater, surface water and sediment to determine if any detrimental effects on the environment are noted. The goals of the monitoring program are as follows: 1) to provide baseline data as to the site characteristics regarding environmental conditions; 2) to provide data that assesses environmental conditions, thus providing a basis for measuring compliance with environmental regulations; and 3) to ensure that Integrated Pest Management and the BMPs are functioning properly.

1.2 Concept of Best Management Practices and Integrated Pest Management

A key component to environmentally sensitive management at the Hyatt Golf Resort is the implementation of Best Management Practices (BMPs) and Integrated Pest Management (IPM). Numerous scientific studies have documented that BMPs and IPM coupled with efficiency in rate and timing of fertilizer and pesticide applications and efficient irrigation management will

substantially reduce or completely eliminate potential water quality problems (Peacock and Smart, 1995; Peacock et al., 1996).

1.2.1 Best Management Practices

Best Management Practices are those engineering or cultural approaches to golf course management which act to prevent the movement of sediments, nutrients or pesticides into environmentally sensitive areas. Through the use of Best Management Practices (BMPs) turfgrass management can coexist in harmony within a natural setting. Best Management Practices (BMPs) can effectively eliminate the risk of unwanted materials reaching environmentally sensitive areas. Distinct BMPs for turfgrass areas have been adapted from those suggested by the US Department of Agriculture, Soil Conservation Service (Bottcher and Baldwin, 1986).

Examples of BMPs include cultural control of pests, biological control of pests, risk assessment based pesticide selection, correct application of pesticides, correct pesticide container disposal, proper timing and placement of fertilizers, planting pest resistant grasses and cultivars and other landscape plants, use of soil testing and plant analysis to establish fertilizer application rates, use of slow release fertilizers, good irrigation water management, use of aquatic filter ponds, good subsurface drainage routing, use of land absorption areas, grassed waterways or outlets, and critical area plantings for filtering drainage. All turfgrass management cultural practices and IPM strategies at the Hyatt Golf Resort have employed those BMPs described.

1.2.2 Integrated Pest Management

Integrated Pest Management (IPM) is a program that uses information about turfgrass pest problems and environmental conditions which may precipitate these problems, and integrates these with turfgrass cultural practices and pest control measures to prevent or control unacceptable levels of pest damage (Ferrentino, 1990). It is not a new idea. IPM practices have been an integral part of general agriculture for over 30 years. However, as concern over the protection of natural resources has increased it has become more refined and taken more of a systematic approach. This approach integrates a number of efforts including: 1) development of a healthy turf that can withstand pest pressure; 2) judicious and efficient use of chemicals; 3) enhancement of populations of natural, beneficial organisms; and 4) effective timing of

handling pest problems at the most vulnerable stage, often resulting in reduced pesticide usage. It is an ecologically based system that uses both biological and chemical approaches to control. As with BMPs, IPM strategies have been incorporated into every aspect of this plan for the Hyatt Golf Resort, and have taken into consideration the entire scheme of golf course operations as they relate to environmental impact.

The IPM approach includes six basic components: 1) **Monitoring** of potential pest populations and their environment; 2) **Determining** pest injury levels and establishing treatment thresholds; 3) **Decision making**, developing and integrating all biological, cultural, and chemical control strategies; 4) **educating** personnel on all biological and chemical control strategies; 5) **Timing and spot treatment** utilizing either the chemical, biological or cultural methods; 6) **Evaluating** the results of treatment.

2.0. ENVIRONMENTAL PLANNING

Increasing attention has been focused recently on the interrelationships between golf courses and the environment, in particular on protecting habitat and water resources from contamination by nutrients and pesticides (Balogh and Anderson 1992; Walker and Branham 1992). By taking a proactive environmental approach to construction and management of the Hyatt Golf Resort , the potential for adverse impacts can be mitigated (Peacock and Smart 1995; Peacock et al, 1996). In the process of environmental planning, existing site conditions and resources were identified and measures to protect those resources, and reduce probabilities of negative occurrences during development and operations were specified. At the Hyatt Golf Resort several steps were followed and they are identified below.

The first step in the Hyatt Golf Resort 's proactive approach was to examine the golf course property in terms of natural resources (Section 2.1). The second step was to identify environmentally and ecologically sensitive areas at the site. Identification allows protection of the sensitive areas (Section 2.2). The third step was to identify those management practices that would be appropriate to ensure protection of these sensitive areas.

Environmental management practices that are addressed in this Environmental Planning section include the following: 1) identification of Management Zones; 2) Best Management Practices; 3) Management of the Golf Course and its Natural Resource Interactions, and 4) construction management. Other significant management practices including Integrated Pest Management with selection of pesticides and fertilizer and restrictions on the use of certain materials in sensitive areas, Water Conservation Management, Water Quality Management, and Maintenance Facility Management.

2.1 SITE DESCRIPTION AND EVALUATION

The site has been examined relative to environmental characteristics, including location of surface waters and proximity of environmentally sensitive areas to golf hole locations. Onsite work by scientists evaluated the property, and topographic maps, golf course routing plans, and engineering drawings were reviewed. Information in this section is a compilation of site

conditions, data and information, and some of the data were taken from various reports prepared by the development team for the project, site plans, and staff reports for permit applications.

2.1.1 Physical Setting

The project is approximately 510 acres and is located in Lee County, Florida (**Figure 2-1**). The project is bordered on the south by Coconut Road, El Dorado Acres subdivision, and Marsh Landing. To the east is commercial property and Hwy 41. To the north is West Bay Club, a residential and golf community; and to the west is Estero Bay. West Bay Club is a fully certified Audubon International Signature Sanctuary.

The site is currently undeveloped. The majority of the site is consists of vegetated upland areas along with freshwater and brackish water wetlands. The eastern portion of the property is traversed by Halfway Creek which flows from the south to the north. An active bald eagle's nest is present along Halfway Creek. Halfway Creek is a conservation area as is the eco-park preserve area, that surrounds the Creek, and includes the nesting area.

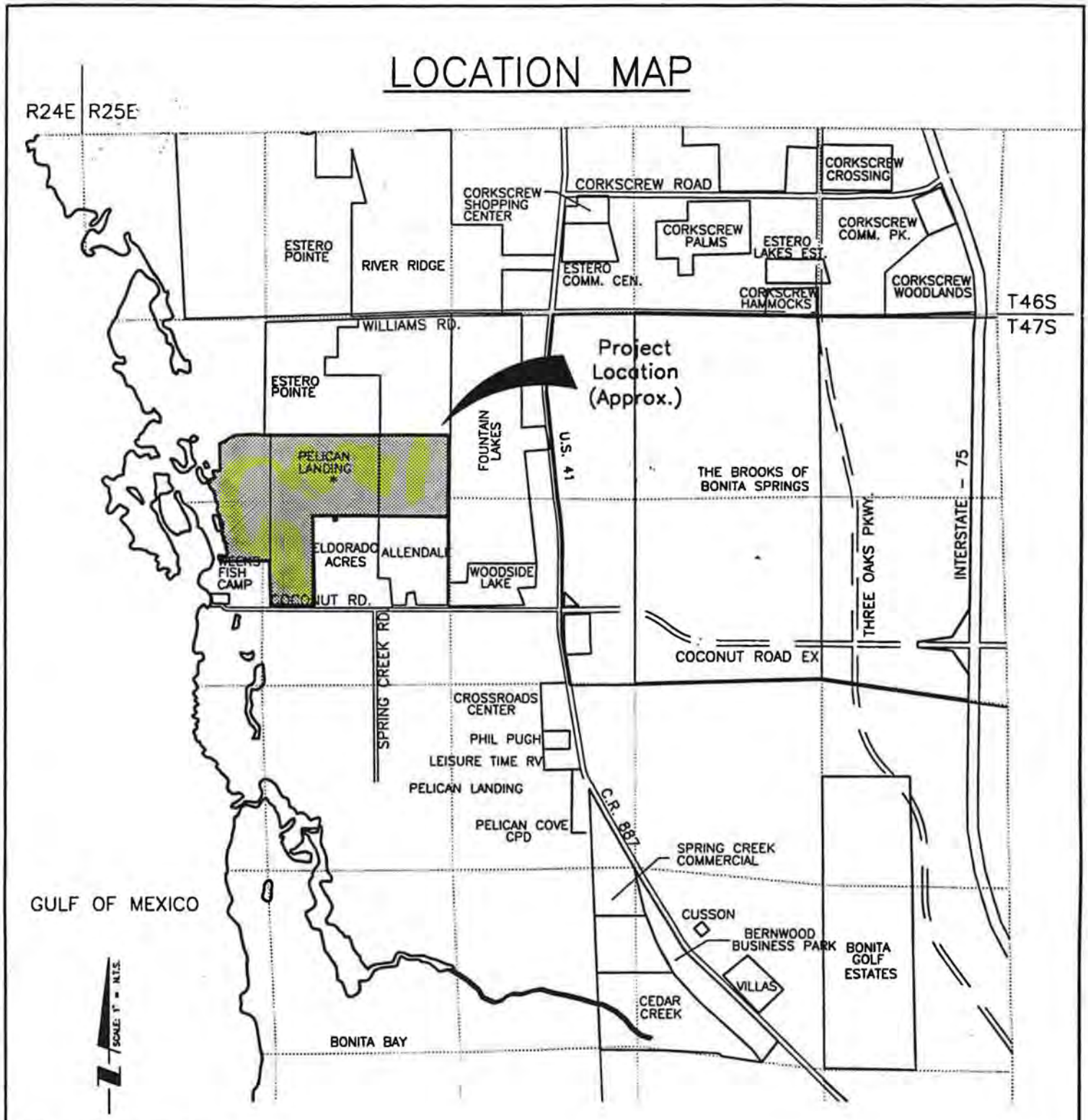
2.1.2 Topography

Topography of the Hyatt Golf Resort site is shown as basically flat, with wetlands throughout (**Figure 2-2**). A 10-ft contour line is shown traversing the site from north to south along the center of the property. A 5-ft contour is just west of the central wetlands. Halfway Creek is shown in the eastern section of the property.

2.1.3 Soils

Soils information is significant from a turf or IPM perspective because soil physical and chemical properties determine the nutritional requirements as well as the behavior of materials, such as pesticides, which are applied during golf course maintenance.

A complete soils analysis at final grading is required as a guide for preplant pH and nutrient adjustment. Even though existing soils will be modified by golf course construction, existing soils information provides the baseline for soils at the site.



*LAT 26° 24' 28" N
LONG 81° 49' 49" W

PROJECT: *HYATT GOLF RESORT*

APPLICANT: *WCI COMMUNITIES, INC. & HYATT DEVELOPMENT CORP*

WilsonMiller

Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants

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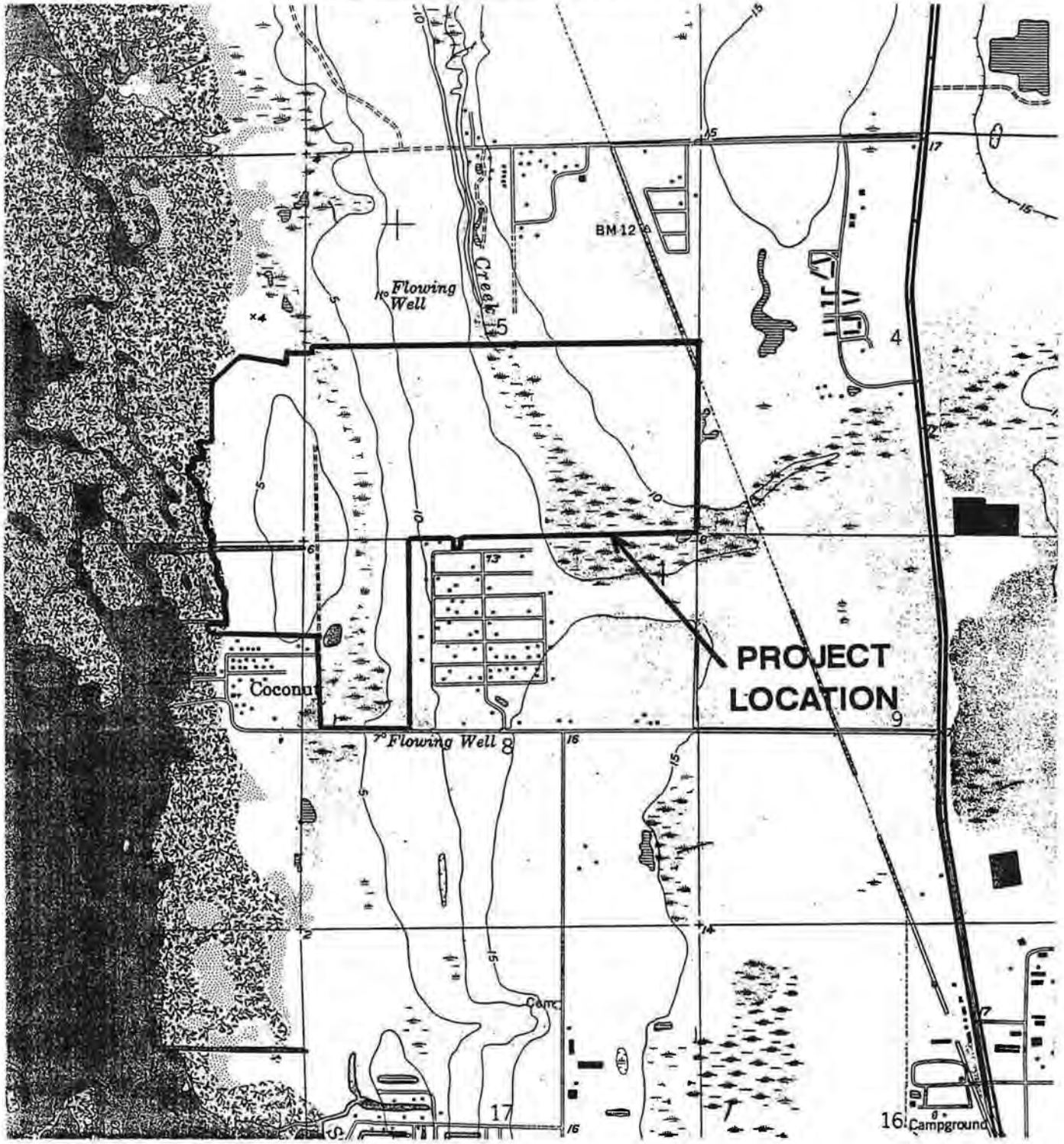
Figure 2-1. Location of The Hyatt Golf Resort Property.

FLA. REG. #	
COUNTY: LEE	DATE: JAN. 2000
SEC: 5,6,7,8 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-005-FPV00	FILE NO: A-0250-35
DRWN BY/EMP NO. M.W.L./1260	SHEET

TOPOGRAPHY MAP



SOURCE: USGS QUADRANGLES, ESTERO, FLA.

PROJECT: *HYATT GOLF RESORT*

APPLICANT: *WCI COMMUNITIES, INC. AND HYATT DEVELOPMENT CORP*

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FLA. REG. #	
COUNTY: LEE	DATE: JAN. 2000
SEC: 5,6,7,8 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-005-FPV00	FILE NO: A-0250-35
DRWN BY/EMP NO. M.W.L./1260	SH

Figure 2-2. Topographic Map of the Hyatt Golf Resort Site (from the USGS Bonita Springs Quad, photorevised 1987).

There are more than 10 different soil series which are present within the property. However, three series are dominant on the site where development is planned. Descriptions are as follows:

Immokalee sand: The Immokalee series consists of deep and very deep, poorly drained and very poorly drained, moderately permeable soils that formed in sandy marine sediments. They occur on flatwoods and in depressions of Peninsular Florida. Slopes are dominantly 0 to 2% but range up to 5%. Taxonomically they are sandy, siliceous, hyperthermic Arenic Haplaquods. A typical pedon is as follows (Colors are for moist soil.):

- A--0 to 6 inches; very dark gray (10YR 3/1) fine sand; mixture of organic matter and light gray sand grains has a salt-and-pepper appearance when dry; weak fine crumb structure; very friable; many fine and medium roots; very strongly acid; clear smooth boundary. (2 to 10 inches thick)
- E1--6 to 12 inches; gray (10YR 6/1) fine sand, many coarse faint gray and few coarse faint dark gray mottles; single grained; loose; common fine and medium roots; very strongly acid; gradual wavy boundary.
- E2--12 to 35 inches; white (10YR 8/1) fine sand; single grained; loose; few fine, medium, and coarse roots; few fine very dark gray streaks in root channels; very strongly acid; wavy boundary. (Combined thickness of the E horizon is 30 to 50 inches.)
- Bh1--35 to 43 inches; black (10YR 2/1) fine sand; lower 2 inches grades to dark reddish brown (5YR 2/2); weak fine granular structure; friable common fine and medium roots; very strongly acid; clear wavy boundary.
- Bh2--43 to 54 inches; dark reddish brown (5YR 3/3) fine sand; single grained; loose; few fine and medium roots; common fine and medium dark reddish brown (5YR 2/2); few fine distinct gray (10YR 5/1) sand lenses and pockets; very strongly acid; gradual wavy boundary. (Combined thickness of the Bh horizon ranges from 10 to 50 inches)
- BC--54 to 72 inches; dark brown (10YR 4/3) fine sand, few fine faint dark brown, pale brown, and light gray mottles; single grained; loose; strongly acid.

Reaction ranges from extremely acid to moderately acid except in limestone phases which are strongly acid to mildly alkaline.

- The A horizon has hue of 10YR, value of 2 or 3, and chroma of 1 or 2, or value of 4, chroma of 1 or 2; hue of N, value of 2 to 4. Where value is less than 3, thickness is less than 10 inches. Texture is sand or fine sand.
- The E horizon has hue of 10YR, value of 5 to 8, and chroma of 1 or 2; hue of 2.5Y, value of 7 or 8, and chroma of 2; hue of N, value of 5 to 8. Some pedons are mottled in shades of gray, yellow, brown, or red. Texture is sand, fine sand. A transitional horizon 1/2 inch to 2 inches thick is commonly between the base of the E horizon and the B horizon.
- The Bh horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 3 or less. Texture is sand, fine sand, loamy sand, or loamy fine sand. In some pedons, vertical or horizontal intrusions or masses of dark gray to light gray or light brownish gray sand or fine sand are in this horizon. In some pedons, there is a second sequum of E' and B'h horizons. Where present, the E' has the same color range as the E' horizon and the B'h horizon has the same color range as the Bh horizon.
- The BC horizon has hue of 10YR, value of 3 to 5, and chroma of 3 or 4; or hue of 7.5YR, value of 4, and chroma of 2. Some pedons have BC/Bh horizons. Where present, matrix color is similar to that of BC horizon with medium and coarse fragments of Bh horizon.
- Where present, the C horizon has hue of 10YR, value of 4 to 6, and chroma of 1 or 2, or value of 6 or 7, chroma of 3 or 4 with or without mottles in shades of brown, yellow, or gray.
- Limestone substratum phases are recognized. These have 2Cr or R horizons of soft or soft and hard porous limestone below a depth of 40 inches with solution holes filed with sand and rock.

Immokalee soils are on flatwoods and in depressions. They formed in sandy marine sediments. Slope gradients are usually 0 to 2%, but adjacent to swamps, ponds, marshes, and lakes, slopes range from 2 to 5%. The mean annual precipitation is about 50 to 60 inches, and mean annual air temperature is about 70 to 74°F.

Immokalee soils are poorly drained or very poorly drained. Runoff is slow or ponded. Permeability is rapid or very rapid in the A and E horizons and moderate or moderately rapid in the Bh horizon. The water table is at depths of 6 to 18 inches for 1 to 4 months during most years. It is between a depth of 18 inches to 36 inches for 2 to 10 months

during most years. It is below 60 inches during the dry periods of most years. Depressional areas are covered with standing water for periods of 6 to 9 months or more in most years.

Principal vegetation is longleaf and slash pines and undergrowth of sawpalmetto, gallberry, waxmyrtle, and pineland threeawn. In depressions, water tolerant plants such as cypress, loblollybay gorodonia, red maple, sweetbay, maidencane, blue maidencane, chalky bluestem, sand cordgrass, and bluejoint panicum are more common.

Myakka fine sand: The Myakka series consists of deep and very deep, poorly to very poorly drained soils formed in sandy marine deposits. These soils are on flatwoods, high tidal areas, flood plains, depressions, and gently sloping to sloping barrier islands. They have rapid permeability in the A horizon and moderate or moderately rapid permeability in the Bh horizon. Slopes range from 0 to 8%.

Taxonomically they are sandy, siliceous, hyperthermic Aeric Haplaquods.

A typcial pedon is as follows (colors are for moist soil):

- A--0 to 6 inches; black (10YR 2/1) crushed, sand; weak fine granular structure; very friable; matted with many fine and medium roots; strongly acid; clear smooth boundary. (3 to 8 inches thick)
- E--6 to 20 inches; white (10YR 8/2) sand; common fine faint vertical dark grayish brown, dark gray, and gray streaks along root channels; single grained; loose; common fine and medium roots; strongly acid; abrupt wavy boundary. (12 to 25 inches thick)
- Bh1--20 to 24 inches; black (N 2/0) sand; weak coarse subangular blocky structure; many fine and medium roots; sand grained coated with organic matter except for common fine pockets of uncoated sand grains; very strongly acid; clear wavy boundary. (2 to 13 inches thick)
- Bh2--24 to 32 inches; dark reddish brown (5YR 2/2) sand; common coarse faint vertical tongues of very dark brown (10YR 2/2) weak coarse subangular blocky structure; many fine and medium roots; sand grains coated with organic matter; very strongly acid; clear smooth boundary. (0 to 23 inches thick)

- Bh3--32 to 36 inches; dark reddish brown (5YR 2/2) sand; weak fine granular structure; very friable; few fine roots; sand grains coated with organic matter; strongly acid; clear wavy boundary. (0 to 16 inches thick)
- C/B--36 to 56 inches; dark brown (7.5YR 4/4) sand (C); weak fine granular structure; very friable; few fine roots; common medium distinct dark reddish brown (5YR 2/2) Bh bodies; strongly acid; clear wavy boundary. (0 to 36 inches thick)
- C--56 to 85 inches; dark grayish brown (10YR 4/2) sand; single grained; loose; few fine roots; strongly acid.

Solum thickness is more than 30 inches. Reaction commonly ranges from extremely acid to slightly acid. In tidal, limestone substratum, and shelly substratum phases reaction ranges up to moderately alkaline.

- Crushed color of the A horizon has hue of 10YR, value of 2 to 4, and chroma of 1; or is neutral (N) with value of 2 to 4. Uncrushed colors have a salt-and-pepper appearance. Texture is sand, fine sand, mucky sand, or mucky fine sand. Some pedons have a layer of muck less than 3 inches thick on the surface.
- The E horizon has hue of 10YR, value of 4 to 8, and chroma of 1 or 2; or hue of 2.5Y, value of 8, and chroma of 2; or it is neutral (N) with value of 6 to 8. In some pedons, this horizon has gray, yellow, and brown mottles. A transition layer from the E to the Bh horizon, ½ inch to 2 inches thick, is in many pedons. Texture is sand or fine sand. Thickness of the A and E horizons ranges from 20 to 30 inches.
- The Bh horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 3; or hue of 5YR, value of 3, and chroma of 4; or it is neutral (N) with value of 2 or 3. Medium to coarse vertical or horizontal tongues or pockets of gray, light brownish gray, or light gray sand range from none to common in the Bh horizon. Texture is sand, loamy fine sand, loamy sand, or fine sand.
- The C part of the C/B horizon has hue of 5YR to 10YR, value of 3 to 5, and chroma of 3 or 4; or hue of 10YR, value of 6, and chroma of 3. The B part has the colors described for the Bh horizon. Some pedons have a BC horizon. Some pedons have E' and B'h horizons below the Bh horizon. Colors are similar to the E and Bh horizons.
- The C horizon has hue of 10YR, value of 4 to 7, and chroma of 1 to 4; or hue of 7.5YR, value of 4 or 5, and chroma of 4. Some pedons have mottles of brown,

yellow, or gray. Texture is sand or fine sand. Shelly and limestone substratum phases are recognized.

Myakka soils occur on nearly level high tidal, flatwoods, flood plains, and depressional areas and gently sloping to sloping barrier islands with gradients of 0 to 8%. The soil formed in sandy marine deposits. Rainfall averages about 50 to 60 inches annually with mean annual air temperature of about 70 to 74°F.

Myakka soils are poorly to very poorly drained. They have slow internal drainage and slow to ponded runoff.

Permeability is rapid in the A and E horizons and moderate or moderately rapid in the Bh horizon. The water table is at depths of less than 18 inches for 1 to 4 months duration in most years and recedes to depths of more than 40 inches during very dry seasons. Depressional areas are covered with standing water for periods of 6 to 9 months or more in most years.

Most areas are used for commercial forest production or native range. Large areas with adequate water control measures are used for citrus, improved pasture, and truck crops. Native vegetation includes longleaf and slash pines with an undergrowth of sawpalmetto, running oak, inkberry, waxmyrtle, huckleberry, chalky bluestem, pineland threeawn, and scattered fetterbush.

Satellite fine sand: The Satellite series consists of deep rapidly permeable soils that formed in thick beds of marine sand. These soils occur on nearly level low knolls and ridges of the flatwoods. They are saturated at depths of 10 to 40 inches for 2 to 6 months during the summer rainy season. Slopes are less than 2%.

Taxonomically they are Hyperthermic, uncoated Aquic Quartzipsamments.

A typical pedon is as follows (Colors are for moist soil unless otherwise stated.):

- A--0 to 6 inches; dark gray (10YR 4/1 rubbed) sand; single grained; loose; common fine roots; few medium roots; color is mixture of light gray (10YR 7/1) sand grains and organic matter; very strongly acid; clear smooth boundary. (2 to 8 inches thick)

- C1--6 to 13 inches; gray (10YR 6/1) sand; single grained; loose; common fine roots; sand grains uncoated; very strongly acid; gradual wavy boundary. (6 to 36 inches thick)
- C2--13 to 45 inches; light brownish gray (10YR 6/2) sand; single grained; loose; few medium and fine roots; many medium faint gray (10YR 5/1) vertical streaks and pockets; sand grains uncoated; very strongly acid; gradual wavy boundary. (10 to 46 inches thick)
- C3--45 to 53 inches; grayish brown (10YR 5/2) sand; single grained; loose; sand grains uncoated; very strongly acid; clear wavy boundary. (4 to 18 inches thick)
- C4--53 to 67 inches; dark grayish brown (10YR 4/2) sand; common coarse distinct very dark brown (10YR 2/2) and grayish brown (10YR 5/2) mottles; single grained; loose; very dark brown mottles are in areas where small pellets of organic matter are concentrated; strongly acid; gradual wavy boundary. (10 to 30 inches thick)
- C5--67 to 80 inches; grayish brown (10YR 5/2) sand; single grained; loose; sand grains uncoated; very strongly acid.

Soil reaction ranges from very strongly acid to mildly alkaline in all horizons. Texture is coarse sand, sand, or fine sand. Moisture equivalent is less than 2%.

- The A horizon is a mixture of black (10YR 2/1) organic matter and white (10YR 8/1) sand grains. Rubbed, this horizon has hue of 10YR, 2.5Y or it is neutral with value of 3 to 5, and chroma of 1 or 2.
- The C horizon has hue of 10YR, 2.5Y, or it is neutral with value of 5 to 8, and chroma of 1 or 2. Sand grains in the horizon lack coatings of silt, clay, or sesquioxides. Upon burning the sand does not change color. In some pedons this horizon has mottles in shades of yellow, brown, or red.

Satellite soils are on nearly level low knolls and ridges on higher elevations in the Lower Coastal Plain. Slopes are less than 2%. The regolith is a thick bed of marine sand. Near the type location average annual precipitation is about 55 inches and mean annual air temperature is about 74°F. Frost-free season is about 330 days.

Somewhat poorly drained; slow runoff; very rapid permeability. The water table is at depths of 10 to 40 inches for periods ranging from 2 to 6 months.

Most of this soil is used for forest and range. Native vegetation is south Florida slash pine, saw palmetto, pineland threeawn and other native grasses.

Table 2-1. Soil Series Physical and Chemical Characteristics at the Hyatt Golf Resort, Lee County, Florida

Soil Series	USDA Modifier*	% Clay	Bulk Density g/cc	Perme-ability in/hr	Available water capacity in/in	pH	% Organic matter
Immokalee							
0-6"	fs, s	1-5	1.20-1.50	6.0-20.0	0.05-0.10	3.6-6.0	1.0-2.0
6-35"	fs, s	1-5	1.45-1.70	6.0-20.0	0.02-0.05	3.6-6.0	-
36-54"	fs, s	2-7	1.30-1.70	0.6-2.0	0.10-0.25	3.6-6.0	-
54-72"	fs, s	1-5	1.40-1.70	6.0-20.0	0.02-0.05	3.6-6.0	-
Myakka							
0-6"	s, fs	1-3	0.25-1.45	6.0-20.0	0.05-0.15	3.6-6.5	2.0-5.0
6-20"	s, fs	0-2	1.45-1.60	6.0-20.0	0.02-0.05	3.6-6.5	-
20-36"	s, fs, lfs	1-8	1.45-1.60	0.6-6.0	0.10-0.20	3.6-6.5	-
36-80"	s, fs	0-2	1.48-1.70	6.0-20.0	0.02-0.10	3.6-6.5	-
Satellite							
0-6"	cos, s, fs	1-3	1.10-1.45	20.0	0.02-0.10	4.5-7.8	0.5-2.0
6-80"	cos, s, fs	0-2	1.35-1.55	20.0	0.02-0.05	4.5-7.8	-

* cos=coarse sand; fs=fine sand; lfs=loamy fine sand; s=sand

2.1.4 Surface Water

Dominant surface water features of the Hyatt Golf Resort project site are Estero Bay, wetlands and Halfway Creek. Estero Bay is a marine Aquatic Preserve and is adjacent to the western boundary of the property. Halfway Creek is an Outstanding Florida Water, and with buffers it occupies approximately 52 acres of the site. There are approximately 125 acres of wetlands and adjacent buffers (**Figure 2-1**). The Halfway Creek conservation area is located in the eastern part of the property. A wetland strand traverses the property from North to South, and is centrally located, and a mangrove swamp is adjacent to Estero Bay on the western boundary of the property. Vegetation associated with each wetland type and Halfway Creek is given below:

Mangrove Habitat: Mangrove habitats occur along the western boundary of the site in areas that are contiguous to Estero Bay and thus are tidally influenced. Vegetation consists of black mangrove *(Avicennia germinans),* white mangrove *(Lan guncularia racemosa),* buttonwood *(Conocarpus erectus),* and scattered red mangrove *(Rhizopora mangle).* Dominant ground cover species include sea purslane *(Sesuvium portulacastrum),* glasswort *(Sahicornia* sp.), saltwort *(Batis maritima),* and coin vine *(Dalbergia ecastophyllum),* along with mangrove seedlings.

Central Wetlands: The central wetlands consist of the following areas:

- Areas in the north are dominated by Brazilian pepper which comprises >75% of the canopy and substrata;
- Areas in the southern portion of the wetland contain a mixture of species in which neither hardwoods or conifers achieve 66% dominance of canopy composition. Exotic species, primarily Brazilian pepper, have infested the native community at levels exceeding 50% of the total vegetative cover. Native species still persisting include cabbage palm, slash pine, laurel oak and red maple in the canopy and cabbage palm, myrsine and wax myrtle in the subcanopy. Ground cover is typically sparse to absent due to the effects of shading by the dense canopy and subcanopy strata of exotic species, but when present typically is dominated by swamp fern.

Halfway Creek: The Halfway Creek jurisdictional wetland community is dominated by tall-stature cypress *(Taxodium distichum)* and comprises the majority of Halfway Creek. Cabbage palm, laurel oak, red maple, pop ash *(Fraxinus caroliniana),* and wax myrtle are also present in the canopy and midstory. Swordfern (*Nephrolepiàp.*) dominates the understory. Melaleuca is present in patches along the wetland-upland interface with occasional Brazilian pepper.

Lakes and ponds will be built as part of the stormwater management program for the property. There are approximately 22.3 acres of lake being built on the project site, and there will be approximately 22.1 acres of phyto-zones. All surface water runoff from the developed portions of this project will be directed to swales or phyto-zones for water quality treatment.

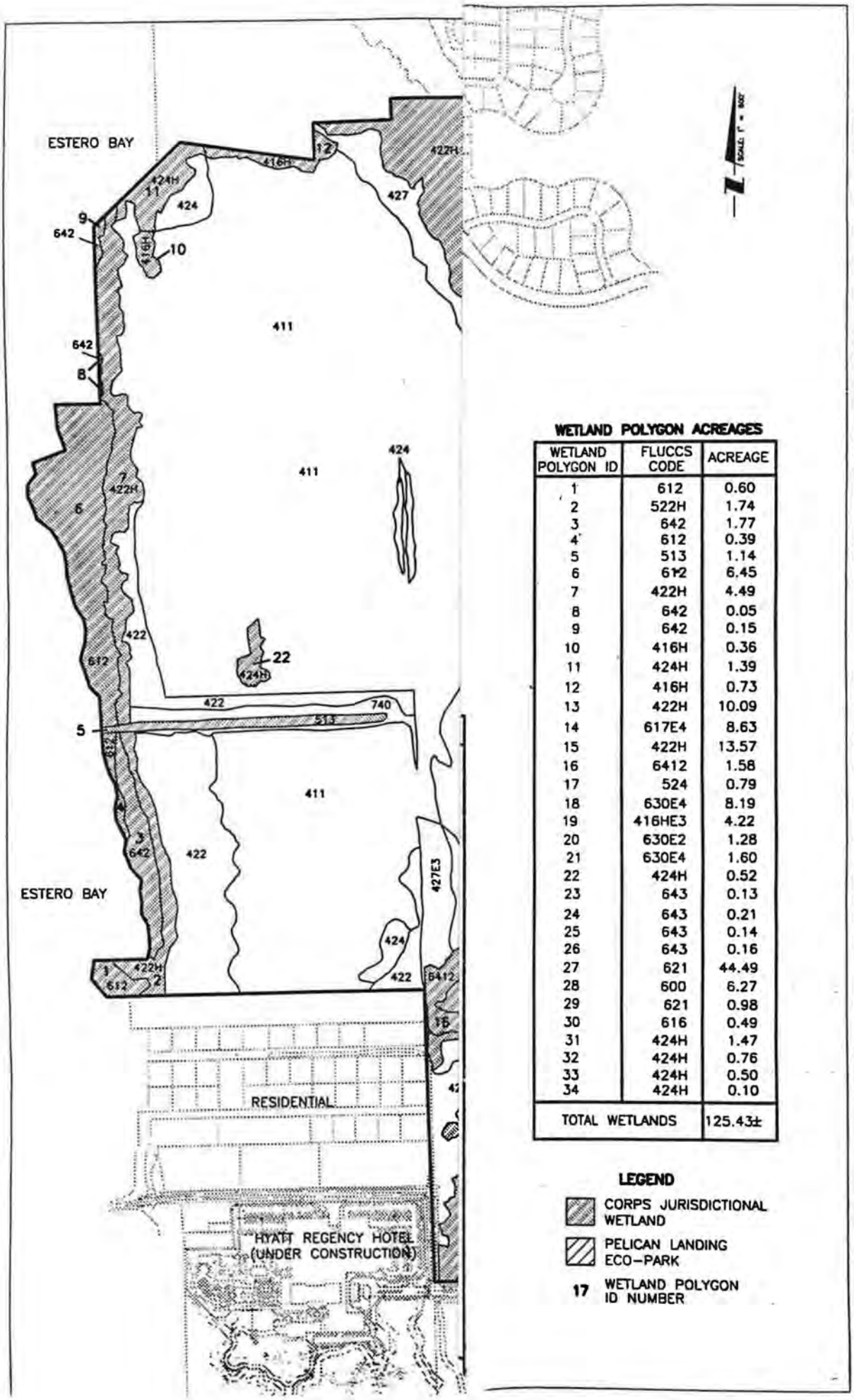
2.1.5 Vegetation and Wildlife

Dominant vegetative communities on the property were 1) Pine Flatwoods - Palmetto Understory, 225.26 acres; 2) Xeric Oak, 69.18 acres; Cypress, 45.47 acres; 4) Brazilian Pepper, 42.11 acres; 5) Saw Palmetto Prairie, 23.31 acres; and 6) Pine Flatwoods/Palmetto Prairie, 22.26 acres (from WilsonMiller, Inc 2000). The plant communities and a description of each are given below and are shown on **Figure 2-3**.

The following is a brief description of the vegetation associations present on the Hyatt Golf Resort site (Vegetative mapping was conducted WilsonMiller and Boylan Environmental Consultants ecologists). Vegetation categories are listed from those that occupy the most area to those that occupy the least.

- **Pine Flatwoods - Palmetto Understory, 225.26 acres (FLUCCS #411).** Pine flatwoods habitats have a canopy of scattered slash pine *(Pinus elliottil)* and a subcanopy of cabbage palm *(Sabal palmetto),* wax myrtle, myrsine *(Rapanea punctata),* scattered live oak *(Quercus virginiana),* and laurel oak *(Quercus laurifolia).* Ground cover species include saw palmetto, bracken fern *(Pteridium aquilinum),* winged sumac *(Rhus copallinum),* beautyberry *(Callicarpa americana),* and cabbage palm seedlings. This habitat can locally infested with exotic species such as Brazilian pepper *(Schinus terebinthifolius),* melaleuca *(Melaleuca quinqueneivia),* and downy rose myrtle *(Rhodomyrtus tomentosus).* Coverage by exotic species varies from 10 to 75% depending on the locality.

- **Xeric Oak, 69.18 acres (FLUCCS #421).** Xeric oak (scrub) habitat of the site has a sparse of slash pine canopy and a midstory dominated by sand live oak *(Quercus geminata)* and other scrub oak species, and rusty lyonia. Ground cover is predominately saw palmetto with paspalum, cordgrass, rosemary, prickly pear cactus, and reindeer lichen. The abundance of bare sandy areas typical of xeric scrub varies depending on locality and elevation. A subclass of xeric oak scrub (FLUCCS #4211) was mapped along the western boundary of Halfway Creek. It occurs at a slightly lower elevation than the traditional xeric oak scrub and has a greater density of oaks and high dense saw palmetto in the midstory and shrub strata.



WETLAND POLYGON ACREAGES

WETLAND POLYGON ID	FLUCCS CODE	ACREAGE
1	612	0.60
2	522H	1.74
3	642	1.77
4	612	0.39
5	513	1.14
6	612	6.45
7	422H	4.49
8	642	0.05
9	642	0.15
10	416H	0.36
11	424H	1.39
12	416H	0.73
13	422H	10.09
14	617E4	8.63
15	422H	13.57
16	6412	1.58
17	524	0.79
18	630E4	8.19
19	416HE3	4.22
20	630E2	1.28
21	630E4	1.60
22	424H	0.52
23	643	0.13
24	643	0.21
25	643	0.14
26	643	0.16
27	621	44.49
28	600	6.27
29	621	0.98
30	616	0.49
31	424H	1.47
32	424H	0.76
33	424H	0.50
34	424H	0.10
TOTAL WETLANDS		125.43±

LEGEND

CORPS JURISDICTIONAL WETLAND

PELICAN LANDING ECO-PARK

17 WETLAND POLYGON ID NUMBER

FIGURE 1. PRE- DEVELOPMENT CONDITIONS

Figure 2-3. The FLUCCS Land Use Classifications for the Hyatt Golf Resort Property. From the FLUCCS codes as produced by WilsonMiller for the project site.

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WilsonMiller, Inc. - FL LB# LC-0000070

SEC 7,8 TWP 47S RGE 25E	
Designed by:	S.K.S./1250
Drawn by:	M.W.L./1260
Checked by:	
Approved by:	
Date:	JAN. 2000
Scale:	1"=600'
PIN: F0250-024-005-FPV00	
File # :	C-0250-39

- **Cypress, 45.47 acres (FLUCCS #621).** This jurisdictional wetland community is dominated by tall-stature cypress *(Taxodium distichum)* and comprises the majority of Halfway Creek. Cabbage palm, laurel oak, red maple, pop ash *(Fraxinus caroliniana),* and wax myrtle are also present in the canopy and midstory. Swordfern *(Nephrolepis* spp.) dominates the understory. Melaleuca is present in patches along the wetland-upland interface with occasional Brazilian pepper.

- **Brazilian Pepper, 42.11 acres (FLUCCS # 422).** These areas are dominated by Brazilian pepper which comprises >75% of the canopy and subcanopy strata. Scattered cabbage palm is present in the subcanopy. Few non-woody species are typically present in the ground cover stratum due to the high degree of subcanopy closure and shading by Brazilian pepper, but when present include scattered swamp fern *(Blechnum serrulatum)* and leather fern *(Acrostichum aureum).* Shoestring fern (*Vittaria lineata)* was also observed growing on cabbage palms. Some areas of the site classified as Brazilian pepper are jurisdictional wetlands and have been designated with an "H" suffix to the FLUCCS code *(i.e.,* 422H).

- **Saw Palmetto Prairie, 23.31 acres (FLUCCS #321).** Palmetto prairies of the site have little, if any canopy component. The midstory layer typically cor of scattered paw paw *(Asimina reticulata),* rusty lyonia *(Lyonia ferruginea),* and wax myrtle *(Myric cerifera).* The ground cover is dominated by a thick, dense layer of saw palmetto *(Serenoa repel.....,,* with lesser amounts of pineweed *(Hypericum gentianoides),* St. Johns wort *(Hypericum fasciculatum),* big blue stem *(Andropogon virginicus),* yellow-eyed grass *(Xyns platylepis),* paspalum *(Paspalum* sp.), cordgrass *(Spartina bakeri,),* gopher apple *(Licania michauxi,),* and partridge pea (*Chamaecnsta fasciculata*).

- **Pine Flatwoods/Palmetto Prairie, 22.26 acres (FLUCCS #411/321).** This habitat is a mix of the pine flatwoods and saw palmetto prairie habitats described above. It differs from pine flatwoods and palmetto prairie by having a variable pine canopy density intermediate between these two habitat types. Thus, it has been given a dual designation. The majority of this habitat occurs in the southern portion of the Pelican Landing Eco-Park. Plant species are typical of the flatwoods and saw palmetto prairie vegetative associations described above.

- **Live Oak, 11.89 acres (FLUCCS #427).** Live oak communities on-site have a canopy dominated by live oak and typically have a dense mid-story dominated by saw palmetto. Other species include scattered slash pine and cabbage palm, Brazilian pepper, wax myrtle, myrsine, dahoon holly *(hex cassine),* poison ivy *(Toxicodendron radicans),* muscadine grape (*Vitis rotundifolia),* Virginia creeper *(Parthenocissus quinquefolia),* and beautyberry. Exotic species are present in the majority of the live oak habitats, comprising from 25% to 75% of the cover.

- **Wetland Forest Mixed, 11.07 acres (FLUCCS #630).** This wetland community is located in the southern portion of the north-south trending slough located in the west-central region of the site and contain a mixture of species in which neither hardwoods or conifers achieve 66% dominance of canopy composition. Exotic species, primarily Brazilian pepper, have infested the native community at levels exceeding 50% of the total vegetative cover. Native species still persisting include cabbage palm, slash pine, laurel oak and red maple in the canopy and cabbage palm, myrsine and wax myrtle in the subcanopy. Ground cover is typically sparse to absent due to the effects of shading by the dense canopy and subcanopy strata of exotic species, but when present typically is dominated by swamp fern.

- **Melaleuca, 8.80 acres (FLUCCS #424).** Areas mapped as FLUCCS #424 represent melaleuca monocultures. Dense stands of melaleuca dominate both the canopy and subcanopy layers. Other species occasionally present include slash pine, cabbage palm, and saw palmetto. Very few other plants grow in the dense shade of this exotic plant community. Herbaceous species are sparse but typically consist of swamp fern when present. Some areas of the site classified as Brazilian pepper are jurisdictional wetlands and have been designated with an "H" suffix to the FLUCCS code (i.e., 424H).

- **Mixed Wetland Hardwoods, 8.63 acres (FLUCCS #617).** Wetland hardwoods communities composed of an ill-defined mixture of hardwood species and dominated by exotic species are located in a portion of the north-south trending slough located in the west-central region of the site. Typical native canopy species include cabbage palm, laurel oak, and red maple *(Acer rubrum).* Native sub-canopy species include beautyberry, cabbage palm, and laurel oak. Ground cover is typically sparse to absent

due to the effects of shading by the dense canopy and subcanopy strata of exotic species. Swamp fern comprises the dominant ground cover species when present. This habitat is heavily infested with Brazilian pepper, which typically comprises >75% of the cover.

- **Mangrove, 7.44 acres (FLUCCS #612).** Mangrove habitats occur along the western boundary of the site in areas that are contiguous to Estero Bay and thus are tidally influenced. Vegetation consists of black mangrove *(Avicennia germinans),* white mangrove *(Lan guncularia racemosa),* buttonwood *(Conocarpus erectus),* and scattered red mangrove *(Rhizopora mangle).* Dominant ground cover species include sea purslane *(Sesuvium portulacastrum),* glasswort *(Sahicornia* sp.), saltwort *(Batis maritima),* and coin vine *(Dalbergia ecastophyllum),* along with mangrove seedlings.

- **Shrub Wetlands, 6.27 acres (FLUCCS #600).** This vegetative association is present within Halfway Creek in the southeast region of the site and is dominated by willow *(Sahix* sp.) and buttonbush *(Cephalanthus occidentalis).* Very few canopy trees are present in this habitat. This shrub wetland may be permanently flooded.

- **Mesic Oak Stands with High Dense Saw Palmetto, 5.66 acres (FLUCCS #4201).** This habitat contains large live oaks in the canopy with very high dense saw palmetto in the shrub and ground cover strata. The ground cover strata is generally void of herbaceous species due to shading caused by the density of the saw palmetto strata.

- **Pine Flatwoods - Graminoid Understory, 5.31 acres (FLUCCS #416).** The pine flatwoods/graminoid understory vegetative community has a canopy dominated by slash pine. The subcanopy contains wax myrtle and rusty lyonia. Ground cover consists of scattered saw palmetto, penny royal, wire grass, paspalum, winged sumac and big blue stem. This habitat is infested with Brazilian pepper, with percent cover varying from 0 to 75% depending on the locality. This habitat can locally infested with exotic species such as Brazilian pepper *(Schinus terebinthifolius),* melaleuca *(Melaleuca quinquenevia),* and downy rose myrtle. Coverage by exotic species varies from 10 to 75% depending on the locality. Some areas of the site classified as pine flatwoods/graminoid understory are jurisdictional wetlands and have been designated with an "H" suffix to the FLUCCS code *(i.e.,* 416H).

- **Oak-Pine-Hickory, 4.66 acres (FLUCCS #423).** A single canopy species is not dominant in this community that is located along the eastern margin of Halfway Creek.. The canopy is a mixture of slash pine, hickory *(Caiya glabra),* and various mesic oaks, including live oak and laurel oak. The subcanopy consists primarily of cabbage palm, myrsine, and saw palmetto. Very little herbaceous vegetation has become established under the dense canopy and subcanopy strata, but when present is dominated by greenbrier *(Smilax laurifolia)* or scattered saw palmetto. This habitat contains 10-24% coverage by exotic species, -primarily melaleuca that occurs in scattered dense patches. Occasional Brazilian pepper and downy rose myrtle are also present.

- **Saltwater Marsh, 1.97 acres (FLUCCS #642).** Saltwater marsh habitat occurs in the western region of the site. Scattered woody species, including saltbush *(Baccharis halimifolia),* buttonwood, white mangrove, black mangrove, and Christmas berry *(Lycium carolinianum)* occur in the subcanopy. Black rush *(Juncus romerianus),* sea purslane, sea oxeye daisy *(Borrichia frutescens),* glasswort, saltwort, marsh elder *(Iva frutescens),* and seedlings of buttonwood, white mangrove, and black mangrove occur in the ground cover stratum.

- **Cabbage Palm, 3.37 acres (FLUCCS #428).** Cabbage palm dominates the canopy of this community. Suboanopy species include myrsine and Brazilian pepper. Ground cover species include beautyberry, saw palmetto, and poison ivy. This habitat is heavily infested with Brazilian pepper and melaleuca, at a coverage ranging from 50 to 75% depending on the locality.

- **Cattail, 1.58 acres (FLUCCS #64 12).** This community is located around the perimeter of the excavated pond in the southwestern region of the site and is a monoculture of cattails *(Typha* sp.).

- **Wet Prairie, 0.64 acres (FLUCCS #643).** Wet prairie habitats are wetlands comprised of predominantly grassy vegetation. Four such areas, collectively comprising lees than one acre, are present in the central region of the site. They are distinguished from marshes by having less water and shorter herbage. Ground cover

species typically present in these habitat include wiregrass, broomsedge *(Andropogon* sp.), sand cordgrass, and yellow-eyed grass *(Xyris* spp.).

- **Scrubby Flatwoods, 0.26 acres (FLUCCS # 415).** Scrubby flatwoods communities lack a canopy and have a subcanopy comprised of various oaks including live oak, laurel oak, and myrtle oak *(Quercus myrtifolia).* Also present in the subcanopy is wax myrtle, rusty lyonia, and rosemary *(Cerabola ericoides).* The ground cover is comprised of saw palmetto, partridge pea, little blue stem *(Schizachyrium scoparium),* wire grass *(Aristida* spp.), penny royal *(Pioblephis rigida),* reindeer lichen *(Cladonia spp.),* winged sumac *(Rhus coppalina),* paspalum, gopher apple, and prickly pear cactus (*Opuntia humifusa*).

2.1.5.1. ***Survey for Listed Plant and Wildlife Species.*** A comprehensive biological survey of the property was conducted by WilsonMiller (2000) to determine listed plant and wildlife species on the property. They conducted the survey according to the guidelines of the Florida Game and Freshwater Fish Commission.

Wildlife. **Table 2-2** identifies Endangered, Threatened and Species of Special Concern identified at the Hyatt Golf Resort site.

Table 2-2. Endangered, Threatened, and Species of Special Concern Identified at the Hyatt Golf Resort Project Site.

Species	Use Type	Occurrence
Gopher Tortoises	Burrows	Observed
Bald Eagle	Nesting/Foraging	Observed
Big Cypress Fox Squirrel	Known Use	Observed
Wading Birds (limpkin observed)	Foraging	Observed

Listed species known to occur on-site, or with a high likelihood of occurring based on field evidence, include the bald eagle, fox squirrel, gopher tortoise, and wading birds such as the wood stork, little blue heron, tricolored heron, snowy egret, and limpkin.

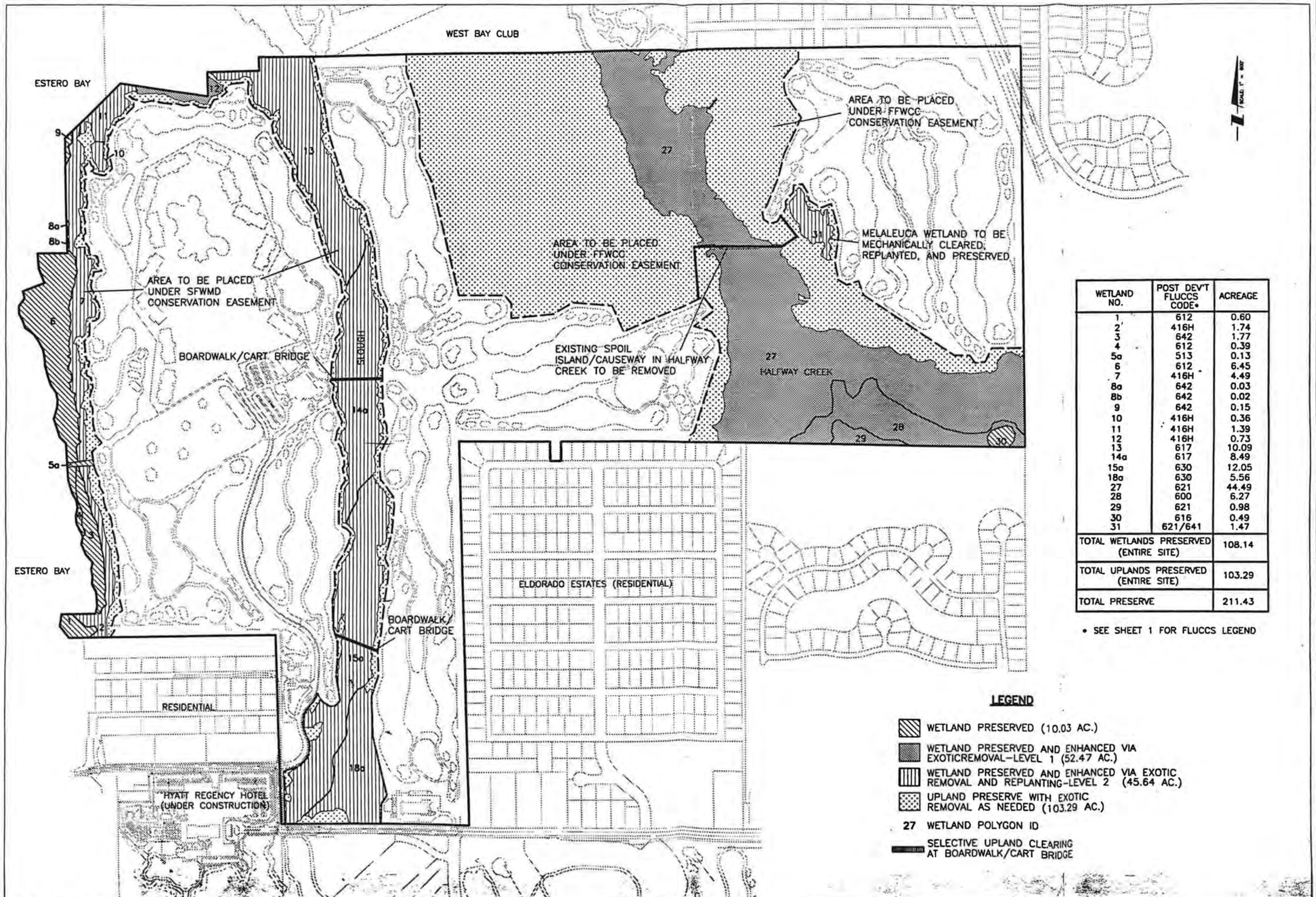
Management programs are in place for the Bald Eagle. The gopher tortoises will be relocated to the Eco-Park, and the fox squirrels generally adapt well to golf course and park areas. The wading birds will likely utilize the improved wetlands (exotic removal), as well as the approximately 40 acres of lake and phyto-zones (wetlands).

Vegetation. There were no listed plants observed on the project site. However, there were three listed plant species observed on the Hyatt Regency hotel site located to the southwest of the project site. Species observed included the butterfly orchid (*Encyclia tampensis* - commercially exploited), and two species of wild pin (*Tillandsia balbisiana, T. fasciulata* - both classified as Endangered). Individuals of these species were not observed at the site, but are likely inhabitants of the project site.

2.1.6 Conservation Areas

To maintain the distinctive natural character of the site, the land plan was designed such that permanent wetland impacts were avoided in high quality wetlands at the site, including Halfway Creek (an OFW) and wetlands contiguous to Estero Bay (an Aquatic Preserve) (**Figure 2-4**). Wetland impacts to lower quality wetlands of the site were minimized to the extent practicable. A significant amount of upland areas have also been preserved as part of the site plan, including buffers adjacent to wetland systems.

Two hundred eleven acres of natural habitat at the site will be placed under conservation easement and preserved. This is 42% of the site. Additional areas to remain in a predominantly natural state but that will not be placed under a conservation easement total ±73 acres or an additional 14%. These areas are uplands located in golf course rough areas and areas between adjacent golf course fairways. Thus, there will be a total of ±285 acres (±56%) of the site that will remain in a predominantly natural state and continue to function to the benefit of wildlife. Wetland preservation areas comprise 109 acres of the 211 acres to be placed under conservation easement. The design of the project has resulted in 86% of Corps wetlands and 87% of SFWMD wetlands being preserved. The majority of these wetlands will be enhanced through the removal of exotic vegetation, thus increasing their functional value.



WETLAND NO.	POST DEV'T FLUCCS CODE*	ACREAGE
1	612	0.60
2	416H	1.74
3	642	1.77
4	612	0.39
5a	513	0.13
6	612	6.45
7	416H	4.49
8a	642	0.03
8b	642	0.02
9	642	0.15
10	416H	0.36
11	416H	1.39
12	416H	0.73
13	617	10.09
14a	617	8.49
15a	630	12.05
18a	630	5.56
27	621	44.49
28	600	6.27
29	621	0.98
30	616	0.49
31	621/641	1.47
TOTAL WETLANDS PRESERVED (ENTIRE SITE)		108.14
TOTAL UPLANDS PRESERVED (ENTIRE SITE)		103.29
TOTAL PRESERVE		211.43

* SEE SHEET 1 FOR FLUCCS LEGEND

WilsonMiller
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FIGURE 2. POST- DEVELOPMENT CONDITIONS

Figure 2-4. Conservation Areas on the Hyatt Golf Resort Project Site
The Conservation Areas are shaded. (From WilsonMiller 2000).

SEC 7/8 TWP 47S RGE 25E	
Designed by:	S.K.S./1250
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File #:	C-0250-39
Sheet	

Upland preservation areas comprise 103 acres of the 211 acres to be placed under conservation easement, for a 27% retention of the existing upland habitat of the site. The majority of this acreage (±91 acres) is within the Eco-Park, but as noted above, there is an additional 73 acres to remain in a predominantly natural state but not be placed under conservation easement. As with wetland preserves, the upland preserve areas, including non-conservation easement areas, will be enhanced through removal of exotic vegetation.

Preserved wetlands have been afforded an upland buffer with a minimum width of 25 feet to minimize the potential for effects from adjacent development. In many areas, the upland buffer is considerably larger. For example, the maximum amount of protection has been afforded to Halfway Creek, by the proposed establishment of an upland buffer along both sides of the creek that ranges from 25 to 1,300 feet and averages approximately 500 feet in width.

2.1.7 Climate

The following table (**Table 2-3**) summarize site conditions related to growth of turfgrass species. Cool-season grasses such as perennial ryegrass, creeping bentgrass, and fine fescues have optimum growth in the temperature range of 60 to 75°F while warm-season grasses such as bermudagrass have optimum growth in the temperature range of 80 to 95°F. Irrigation requirements in relation to climatic data is discussed in Section 4.0 under Water Conservation Management.

Table 2-3. Maximum and Minimum Average Temperatures (°F) in , Naples FL averaged over a 48 year period from 1948 to 1995.

Month	Average Daily Maximum	Average Daily Minimum
Jan	76.2	54.1
Feb	77.2	55.0
Mar	80.4	58.5
Apr	84.1	62.2
May	87.5	67.1
Jun	89.7	71.6
Jul	91.0	72.8
Aug	91.5	73.5
Sep	90.4	72.9
Oct	86.7	68.0
Nov	82.0	61.3
Dec	77.6	55.7
Yearly Average	84.6	64.4

2.2 ENVIRONMENTAL CONSIDERATIONS

After identifying site conditions, the next steps in the environmental planning process were to determine the golf course's position in the landscape and determine areas that require protection, and management practices and strategies that would be appropriate to protect sensitive areas. Management practices and strategies that are addressed in this section include: 1) identification of Management Zones, 2) Best Management Practices to protect resources, and 3) management of the golf course and natural resource interactions. Other significant management practices including Integrated Pest Management (with selection of pesticides and fertilizer and restrictions on the use of certain materials in sensitive areas), Water Conservation Management, Water Quality Management, and Maintenance Facility Management are addressed in Sections 3.0, 4.0, 5.0, and 6.0, respectively.

2.2.1 Golf Course and Resource Interaction

A summary of the drainage basins, golf hole, and golf hole location relative to resources is given in **Table 2-4**. The golf course routing plan relative to the drainage basins is shown in **Figure 2-5**.

Table 2-4. Drainage Basins, Golf Hole Location, and Golf Hole Location Relative to Natural Resources at the Hyatt Golf Resort Project.

Drainage Area	Drainage Area (acres)	Golf Hole	Golf Hole Relative to Natural Resources
DA1	58.9	2W - 2/3 fwy, green	central wetlands, mangrove swamp
		3W	mangrove swamp
		4W	uplands
		5W	Lake 2, mangrove swamp
		6W	Lake 2
		7W	Lake 2
DA2	74.7	1W	Lake 3, central wetlands, secondary eagle management zone
		2W - 1/3 fwy, tee	central wetlands

Table 2-4. Drainage Basins, Golf Hole Location, and Golf Hole Location Relative to Natural Resources at the Hyatt Golf Resort Project.

Drainage Area	Drainage Area (acres)	Golf Hole	Golf Hole Relative to Natural Resources
DA2	74.7	8W	uplands
		9W	central wetlands
DA3	84.1	1C	Lake 7, Lake 8, central wetlands, secondary eagle management zone
		2C	Lake 8, central wetlands, upland preserve, secondary eagle management zone
		3C	Lake 8, upland preserve, secondary eagle management zone
		4C	lake 7, upland preserve, secondary eagle management zone
		5C - g, fwy, ½ t	upland preserve, secondary eagle management zone
		6C	central wetlands, secondary eagle management zone
		7C	Lake 5, Lake 6, central wetlands
		8C	Lake 5, Lake 6
		9C	Lake 6, secondary eagle management zone
		1E - t, 1/4 fwy	secondary eagle management zone
		9E - 2/3 fwy, g	secondary eagle management zone
		maintenance facility	Lake 5, central wetlands
DA4	17.3	1E - 3/4 fwy, g	Lake 9, upland preserve, secondary eagle management zone
		2E	Lake 9, upland preserve, secondary eagle management zone
		9E - 1/3 fwy, t	lake 9, upland preserve, secondary eagle management zone
		5C - ½ t	upland preserve

Table 2-4. Drainage Basins, Golf Hole Location, and Golf Hole Location Relative to Natural Resources at the Hyatt Golf Resort Project.

Drainage Area	Drainage Area (acres)	Golf Hole	Golf Hole Relative to Natural Resources
DA5	64.4	3E	upland preserve, secondary eagle management zone
		4E	upland preserve, secondary eagle management zone
		5E	Halfway Creek, upland preserve, secondary eagle management zone
		6E	Lake 10, Halfway Creek, upland preserve, secondary eagle management zone
		7E	Lake 10, upland preserve, secondary eagle management zone
		8E	wetland, upland preserve, secondary eagle management zone

2.2.2 Environmental Protection Areas

Environmental protection areas are those areas on the Hyatt golf property that are susceptible to change which can alter ecosystem or habitat structure or function, and include areas that exhibit any of the following characteristics: 1) it supports a rare, threatened, or endangered species; 2) it is valuable because of its maturity, density, or diversity of plant or animal species; 3) it is a highly productive habitat; 4) it has a high commercial, economic, or recreational value. Environmental protection is necessary for these areas, as well as those protected by regulations.

1. **Groundwater Quality.** Groundwater quality and the potential for introduction of unwanted chemicals to the groundwater.

2. **Surface Water Quality.** Lakes/Ponds located throughout the property will be protected.

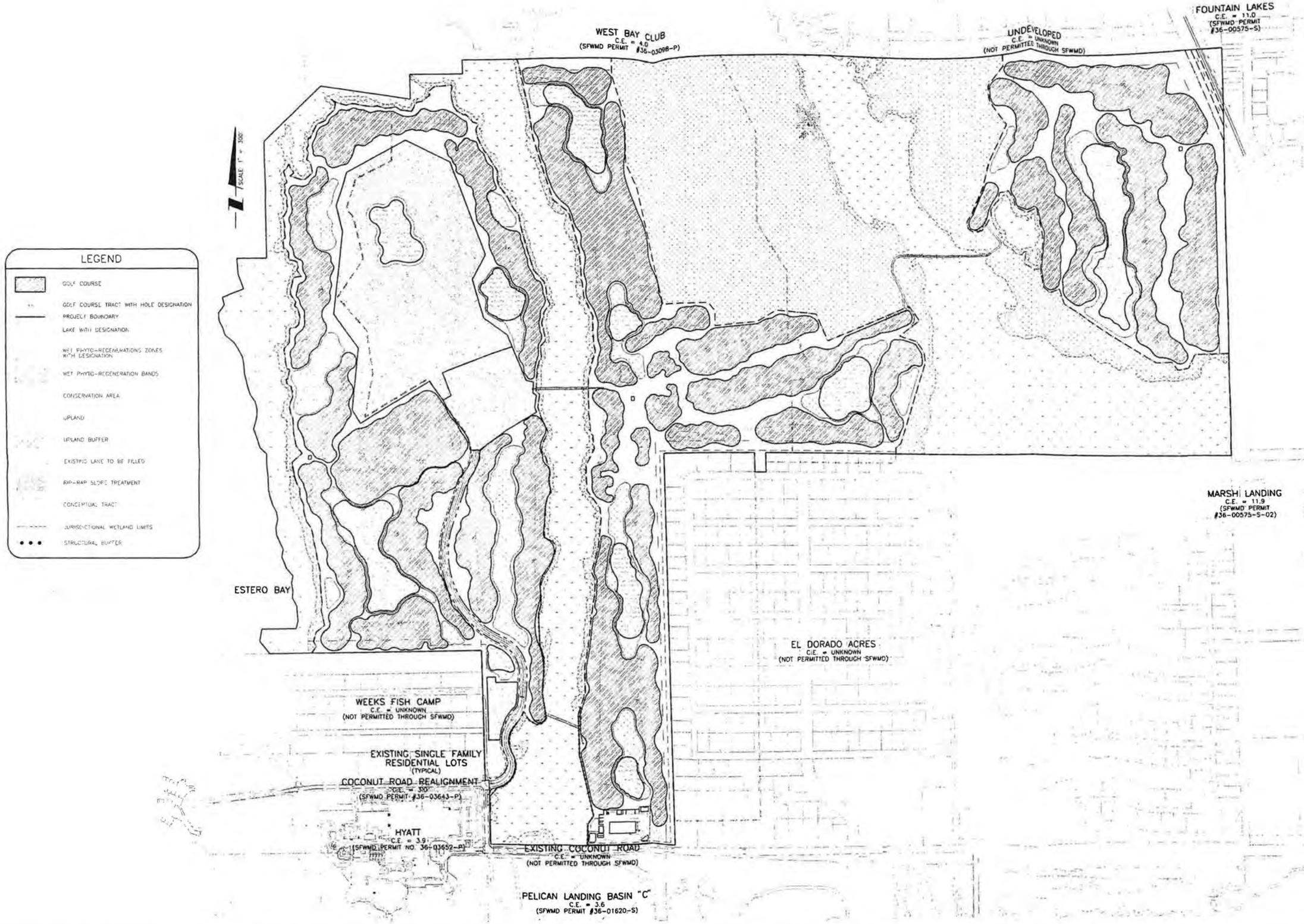


Figure 2-5. The Conservation Areas, Golf Course Routing, and Lakes/Ponds at the Hyatt Golf Resort, Lee County, FL.

	J.C.E./1025	01/00
	J.M.E./1322	01/00

WilsonMiller

CLIENT: WCI COMMUNITIES, INC. & HYATT DEVELOPMENT CORP.

JAN. 2000 1" = 300'

TITLE: GOLF COURSE DELINEATION EXHIBIT

3. **Wetland Conservation Areas.** Wetlands which are located throughout the property will be protected.

4. **Upland Conservation Areas.** Uplands located throughout the property will be protected.

One of the objectives of this plan is to provide the necessary protection for these areas by correct design and operation of the golf course and maintenance facility. This is accomplished through Best Management Practices, careful selection of pesticides and fertilizers (Section 3.0, IPM), restrictions on the use of certain materials in sensitive areas (i.e., no spray zones, IPM section), and proper construction to minimize point and non-point source pollutant input to sensitive areas within the management zones at the course.

Use of native and naturalized plants is an important component of the overall protection and enhancement plan. A list of native and naturalized vegetation is given in **Appendix IV.**

2.2.3 Management Zones at the Hyatt Golf Resort Golf Club

The process of managing the Hyatt Golf Resort in an environmentally sensitive and responsible manner involves establishing management zones throughout the golf course. Management zones are defined as areas on the course that have distinct management practices that coincide with their position in the watershed, and are based on the analysis of resources and habitat protection requirements. Management zones work hand-in-hand with establishment of Best Management Practices and Integrated Pest Management. Management zones are identified below, and are shown generally in **Figure 2-6**.

2.2.3.1. ***Management Zone A - No Spray Zones.*** No spray zones are established around each lake 25 feet landward from normal water elevation. No pesticides will be used in these areas, and organic fertilizers only will be used. Note that the 25 foot zone is coincidental with the maintenance and access easement around each lake.

2.2.3.2. ***Management Zone B - Limited Spray Zones.*** Limited spray zones are established around each water body (ponds, wetlands), beginning 25 feet landward from normal water elevation and extending 50 feet landward from normal water elevation.

Figure 2-6. The Conservation Areas, Golf Course Routing, and General Locations for Management Zones for the Hyatt Golf Resort, Lee County, FL.

The red lines indicate the general location of management zones. Management zones include a No-Spray Zone, Limited Spray Zones, and bridge crossings.

A limited set of pesticides (identified in **Table 3-8**) will be used in this zone, and organic fertilizers or 'spoon feeding' will be used. Additionally, when wind speed is greater than 10 mph, a shroud will be used on spray equipment to avoid drift.

2.2.3.3. ***Management Zone C - Structural Buffers.*** The Water Conservation Areas and Upland Conservation Areas are protected from surface flow with structural buffers along the boundaries of the Conservation Areas (these are shown on the plans from WilsonMiller and are discussed further in Section 2.2.4). Once these buffers are in place, decisions will be made as to management of the golf course side of the buffer (i.e., are limitations in pesticide or fertilizer use necessary to protect habitat and water quality). See **Appendix V** for examples of these buffers.

2.2.3.4. ***Management Zone D - Bridge Crossings***. Bridge crossings are short-term, specialized management zones for the construction of bridges associated with the cart path. Erosion barriers described in the Erosion Control Plan (silt fence with hay bales, and sedimentation ponds where needed) will be in place for bridge crossings. Bridge construction will be conducted so that construction equipment does not enter a stream/wetland; rather, only the location of the bridge footings will disturb the wetlands. The bridges are built with the bridge itself as the work platform.

2.2.4 Best Management Practices to Protect Environmentally Sensitive Areas

Best Management Practices are those drainage facilities or cultural approaches to golf course management which act to prevent the movement of sediments, nutrients or pesticides into environmentally sensitive areas. Through the use of Best Management Practices (BMPs) and management zones, the turfgrass management program at the Hyatt Golf Resort can coexist in harmony within it's natural setting, and the quality of water moving from the Club can be protected by appropriate watershed controls and management practices. The goals of BMPs are as follows: 1) to reduce the off-site transport of sediment, nutrients and pesticides; 2) to control the rate, method and type of chemicals being applied; and 3) to reduce the total chemical load by use of Integrated Pest Management.

Because water is the primary movement mechanism for contaminants, protection of water resources also provides protection for sensitive areas and species. Preventative measures preclude potential contaminants from creating environmental problems in waters and habitat.

BMPs include preventative and structural controls which constitute the building blocks of the watershed protection program.

Preventative measures include nonstructural practices that minimize or prevent the generation of runoff and the contamination of runoff by pollutants; for example, using organic fertilizers. Structural controls are capital improvements designed to remove, filter, detain, or reroute potential contaminants carried in surface water. The most effective way to protect surface water and protect groundwater is by using a comprehensive systems approach that includes integration of preventative practices and structural controls (Eaker, 1994).

This comprehensive systems approach, used throughout The Hyatt Golf Resort stresses optimum site planning and the use of natural drainage systems, and is considered a "Best Management Practices (BMPs) Train" in which the individual BMPs are considered the cars (Livingston and McCarron (1991). The more BMPs incorporated into the system the better the performance of the treatment train (**Figure 2-7**). The first 'cars' include preventative BMPs to minimize generation of runoff (e.g., irrigation management, pesticide selection) and the final cars generally include structural controls (Eaker 1994).

Preventative measures are considered the 'first cars in the BMP train' and are the 'first line of defense' in an integrated storm water management system. Preventative measures used at The Hyatt Golf Resort include the following:

2.2.4.1. ***Source Prevention BMPs for The Hyatt Golf Resort*.** Source prevention practice BMPs to be employed at The Hyatt Golf Resort include use of resistant crop varieties, cultural control of pests, proper irrigation water management, good nutrient management techniques (including: soil testing and plant analysis to determine fertilizer requirements; proper timing and placement of fertilizers; and the use of slow release fertilizers), biological control of pests, risk analysis for pesticide selection, rotation of pesticides, correct application of pesticides, and correct pesticide container disposal. These are described below:

> *Resistant Turf Varieties* - use of plant varieties that are resistant to insects, nematodes, diseases, etc., in order to reduce pesticide use. Care has been taken in the selection of the turfgrass species and cultivars best adapted for the edaphic and climatic conditions of The Hyatt Golf Resort site.

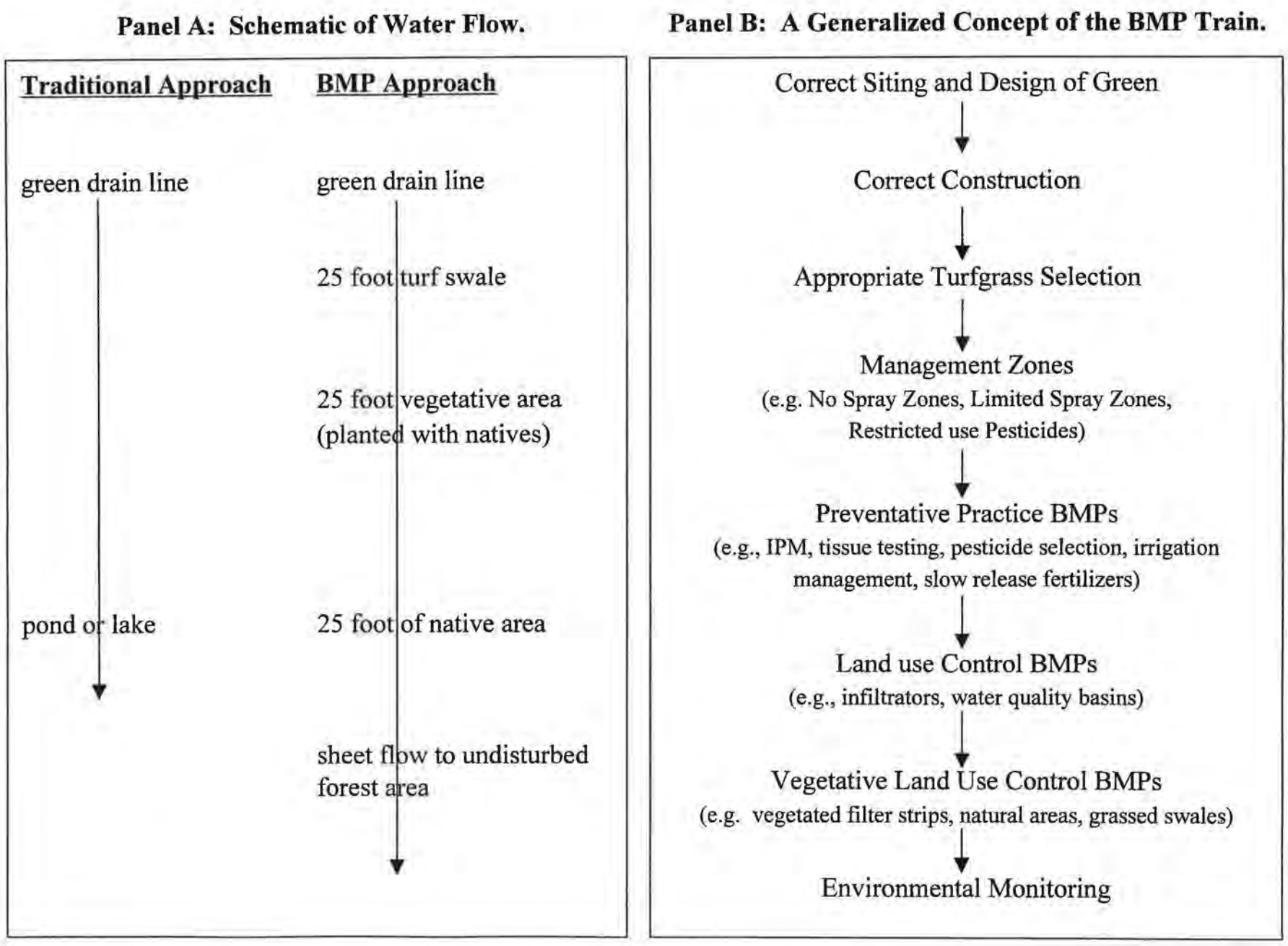


Figure 2-7. A Generalized Concept of the Best Management Practices "Train" Approach to Managing Resources at The Hyatt Golf Resort.

Cultural Control of Pests - using cultural practices to partially substitute for pesticides. Details of the proper cultural practices including mowing, fertilization, irrigation, and cultivation practices are included in this plan to take advantage of every aspect of cultural control of pest problems.

Proper Irrigation Water Management - determining and controlling the rate, amount, and timing of irrigation water application in order to minimize soil erosion, runoff, and fertilizer and pesticide movement.

The irrigation system will be designed to have an average application rate below the infiltration capacity of the soil so that no surface ponding will occur and maximum efficiency of water percolation will occur. All irrigation will be based on a water balance method which takes into account plant water use, environmental conditions, soil drainage and natural rainfall (See Section 4.0, 'Water Conservation Management').

Soil Testing and Plant Analysis - testing is used to determine the amount of fertilizer that is needed by the plant so that over fertilization and subsequent losses of nutrients is avoided. All initial fertilizer recommendations will be based on soil testing and tissue testing. All subsequent fertilization programs will be finalized based on a minimum sampling program consisting of annual soil and quarterly tissue analyses.

Timing and Placement of Fertilizers - timing and placement of fertilizers for maximum utilization by plants and minimum leaching or movement by surface runoff. Every precaution in fertilization timing, including scheduling to avoid potential rainfall which could produce runoff and/or leaching, verification of application rate through proper calibration of equipment, and choice of materials will be employed by the golf course superintendent.

Slow Release Fertilizer - applying slow release fertilizers to minimize nitrogen losses from soils prone to leaching. All fertilization programs include slow release fertilizers.

Biological Control of Pests - use of natural enemies either native or introduced as part of an Integrated Pest Management (IPM) program which can reduce the use of pesticides.

Biological controls which provide effective pest management for turfgrasses are limited; however, they will be implemented as necessary and practical.

Pesticide Selection - using a risk-based process to select pesticides which are less toxic, persistent, soluble and volatile whenever feasible. All pesticides selected for use on this site have been analyzed for their potential to be sources of nonpoint pollution. Only materials which have a reasonable margin of safety have been included in the recommended list.

Rotation of Pesticides - rotating pesticides to avoid developing pest populations which are resistant to specific chemicals or classes of chemicals.

Correct Application of Pesticides - spraying when conditions for drift are minimal. Avoiding application when heavy rain is forecast. Irrigating with appropriate volumes of water when specified. Using shrouded sprayers around sensitive areas. All of these conditions as well as proper calibration of equipment will be scrutinized at every pesticide application by the golf course superintendent.

Correct Pesticide Container Disposal - following accepted methods for pesticide container disposal. This will be a routine practice under the supervision of the golf course superintendent.

2.2.4.2. *Structural Control BMPs for The Hyatt Golf Resort*. Structural BMPs that will be used at the Hyatt Golf Resort site include phyto-remediation zones, structural buffers, vegetated filter strips, and swales/grassed waterways.

Structural Buffers - Structural buffers have been designed by Wilson Miller to physically route water away from conservation areas. Conservation areas abutting the golf course are protected by these buffers. Cross-sections of the buffers are given in **Appendix V.** The buffers vary according to the specific location on the site, but their common feature is elevation change that will force surface water away from the Conservation Areas. The backslopes of the structural buffers will be planted with native grasses.

Phyto-Remediation Zones - Phyto-Remediation Zones (PRZs) provide filtration through plant material within a basin prior to discharge. They are used to reduce runoff quantity and improve water quality. Cross-sections of the PRZs are given in **Appendix V**, and they provide filtration equivalent to a wetland system. Additionally, the wetland plant system provides wildlife habitat.

2.2.4.2.1. Vegetative filtration. Common examples of vegetative filters used throughout the Hyatt Golf Resort are vegetated filter strips and swales. Vegetative filters act as natural biofilters to reduce storm water flow and pollutant load, and turf areas are effective filters. Turf uses the natural processes of infiltration, filtration and biological uptake to reduce flows and pollutant loadings.

Grassed Swales. Vegetated swales will be used to permit filtering and infiltration of storm water. The grasses for these swales are to be of the water tolerant and erosion resistant type. These types of swales are to be used in gentle slopes where slower velocities will enhance the filtering and infiltration processes.

Swales are effective in routing water to maximize contact time of water and vegetation. An example is the routing of water from the under-drains of greens. Filtration can be greatly increased by carefully choosing the route of water from the under-drain. If space is limited, drainage water could be directed to flow along a path that maximizes the distance of contact with vegetation, rather than be directly routed to the lowest point. The effectiveness of swales in reducing flows and pollutants is similar to filter strips.

Vegetated Filter Strips. Filter strips are manmade or naturally occurring flat areas which are established at the perimeter of the disturbed or impervious areas, or adjacent to conservation areas to intercept runoff as sheet flow and remove particulates and contaminants. Either grassed or wooded (forested) areas can function as filter strips. The Hyatt Golf Resort project includes dense growing turf, or native vegetation which will be incorporated into the golf course perimeter areas. In order to be an effective BMP, filter strips will have a minimum width of 25 feet, with slopes not to exceed 5%. All wetland and conservation areas will have a minimum of 25 ft of a vegetative filter strip.

Vegetated filter strips remove sediment and attached chemicals, organic material, trace metals, and nutrients (nitrogen and phosphorus). Sediment removal rates are generally greater than 70% and nutrient removal is typically greater than 50% (USEPA, 1993). The length of the vegetated filter strip is an important variable influencing effectiveness because contact time between runoff and vegetation in the filter strip increases with increasing filter strip length. Some sources suggest a minimum of 50 ft of vegetative buffer for maximum effectiveness (Dillaha et al., 1989), and other studies have shown that 15 to 25 feet of turf is an effective filter (e.g. Doyle et al., 1977; Baird et al., 1996).

Grassed Waterway or Outlet - a natural or constructed waterway or outlet maintained with vegetative cover in order to prevent soil erosion and filter nutrients. Dry ponds and swales serve in this capacity. Filtration is through either turf or native vegetation.

Critical Area Planting - planting vegetation to stabilize the soil and reduce erosion and runoff. Turfgrasses are the premium choice of plants for this purpose.

Turfgrass Used as a Vegetative Filter. One of the most effective BMPs for protection of surface water is use of turf as a vegetative filter in swales and filter strips. Turfgrassed areas are extremely effective in reducing soil losses compared to other cropping systems. In a comparison of soil loss from conventional agriculture with soil loss from turf, measured soil loss from tobacco production (4210 lbs/acre) was 842 times higher than from turf areas (5 lbs/acre) even with a slope of 16% on a silt loam soil (Gross et al., 1987; Gross et al., 1990). Where polluted runoff from agricultural areas has occurred, establishment of turf buffer strips of only 15 feet have been shown to improve water quality (Doyle et al., 1977). Recent studies at Oklahoma State University have shown that turfgrass buffers of 16 ft effectively reduce concentrations of chemicals in runoff waters (Baird et al., 1996). Wauchope (1978) noted that in cases where water quality has declined due to agricultural practices leading to loss of nutrients and erosion, grass buffer strips placed between treated fields and surface waters have significantly reduced the problem. This is related to the architecture of the turf canopy and the fibrous nature of the turf root system. Turf density, leaf texture and canopy height are physical factors which restrain soil erosion and sediment loss by dissipating impact energy from rain and irrigation water droplets providing a resistance to surface movement of water over turf. Turfgrasses have an extensive fibrous root system with 80% of the root mass found in the

upper 2 inches of the soil profile (Welterlen et al., 1989). Therefore it is a combination of the turf canopy and root mass which have a strong soil stabilizing effect.

2.2.4.3. ***Effectiveness of BMPs.*** The effectiveness of pollutant removal is a function of three interrelated factors: 1) the removal mechanisms used by the BMP, which include physical, chemical, and biological processes; 2) the fraction of runoff treated by the BMP; and 3) the nature of the pollutant being removed. Thus, an effective BMP train is one that treats 100% of runoff by physical, chemical, and biological processes. **Table 2-5** and **Figure 2-8** show relative removal efficiencies of infiltration basins, vegetated filter strips, grass swales, wet ponds, and storm water wetlands for four variables (total suspended solids, total phosphorus, total nitrogen, and chemical oxygen demand). By including as many removal mechanisms as possible the probability of success for removal of a particular pollutant is increased.

BMPs that utilize settling and filtering processes are relatively effective at removing sediment and pollutants that are bound to sediment particles (**Figure 2-8**). Turf buffers are very effective filters that allow drainage of water from the course and, at the same time, effective filtering to improve water quality. Turf density, leaf texture and canopy height are physical factors which restrain soil erosion and sediment loss by dissipating impact energy from rain and irrigation water droplets providing a resistance to surface movement of water over turf. Ponds and infiltration BMPs can achieve 60 to 100% removal efficiencies for sediment. Infiltration BMPs are capable of similar removal efficiencies for sediment, but are subject to clogging if sediment inputs are excessive. Wet ponds and extended-detention ponds with shallow marshes have a moderate to high capability for removing both soluble and particulate pollutants because they utilize settling and biological uptake.

2.2.4.4. ***Maintenance of Best Management Practices Facilities.*** Periodic long-term inspection and maintenance of the proposed BMPs for The Hyatt Golf Resort will be essential to ensure that they will function as designed. The superintendent and maintenance crew are responsible for the inspection and maintenance of the BMPs for the golf course.

Table 2-5. Storm Water Pollutant Removal Efficiencies, Urban BMP Designs†

BMP/Design	Total Suspended Sediment (TSS)	Total Phosphorous (TP)	Total Nitrogen (TN)	Zinc (Zn)	Lead (Pb)	Biological Oxygen Demand (BOD)
Extended Detention Pond						
Design 2	75%	50%	35%	55%	55%	40%
Design 3	80%	70%	55%	75%	75%	50%
Wet Pond						
Design 4	55%	35%	25%	25%	45%	25%
Design 5	75%	55%	40%	40%	70%	40%
Water Quality Basin						
Design 7	70%	50%	50%	50%	50%	70%
Filter Strip						
Design 11	40%	20%	20%	40%	40%	20%
Design 12	90%	50%	50%	90%	90%	70%
Design 12A	80%	40%	40%	80%	80%	60%
Grassed Swale						
Design 13	20%	20%	20%	10%	10%	20%
Design 14	30%	30%	30%	20%	20%	30%

Extended Detention Basins

Design 2: "First flush" runoff volume produced by 1.0 inch, detained for 24 hours.

Design 3: Runoff volume produced by 1.0 inch storm detained for 24 hours or more with shallow marsh added in bottom stages.

Wet Pond

Design 4: Permanent pool equal to 0.5 inches of runoff per watershed ac.

Design 5: Permanent pool equal to 2.5 times the volume of runoff from the mean storm (0.5 inches).

Water Quality Basin

Design 7: Infiltration basin which filtrates "first flush" of 0.5 inch runoff/impervious acre.

Filter Strips

Design 11: 25 to 50 foot turf strip.

Design 12: 100 foot wooded strip.

Design 12A: 25 to 50 foot wooded strip.

Grassed Swale

Design 13: High slopes with check dams.

Design 14: Low gradient (less than 5%) with check dam.

† Sources: Schueler 1987 and NYSDEC, 1993.

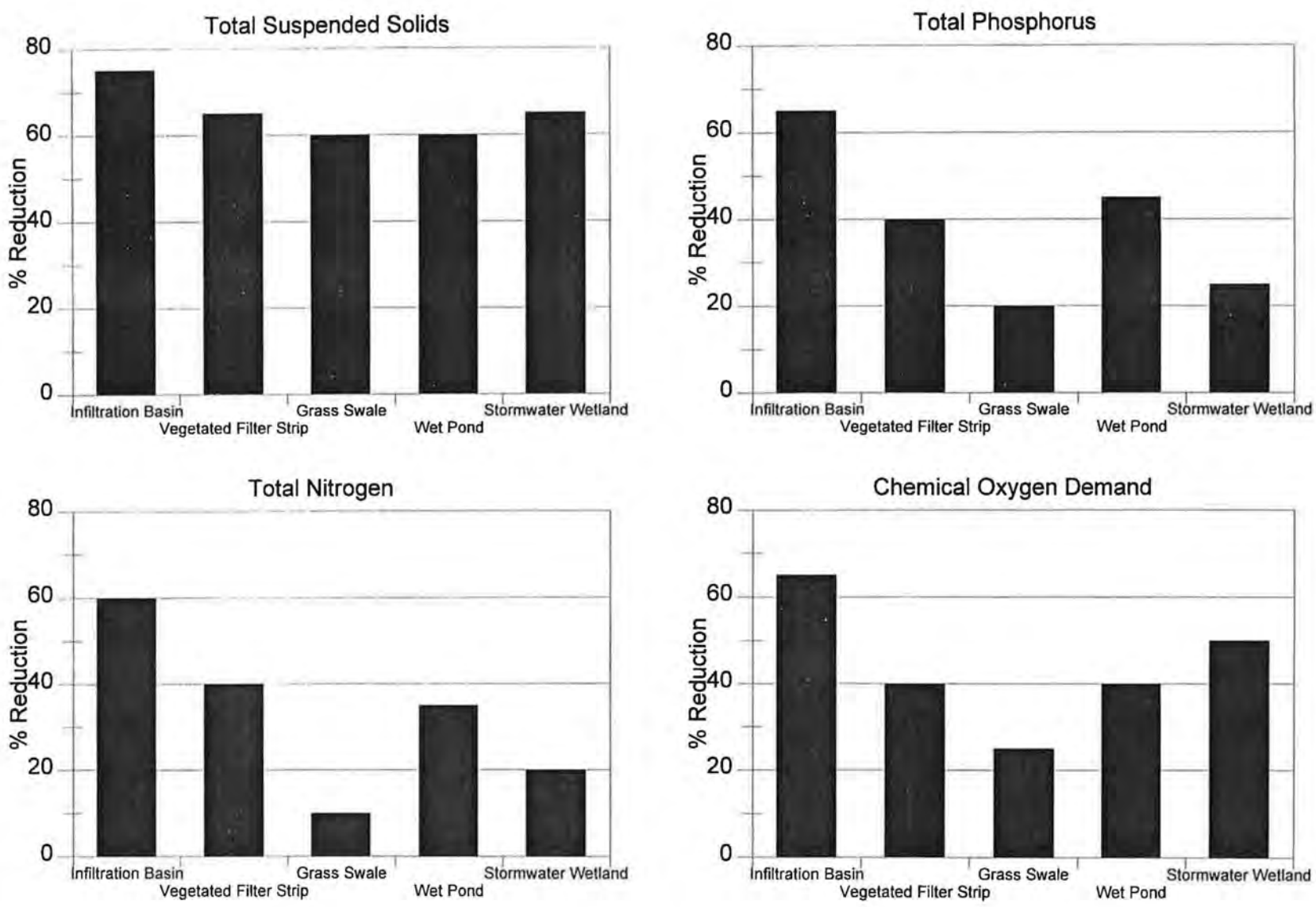


Figure 2-8. Relative Effectiveness of Best Management Practices to Protect Surface Waters.
(U.S. Environmental Protection Agency, *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, 1993)

Phyto-Remediation Zones

Inspections. Phyto-Remediation Zones should be inspected periodically for the first few months after construction and on an annual basis thereafter. They should be inspected following major storm events.

Inspection priorities include checking the embankment for subsidence, erosion, cracking, tree growth, and the presence of burrowing animals such as muskrats, all of which can cause an impoundment to fail. Also, inspect the condition of the emergency spillway and drain; the accumulation of sediment; clogging of the barrel and outlet; the adequacy of erosion control measures in the contributory drainage; and the adequacy of channel erosion control measures at the outlet.

Mowing. Establishment of trees and (woody) shrubs will be prevented on embankments, emergency spillways, and buffer areas through periodic mowing (at least twice a year). More frequent mowing may be desirable if the retention pond is in a residential area or if it is to be used for recreational purposes.

Debris and Litter Removal. Debris and litter will be removed periodically from the pond and surrounding buffer areas. Debris around the riser and outlet will be removed as necessary to prevent clogging.

Nuisance Control. In some instances, insects, weeds, odors and algae may become a problem or nuisance in wet ponds. Problems such as these are rare except under extremely dry weather conditions. Even under dry weather, nuisance conditions such as these are best controlled with biological controls rather than application of chemicals. Biological control usually involves the introduction of minnows and other fish to prey on insect larvae in the wet pond stage.

Structural Repairs and Replacement. Various inlet/outlet devices and standpipe or riser structures will deteriorate with time and may have to be replaced. Indications are that concrete barrels and risers will last from 50 to 75 years or longer, while corrugated steel pipes may have a useful life of from 15 to 25 years (NYSDEC, 1993).

Erosion Control. Eroding soils in drainage areas that are contributory to Photo-Remediation Zones will be stabilized immediately with vegetative practices or other erosion control practices. Soil may slump and erode from buffer areas surrounding a wet pond, side-slopes, the emergency spillway, and from the wet pond impoundment or embankment. When this occurs, the problems area may have to be regraded and vegetation may have to be re-established to stabilize the soil. If dislodged by stormwater discharges, rip-rap protecting the channel downstream, from an outlet structure may have to be repositioned and stabilized.

Sediment Removal. The frequency of sediment removal from a Photo-Remediation Zone will vary on the basis of watershed stability. Accumulated sediment in a wet pond will be removed when 10% of the pond capacity has been lost due to sedimentation. This normally will require a clean-out cycle of ten to twenty years. Installation of and periodic removal of sediment from a forebay are cost-effective ways of extending the clean-out cycle.

Structural Buffers

Inspections. Structural buffers will be inspected on an annual basis to ensure that the structure operates in the manner originally intended. Maintenance will primarily involve periodic mowing, occasional spot reseeding, and weed control. When possible, inspections will be conducted during wet weather to determine if the structure is meeting the goal of re-routing water. Other problems which will be checked include: subsidence, erosion, cracking or tree growth on the bermed area; and modifications to the buffer or its contributing watershed that may influence pond performance. Inspections should be carried out with as-built plans in hand (Schueler, 1987). Repairs will be made when the need for them is observed.

Mowing. The back-slope and side-slopes should be mowed at least twice a year to discourage woody growth and control weeds. The use of native grasses which are water-tolerant, hardy and slow-growing are recommended.

Debris and Litter Removal. Debris and litter will be removed during regular mowing operations, and when observed.

Erosion Control. The back-slope and side-slopes may periodically suffer from slumping and erosion. Inspections should ensure that sheet flow is occurring.

Grassed Swales

Swale maintenance is largely aimed at keeping the grass cover dense and vigorous (see **Section 3.2.2**). This primarily involves periodic mowing, occasional spot reseeding, and weed control. Watering may also be necessary in times of drought, particularly in the first few months after establishment. In addition, excessive sediment buildup behind check dams will be removed as necessary.

Vegetative Filter Strips

Maintenance required for a filter strip depends on whether or not natural vegetative succession is allowed to proceed. Maintenance tasks and costs are both sharply reduced for these "natural" filter strips. However, corrective maintenance is still needed around the edge of the strip to prevent concentrated flows from forming.

Shorter filter strips must be managed as a lawn or short grass meadow. These strips will be mowed at least 2-3 times a year to suppress weeds and interrupt natural succession (see **Section 3.2.2**). Periodic spot repairs, watering and fertilization may be required to maintain a dense, vigorous growth of vegetation. Accumulated sediments deposited near the top of the strip will need to be manually removed over time to keep the original grade.

All filter strips will be inspected on an annual basis. Strips will be examined for damage by foot or vehicular traffic, encroachment, gully erosion, density of vegetation, and evidence of concentrated flows through or around the strip. Extra strip maintenance must be devoted in the first few months and years to make sure the strip becomes adequately established. This may involve extra watering, fertilization and reseeding. (Schueler, 1987).

3.0. INTEGRATED PEST MANAGEMENT

Integrated Pest Management (IPM) is a management program that uses information about turfgrass pest problems and environmental conditions which may precipitate these problems, and integrates these with turfgrass cultural practices and pest control measures to prevent or control unacceptable levels of pest damage (Ferrentino, 1990). It is a preventative approach incorporating a number of objectives including the following: 1) development of a healthy turf that can withstand pest pressure; 2) judicious and efficient use of chemicals; 3) enhancement of populations of natural, beneficial organisms; and 4) effective timing of handling pest problems at the most vulnerable stage, often resulting in reduced pesticide usage. It is an ecologically based system that uses biological and chemical approaches to control.

Like BMPs, IPM strategies have been incorporated into every aspect of this plan for the Hyatt Golf Resort, and have taken into consideration the entire scheme of golf course operations as they relate to environmental impact. IPM programs rely on six basic approaches for plant and environmental protection. These include the following:

1. *Regulatory* - using certified seed and sod to prevent unwanted weed contamination and selecting the best adapted turfgrass species;
2. *Genetic* - selecting improved grasses which perform well in specific areas and show a resistance to pest problems;
3. *Cultural* - following recommendations made for proper primary and secondary cultural practices which will maintain the turf in the most healthy condition and influence its susceptibility and recovery from pest problems. Practices such as aerification, vertical mowing, topdressing, maintenance of proper soil nutrient levels, sound irrigation management and proper mowing techniques will produce a high quality turf;
4. *Physical* - cleaning equipment to prevent spreading of diseases and weeds from infected areas; 5) *Biological* - for a limited number of pest problems biological control can be used whereby natural enemies are introduced to effectively compete with the pest; and

6. *Chemical* - pesticides are a necessary and beneficial approach to turf pest problems, but use can be restricted in many cases to curative rather then preventive applications, thus reducing environmental exposure. Pesticide selection is based on a risk assessment approach that strives to use only pesticides that are based on effectiveness, not toxic to non-target species, that act quickly and degrade quickly, are not soluble and not persistent. Few pesticide applications will be made on a regularly scheduled basis. Exceptions may include preemergence herbicides and fungicides used to control certain diseases. Additionally, materials must be applied strictly in accordance with label instructions, at labeled rates, under appropriate environmental conditions (i.e., no spraying on windy days or when rain is forecast), with a low-volume sprayer to reduce the possibility of drift, and materials will be rotated as to use. This will deter the development of resistant strains of pests which may require more frequent and/or higher rates of pesticide applications.

IPM includes six basic components as follows:

1. Monitoring of potential pest populations and their environment;
2. Determining pest injury levels and establishing treatment thresholds;
3. Decision making, developing and integrating all biological, cultural, and chemical control strategies;
4. Educating personnel on all biological and chemical control strategies;
5. Timing and spot treatment utilizing either the chemical, biological or cultural methods; and
6. Evaluating the results of treatment.

Figure 3-1 is a flow chart for decision making based on IPM strategies.

One of the most critical components to IPM programs is monitoring. A well-trained and experienced golf course superintendent will scout or designate someone to scout to detect symptoms of a pest problem on a daily basis. This approach coupled with compiling a site specific history, and consulting with other superintendents in the area and with specialists in turfgrass management make it a workable program.

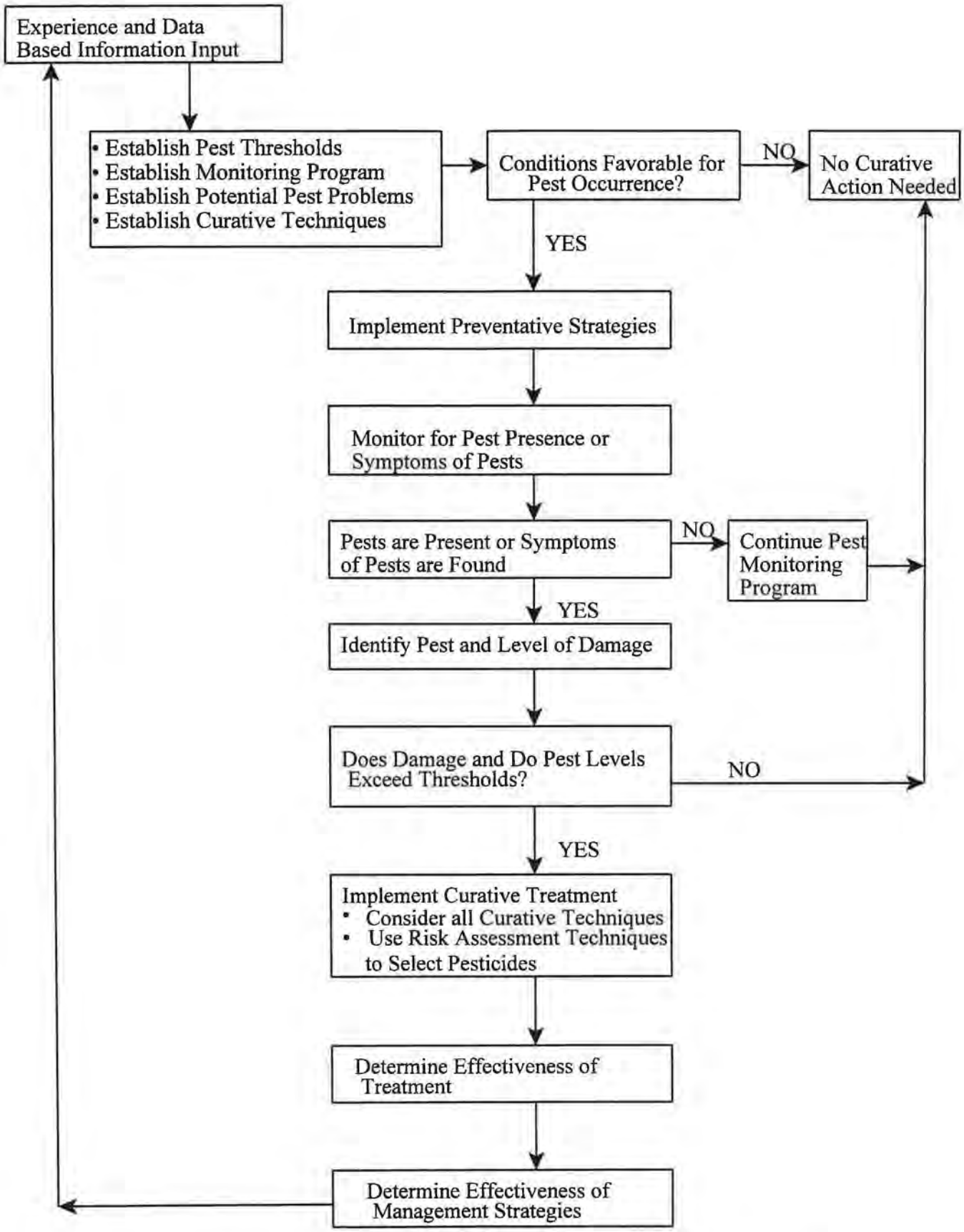


Figure 3-1. Integrated Pest Management Decision Flow Chart for The Hyatt Golf Resort.

3.1 AGRONOMIC CONSIDERATIONS AND REQUIREMENTS

Agronomic and cultural practices are important components in maintaining environmental integrity and enhancing the current conditions at the Hyatt Golf Resort. The land use design and extensive use of Management Zones, Best Management Practices, and Integrated Pest Management, as discussed above, coupled with state-of-the-art agronomic and cultural practices ensure environmental sensitivity of the golf course conservation area. Particular attention has been given to areas adjacent to freshwater wetlands and watercourses to protect the habitat and water quality.

The following sections discuss agronomic and cultural practices that are critical to maintaining environmental sensitivity at the Hyatt Golf Resort .

3.1.1 Soil Mixes and Modifications

While soil modification on large acreage is impractical, some soil modification is necessary. Grading will result in a mixing of topsoil and subsoil and will require extensive soil testing for determination of nutrient levels prior to sprigging/sodding.

3.1.1.1. ***Putting Greens***. It is important that greens be constructed to withstand traffic and wear, and at the same time, protect environmental resources. Playing surfaces will be constructed with materials which provide good drainage and resist wear and compaction, and this will maximize the playability even immediately after rainfall or irrigation. It is also important that surface and subsurface drainage be directed into specific filtration areas so that water resources are protected. For these reasons, the greens will be constructed using an on-site sand amended with peat and internal drainage will be installed and directed into structural BMPs.

3.1.1.2. ***Tees.*** Tees are the most trafficked areas on golf course and especially on a training facility such as this one. Tees will be constructed in a manner similar to the putting greens. The higher height of cut on the tee surface provides a much deeper root system in the soil profile and imparts considerably better wear tolerance than is usually observed on putting greens. Typically tee areas are not as intensively managed as greens and the nutrient and pesticide requirements are lower. Surface runoff will be directed into appropriate filtration areas, which may include adjacent roughs, out of play areas, or other vegetative areas.

3.1.1.3. ***Fairways, Roughs, and Driving Range.*** Soil modification of fairways, roughs and the driving range is not practical since this encompasses a significant portion of the acreage involved with the facility. Soil samples will be analyzed from as many locations as necessary once final grading begins so that pre-planting fertilization recommendations can be made.

3.1.2 Turfgrass Selection

Over the years, extensive turfgrass breeding programs and research have resulted in grass varieties that are exceptionally well-suited for golf course turf. Species and cultivars selected for use at will be those that are efficient in water use and low in susceptibility to insects, disease and weed infestation.

In addition, the natural characteristics of the turfgrasses limit movement of pesticides and fertilizers into underlying soils, surface water, and ground water. Thatch produced by the turf acts as an organic filter to chemically bind pesticides that might otherwise enter the local surface and ground waters. Producing a healthy turf, which is needed for a golf course, has the added benefit of immobilization and microbial degradation of pesticides retained in the thatch layer. In addition, turfgrass root systems are quite extensive and fibrous, and are able to adsorb and absorb applied pesticides that might penetrate the canopy and thatch and reach the roots. Thus, a healthy turf results in effective nutrient and pesticide retention and control.

All areas will be planted to bermudagrass (*Cynodon dactylon* or a *Cynodon dactylon x C. transvaalensis* hybrid).

3.1.2.1. ***Greens.*** These will be planted to a hybrid bermudagrass (*Cynodon dactylon x C. transvaalensis*). The exact cultivar has yet to be determined, but a dwarf or ultra-dwarf variety will probably be selected from a group which includes Tifdwarf, TifEagle, Floradwarf, Champion and several others.

3.1.2.2. ***Tees, Fairways and Roughs.*** Will be planted to bermudagrass (*Cynodon dactylon x C. transvaalensis*). Given the summer temperatures and the desire to practice water conservation, this species will provide an exceptional quality playing surface with a minimal of pest problems. It can be irrigated at less than daily ET demand and maintain good quality in the summer months.

3.1.2.3. ***Non-Play Areas***. These will be planted to a mixture of native/naturalized species.

3.1.3 Construction and Grow-In

Soil erosion is most likely to occur during the construction and grow-in phases of the Hyatt Golf Resort. The major pathway for phosphorus loss is soil erosion, as sediment is the carrier (see Section 5.0, Water Quality Management). Therefore, any technique effective in reducing soil erosion will also reduce phosphorus losses, and help ensure good water quality. Use of buffer strips, grass waterways, and berms, the use of soil stabilization blankets on steep slopes and the use of silt screens are examples of structural techniques for erosion control that will be used during construction and grow-in.

Final site grassing preparation will ensure surfaces are reasonably free of large dirt clods, roots and other debris that would interfere with sodding and sprigging and subsequent maintenance operations. Initial pH correction, if necessary, and fertilization will be based on soil test recommendations and will be applied prior to planting. Care will be taken in fertilization because of the potential for runoff at this time. Lastly, the surface will be floated with a drag to be sure it is smooth and firm for planting.

Once the Hyatt Golf Resort course has been planted, the future of the project will depend on how well it is grown-in and maintained. The objective of the grow-in program is the rapid establishment of a high quality turf cover to minimize water erosion and weed infestation.

The judicious use of water and fertilizer is essential for a quality turf cover. While areas must be kept continuously moist, they must not be kept excessively wet, otherwise the potential for erosion is increased. Where necessary sodding will be considered to prevent erosion that may occur if excess irrigation occurs. This is a field driven decision, because the Hyatt Golf Resort is relatively flat.

Since efficient water use and conservation of irrigation water are the responsibility of the superintendent and technician, they will need to be well acquainted with the capabilities of the irrigation system. In addition, they will be in charge of the growing-in program.

3.1.4 Basic Growing-in Program

3.1.4.1. ***Watering***. Planted areas of the Hyatt Golf Resort will be kept continuously moist throughout the establishment period and until the turf starts to put down significant roots, approximately the first three weeks. This means frequent, light watering rather than soaking the soil when it becomes dry. Water will not be allowed to puddle or run off the surfaces. As the turf becomes established and the root system develops, watering frequency will be decreased with application volumes increased. This will ensure adequate soil moisture at depths to optimize root growth.

3.1.4.2. ***Fertilizing***. The Hyatt Golf Resort construction specifications for pre-plant fertilization will be developed after the soil testing has been completed. A sample program has been included as **Table 3-1**. However, any material which will provide similar fertilization can be used. These also may need to be adjusted based on soil tests conducted after final grading.

Table 3-1. Grow-in Fertilization Program for the Hyatt Golf Resort†.

Timing	Product	Application rate lbs./acre	N rate lbs./M
Pre-plant	UF/DAP 16-16-16 dolomitic limestone	1000 2000	3.6
Post-plant 1st week	30-0-0 SCU/IBDU	440	3.0
Post-plant 4th week	18-6-18 SOP SCU/IBDU/UF	675	2.75
Post-plant 8th week	18-6-18 SOP SCU/IBDU/UF	675	2.75

† Recommendations are based on grow-in experience FL area. All granular materials contain 75% slow release N. Multi-staged nitrogen release rates from Sulfur Coated Urea (SCU), isobutylidene diurea (IBDU) and ureaformaldehyde (UF).

3.1.4.3. ***Mowing***.

Greens. To help control weeds and promote lateral growth, mowing will begin at the Hyatt Golf Resort when the turf reaches ½ inch. Mowing at this height will be done for

the first 2 or 3 mowings and then the height gradually reduced to the that optimum for the turf. This will encourage lateral spread, increase density, and maintain a fine texture. The mowing will be frequent enough so that no more than one-third of the top growth is removed at any one clipping.

Tees. For tees, they will be mowed at ⅝ inch until fully established and then the mowing height lowered to ½ inch.

Fairways. They will be mowed at ¾ inch until fully established and then the mowing height lowered to ½ to ⅝ inch. Whether sodded or sprigged the mowing will be frequent enough so that no more than one-third of the top growth is removed at any one clipping.

Roughs. They will be mowed at ¾ to one inch.

3.1.4.4. *Rolling.* To provide a smooth, firm surface for future operation of mowing equipment and golf carts, all areas may need to be rolled a few time. For sprigged areas, the first rolling will not occur until the grass covers approximately 25 to 50% of the area.

3.1.4.5. *Developing Tee and Putting Surfaces.* During the growing-in period, tees and greens will need topdressing and rolling and perhaps aerifying and/or vertical mowing a number of times to produce smooth, true and firm surfaces. Topdressing material will be identical to the material used in the root zone mix.

3.1.4.6. *Pest Control.* The course will be inspected daily for pests. When control is necessary, follow label directions and precautions utilizing materials approved in this plan, and follow restrictions as defined in this plan.

3.2 GOLF COURSE CULTURAL PRACTICES

The cultural practices that produce and sustain a healthy turf are mowing, irrigation, fertilization and cultivation. These, if done properly, have a strong positive effect on turf performance. Thus, it is essential that these practices are executed in a proper and timely manner to insure turfgrass quality and playability. The best deterrent to weed, insect and disease infestation is a healthy turf. Thus, maintaining hearty grasses will minimize the need to apply fertilizers and pesticides.

3.2.1 Mowing

Mowing is the most basic maintenance operation on a golf course. Without regular mowing at the appropriate heights of cut, the course would become unplayable. With good mowing practices, density, texture, color, root development, wear tolerance and other aspects of turf quality are enhanced. Proper mowing practices also can reduce the amount of irrigation needed. Taller grasses can have a significantly higher evapotranspiration rate and thus a greater need for water. Mowing grass too short stresses the turf which not only produces a need for more water, but can cause the weakened turf to be more susceptible to weed, insect and disease infestation. Recommended mowing practices are presented in **Table 3-2**.

Table 3-2. Recommended Mowing Practices for the Turf Areas at the Hyatt Golf Resort.

Mowing	Greens	Tees	Fairways	Roughs
Height (inches)	1/8* - 3/16 (0.125 - 0.1875)	⅜ - ½ (0.375 - 0.5)	½ - ¾ (0.5 - 0.75)	3/4 to 1.0 (0.75 to 1.0)
Frequency	Daily	2 to 4 times per week	1 to 3 times per week	1 to 2 times per week
Clippings	Remove and compost	Remove and compost	Return	Return

* Only if an ultra-dwarf cultivar is selected.

Grass variety and turf use have the greatest influence on mowing height. Each turfgrass has a mowing tolerance range within which it can be expected to provide outstanding turf. At the Hyatt Golf Resort, the highest mowing height acceptable for the various playing surfaces will be maintained. However, if fast greens are required to prepare for tournament play, mowing can be lowered below recommended minimums for a short period of time. On the other hand, another possibility is to continue mowing at the higher height and double cut the greens. This operation will produce the same green speed as the lower cut. In addition, during the summer months when stress is likely to occur, do not lower the height of cut. If the demands are for faster green speeds, double cutting once or twice per week and/or rolling several times a week can improve speed without lowering the height of cut.

3.2.2 Nutrient Management

3.2.2.1. ***General Recommendations.*** The most important aspect of the nutrient management program at the Hyatt Golf Resort is to ensure that the nutrients applied to the golf course turf and landscape areas do not migrate to surface- or ground- water. Migration of the nutrients (primarily nitrogen and phosphorus) can result in pollution of resources, most notably eutrophication in ponds and lakes. In freshwater systems, phosphorus is the element most often associated with the eutrophication while in estuary systems such as Estero Bay, nitrogen is also a major concern. (Jones and Bachmann, 1976; Wetzel, 1983). Eutrophication of water bodies may result in algal blooms, aquatic plant infestations, reduction in depth, and a marked decrease in overall water quality (see **Section 5.0**)

Attention must be given to protect water resources at the Hyatt Golf Resort from contamination by phosphorus and nitrogen. Much of the nitrogen fertilizer applied to the golf course will be in the ammonium and nitrate forms, and most of the ammonium will be converted by soil microorganisms to nitrate, provided there is adequate aeration and optimum soil pH. From an environmental perspective, nitrate is highly mobile and is thus readily available for plant uptake; however, the mobile nature of nitrate also allows it to be leached into ground water. The Federal drinking water standard for nitrate is 10 mg/l. However, nitrate concentrations will be significantly less (less than 0.50 mg/L) than this to be protective of the estuary and freshwater ecosystems at the Hyatt Golf Resort.

A review of the published research on nitrogen fertilizers applied to turfgrasses (Petrovic, 1990) has determined that nitrate-nitrogen concentrations in soil water leaching through the surface soil exceeds drinking water standards of 10 ppm only on sandy soils when one of the following conditions exist: 1) high levels of soluble nitrogen are applied, greater than 3 lbs. N/1000 sq.ft. at one time; or 2) very frequent (daily) irrigation is practiced coupled with application of water soluble nitrogen sources.

Minimizing nitrate movement is directly related to best management practices that control nitrogen sources and irrigation. This is accomplished by applying the correct nitrogen source at the correct time, rate, and location and by applying the correct amount of irrigation at the correct time, rate and location. Reports by Walker and Branham (1992) concluded that several management options are available to minimize or eliminate any threat to ground or surface water

by 1) limiting irrigation to replacement of soil moisture; 2) using slow release nitrogen sources; 3) timing fertilizer applications in relation to active uptake; and 4) use of realistic nitrogen application rates. Additionally, by making controlled applications (spoon feeding or fertigation; Snyder et al 1981, 1984, 1989), and using controlled materials (slow-release) or using a combination of these approaches reduces the potential for leaching of nitrogen. ***All*** of these factors are part of the management program for the Hyatt Golf Resort, and when addressed will eliminate nonpoint source losses of nutrients from the golf course.

When a fertilizer is applied in excess of what the plant can use or when the turf is not actively growing due to temperature, water, light, lack of an individual nutrient, etc., much of the application could be lost from the golf course. For these reasons, before a fertilizer is applied, the limiting growth factors for the turfgrass are considered. In addition, only a fertilizer containing the nutrients in the right form needed by the plant is used and applied at the right rate and frequency. Plants will respond to fertilizer only if it contains a nutrient that is deficient.

The first step, then, in arriving at a sound fertilizer program at the Hyatt Golf Resort is to have the soil analyzed to determine pH, calcium, magnesium, phosphorus and potassium availability and balance. From this information a valid pH correction and fertilizer program can be developed with the assurance that excess nutrients will not be applied.

Nitrogen is the nutrient used by grasses in the largest quantities. Its function is to stimulate vegetative growth and provide the grass with green color. Nitrogen fertilization will be determined by color, density and rate of growth (clipping yields) of grass, and tissue analyses.

Controlled applications can be made by using soluble fertilizers and applying the materials with sprayers that have been calibrated to put out an accurate amount of material per acre. The superintendent can personally control the rate and frequency of fertilizer application, and thereby reduce the tendency to apply excessive amounts of nitrate and ammonium forms of nitrogen on an infrequent basis. These supplemental nitrogen applications will be a mixture of quickly available sources such as urea, ammonium nitrate, ammonium sulfate, mono- or di-ammonium phosphate and slowly available sources (SR) such as natural organic sources (Milorgranite, Ringer, Sustane, Nature Safe, etc.), isobutylidene diurea (IBDU), methylene ureas (MU) or coated ureas (SCU, Polyon, Poly-S, Sulfurkote-II and others). They have the advantage of supplying a longer more uniform source of nitrogen, a lower salt index and reduced nitrogen

leaching. By combining soluble nitrogen sources with the slow-release nitrogen products, availability can be extended to the grass without fear of nitrogen leaching into the groundwater. All granular products used here will contain at least 75% slow release nitrogen.

3.2.2.2. ***Basic Fertilizer Program.*** For optimum soil microbial activity and improved nutrient availability it is preferred to keep the pH in the 6.0 to 7.0 range. Bermudagrass also performs best when soil pH ranges from 6.0 to 7.0.

The following discussion provides a general overview of nitrogen, phosphorus and potassium applications on various playing surfaces. Adjustments to the rates provided here will be made based on analyses which will include color, density and rate of growth (clipping yields) of grass, tissue analyses, as well as soil nitrogen reserves. It is also important to maintain a calcium to magnesium ratio of 10:1.

Greens. If the soil test shows that either dolomite for soil pH correction and/or phosphorus are needed, they will be applied during the aerifying operation so they can be worked into the root zone. Addition of potassium will be made in six to nine applications per year and applied at the rate of 0.5 to 1.0 pounds per 1000 square feet. Slow release sources of nitrogen will be applied at the rate of 0.5 to 1.0 pound per 1000 square feet (**Tables 3-3 and 3-4**). If a complete micro-dosing approach to fertilization is used (fertigation), small increments of all nutrients can be applied every week or two. Exact application rates must be determined by the superintendent. Total yearly application rates of nitrogen will normally be in the range of 12 to 18 lbs. of N/1000 sq.ft. regardless of the application method because of the year round need to grow a quality turf.

Tees. If the soil test shows that either dolomite for soil pH correction and/or phosphorus are needed, they will be applied during the aerifying operation so that they can be worked into the root zone. The addition of potassium will be made in four to six applications per year and applied at the rate of ½ to 1 pound per 1000 square feet. Nitrogen and potassium will be applied at a rate higher than for fairways because of the intense stress from traffic (**Tables 3-3 and 3-4**).

Table 3-3. General Fertilizer Applications on Greens and Tees at the Hyatt Golf Resort.†			
Area	**Nitrogen ($lb/1000ft^2/yr$)**	**Phosphorus ($lb/1000ft^2/yr$)**	**Potassium ($lb/1000ft^2/yr$)**
Greens	12 to 18	2 to 4	4 to 6
Tees	9 to12	2 to 4	4 to 6
† Adjustments will be made based upon testing results and turf response.			

Table 3-4. Suggested Fertilizer Schedule for Greens and Tees at the Hyatt Golf Resort.†		
Timing	**Product**	**Application rate lbs./M**
Greens:		
Jan - Apr	14-4-16	10 lbs. every 2 to 3 weeks
May - Sep	15-2-15	10 lbs. every 2 weeks
Oct - Dec	15-2-15	10 lbs. every 2 to 3 weeks
Tees:		**lbs./acre**
Jan	30-0-0 SCU/IBDU	150
Mar	24-6-12 SCU/IBDU/UF	200
Apr	30-0-0 SCU/IBDU	150
May	24-6-12 SCU/IBDU/UF	200
Jun	30-0-0 SCU/IBDU	150
Jul	24-6-12 SCU/IBDU/UF	200
Aug	30-0-0 SCU/IBDU	150
Sep	24-6-12 SCU/IBDU/UF	200
Nov	10-20-10 75% IBDU	320
† Adjustments will be made based upon testing results and turf response. Recommendations are based on grow-in experience in Florida. All granular materials contain 75% slow release N. Multi-staged nitrogen release rates from Sulfur Coated Urea (SCU), isobutylidene diurea (IBDU) and ureaformaldehyde (UF).		

Fairways. Dolomite and phosphorus applications will be based on soil test results and no individual application of nitrogen or potassium will exceed 40 pounds per acre without 70% of the nitrogen from a slow release source (**Tables 3-5 and 3-6**).

Table 3-5. General Fertilizer Applications on Fairways and Roughs at the Hyatt Golf Resort .†

Area	Nitrogen (lb/acre/yr)	Phosphorus (lb/acre/yr)	Potassium (lb/acre/yr)
Fairways/Roughs	225 to 315	90 to 135	135 to 225

† Adjustments will be made based upon testing results and turf response.

Table 3-6. Suggested Fertilizer Schedule for Fairways and Roughs at the Hyatt Golf Resort.†

Timing	Product	Application rate (lbs./acre)
Jan	30-0-0 SCU/IBDU	150
Feb	24-6-12 SCU/IBDU/UF	350
Apr, Jun,Aug	24-6-12 SCU/IBDU/UF	350
Oct-Nov	10-20-10 (75% IBDU)	250

† Adjustments will be made based upon testing results and turf response. Recommendations based on grow-in experience in Florida. All granular materials contain 75% slow release N. Multi-staged nitrogen release rates from Sulfur Coated Urea (SCU), isobutylidene diurea (IBDU) and ureaformaldehyde (UF).

3.2.2.3. *Fertigation.* Fertigation is the process of fertilizing at low rates through the irrigation system. Fertigation will be used to apply low rates of fertilizer to supplement or substitute the proposed schedules listed previously. Snyder et al. (1989) in studies conducted in south Florida (where due to soil and weather conditions it is difficult to maintain balanced nutrition) concluded that turfgrass nitrogen uptake and subsequent plant growth was more uniform and the potential for leaching greatly reduced by fertigation compared to conventional fertilizer application.

Any type of fertilizer can be used in the fertigation system including controlled release materials such as CoRoN 28-0-0 which is a controlled-release liquid nitrogen fertilizer with 70% of nitrogen coming from controlled release and 30% from water soluble urea. Other brands of fertilizer with similar slow-release nitrogen characteristics as CoRoN 28-0-0 may be used in the fertigation system, depending on the turf needs and site conditions. A state-of-the-art computerized irrigation system that has individual head control for each of the sprinklers allow for maximum flexibility as to adjustment of not only irrigation needs, but also of fertilization. It is integrated with the weather station located on site and estimates water needs based on the evapotranspiration of the turf.

Studies in Florida have focused on comparing nitrogen loss under sensitive soil conditions using various nitrogen sources and fertilizer application techniques. Snyder et al. (1981) found that the greatest amount of nitrogen leaching occurred from using a completely water soluble nitrogen source, 9.3% of the total applied, compared to slow release sources which ranged from 0.1 to 5.5% of the total applied on bermudagrass maintained under fairway conditions. Nitrate-N concentrations in the leachate water averaged only 1.4 ppm at the highest for the slowly available materials compared to 2.4 ppm for the water soluble sources. Other studies by Snyder et al. (1984) found that during periods of excessive irrigation and/or high rainfall, nitrogen leaching can be reduced by daily "fertigation", fertilizing at low nitrogen rates (⅛ lb of N/1000 sq.ft.) through the irrigation system as compared to applying soluble nitrogen tri-weekly at a rate equivalent to that applied by fertigation during a 3-week period. Subsequent work by Snyder et al. (1989) documented that working on a sand soil with a high percolation rate, nitrogen leaching was reduced by over 80% with the use of fertigation compared to conventional applications of granular soluble carriers. They concluded that turfgrass nitrogen uptake and subsequent plant growth was more uniform and the potential for leaching greatly reduced by fertigation compared to conventional fertilizer application.

Figure 3-2 show comparisons of fertigation versus conventional fertilization and irrigation for nitrogen losses. Fertigation will provide a way to gradually feed the turf without having large quantities of nitrogen free in the environment at any one time.

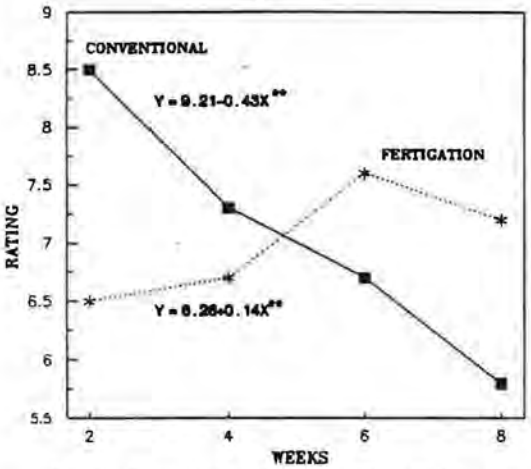


Fig. 1. Bermudagrass quality rating with time after N application by the Conventional method and with N applied by Fertigation.

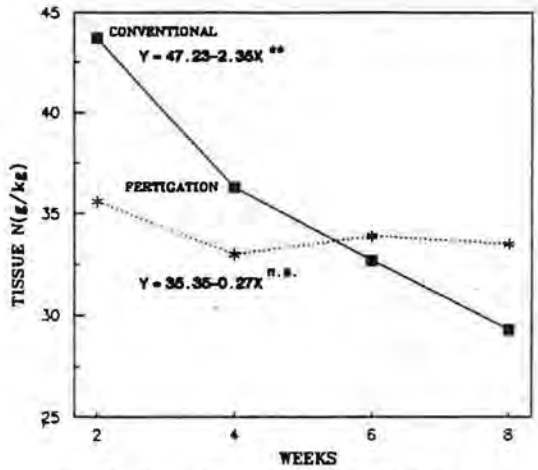


Fig. 2. Bermudagrass tissue N with time after N application by the Conventional method and with N applied by Fertigaton.

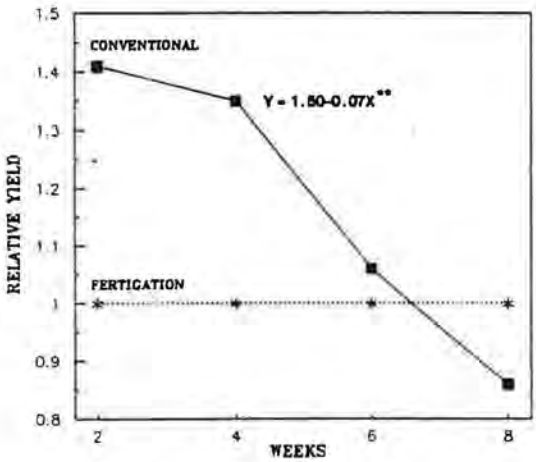


Fig. 3. Relative yield (Conventional/Fertigation) with time after N application by the Conventional method.

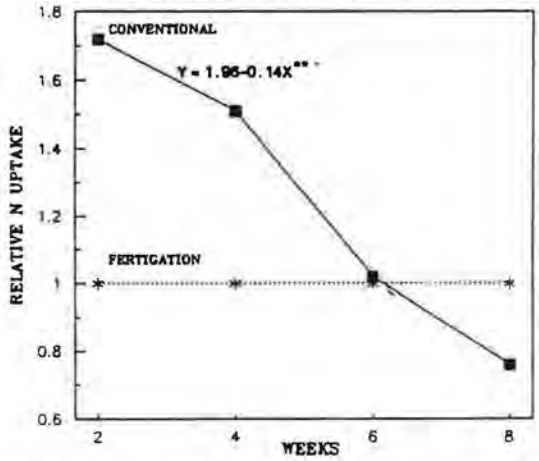


Fig. 4. Relative N uptake (Conventional/Fertigation) with time after N application by the Conventional method

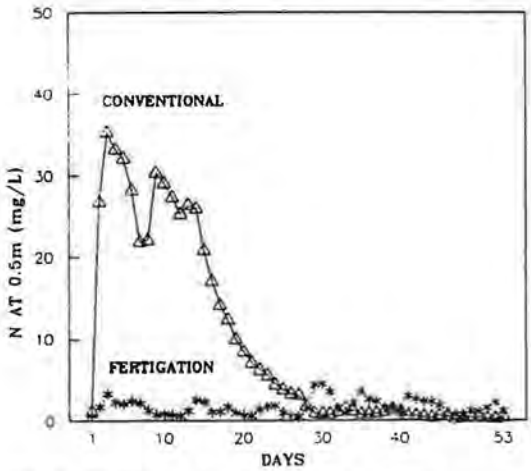


Fig. 5. Nitrogen at 0.5 meter depth with time after N application by the Conventional method and with N applied by Fertigation.

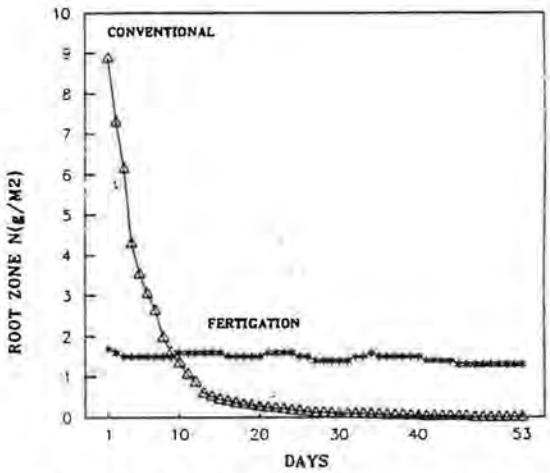


Fig. 6 Calculated rootzone N, expressed on an area basis (g/m2), with time after N application by the Conventional method and with N applied by Fertigation.

FOOTNOTE. ** and n.s. refer to significance at 0.01 and not significant, respectively.

Figure 3-2. Comparison of Fertigation versus Conventional Fertilization and Irrigation for Nitrogen Losses. (Snyder et. al, 1989)

3.2.3 Cultivation

To help develop and sustain quality turf at the Hyatt Golf Resort, cultivation including spiking, vertical mowing, aerifying, topdressing and rolling are used. These operations physically alter the plant's environment by removing and or relocating soil and organic materials, providing better oxygen exchange and or altering turf growth habit. These cultural practices will be performed only when turfgrasses are actively growing.

3.2.3.1. ***Spiking.*** Spiking is most useful in breaking up soil surface compaction and improving moisture infiltration and gas exchange. In addition, it is useful in lifting the blades of grass before mowing to aid in preventing the turf from thatching. It is not a substitute for proper aerification to relieve compaction.

3.2.3.2. ***Vertical Mowing.*** When done on a timely basis, vertical mowing can be used to remove mower induced grain on greens and reduce thatch. In addition, vertical mowing can be used to thin turf so that a better job of reel mowing can be done. Experience with the ultradwarf cultivars, particularly TifEagle has found that aggressive vertical mowing with a thin-bladed unit that penetrates deeply into the turf profile eliminates the thatch layer and produces a superior playing surface. Also, vertical mowing is used to separate the soil from aerifier cores and mix the soil with the sand used to fill the aerifier holes and topdress the playing surface. In cases where large accumulations of thatch may form, vertical mowing of fairways may be necessary.

3.2.3.3. ***Aerifying.*** The main purpose of aerification is to relieve compaction which in turn improves surface water infiltration, allows for good root penetration, provides for easier air exchange in the soil, improves nutrient uptake, enhances thatch degradation and increases turfgrass vigor.

Two ty[illegible] aerification are used. Coring involves removing plugs from the soil profile, thus allowing for lateral expansion of the remaining soil thereby relieving soil compaction. This is accomplished using an aerifier equipped with hollow coring tines. Using solid coring tines, or water injection can provide benefits to the soil by improving water and air infiltration and soil aeration, but they do not relieve soil compaction. Both approaches are normally incorporated into management strategies. Core aerification on putting greens is commonly followed with

topdressing either as a separate application or by breaking the soil cores apart with a vertical mower and then redistributing the soil back over the green.

3.2.3.4. ***Topdressing.*** Topdressing aids in thatch decomposition, lessens grain development in the turf, stimulates new shoot growth, encourages stolon rooting and makes the ball roll true and faster. Although a small amount of thatch (¼ - ½ inch thick) is desirable to provide a certain amount of resiliency, thatch is the greatest single limiting factor in the development of fast, uniform greens. Although topdressing does not prevent the development of stems and roots which contribute to thatch buildup, it does keep the thatch separated to prevent dense, compacted mats from forming. By mixing suitable topdressing materials with the organic material, thatch layers, as such, will not develop and organic matter will decompose faster. The addition of compost to the topdressing sand has been shown to be of benefit in addressing the soil microbiological balance and has been shown to reduce disease incidence in certain cases. This will be a routine part of the biological IPM approach at the Hyatt Golf Resort.

3.2.3.5. ***Rolling.*** New light weight self propelled rolling equipment has made rolling a viable practice for smoothing the turf surface and improving green speed. It is frequently used in the summer months to allow a higher height of cut for improved stress tolerance while increasing green speeds. However, recent research has shown it can be overdone. Rolling more often than once or twice a week can lead to excess wear and compaction.

3.3 BASIC ANNUAL MAINTENANCE GUIDE FOR THE HYATT GOLF RESORT

The following remarks supplement the Basic Annual Maintenance Guide given as **Table 3-7** on the following pages. It will be noted that this basic program will need to be adjusted and fine tuned by the superintendent based on specific situations encountered at the Hyatt Golf Resort.

1. **Soil Analysis.** Sample representative greens, tees, and fairways for analysis and recommendations. The primary purpose of soil testing is to insure a sound lime and fertilizer program based on nutrient availability and balance for good growth of the grass. A healthy plant is less susceptible to disease and other pests.

2. **Calibration of Equipment.** All spreaders and sprayers must be repaired, if needed, and calibrated for proper distribution of fertilizers and pesticides.

3. **Mowing.** After irrigation, mowing is the most important and most time consuming maintenance operation on a golf course. Without regular mowing at the appropriate heights of cut, the course would become unplayable. With good mowing practices, density, texture, color, root development, wear tolerance and other aspects of turf quality are enhanced.

4. **Fertilizing.** The fertilizer program will be based on soil test results for pH, calcium, magnesium, phosphorus and potassium. Nitrogen fertilization will be determined by color, density and the rate of growth (clipping yield), and tissue analysis.

5. **Irrigation Program.** Each time water is applied, the objective is to wet the soil to the depth of rooting. When greens are stressed, hand water during the heat of the day in addition to regular night irrigation.

6. **Spiking.** This procedure is needed to relieve surface compaction and insure good gas exchange (oxygen and carbon dioxide).

7. **Vertical Mowing.** During the growing season, this operation is needed to reduce mower induced grain and thatch buildup, and to provide a smoother, faster putting surface.

8. **Aerifying.** Aerifying surfaces relieves compaction, increases soil and surface air exchange and improves fertilizer and water movement into the soil.

9. **Topdressing.** In addition to following aerification, topdressing will be applied once or twice per month during the growing season at the rate of one-quarter cubic yard per 1000 square feet. This practice not only helps control thatch, but also helps provide a smooth, true surface for mowing and accurate ball roll.

10. **Liming.** Apply dolomitic limestone to any area where soil test results indicate a need.

11. **Nematode Control.** May be needed infrequently. A soil nematode analysis will determine population levels and suggest treatment.

12. **Wetting Agent Applications.** If localized dry spots appear on the greens, apply a good quality wetting agent and water immediately to prevent yellowing of the grass. During this period, use a wetting agent when applying a liquid fertilizer or pesticide unless the label states otherwise.

13. **Raking and Edging Bunkers.** Bunkers need to be raked daily and edged a minimum of once per month.

14. **Weed Control.** Monitor for the presence of weeds. If the population becomes so large that it effects the playing surface, use the appropriate herbicide. Also see Section on weed control in 'Specific Local Problems'.

15. **Insect Control.** Monitor as necessary for beetles, grubs, caterpillars and other insect pests depending on their biology and life cycle. However, do not treat unless the pest is found, identified and present in damaging numbers. Also see Section on insect control in 'Specific Local Problems'.

16. **Disease Control.** During periods when disease or conditions favoring a disease outbreak are prevalent, inspect the surfaces daily and treat only as necessary. Also see Section on disease control in 'Specific Local Problems'.

17. **Nematode Control.** Greens and tees will be tested every two or three years for nematode levels.

Table 3-7. Basic Annual Maintenance Guide
The Hyatt Golf Resort

Operation	J	F	M	A	M	J	J	A	S	O	N	D	Remarks
General													
Soil Analysis										X			1
Calibrate Equipment	X	X	X	X	X	X	X	X	X	X	X	X	2
Greens													
Mowing	X	X	X	X	X	X	X	X	X	X	X	X	3
Fertilizing	X	X	X	X	X	X	X	X	X	X	X	X	4
Irrigating	X	X	X	X	X	X	X	X	X	X	X	X	5
Spiking				X	X	X	X	X	X				6
Vertical Mowing				X	X	X			X	X	X		7
Aerifying			X		X		X		X	X			8
Topdressing			X	X	X	X			X	X			9
Liming											X		10
Disease Control	X	X	X	X	X	X	X	X	X	X	X	X	16
Weed Control			X	X	X	X	X	X	X				14
Insect Control					X	X	X	X	X				15, 11
Nematode Control			X							X			17
Wetting Agents						X	X	X	X				12
Tees													
Mowing	X	X	X	X	X	X	X	X	X	X	X	X	3
Fertilizing	X	X	X	X	X	X	X	X	X	X	X	X	4
Irrigating	X	X	X	X	X	X	X	X	X	X	X	X	5
Spiking				X		X		X					6
Vertical Mowing					X	X	X	X					7
Aerifying					X		X		X				8
Topdressing					X		X		X				9
Disease Control			X	X	X	X	X	X	X	X	X		16
Weed Control				X	X	X	X	X	X	X			14

Table 3-7. Basic Annual Maintenance Guide
The Hyatt Golf Resort

Operation	J	F	M	A	M	J	J	A	S	O	N	D	Remarks
Insect Control				X	X	X	X	X	X	X			15
Nematode Control			X						X				17
Liming											X		10
Fairways													
Mowing	X	X	X	X	X	X	X	X	X	X	X	X	3
Fertilizing	X	X		X		X	X	X	X	X		X	4
Irrigating	X	X	X	X	X	X	X	X	X	X	X	X	5
Aerifying						X		X					8
Disease Control					X	X	X	X	X				16
Weed Control				X	X	X	X	X	X				14
Insect Control					X	X	X	X	X				15
Liming											X		10
Bunkers													
Raking & Edging	X	X	X	X	X	X	X	X	X	X	X	X	13

3.4 PESTICIDE SELECTION

The objectives of pesticide selection are to:

1. Identify those pesticides (fungicides, insecticides, and herbicides) which, when applied to the Hyatt golf course in accordance with label specifications, will pose only negligible risk to human health or the environment;

2. Establish a list of pesticides for use at the golf course restricted, to the maximum extent practical, to only those pesticides determined to pose negligible risk to human health and the environment; and

3. Identify special restrictions for the limited use of specific pesticides when their use, in the absence of such restrictions, could pose more than a negligible risk to human health and/or the environment.

The U.S. Environmental Protection Agency (EPA) has established a procedure for assessing the risk of pesticide use to human health and the environment (Urban and Cook, 1986 and Touart, 1995). The risk assessment procedure is designed to provide a comparison of maximum anticipated pesticide concentrations in ground and surface waters against specific standards defining toxicity (i.e., effects criteria). If the maximum anticipated concentration of a given pesticide exceeds the effects criteria for that pesticide, it is presumed that a risk of impact exists. Likewise, if the maximum anticipated concentration of a given pesticide is less than the effects criteria for that pesticide, it is presumed that only a negligible risk of impact exists. The sensitivity of the assessment depends on the assumptions used in estimating maximum anticipated concentration and the setting of the effects criteria. A high sensitivity assessment (i.e., one which produces a conservative or "worst case" risk designation) is one which is based on "worst case" assumptions with regard to application rates and environmental conditions and incorporates low effects criteria. A less sensitive assessment is one which is based on less than "worst case" assumptions with regard to application rates and/or environmental conditions and incorporates higher effects criteria. This procedure represents a rational approach to assessing the risks associated with pesticide use in that it is based on both sound science concerning toxicity and reality concerning actual use practices and environmental conditions.

The EPA supports the use of a risk assessment which is moderate in its level of sensitivity – a tiered risk assessment (EPA, 1992). Under a tiered assessment, a suite of pesticides is assessed first (Tier 1) by assuming "worst case" application and environmental conditions and comparing the resulting maximum anticipated concentrations against such effects criteria as the EPA-established Health Advisory Limit (HAL) for human risk assessment and the LC_{50} toxicity level of the most sensitive aquatic organism for environmental risk assessment. If the maximum anticipated concentration of a given pesticide under these "worst case" assumptions exceeds either of its effects criteria, that pesticide is singled out for further analysis under Tier 2. The Tier 2 analysis utilizes site-specific soils and hydrologic data to refine the estimate of maximum anticipated concentration. Use of such site-specific data in the assessment always produces estimates of maximum anticipated concentration which are lower (thus, less likely to exceed effects criteria) than those produced assuming "worst case" conditions. If the Tier 2 estimate of

maximum anticipated concentration exceeds either of the effects criteria, the pesticide is analyzed further under Tier 3. The Tier 3 analysis incorporates more specific information concerning site soils than the Tier 2 analysis, resulting in a still more refined estimate of maximum anticipated concentration. As with Tier 2 compared to Tier 1, the Tier 3 estimates of maximum anticipated concentration are always lower (again, less likely to exceed effects criteria) than the Tier 2 estimates. This tiered approach, then, produces a more refined, but substantially less conservative, estimate of risk associated with the use of pesticides than an approach which is single-step and based on "worst case" assumptions.

In selecting pesticides for use at the Hyatt golf course, a high sensitivity, single-step risk assessment was conducted. This single-step assessment was conducted using the "worst case" assumptions used under Tier 1 of the EPA-supported assessment procedure, and the effects criteria) were conservatively set to evaluate the acute and chronic aquatic toxicity and human health toxicity. Toxicity was evaluated with US EPA approved screening models for pesticides (GEENEC and SCI-GROW; EPA 1995; see Appendix I for details). Exposure concentrations (model output) generated from each of these models are considered by EPA to be reasonable, conservative estimates of pesticide concentrations. Once exposure concentrations (model output) were determined, acute and chronic aquatic toxicity and human health toxicity were evaluated as follows:

1. Acute Aquatic = Peak runoff [a] / LC_{50}
2. Chronic Aquatic = (Avg 21-day runoff)[a] / (LC_{50} * 0.1)[b]
   where:
   [a] peak runoff and average 21-day runoff are from "worst case" expected concentrations as determined by the US EPA model GEENEC
   [b] the chronic toxicity is estimated using LC_{50}*0.1; this is a conservative factor that estimates chronic values (Suter et al., 1981; Warren-Hicks et al., 1989, 1995)
3. Human Health = model output [c]/HAL [d]
   where:
   [c] the model output is from the US EPA model SCI-GROW
   [d] HALs are the US EPA Health Advisory Levels for each chemical.

Negligible risk is assumed if the quotients for the equations are less than 1. If the quotient for expected risk (i.e., results for equations 1, 2, & 3 above) is greater than 1, then potential for risk is assumed. Pesticides selected for use at Hyatt golf course had quotients less than 1.0.

Only those pesticides found to have a negligible risk associated with their use on the golf course (i.e., the maximum anticipated concentration is less than the effects criteria), were selected for use on the course, unless no other pesticide currently is available to control the target pest. Pesticides which were determined to have more than negligible risk but were selected for use on the golf course because no substitute pesticide is available are to be used subject to specific restrictions designed to minimize the risk. The results of the risk assessment are summarized in **Table 3-8** and supporting data are presented in **Appendix I**.

Concerns over protecting water environmental quality from both a surface and ground water perspective involve addressing the following four factors:

1. Conditions of the site;
2. Properties of the soil;
3. Properties of the pesticide; and
4. Management practices.

Integrating all of these factors results in reduced probabilities for unwanted chemical movement.

1. **Site Conditions.** Depth to groundwater and surface runoff potential are important considerations in protecting natural resources. Groundwater at the Hyatt Golf Resort site, under normal water elevations, is generally shallow. Attenuation of chemical concentration occurs through distance traveled and the medium over which water must move (e.g., turf and thatch layers), thus care will be taken when using pesticides because of the shallow water table. Surface water is protected by the many mechanisms that have been discussed throughout this plan (i.e., BMPs, IPM, management zones, buffers).

2. **Soils.** Soil texture, permeability, water holding capacity, pH and organic matter content are important considerations for pesticide selection. Texture and permeability will greatly affect how fast water percolates through the soil profile. However, this will change with the maturity of the turf area. Current research at North Carolina State University has found that permeability of a putting green soil can decrease by as much as 66% during a period of very active turf growth due to the influence of the root system on soil drainage (Peacock, unpublished data). This is advantageous from

a pesticide application viewpoint in that it slows percolating water movement allowing longer times for material degradation to occur. Organic matter content influences soil water holding and ionic exchange capacity. As the organic matter content increases with turf growth, the soil can hold more water, reducing percolation, and adsorption capacity increases holding pesticides in the root zone favoring microbial degradation (Weber, 1990). Turfgrasses are strong soil builders, adding organic matter to the soil over time due to root and/or shoot growth. Soil pH also affects the sorption of basic and acidic pesticides and it affects microbial activity favoring breakdown of materials.

3. **Pesticide Properties.** Much of the propensity for pesticide movement in the soil solution is based on the chemical properties of the materials. Properties that are known to influence potential for pesticide movement include solubility, the soil binding capacity, volatility, and degradation rate. Weber (1990) noted that in order for a pesticide to contaminate ground water, the chemical must move through the soil partitioning itself between the organic matter fraction and the soil solution at a faster rate than it degrades. Therefore, irrigation management plays a major role in determining how fast this occurs.

4. **Management Practices.** Application methods, pesticide rates and application timing and irrigation management must be critically evaluated to protect water quality. Pesticides which are applied at low rates are more favorable since the quantity of parent compound to be degraded is smaller. A qualified golf course superintendent, trained and licensed to properly apply materials, in consultation with agronomic specialists who are aware of and sensitive to local environmental conditions should provide the margin of safety required for resource protection.

3.4.1 Risk Assessment to Select Pesticides

This section describes the approach for the evaluation and selection of pesticides for use at the Hyatt Golf Resort. Using the risk assessment approaches developed by the Environmental Protection Agency (U.S. EPA, 1992), an evaluation of the potential human health and environmental health risks of pesticides that are generally appropriate for use at this golf course was conducted. Based on rigorous evaluations of potential toxic effects, materials selected for

use at the golf course are those pesticides that have the least impact to the environment and human health, while meeting the needs of the golf course superintendent to provide healthy turf. This approach evaluates the potential impacts of pesticides to human and environmental health in three tiers (**Figure 3-3**).

Tier 1, the screening level risk assessment, incorporates conservative estimates of pesticide application rates, along with conservative exposure and risk characterization methods, to provide estimates of the potential of chemical risk. The Screening Concentration in Ground Water (SCI-GROW) and the Generic Expected Environmental Concentration Program (GENEEC) were used to estimate exposure concentrations of the pesticides. These models were developed by EPA's Office of Pesticides and are considered the current best models for screening pesticides impacts to the environment (Parker and Rieder 1997, Barrett, 1997). Exposure concentration estimates were compared with ecological (LC_{50}) and human health indicators of risk (HAL and MCL values).

For those pesticides shown to have a potential for effect in the Tier 1 assessment, a Tier 2 risk assessment may be implemented, or the pesticide was dropped and will not be used at the golf course. Tier 2 uses high quality data and more accurate methods to generate estimates of pesticide risk.

If further evaluation is needed, a Tier 3 assessment is conducted. In Tier 3, site-specific data is generated for use in the exposure models. Typically, this equates to site surveys, collection of soil and water samples, and possible toxicity testing of site-specific materials.

Tier 3 analyses are expensive and generally not conducted in the selection process. Rather than conduct a Tier 3 risk assessment, a pesticide will simply not be used at the golf course.

The major components (**see Figure 3-3**) of a pesticide risk assessment are described below (problem formulation, exposure assessment, effects assessment, and risk characterization). Each of these components is implemented within each tier of the risk assessment process. However, the methods, data requirements, and interpretation of the risk process is tier specific. After an initial description of the risk assessment components, we describe the specific methods appropriate to each tier.

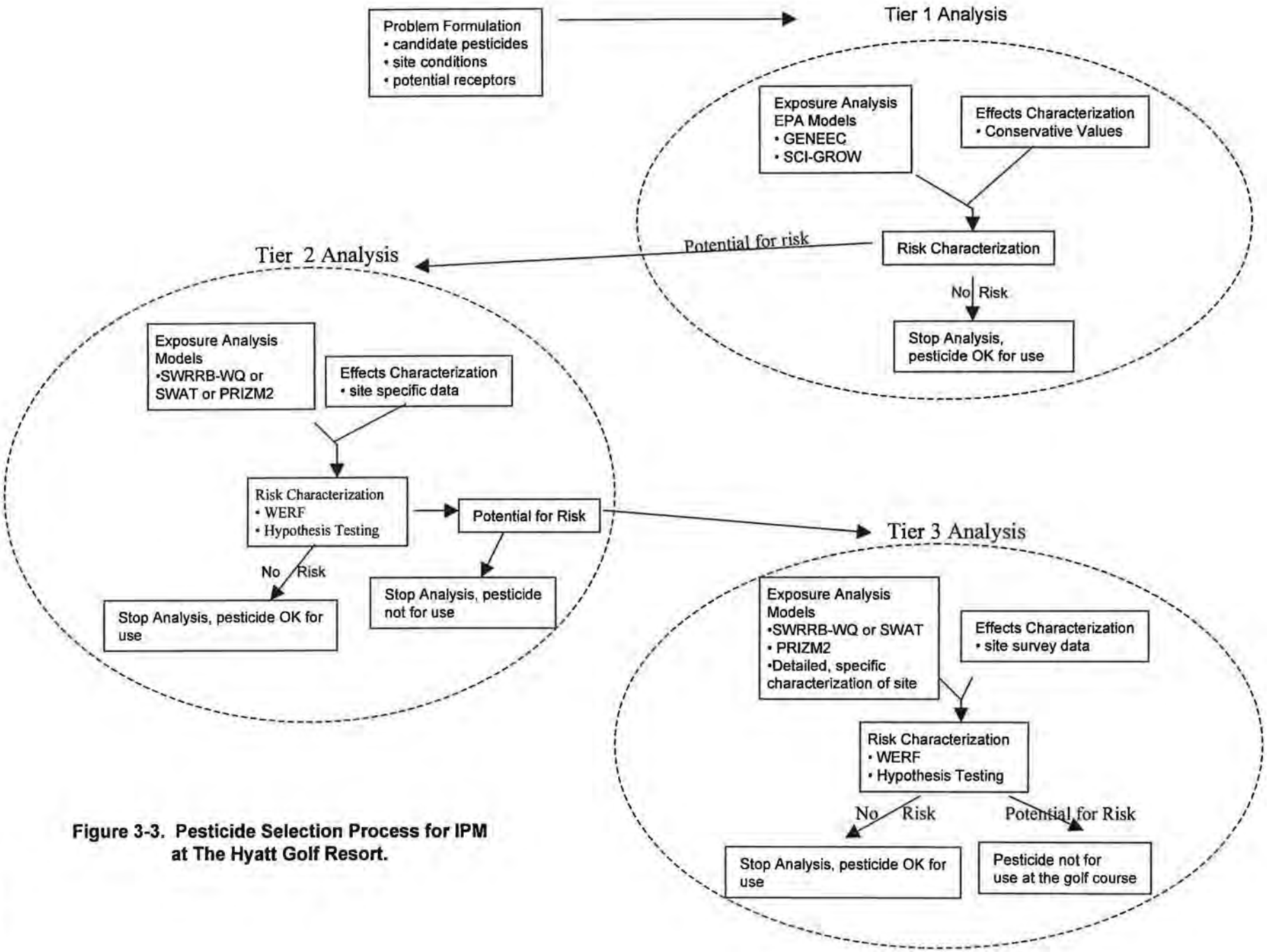


Figure 3-3. Pesticide Selection Process for IPM at The Hyatt Golf Resort.

3.4.1.1. ***The Planning Stage: Problem Formulation***. The objective of a pesticide risk assessment is to provide rigorous scientific information about the potential toxic effects of pesticides. Using the outputs from the assessment pesticides were selected that will minimize any potential environmental or human health impacts of pesticides that may runoff into drinking water sources or water bodies containing aquatic life. In addition, the assessment will provide golf course superintendents with information useful for selecting effective pesticide application rates and practices, while minimizing any adverse impacts to human or environmental health.

The problem formulation stage is the general planning stage for the assessment. The major information gathered in this stage includes the following:

1. A list of candidate pesticides for use at a specific golf course - these pesticides will be evaluated in the tiered risk assessment process described below.

2. A detailed description of the golf course site and surrounding areas, including topography, drinking water supplies and water bodies potentially receiving runoff from the site.

3. A list of potential receptors (e.g., those animals or human communities potentially impacted from pesticide runoff or ground water flow). Information will include routes of exposure for specific chemicals and information on the signs and symptoms of pesticide toxicity. A literature review of the concentrations of specific pesticides shown to cause toxicity to humans and biota is also required.

4. A chemical description of the candidate pesticides including chemical structure, partition coefficients (Koc), half life, degradation rate, and volatility.

5. A description of the soil system under and surrounding the golf course, including soil type, number of horizons, and transfer coefficients between horizons.

6. Supporting information useful for evaluating the exposure concentrations of the pesticide and risk of the pesticide to human and environmental health. Typical information includes representative meteorological data, health affects levels (HAL), and environmental screening criteria (e.g., LC_{50} of a sensitive local species).

During this stage, a list of pesticides that are candidates for use at the golf course was selected and all relevant information required to successfully conduct the risk assessment (see above) was gathered. In addition, the criteria used to judge the potential risks posed by the pesticides under consideration were defined. The criteria generally represent a concentration in the drinking water supplies or surrounding water bodies that pose a risk to human or ecological health. Selection of specific criteria are dependent upon the risk tiers (described below). More conservative criteria are used in the early tiers.

3.4.1.2. ***Exposure Assessment.*** The exposure assessment provides information on the concentration of pesticide in drinking water and surface water that results from application of pesticide at the golf course. These expected concentrations are used to judge the relative risk of the pesticide to human and environmental health. The objective of the exposure assessment is to (1) quantify the amount and timing of pesticide release into the environment, (2) estimate the fate and transport of the pesticide within the golf course boundary and onto surrounding areas, and (3) quantify the exposure of individuals and biota to the resulting concentrations of pesticides in drinking water supplies and receiving water bodies. The specific methods used to generate the exposure concentrations are dependent upon the risk assessment tier under evaluation. In Tier 1, the exposure concentrations are generated in a manner that provides the most conservative concentration estimate (the highest concentration) that could reasonably be thought to occur. In Tier II and Tier III, more accurate estimates of the exposure concentration are generated using detailed site-specific information in the exposure estimates.

Background concentrations of pesticides in groundwater and surface waters are checked (see Environmental Monitoring section). These background concentrations allow us to separate the relative pesticide risk caused by those pesticides used at the golf course from other sources of pesticides (e.g., the power transmission corridor).

Prior to golf course construction and operation, exposure concentrations can only be calculated with the use of ground water flow and surface water runoff models. After golf course operation has begun, water samples from groundwater and surface receiving waters can be obtained from laboratory chemical analysis.

Ecological considerations of pesticide exposure include bioaccumulation of pesticides up the food chain to higher trophic levels. In this context, the potential exposure of carnivores such as birds and foxes to magnified pesticide concentrations are also be considered.

3.4.1.3. ***Effects Characterization.*** Effects characterization involves generating a list of all organisms that may be exposed to pesticide concentrations resulting from golf course application. In addition, a review of the literature to establish toxic pesticide concentrations for each organism is conducted. For biota, LC_{50}, IC_{25}, or EC_{50} values generated from laboratory bioassay tests are recorded. For humans, health effects criteria, including drinking water and fish consumption levels, are generated. These data are used in combination with the exposure levels to generate estimates of risk. In addition, information gathered in the literature reviews provides a scientific basis for any potential risk to human health or the environment that may be found as a result of the risk assessment.

3.4.1.4. ***Risk Characterization.*** Information on exposure levels and effects are combined in the risk characterization stage to generate estimates of the potential risk of pesticide application to the golf course. The methods used in this stage are dependent upon the risk assessment tier under consideration. In Tier 1, conservative assumptions are used that effectively generate the highest probability of finding pesticide risk. If, using these conservative assumptions a pesticide is shown to have negligible risk levels, the risk assessment is ended. However, if the pesticide is shown to have the potential for environmental or human health risk we have options. First, if surrogate pesticides are available the pesticide under evaluation could be dropped from further consideration. Or, the team could elect to proceed to Tier 2. The Tier 2 methods provide more accurate estimates of pesticide risk, but are more costly and require higher quality data to generate the risk estimates. At the end of the Tier 2 assessment, the golf course team faces a similar decision. Again, the pesticide could be shown to have negligible risk or to have the potential for environmental or human health risk. If the potential for effects is present, we could elect to drop the pesticide from further consideration or proceed to Tier 3. Unlike the prior tiers, Tier 3 requires that extensive site-specific data be generated for use in the risk methodology. These site surveys are generally expensive.

3.4.1.5. ***Tier 1: Screening Level Risk Assessment.*** The screening level risk assessment generates the highest risk levels possible for a specific pesticide. A quotient is calculated that compares the maximum expected exposure concentration of the pesticide in the media of interest

(drinking water, fish tissue, sediments, surface water) to a conservative benchmark dose representing a threshold for effect (i.e., EPA's water quality criteria, HAL, etc.). If the quotient is greater than 1 (one) the potential for risk is assumed.

Expected Risk = Maximum Expected Concentration / Effects Criteria

In a Tier 1 assessment, the maximum expected concentration of the pesticide and conservative estimates of effects are combined to generate the risk estimates. The tier 1 results are used for screening those pesticides with no obvious human or environmental risk from those that require further study. The effects criteria represent a value that is protective of human or environmental health on a broad scale.

For exposure estimation at Tier 1, we employ conservative screening models to generate the maximum expected pesticide concentration in drinking water or surface water at golf courses. These models are SCI-GROW (ground water) and GENEEC (surface water). These models have been adopted by the joint EPA task group on pesticide exposure modeling (for more detail on the models or the joint task group see http://www.femvtf.com on the world wide web). This task group is made up of EPA and industry personnel. These models were developed by EPA's Office of Pesticides and are considered the current best models for screening pesticides impacts to the environment (Parker and Rieder 1997, Barrett, 1997).

The SCI-GROW estimates are based on environmental fate properties of the pesticide, the application rate, and the existing body of data from EPA-required small-scale perspective ground water monitoring studies for all pesticides. Site-specific soil properties can be added to the model to increase the relevance of the model predictions. GENEEC assumes that runoff is sufficient to remove 10% of the dissolved pesticide from a 10 hectare field. The required inputs include application rate (lbs a.i./acre), the maximum number of applications per year, absorption rate of dissolved pesticide to soil organic matter, and others.

3.4.1.6. ***Tier 2: Risk Assessment.*** For those pesticides shown to have a potential for effect in the Tier 1 assessment, a Tier 2 risk assessment may be implemented. Tier 2 uses high quality data and more accurate methods to generate estimates of pesticide risk. In addition, uncertainty analysis of both the model predictions of pesticide concentrations and effects criteria are used in the analysis to provide a scientifically valid method for assessing pesticide risk.

Tier 2 exposure models include PRZM2 (ground water, US EPA 1993) and the Simulator for Water Resources in Rural Basins-Water Quality (SWRRBWQ, surface water runoff, Arnold and Williams 1994; Arnold et al. 1989; Williams et al., 1985). SWRRBWQ is a model that uses GLEAMS pesticide fate component, CREAMS daily rainfall hydrology model, and SCS technology for estimating peak runoff rates and newly developed sediment yield equations to simulate hydrologic and related processes in rural basins (Williams et al 1985; Arnold and Williams 1994). The objective of the model is to predict the effect of management decisions on water, sediment, nutrient, and pesticide yields at the outlet of a sub-basin or basin. SWRRBWQ is a comprehensive, continuous simulation model covering aspects of the hydrologic cycle, pond and reservoir storage, sedimentation, crop growth, nutrient cycling, and pesticide fate. This model was developed for row crop agricultural and has recently been evaluated for turf situations (Smart and Warren-Hicks 1998; Warren-Hicks et al. 1996).

Although other models are available for use, PRZM2 has become the model of choice for the EPA's Office of Pesticides for predicting transport and transformation of pesticides throughout the crop root and unsaturated zones. The model has a built-in Monte Carlo simulator for conducting an uncertainty analysis of sensitive model input parameters.

Exposure models in Tier 2 require a great deal more data to implement than the screening level models of Tier 1. For example, PRZM2 requires over 100 input parameters, including site-specific meteorological data, for successful implementation. Of course, many times the input values for a specific golf course are not available. At Tier 2, when input parameters are uncertain we employ generic values for the soil systems under evaluation. [note: tier 3 requires site-specific studies to generate accurate input parameters].

Exposure estimates at Tier 2 are generated taking into account the uncertainty in the model inputs and the generic inaccuracy of the model. An uncertainty analysis that propagates the uncertainty of the model inputs into the expected error in prediction is called a Monte Carlo analysis. PRZM2 has a built-in algorithm for implementing the Monte Carlo analysis. The model allows a Monte Carlo uncertainty analysis to be implemented on those parameters that have the most influence on the predicted exposure concentrations. Therefore, we can use the expected exposure concentration generated by the model (the mean value) and the uncertainty in the predictions (represented by a prediction interval or standard deviation) in the risk estimation procedure. Unfortunately, SWRRBWQ does not have a built-in Monte Carlo procedure. Therefore, we

manually generate a prediction uncertainty by running the model several times using different values of sensitive input parameters. The range of model predictions are used to generate a prediction interval of the exposure estimates. Prior work with SWRRBWQ (Smart and Warren-Hicks 1998; Warren-Hicks et al. 1996) has shown that SWRRBWQ produces realistic predictions of pesticides in surface water runoff and that the described method of generating prediction intervals is sufficient in most applications.

Estimates of risk at Tier 2 can be evaluated using the following procedures:

1. For ecological risk, community level risk curves can be generated using the Water Environment Research Foundation's (WERF's) Aquatic Ecological Risk Procedures and Software (Parkhurst et al. 1995, Warren-Hicks and Parkhurst 1995). This method combines the distribution of exposure concentrations with a community level risk curve developed from laboratory toxicity test data to generate the probability of impact of one or more pesticides to the environment. This method is appropriate when sufficient laboratory toxicity data are available for a specific pesticide. In many cases, both acute and chronic community curves can be generated.

2. For both human health and environmental criteria, hypothesis testing can be employed. Here, we use the uncertainty in the exposure concentrations and risk criteria to statistically evaluate if a potential for risk is apparent. We test the hypothesis:

   H_0: exposure concentration > risk criterion
   H_1: exposure concentration < risk criterion

   The test is a one-tailed evaluation of risk. We are only concerned if the exposure criterion is greater than the risk criterion.

In this approach, we attempt to use more realistic risk criterion than employed in Tier 1. The WERF method provides methods for generating realistic criterion for environmental impacts. For human health impacts, we use the geometric mean of the health effects criterion published for a particular pesticide.

3.4.1.7. ***Tier 3: Assessment.*** The Tier 3 methods are identical to the Tier 2 methods. However, at Tier 3 we attempt to generate excellent site-specific data for use in the exposure models. Typically, this equates to site surveys, collection of soil and water samples, and possible toxicity testing of site-specific materials. The risk characterization methods are identical, but the confidence in the analytical results is increased over the Tier 1 and Tier 2 results. These surveys are typically very time consuming and expensive, and we often exclude the pesticide from further consideration rather than attempt to gather the data needed for a Tier 3 analysis.

3.4.2 Results of Modeling

The results of the risk assessment indicate that the fungicides chlorothalonil, thiophanate-methyl, and thiram, the insecticides ethoprop and trichlorfon, and the nematicide fenamiphos have more than negligible risk associated with their use on the Hyatt golf course. Alternative pesticides with negligible risk are available to control the target pests of chlorothalonil, thiophanate-methyl, thiram, ethoprop, and trichlorfon; therefore, these pesticides have not been selected for use on the Hyatt golf course. Fenamiphos is the only effective and available pesticide control for nematodes; accordingly, it has been selected for use on the golf course subject to tight restrictions (use restricted to once per year on greens only – see **Table 3-9**).

Additionally, the use of chlorpyrifos and mancozeb are not for use on the golf course. Chlorpyrifos is exhibiting toxicity characteristics that are not consistent with the program goals, and mancozeb degrades to ETU, a toxic compound.

The specific pesticides selected for use at the Hyatt golf course are listed in **Tables 3-11** (fungicides), **3-13** (insecticides), and **3-16** (herbicides). As stated above, fenamiphos has been selected for use as a nematicide in the event nematode infestations of greens require pesticide treatment. These Tables identify the selected pesticide by target pest and define a use hierarchy based on an Environmental Impact Quotient (EIQ). The EIQ represents a pesticide ranking based on factors which define impact potential relative to other pesticides and pest control strategies. The EIQ is described in Kovach et al. (1992). Within the Tables pesticides are ranked for use according to their EIQ wherever an EIQ has been determined. Those with a lower EIQ are preferred over those with a higher EIQ. Note that the EIQ neither replaces nor supersedes the results of the risk assessment, it merely supplements those results for the purpose of ranking preferences.

Table 3-8. Results of the Modeling Exercises for Pesticide Selection for the Hyatt Golf Resort.[a]

Pesticide	Model Results Risk Ratios[b]		
	Acute Aquatic	Chronic Aquatic	Human Health
Fungicides			
azoxystrobin*	negligible risk	negligible risk	ND
Daconil chlorothalonil	potential risk	potential risk	potential risk
Fungicide V chloroneb	negligible risk	negligible risk	negligible risk
Koban etridiazole Terrazole	negligible risk	negligible risk	negligible risk
fenarimol* Rubigan	negligible risk	negligible risk	negligible risk
flutolanil Prostar	negligible risk	negligible risk	ND
fosetyl-Al* Aliette	negligible risk	negligible risk	negligible risk
iprodione* Chipco 26019	negligible risk	negligible risk	negligible risk
mancozeb Dithane, Fore	negligible risk	negligible risk	negligible risk
mefenoxam*	negligible risk	negligible risk	negligible risk
myclobutanil* Eagle	negligible risk	negligible risk	negligible risk
PCNB Terraclor	negligible risk	negligible risk	negligible risk
propamocarb* Banol	negligible risk	negligible risk	negligible risk
propiconazole Banner	negligible risk	negligible risk	negligible risk
Cleary's 3336 Fungo Flo thiophanate-methyl	potential risk	potential risk	negligible risk
thiram Spotrete	potential risk	potential risk	negligible risk
triadimefon* Bayleton	negligible risk	negligible risk	negligible risk
Touche vinclozolin* Curalan	negligible risk	negligible risk	negligible risk
Herbicides			
2,4-D Trimec	negligible risk	negligible risk	negligible risk
benefin* Balan	negligible risk	negligible risk	negligible risk
Pre San bensulide Betasan	negligible risk	negligible risk	negligible risk
bentazon Basagran	negligible risk	negligible risk	negligible risk
bromoxynil	negligible risk	negligible risk	negligible risk
dicamba* –	negligible risk	negligible risk	negligible risk
diclofop-methyl	negligible risk	negligible risk	negligible risk

Table 3-8. Results of the Modeling Exercises for Pesticide Selection for the Hyatt Golf Resort.[a]

Pesticide	Model Results Risk Ratios[b]		
	Acute Aquatic	Chronic Aquatic	Human Health
dithiopyr Dimension	negligible risk	negligible risk	ND
glyphosate* Round Up	negligible risk	negligible risk	negligible risk
halosulfuron Manage	ND	ND	ND
imazaquin* Image	negligible risk	negligible risk	negligible risk
isoxaben* Snapshot	negligible risk	negligible risk	negligible risk
mecoprop	negligible risk	negligible risk	negligible risk
metolachlor	negligible risk	negligible risk	ND
metribuzin* Sencor	negligible risk	negligible risk	negligible risk
MSMA	negligible risk	negligible risk	ND
oryzalin* Surflan	negligible risk	negligible risk	negligible risk
oxadiazon Ronstar	negligible risk	negligible risk	negligible risk
pendimethalin Pre-M	negligible risk	negligible risk	negligible risk
prodiamine Barricade	negligible risk	negligible risk	negligible risk
pronamide Kerb	negligible risk	negligible risk	negligible risk
simazine Princep	negligible risk	negligible risk	negligible risk
Insecticides			
acephate Orthene	negligible risk	negligible risk	negligible risk
bifenthrin Talstar	negligible risk	negligible risk	negligible risk
carbaryl* Sevin	negligible risk	negligible risk	negligible risk
chlorpyrifos Dursban	negligible risk	negligible risk	negligible risk
cyfluthrin Tempo	negligible risk	negligible risk	negligible risk
ethoprop Mocap	negligible risk	negligible risk	potential risk
fenamiphos Nemacur	negligible risk	potential risk	potential risk
fipronil Chipco Choice	ND	ND	ND
halofenozide*	negligible risk	negligible risk	negligible risk
imidacloprid* Merit	negligible risk	negligible risk	negligible risk
Battle lamba-cyhalothrin Scimitar	negligible risk	negligible risk	negligible risk

Table 3-8. Results of the Modeling Exercises for Pesticide Selection for the Hyatt Golf Resort.[a]

Pesticide	Model Results Risk Ratios[b]		
	Acute Aquatic	Chronic Aquatic	Human Health
permethrin Astro	negligible risk	negligible risk	negligible risk
spinosyn*	negligible risk	negligible risk	ND
trichlorfon Dylox	negligible risk	potential risk	negligible risk

a See Appendix I for additional model results and data, but note that in the Model Results column, if the quotient for the Expected Risk is greater than 1 (one) the potential for risk is assumed (Expected Risk = Maximum Expected Concentration / Effects Criteria; see footnote *b*). Restrictions for use are given in Table 3-9. The * indicates that the material can be used in the Limited Spray Zone as defined in Section 2.2.3.
b Expected Risk = Maximum Expected Concentration / Effects Criteria; therefore, for
Acute Aquatic = GEENEC (Peak Runoff)/LC_{50},
Chronic Aquatic = GEENEC (Avg 21 day runoff)/(LC_{50} * 0.1)
Human Health = SCI-GROW output/HAL
c ND means no data

3.4.3 Pesticide Use Restrictions

Specific restrictions to be implemented in the use of the selected pesticides on the Hyatt golf course are listed in **Table 3-9**. These restrictions supplement the basic restrictions specified on manufactures' labels. In addition to the restrictions on the use of fenamiphos, the use of any pesticide with a HAL or with a LC_{50} of less than 50 ppb is to be prohibited within the Management Zones defined under section 2.2.3 (i.e., within 50 feet of a wetland or watercourse).

Table 3-9. Restrictions for Use of Pesticides at The Hyatt Golf Resort.†

Pesticide	Applications per year	Restrictions
Fungicides		
chlorothalonil Daconil	0	Not for use on the golf course.
mancozeb	0	Not for use on the golf course. Degradation product is ETU.
PCNB Terraclor	1	No more than 40% of the acreage treated at any one time. A 21-day waiting period between applications.

Table 3-9. Restrictions for Use of Pesticides at The Hyatt Golf Resort.†

Pesticide	Applications per year	Restrictions
cleary 336 thiophanate-methyl	Fungo Flo 0	Not for use on the golf course.
thiram Spotrete	0	Not for use on the golf course.
Herbicides		
bensulide Betasan	2	No more than 40% of the acreage treated at any one time. A 120-day waiting period between applications.
bentazon Basagran	2	No more than 40% of the acreage treated at any one time. A 30-day waiting period between applications.
bromoxynil	2	No more than 40% of the acreage treated at any one time. A 7-day waiting period between applications.
diclofop-methyl	2	No more than 40% of the acreage treated at any one time. A 40-day waiting period between applications.
mecoprop	2	No more than 40% of the acreage treated at any one time. A 21-day waiting period between applications.
oxadiazon Ronstar	2	No more than 40% of the acreage treated at any one time. A 60-day waiting period between applications.
prodiamine Barricade	2	No more than 40% of the acreage treated at any one time. A 60-day waiting period between applications.
pronamide Kerb	2	No more than 40% of the acreage treated at any one time. A 60-day waiting period between applications.
simazine Princep	2	No more than 40% of the acreage treated at any one time. A 60-day waiting period between applications.
Insecticides		
acephate Orthene	2	No more than 40% of the acreage treated at any one time. A 3-day waiting period between applications.
bifenthrin Talstar	3	No more than 60% of the acreage treated at any one time. A 25-day waiting period between applications.
chlorpyrifos Dursban	0	Not for use on the golf course.
cyfluthrin Tempo	1	No more than 20% of the acreage treated at any one time. A 5-day waiting period between applications. Not used within 25 ft of water features.

Table 3-9. Restrictions for Use of Pesticides at The Hyatt Golf Resort.†		
Pesticide	**Applications per year**	**Restrictions**
ethoprop Mocap	0	Not for use on the golf course.
lambda-cyhalothrin Battle Scimitar	2	No more than 20% of the acreage treated at any one time. A 30-day waiting period between applications.
permethrin Astro	2	No more than 20% of the acreage treated at any one time. A 30-day waiting period between applications.
trichlorfon Dylox	0	Not for use on the golf course.
Nematicides		
Fenamiphos Nemacur	1	Used on greens only. Highly toxic to aquatic organisms and mobile.
† Acreage is given as the percent of total area of greens, tees, fairways and roughs. Spot treatment will be used when possible.		

3.5 SPECIFIC LOCAL PROBLEMS

As a component of IPM, the golf course superintendent must make decisions about pest problems and develop control recommendations including the judicious use of pesticides. **Figure 3-1** is the suggested flow chart for decision making at the Hyatt Golf Resort based on IPM strategies. Strategies include identifying an anticipated pest complex, the interrelationship of disease infection and expression of symptoms, noting temperature ranges when diseases most prevalent on cool-season grasses are active, and identifying timing for optimum insect and weed control. As part of the strategy, pesticides approved based on the pesticide analysis previously noted in this plan are suggested for use with each specific pest.

3.5.1 Disease Management

Only the most prevalent diseases for this location are discussed. Other disease problems will be evaluated as they become a serious concern. Disease control is discussed in terms of conditions which favor development, what measures can be taken to reduce the potential, disease control and then guidelines for disease management are given. Disease incidence is closely linked to

environmental factors, primarily temperature, humidity, and amount of sunshine. The temperature ranges which favor development and growth of turfgrass pathogens are given in **Figure 3-4.**

As part of IPM strategies, logging of daily temperature information is critical to observe when disease development is favored. While this approach is helpful for many diseases, there are several in which infection and expression of symptoms are distinctly different (**Figure 3-5**). Putting greens and tees will be scouted daily for signs of disease (**Figure 3-6**). Fairways will be scouted several times a week.

Fungicides which are recommended for use at the Hyatt Golf Resort are given in Section 3.4. The risk assessment selection process is also detailed in **Section 3.4**.

3.5.1.1. ***Common Warm-Season Grass Disease Problems.***

Dollar Spot - Favored by low nitrogen levels. Use of several natural organic fertilizers/composts has also been shown to reduce incidence by up to 45% (Nelson, 1990). This disease is slow to develop and cause damage, therefore daily scouting during the months which favor disease development will preclude treatment except on a curative basis. This is normally when night temperatures are >50°F and day temperatures are <90°F. Disease is severe on turf subjected to drought stress.

Management - Seldom is it necessary to use a fungicide on warm-season grasses, especially bermudagrass to control dollar spot. A fertilizer application at 0.5 to 1.0 lb. N/1000 sq.ft. is usually sufficient to control the disease.

Leaf Spot - This disease is most prevalent during warm, wet periods and most often affects new growth. Since the warm months coincide with low rainfall, over-watering can create conditions which favor disease development. It is also favored by excess thatch and nitrogen deficiency.

Management - Remove thatch at regular intervals and apply adequate nitrogen. A nitrogen application is often beneficial rather than applying a fungicide.

Pythium Blight - Pythium blight normally appears in low spots that remain wet. Good drainage will preclude conditions developing which will favor this disease.

Management - Avoid over-watering and keep good soil aeration.

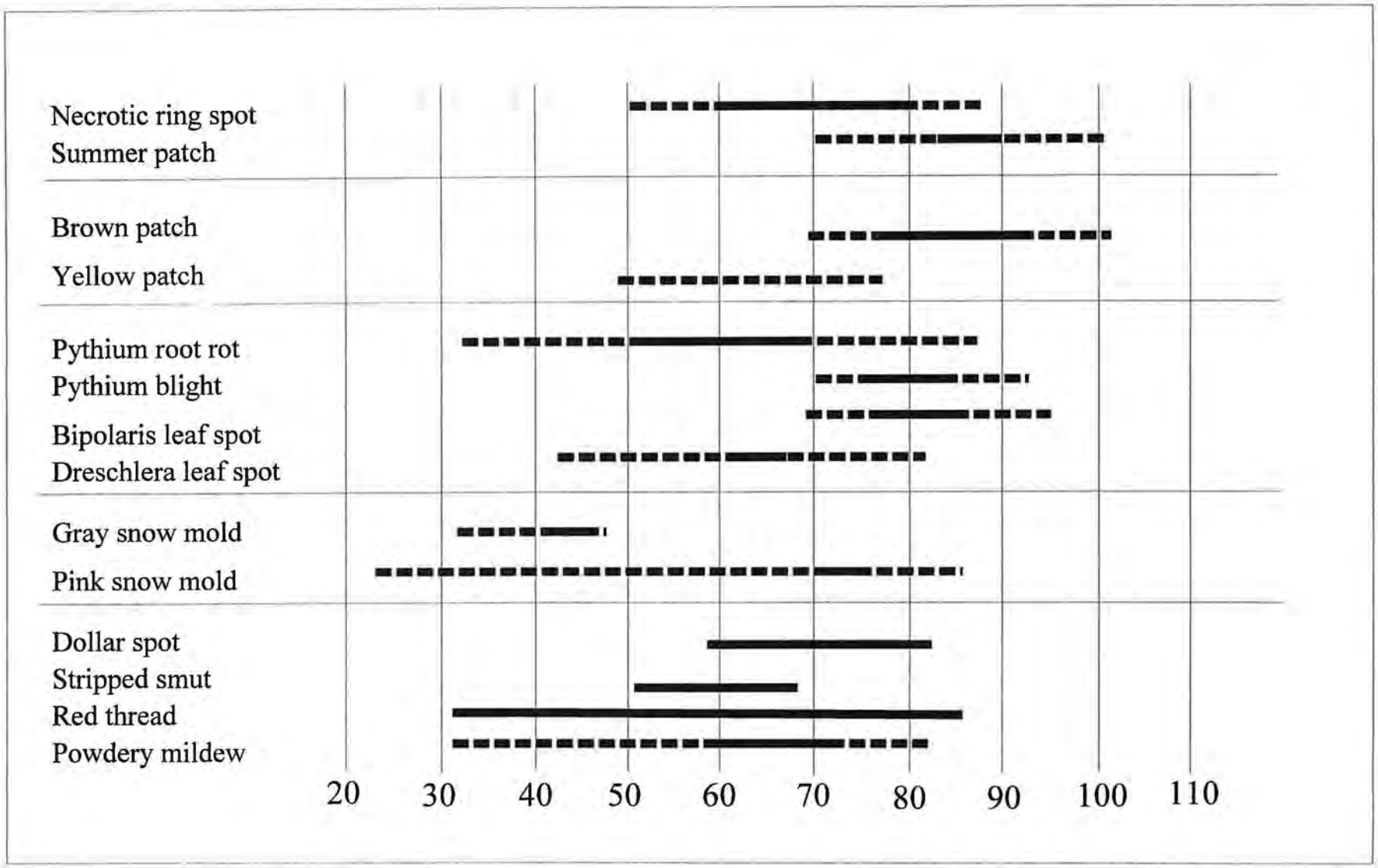


Figure 3-4. Temperature ranges (° F) for turfgrass disease development. Solid lines note when disease is most active.

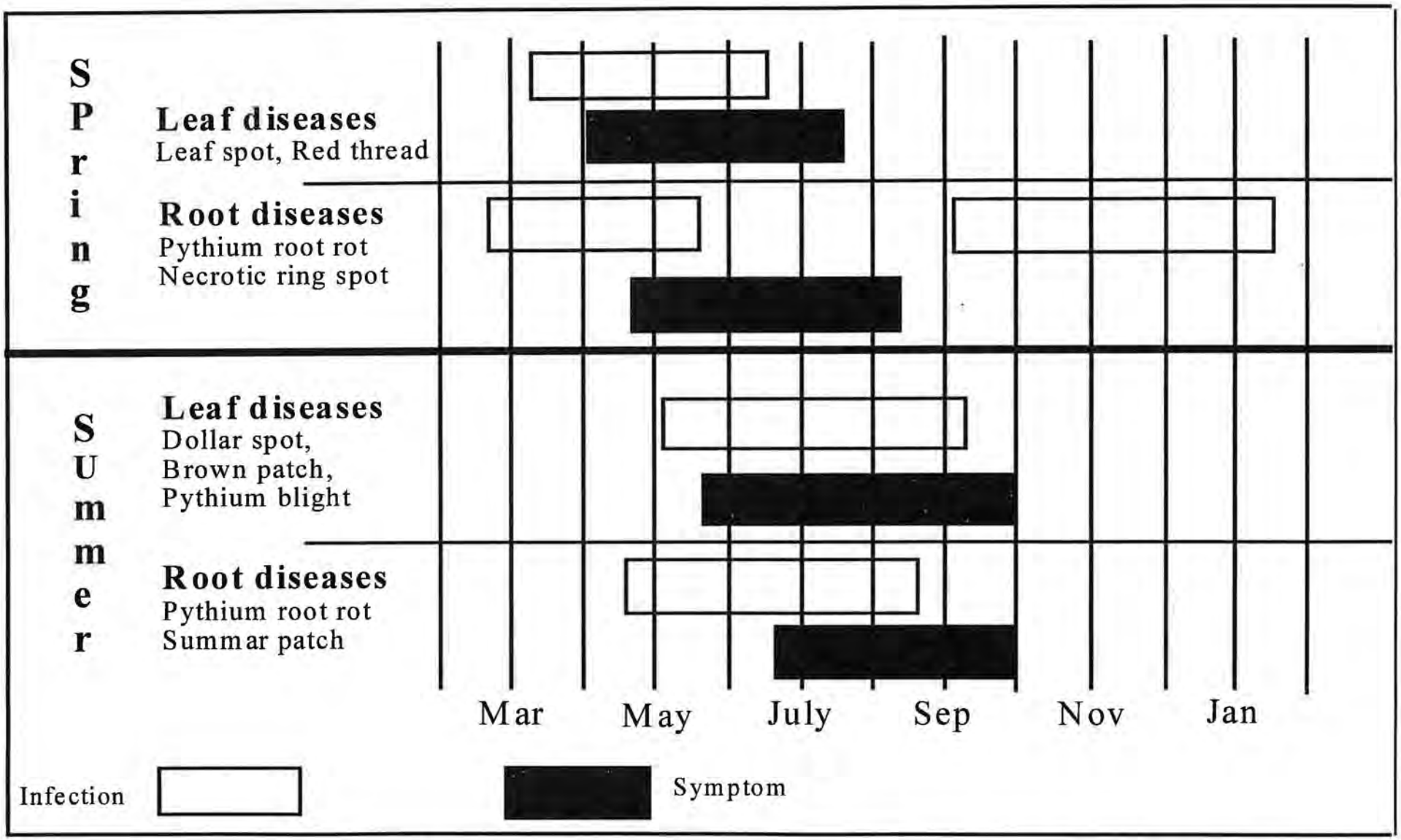


Figure 3-5. Interrelationship between turfgrass disease infection and symptom development.

Figure 3-6. Turf Pest Damage Monitoring Chart

	Causal Agent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Symptoms of Damage
Diseases that cause irregular damage	Fusarium Leaf Blight/ Crown and Root Rot							X	X	X				Irregular dull tan leaf spots with dark margins, oval or eye shaped
	Leafspots, Blights, and Melting Out				X	X	X	X	X	X	X			Oval or eye shaped dark bordered spots, dark specks present in older diseased tissue.
	Powdery Mildew							X	X	X				White to powdery gray mold which is easily wiped off, often found in shade. No leaf spots present.
	Red Thread/ Pink Patch				X	X	X	X	X	X	X			Irregular pattern of pink to reddish leaves with gelatinous mycelium. Red "thread" like growths beyond tips may be present.
	Rusts							X	X	X	X			Irregular pattern of bright orange, yellow, reddish brown pustules on the grass blades.
	Slime Molds						X	X	X	X				Slimy superficially whitish gray to yellow fungus, turning powdery later.
	Stripe Smut				X	X	X	X	X	X	X	X		Gray to black streaks of black powdery spores in leaves. Usually in turf 3 or more years old.
Diseases that cause circular dmage	Anthracnose					■	■	■	■	■				Leaves yellow and wilting; black spiny hairs in tufts may be visible by hand lens.
	Brown Patch						■	■	■	■				1-3" patches of light brown grass. Gray mycelium may be present in moist conditions.
	Dollar Spot						■	■	■	■				Whitish tan leaf spots with brown, reddish brown, or purplish borders.
	Downy Mildew				■	■				■	■			Yellow patches or tufts <1" across. Plants easily pulled from turf.
	Necrotic Ring Spot						■	■	■	■				Patches, rings, "frog eyes" approx. 6-8" across, enlarging later. Common in Kentucky Bluegrass and annual Bluegrass.
	Pythium Root Rot			■	■	■	■	■	■	■	■	■		Turf wilted, killed, or rotted. Often in poorly drained areas.
	Pythium Blight						■	■	■					Circular pattern with tan spots lacking dark borders on the leaves. Leaves matted and slimy with dense white mold.
	Snow Mold (Pink and Gray)	■	■	■	■	■					■	■	■	Wet grass covered with white, pink, bluish gray mold. Small reddish, brown, or yellow scelonda present on leaves in gray variety.
	Summer Patch							■	■	■				Circular patches of straw colored grass 6-8" across. Center may be green. (Identical to Necrotic Ring Spot.)
	Take All			■	■	■	■			■	■	■		Yellow turning reddish, then brown, and later sunken patches occur. Centers often invaded by weeds.
	Yellow Patch (cool season Brown Patch)	■	■	■	■						■	■	■	Yellow to straw colored grass often sunken in high cut areas.
	Fairy Ring				■	■	■	■	■	■	■			Rings or arcs up to 15' across often with outer ring of dark green grass. Mushrooms may be present in ring.

Figure 3-6. Turf Pest Damage Monitoring Chart

	Causal Agent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Symptoms of Damage
Insects	White Grubs: Japanese beetle, Eur. chafer, Masked chafer, Oriental beetle				X	X	X		X	X	X			Turf appears to suffer drought stress. Skunks, raccoons, and crows may tear up the turf. Turf may pull up "carpet like".
	White Grubs: May or June beetles				X	X	X	X	X	X	X			Three year life cycle—damage occurs throughout growing season of "Year 2".
	Billbugs							X	X					Areas wilt and do not respond to watering. "Sawdust" like material in thatch. Turf is easily tugged loose.
	Black Turfgrass Ataenius						X	X	X					Similar to white grubs above.
	Chinch Bugs							X	X					Wilted or browned areas, most severe in sunny or sandy areas.
	Cutworms						X	X	X					Burrows surrounded by brown patches, green frass may be present.
	Hyperodes Weevil						X	X						Yellow patches beginning near collars and fairways. Damaged areas may appear water soaked. Usually two generations per year.
	Sod Webworm						X	X	X					Discrete browned areas which coalesce later. Most common in sunny areas. May cause damage in late Spring.
Weeds	Crabgrass and Other Annual Grasses				■	■	■							Period of peak germination. When soil temperatures are 12-14.5°C (53-58°F) at a depth of 10 cm (4").
	Annual Bluegrass and Winter Broadleaves							■	■	■	■	■		Period of peak germination. May develop seed heads earlier in season if weather is favorable.
	Perennial Broadleaves					■	■		■	■				Period of peak germination.
	Annual Broadleaves				■	■	■		■	■	■			Period of peak germination.
	Weed Scouting Period: Optimum							■	■	■	■			Most weeds are large enough for easy identification.
	Weed Scouting Period: Secondary			■	■	■	■	■						

Pythium Root Rot - Similar to pythium blight, this is favored by hot weather, poor drainage and excessive soil moisture.

Management - Avoid over-watering and keep good soil aeration.

Rhizoctonia Blight - Excessive thatch and mat along with soft lush growth favor development.

Management - Keep thatch levels below ½ inch. Avoid nitrogen levels that force a lot of soft lush growth. Keep good soil aeration and drainage.

Bermudagrass Decline - Only occurs on bermudagrass under low heights of cut. Disease is triggered by stress including too short a mowing height, nematode injury, soil insects, poor irrigation management, compaction and others.

Management - Aerify greens deeply and frequently when grass is healthy. Remove cores and topdress. Keep mowing height on the upper side of the range.

3.5.1.2. ***IPM Guidelines for Fungicide Use.*** No annual fungicide program can, nor will, be developed for the Hyatt Golf Resort because using the IPM approach, many diseases are treated curatively and not on a preventative basis. The need for excessive preventative and curative applications is minimized by sound cultural programs, practicing routine scouting and monitoring of turf and environmental conditions.

Table 3-10 provides guidelines under which disease management by use of fungicides may be initiated are provided for cool- and warm-season grasses for specific diseases. **Table 3-11** lists fungicides recommended for use.

Table 3-10. Guidelines Under Which Disease Management is Initiated

Disease	Treatment
Pythium Blight and Pythium Root Rot	Curative upon detection of any incidence on any area. This disease is easily spread if in the blight stage. The root rot form can be exceptionally damaging since it affects nutrient and water uptake
Rhizoctonia blight	Curative treatment upon detection of 4 to 6 incidences which are 2 to 4 inches in diameter per 1000 sq.ft.
Bermudagrass Decline	Curative upon detection.

Table 3-11. Fungicides† Recommended for Control of Specific Turfgrass Diseases at the Hyatt Golf Resort

Disease	Fungicide Selections
Fairy ring	flutolanil Prostar
Rhizoctonia blight	①azoxystrobin, ①myclobutanil Eagle, ①propiconazole Banner, ①triadimefon Bayleton, ①vinclozolin Curalan, Touche, ②fenarimol Rubigan, ②iprodione Chipco 26019; ③PCNB; chloroneb Terraclor, flutolanil Prostar Fungicide V
Pythium Blight and Root Rot	①azoxystrobin, ①mefenoxam, ②etridiazole Koban, ②propamocarb Banol, ③ fosetyl- Al; chloroneb, Aliette, Fungicide V
Dollar spot	①myclobutanil Eagle, ①propiconazole Banner, ①triadimefon Bayleton, ①vinclozolin Curalan Touche, ②fenarimol Rubigan, ③PCNB Daconil Revere
Leaf spot	①azoxystrobin, ①myclobutanil Eagle, ①propiconazole Banner, ①triadimefon Bayleton, ①vinclozolin Curalan Touche; ②iprodione Chipco; ③PCNB Revere
Bermudagrass decline	①azoxystrobin, ①myclobutanil Eagle, ①propiconazole Banner, ①triadimefon Bayleton,② fenarimol Rubigan

†Pesticides with the lowest EIQ are identified and those pesticides that do not have an EIQ rating are simply listed. All materials must be applied at rates and under conditions prescribed by the label. Ecological risk assessment protocols were used to select pesticides, see Section 3.4. Pesticides are numbered based on Environmental Impact Quotient protocols, and pesticides with the lowest number are preferred, see Section 3.4.1.

3.5.1.3. ***Biological Control.*** Some commercial biological control products for turfgrass diseases have recently become available, but their successful use in commercial turfgrass management has not been widely demonstrated. The two practical uses are as follows:

1. Introduction of specific microorganisms that will prevent or reduce certain turfgrass diseases by producing toxic compounds or out-competing the pathogenic fungi. The University of Florida's IFAS Extension Service does not currently recommend the use of any of the commercial products for disease control. As evaluations determine these materials may have efficacy under Florida conditions this could change.

2. Application of organic materials (e.g. composts) that contain populations of microorganisms which may reduce turfgrass disease development. While certain composts have been shown to suppress a number of diseases, not all composts are disease suppressive. The details of this science are not completely understood, and

reliable quality control of composts for disease suppression still lies in the future. In fact, the actual microbial inoculation of most composted materials is mostly accidental and depends on what organisms are present at the time the process is completed. The use of compost mixed into the topdressing material to provide microbial inoculum will be considered. However, before purchasing a compost for its disease suppressive activity, check on recent field research for the latest results.

3.5.2 Insect and Nematode Control

Insect problems at this course will include lepidopteran larvae, root feeding grubs and beetles and mole crickets. A vigorous, healthy turf will withstand a moderate infestation. Routine scouting and sampling of turf for adults and grubs can isolate areas of concern and target control measures. While biological treatments such as parasitic nematodes and bacteria for insect control are available, they do not give the degree of consistency, reliability and versatility and are proven ineffective in many circumstances (Potter 1993). However, they will be considered where there is a concern about use of an insecticide.

3.5.2.1. ***Insect Management and Detection***. Seasonal activity of the major turfgrass pests depends on environmental and local microclimate conditions. Timing may be shifted several weeks either way for most insect problems.

Armyworms - Bird predation and parasitic flies and wasps help keep the populations in check. Thus, indiscriminate use of insecticides which would also reduce populations of these predators and is therefore discouraged. Scouting of the turf for chewed or skeletonized grass blades mingled with green fecal pellets will be done beginning in summer and continuing through October.

Management - Remove thatch to eliminate daytime resting areas. Eliminate damp areas with rank growth where armyworms tend to lay eggs.

White grubs - a number of beetle larvae can cause damage to turf. However, warm-season grasses tend to be very tolerant of grub feeding. One of the most common in the southeastern US is the Masked Chafer. These are beetle larvae that are white, up to 1 inch in length. These complete one generation per year; adult males are attracted to lights at night, mostly from mid-June through July. Symptoms resemble drought stress and exist

even where there is sufficient irrigation. Extensive root feeding sometimes allows the turf to be rolled back like a carpet. The most damage usually takes place in late summer or early fall. Current chemical control options are most effective against early instar larvae (less than 0.5 inch long). Adult activity generally occurs during the period from mid-June to July. Optimum timing for treatment is 3 to 4 weeks following peak adult activity. Scouting for drought stress symptoms and examining the turf closely will give indicate the presence of these insects. These pests have started to be a severe problem in areas where the turf has been treated for mole crickets with fipronil. Fipronil is not broad-spectrum enough to control both. Therefore scouting in these areas is critical. Rotation of materials for mole cricket control with a more broad-spectrum material will help minimize this problem.

Sod webworms - these drop their eggs indiscriminately into the turf. At night the larvae emerge to feed. The first instar larvae are leaf skeletonizers. Later instars notch or cut-off leaf blades that are drawn back into the burrow in the thatch. Heavily-infested turf (more than 100 per square yard) quickly appears moth eaten, with irregular patches of brown grass or bare areas. Warm-season grasses are relatively tolerant of webworm feeding but, putting greens can be devastated overnight with a heavy infestation. Monitoring for these will be from June to early October. There may be more than one generation per year.

Management - Thatch removal can assist in removing sod webworm habitat, however, these larvae do not require a thatch layer in order to be present in high numbers.

Billbugs - While there are several species of billbugs, the Hunting billbug is more common on bermudagrass in Florida. They become active in mid-to-late spring and after mating eggs are laid in the turf in cavities chewed into grass stems near the crown. Newly hatched larvae feed for two to three weeks within stems before migrating to the crown and root zone to feed. Larvae feed until mid-July. Greatest damage occurs from mid-June through mid-July. Billbug damage is similar and often mistaken for that caused by white grubs. However, the grass is easily pulled from the soil and tends to break at the crown rather than pulling loose from the roots.. Billbug adults are difficult to detect, even when numerous. Scouting for the adults on the cartpaths or sidewalks in spring (April, May) will be done to determine when adults are emerging from overwintering and will be mating. Adults can be flushed form the turf by mixing 1 tablespoon of 1% pyrethrins or

¼ cup of lemon-scented household detergent with 2 gallons of water and applying it over one square yard of surface area. This irritates the billbugs and drive them to the surface in about 15 minutes where they can be counted to determine if they exceed threshold levels. Billbug larvae can be detected by selecting several locations in the turf and peeling back ¼ square foot (6" x 6") of turf to a depth of 2 to 3 inches at each site. A cup cutter can also be used to sample 0.1 square foot areas. Pitfall traps can also be placed in areas which have a history of billbug activity. These will be set out in March or April at approximately 20-foot intervals. These will be monitored one to two times a week until late May or early June. Where pitfall traps are used, two to five adult billbugs captured per trap indicates the potential for light to moderate damage. If trap catches exceed seven to ten billbugs per trap, severe turfgrass injury is probable.

Mole Crickets - The principle ones found in Florida are the southern mole cricket and the tawny mole cricket. The adult lays approximately 120 eggs in underground cells. The nymphs develop throughout the summer and most are adults by fall. Most eggs are deposited in May. Proper timing of pesticide application is extremely important. Where economic damage has occurred in previous years, apply sprays or granules during mid-June or a bait during July. Mapping of these areas will help determine areas where control may need to be concentrated in the future. Pesticides may also be applied when damage appears in spring due to egg-laying activity or during August, September or October, but will not be as effective at these times due to maturity of the crickets. Irrigate before application and irrigate after applying sprays or granules with ½ inch of water. Do not irrigate after applying baits for 3 to 4 days if possible.

3.5.2.2. ***IPM Guidelines for Pesticide Use.*** Determination of insect activity is the criteria behind which a decision is made to apply an insecticide. Thresholds before chemical treatment is necessary are given in **Table 3-12.** Insecticides which are recommended for use at The Hyatt Golf Resort are listed in **Table 3-13.**

Table 3-12. Thresholds for Treatment of Insect Problems at The Hyatt Golf Resort.

Insects	#/sq.ft.	#/4-inch core
Mole crickets	1 to 2	1
Armyworms	1 to 2	1
Sod webworms	2	1
Billbug larvae	25 to 30	2 to 3
Billbug adults	1	1
White grubs	1	1

Table 3-13. Insecticides† Recommended for Control of Specific Turfgrass Insects at the Hyatt Golf Resort.

Insect	Pesticide Selection
Mole crickets	①bifenthrin, ①cyfluthrin, ②acephate, ②carbaryl,
Armyworms and Sod webworms	*Bacillus thuringiensis* (biological) ① bifenthrin, ①cyfluthrin, ①lambda-cyhalothrin, ①spinosyn, ②acephate, ②carbaryl, ②permethrin, azadirachtin
White grubs and billbugs	①imidacloprid
Nematodes	①fenamiphos

†Pesticides with the lowest EIQ are identified and those pesticides that do not have an EIQ rating are simply listed. Ecological risk assessment protocols were used to select pesticides, see Section 3.4. Pesticides are numbered based on Environmental Impact Quotient protocols, and pesticides with the lowest number are preferred, see Section 3.4.1. All materials must be applied at rates and under conditions prescribed by the label.

3.5.2.3. ***Biological Controls***. While none of the biological control agents give the consistency of synthetic pesticides, their use will be considered. Only two are commercially available and recommended by the University of Florida's IFAS Extension Service.

Azadirachtin - A naturally occurring insect growth regulator from the neem tree. Can be used on cutworms or sod webworms. The biggest disadvantage is that it must be applied when the target insect is in relatively small, immature stages.

***Bacillus thuringiensis,* or Bt toxin** - This is a bacterial toxin and is an option for lepidopteran larvae. It is more expensive than a conventional insecticide and acts more slowly. It will take several days to kill target insects. Timing is critical: applications must be made when target insects are in smallest, immature stages.

Beauvaria bassiana - This is a fungal organism which parasitizes billbug larvae. It is very sensitive to breakdown in sunlight.

Steinernema scapterisci - This is an entomopathogenic nematode which penetrates insect bodies through natural body openings and releases bacteria which then cause disease in the target insect. The disadvantages to use of these materials include: they are very

sensitive to desiccation, will not be applied when temperatures are hot and must be watered into the turf immediately after application; shelf life (3 to 6 months) is shorter than most traditional insecticides; repeat applications may be necessary, so total cost may be higher than with traditional insecticides; timing of application is even more critical than with traditional insecticides; often they will not be effective against all stages of insects; the level of control may be lower than expected with traditional insecticides. Further, mole cricket nymphs are less susceptible than are adults, and small nymphs are scarcely susceptible at all. Tests have shown that *S. scapterisci* is quite specific to *Scapteriscus* mole crickets. *Steinernema scapterisci* was brought to Florida and released in the hope that it would reduce *Scapteriscus* mole cricket populations. Whether it would function as a classical biological control agent or as a biopesticide was unknown at the time. It has proven to have some of the attributes of both. First, when released in pastures, it established and maintained populations for at least five years, killing mole crickets week after week for the whole time. Second, when released in larger numbers in larger plots, it achieved the greatest effect on mole crickets within the first 7-10 days, with much reduced effect thereafter. It will have its greatest effect where mole cricket populations are highest, because there it will be able to reproduce best. This means that its effect in pastures, where mole cricket populations tend to be high, is likely to be greater than its effect in turf, where populations tend to be lower. *Steinernema scapterisci* can be used as a biopesticide. It kills mole crickets within 7-10 days as contrasted with a few hours in many chemical pesticides, but death of infected mole crickets is certain. Although the proportion of mole crickets killed by direct application (in water, at 800 million nematodes per acre) may range up to about 60%, and this is not as high as are killed by the most effective current chemical pesticides, the nematode has a special attribute: it has a residual effect. This residual effect has two causes: (1) nematodes can persist in the soil for many weeks, and (2) nematodes that succeed in finding host mole crickets will reproduce, releasing more third-stage juveniles into the soil to infect and kill more mole crickets. This residual effect can continue indefinitely, though kill of mole crickets after the first 7-10 days will be at much lower levels than it was initially. *Steinernema scapterisci* is now being sold commercially in Florida as a biopesticide. The price is high, and golf courses are being targeted as the market. When applied, the nematode must be irrigated into the ground because it will die if left on the surface: it is susceptible to desiccation and to ultra-violet light. Application in the evening, when light intensity is

lower, helps to reduce exposure to ultra-violet light, as does application on cloudy days. Application during rain helps to avoid the need for irrigation.

Quality of the nematodes to be applied is of great importance. They must be healthy and must contain the necessary bacteria in their guts. Health of the nematodes may most readily be determined if they are seen to move, but a microscope is necessary to see them. Their bacterial complement is harder to evaluate. This is best done by exposing mole crickets to a sample of them in a bucket of soil; if the mole crickets die, then the nematodes can be presumed to have enough of the necessary bacteria. The check for the test of bacteria is another bucket of soil and mole crickets, to which no nematodes are added; these mole crickets, of course, will live, in contrast to those exposed to the nematodes. Some commercial companies may sell *Steinernema* nematodes other than *S. scapterisci* as biopesticides for use against mole crickets. If the label does not give the species of nematode, ask the supplier to give the name in writing. It is true that other *Steinernema* species will kill mole crickets, at least to some extent, but do not expect them to give any residual activity since they are not known to reproduce in mole crickets. Nematicides used on golf courses against plant-parasitic nematodes are expected to kill *Steinernema scapterisci* where they come into contact with it. Although the initial cost of applying nematodes to turfgrass areas is high, sometimes even higher than the cost of chemical nematicides, the eventual cost is lower. As mentioned, the nematode has a residual effect and will kill mole crickets long after chemical insecticides have ceased to do so. The immediate benefit to the turf manager will be a lessening in chemical costs. A second benefit is that the nematode does not pollute the environment with chemical run-off or fumes. There is no cleanup required by local sewage systems and no accidental kill of non-target organisms. The use of biological control agents instead of chemicals not only saves energy costs, but enhances the reputation of the turf manager in the community.

3.5.3 Nematodes

Nematodes are tiny, unsegmented round-worms, generally transparent and colorless. Most are slender, with bodies from 1/100-1/8 inch (0.25-3.0 mm) long, essentially invisible to the unaided eye. Plant nematodes feed on or in plants, usually in their roots. They are aquatic animals that live in soil water or in plant fluids. Females produce a few dozen to over 500 eggs each. Eggs of some species can survive without hatching for years but hatch quickly when a host plant grows

near them. Rates of activity, growth, and reproduction increase as soil temperature rises, from about 50°F to about 90°F. Minimum generation time is about 4 weeks for many nematodes. Nematodes important as turf pests in Florida are described below. **Table 3-14** shows the lowest numbers of each kind of nematode expected to cause significant damage. Properly maintained turf can often stand much higher populations than the minimal action levels shown.

Table 3-14. Minimum Levels of Some Common Nematodes That May Justify Nematicide Application to Turfgrasses in Florida, and Expected Relative Effectiveness of Nematicides for Their Control

Minimum Level		**Expected effectiveness**	
Nematode	No./100cc soil	fenamiphos	isazophos
Sting, Awl	10	Good	Good
Lance	40	Good	Good
Root-Knot	80	Moderate	Unknown
Stubby-root	40	Good	Unknown

Sting Nematode (*Belonolaimus longicaudatus*): Single most serious nematode pest of turf in Florida, damages all grasses commonly grown in Florida; generally found only in very sandy soils.

Lance Nematodes (*Hoplolaimus* species): Widely distributed.

Root-Knot Nematodes (*Meloidogyne* species): Widely distributed, assumed to be injurious when numerous, but their effects on turf grasses are poorly known.

Stubby-Root Nematodes (*Paratrichodorous* species and related genera): Live in most soil types in the state; damage similar to that of sting nematodes.

Awl Nematode (*Dolichodorus heterocephalus*): Very damaging to turfgrasses in wet locations such as low land near lakes, ponds and canals.

Other nematodes may damage turf when very numerous or when other pests, pathogens, or environmental conditions stress turf. These include lesion (*Pratylenchus*), stunt

(*Tylenchorhynchus*), dagger (*Xiphinema*), sheath (*Hemicycliophora*), and sheathoid (*Hemicriconemoides*) nematodes.

3.5.4 Weed Control

The most effective weed control is a dense healthy turf. Therefore, after the first year and the turf is fully established weed problems will be minimal. Paying strict attention to optimum cultural practices to maintain an aggressive turf is the first requisite in weed control. Mapping of problem areas is critical to determining what soil or cultural conditions need to be improved. Where there is a history of problem, these are best handled with a pre-emergent herbicide to reduce weed seed populations. **Table 3-15** provides guidelines under which weed management by use of herbicides may be initiated are provided for each area of the golf course.

Table 3-15. Guidelines for Initiation of Weed Control at Various Locations at the Hyatt Golf Resort

Golf Course Area	Grassy Weeds (%)	Broadleaf Weeds (%)
Greens	0-1	0-1
Tees	2-6	1-4
Fairways	3-8	2-7
Roughs	7-12	8-13

Annual Bluegrass - Growth and persistence of annual bluegrass is favored by compacted and/or wet soils, high soil pH, and high soil phosphorus levels. Keeping cultural practices current to prevent these conditions and favor the growth of the preferred grasses will minimize the competition.

Broadleaf Weeds - Broadleaf weeds will only invade weakened or thin turf, especially if they are annuals. Soil conditions which favor weed growth need to be corrected to promote growth of a healthy turf.

Crabgrass and Other Grassy Weeds- Crabgrass is an annual grassy weed that invades thin turf. Crabgrass seed require light for germination. Thus an effective control is to

maintain a dense stand of grass. Once it is determined that an herbicide is needed for control, crabgrass seed is known to germinate when soil temperatures reach 53 to 58°F at a 4-inch depth. Thus, timing of a pre-emergent herbicide application will be just prior to soil temperatures reaching this range. Isolated areas will be spot treated post-emergent. An evaluation of weed pressure will determine if a particular area needs to be considered for pre-emergent herbicide use the next growing season. Goosegrass is often confused with crabgrass, but it is darker green, grows in tufts, and has a white or silvery color near the flattened stem bases. It germinates later in the spring than crabgrass when soil temperatures at a 4-inch depth reach approximately 64°F. This weed is favored by compacted soils or areas of heavy wear. Other annual grassy weeds can treated post-emergent unless infestation pressure determines that a pre-emergent application may be a better treatment option.

Sedges - Yellow and purple nutsedge are serious perennial weeds in turf. Both produce an extensive system of underground tubers from which they can regenerate. Other sedges can also be a nuisance especially in the roughs where the height of cut is higher. These are primarily a problem where turf areas stay excessively wet.

Herbicides which are recommended and approved based on the selection guidelines previously noted are listed in **Table 3-16**.

Table 3-16. Herbicides† or PGRs Recommended for Control of Specific Turfgrass Weeds at The Hyatt Golf Resort

Weed	Greens	Tees/Fairways
Annual bluegrass - pre-emergent	benefin, fenarimol Balan Rubigan	benefin, bensulide, dithiopyr, oryzalin, oxadiazon, pendimethalin, prodiamine, pronamide
Annual bluegrass - post-emergent	fenarimol Rubigan	pronamide, simazine
Broadleaf - pre-emergent	isoxaben Snapshot	isoxaben, simazine
Broadleaf - post-emergent	2,4-D+dicamba+MCPP Trimec	2,4-D; 2,4-D+dicamba+MCPP; bromoxynil
Grassy - pre-emergent	Betasan bensulide, Betasan bensulide+oxadiazon, Ronstar dithiopyr Dimension	benefin, bensulide, dithiopyr, metolachlor, oryzalin, oxadiazon, pendimethalin, prodiamine

Manage?

Table 3-16. Herbicides† or PGRs Recommended for Control of Specific Turfgrass Weeds at The Hyatt Golf Resort

Weed	Greens	Tees/Fairways
Grassy - post-emergent	dithiopyr Dimension	diclofop-methyl, MSMA, metribuzin Sencor
Sedges	none	Basagran bentazon, imazaquin Image
PGRs	none	trinexapac-ethyl Primo

† Ecological risk assessment protocols were used to select pesticides, see Section 3.4. All materials must be applied at rates and under conditions prescribed by the label.

Plant Growth Regulators - These materials are used to suppress leaf growth as a way to reduce mowing costs. While there can be undesirable side effects from several of these materials, the newer ones have shown to give good performance for from 4 to 7 weeks.

3.5.4.1. ***Biological Control.*** No commercial products are currently available for the biological control of weeds.

3.6 SCOUTING AND MONITORING PROGRAM FOR THE HYATT GOLF RESORT

The IPM scouting and monitoring plan for The Hyatt Golf Resort relies on a number of tenants. In developing the program, there are specific items which need to be addressed in order to ensure the program will be successful. The superintendent must ensure that the following steps are followed:

1. Assign individuals to conduct the scouting, record the results, evaluate the information and make the decisions once the information is recorded. This may be done in a team approach with the scout consulting with specific members of the staff, or it may be an individual IPM specialist.

2. Provide proper education and training to all involved in any aspect of the IPM program. This will include formal seminars, workshops, conferences, short courses, and training for the superintendent and assistant superintendent. State, regional, and national conferences are excellent formats from which to obtain these types of

programs. In-house training sessions for the maintenance crew will be held to inform them of IPM strategies.

3. Review, at least annually, the complete program and evaluate its effectiveness. Changes will constantly be made as the golf course matures, changes in design are made, or as new information concerning handling of turf management or pest problems becomes available.

Weather conditions will be monitored on-site. An automated weather station will be installed to record measure maximum and minimum air and soil temperatures, rainfall, solar radiation, and relative humidity. Temperatures can be used with a simple computer model to calculate degree days. These degree days can be used to determine if the phenology model database triggers scouting or treatment for particular pest problems (**Table 3-17**). These models will be tested for one or more seasons after the golf course is established to see how closely field observations match model data.

Table 3-17. Degree Day Accumulations Required for Each Stage of Development for Specific Pest Problems at the Hyatt Golf Resort.

Pest and Stage of Development	Degree-Day Accumulations (Base 50°F)
Armyworm	
Eggs	113.4
Larvae	498.6
Pupae	297.0
Generation Time (Egg to Adult)	909.0
Pre-egg laying adults	126.0
Generation Time (Egg to Egg)	1035.0
Sod Webworm	
50% adult emergence	380-488
First generation to second generation	974-1098
Second generation to third generation	1314-1343

Table 3-17. Degree Day Accumulations Required for Each Stage of Development for Specific Pest Problems at the Hyatt Golf Resort.

Pest and Stage of Development	Degree-Day Accumulations (Base 50°F)
Smooth Crabgrass	
First emergence	76-140
Initial major emergence	252-414
25% emergence	558
50% emergence	801
75% emergence	1107
95% emergence	1701

Tools necessary to conduct the scouting program will be determined by the level of intensity of the scouting. At a minimum the following items are required: hand lens (10x), collection vials, soil probe, paper bags, pocket knife, small ruler, small spade, notebook, cup cutter, field identification guides, tweezers, and small camera.

3.6.1 Scouting Program

3.6.1.1. *Daily.*

General

- Record data from weather station. Calculate degree days.
- Refer to climatic requirements for different disease, insect and weed problems and determine if conditions are prevalent for particular pest problems.

Greens and Tees

- Quality of cut - while this is dependent on species and cultivars of grass, cutting height, mowing speeds, clips per inch and type of mower, it is an excellent indicator of the overall health of the turf. Additionally, since mowing creates an open wound, it is desirable it heal quickly, and torn or ragged edge is indicative of poor cutting quality which will need to be addressed.
- Soil moisture - whether using a soil moisture meter or simply pulling a core with a probe, the soil moisture will be wet, but not saturated, to prevent moisture stress. This is a gauge form which to help guide the irrigation program.
- Diseases - this is especially critical during periods of warm, moist weather as these are important requisites for disease development. Early morning is the best time for

walking the green by separating paths into six foot segments to note any small spots or white threads of fungal hyphae. A closer examination with the hand lens or a sample to take to the field laboratory for microscopic analysis can be collected to confirm disease presence.

- Weeds - similar to inspection for disease problems, look for any differences in color or texture of leaves, particularly in thin turf areas or where ball marks have damaged the turf. With this approach, many weeds can be hand picked or mechanically controlled before they become mature enough to create a problem.
- Insects - leaf eating insects will be detectable in the same manner as looking for disease and weed problems. On closely mowed turf, a scouting of the surface and thatch layer will be sufficient. Specific insect problems as noted in the section 3.4.2 will be intensively scouted during the peak activity periods noted.

3.6.1.2. *Weekly or Bimonthly.*

All Areas

- Soil temperature - root growth, seed germination (including weeds), disease and insect activity and other factors which impact turf growth are tied closely to soil temperatures.
- Plant tissue analysis - will help guide fertilization programs.

Ponds and Lakes

- Identify aquatic growth that is over-abundant or a nuisance. Scouting will begin in the spring (when water temperatures warm) and end in fall (when water temperatures decrease). Early detection will allow appropriate treatment. Biological controls are a good alternative to chemical treatment of submerged aquatic plants. If chemicals are required, treat only one-third of the lake/pond at a time.
- Should plant problems continue and recur each year, steps will be taken to determine the reason for the nuisance conditions. Once determined, then effective solutions can be implemented.

Greens and Tees

- Scout for signs of algae, molds or moss. They can be observed growing in the mat layer on the soil surface or in the soil profile. Their growth is encouraged by soil acidity and saturated soil profiles. When this scum appears, a light dusting of hydrated

lime at 2 to 5 pounds per 1000 sq.ft. Will kill the algae. Plugging or sodding along with topdressing can be done if necessary as soon as the soil dries out. Vertical mowing can also be performed to break up the scum formed once it has dried if it has formed a thick layer.

- Check for hydrophobic soil conditions by inspecting for areas that turn blue or gray. This condition may be caused by excessive surface compaction or because of the coating of the sand soil particles with a hydrophobic layer of organic matter. A soil probe can be used to extract a column of soil and water droplets can be placed at 2 inch increments along the soil column. If the water beads and does not infiltrate into the soil, a true hydrophobic condition exists. Spot aerification, along with lime and fertilizer and use of a wetting agent can help rectify this problem.

Fairways

- Scout for visual signs of disease, weed and insect problems at least weekly. Dividing the fairways into 15 to 20 foot strips and observing while riding in a golf cart or utility vehicle, scout for signs of pest problems. If symptoms are present, use the thresholds predetermined for a decision on whether to treat with a pesticide. Scouting for insects could include use of pitfall traps, light traps, pheromone traps, cup cutter samples or drenching with soap solutions to flush them to the surface. Once detected, use a grid to quantify the numbers present per sq.ft. or sq.yd. for threshold determination.
- Mapping of the pest problems observed will be done on a grid system of specific locations on the course to develop a history of pest infestation. This will be useful for future control options.

3.6.1.3. *Monthly.*

All Areas

- Sample the soil profile to check for layering. Examine the condition of the roots (should be white and fibrous), smell for indications of anaerobic conditions, probe to check for soil compaction, and measure thatch amounts. A soil analysis in areas where the turf is not performing well for pH and soluble salts can be useful.
- Spot check irrigation system uniformity on at least 4 to 5 greens. Use containers spaced two feet apart from sprinkler head-to-head in a straight line. Operate the system for 15 minutes and check volumes in each container. Multiply by 4 to gauge

the irrigation system inches per hour and determine if it is within specification guidelines.

3.6.1.4. *Semi-Annual.*

All Areas

- Soil test for nutrient levels including macro nutrients, micro nutrients, pH and soluble salts.
- Scout for drainage and seepage problems. Presence of moss or algae is a certain sign of poor drainage. Puddled soil and signs of scald note excessive soil wetness. If seepage is suspected, dig a hole two feet deep with a spade or post hole digger and allow 24 hours for it to refill. If it does so it indicates seepage from below ground either vertically or laterally. Installation of drainage lines may be a way to resolve this problem.
- Monitoring in both mornings and afternoons will determine if tree shade azimuths are creating low light conditions for grass growth and the need to thin trees. This could also help determine wind movement patterns which are important in drying turf areas and preventing disease problems.

3.6.2 Record Keeping

Recording the information collected during the scouting on forms such as those which are in **Appendix II** will help build a record for each area on the course. This will be useful in determining if certain pest problems are recurring. This approach will allow subsequent "fine-tuning" of the IPM program as the course matures.

3.7 MANAGING THE PROGRAM - PERSONNEL

The success of this golf course Integrated Pest Management plan depends, to a large extent, on the manner in which the program is carried out. Since The Hyatt Golf Resort is located in a locale that has environmentally sensitive areas, it is imperative that the selection of personnel be made very carefully. The golf course will need a cadre of highly qualified key people to see that daily operations are carried out properly and in a timely manner. These include the following, although multiple responsibilities may be assigned to one person:

3.7.1 Superintendent

Because turfgrass management has become more scientific in the past few years, it is desirable for the superintendent to have a degree in agronomy, horticulture, plant or soil sciences, as well as experience in all phases of golf course management. Since it is their management ability and day-to-day decisions based on sound agronomic principles and practices that make a successful program, they should have a thorough knowledge of Best Management Practices (BMP), exhibit an understanding of the principles of Integrated Pest Management (IPM), and have a license to apply restricted use pesticides. A participating knowledge of the game of golf and the ability to train and effectively supervise employees are also important. Given the environmentally sensitive location of the course, a superintendent certified by the GCSAA is recommended. Additionally, it should be considered that someone who has successfully guided a golf course through the Audubon Cooperative Sanctuary Certification program be a consideration.

3.7.2 Assistant Superintendent

Similarly, the assistant should also have a degree in agronomy, horticulture, plant or soil sciences. They will be licensed in pesticide usage, have a working knowledge of golf course maintenance practices and the ability to schedule and supervise work to achieve the most efficient utilization of employees and equipment.

3.7.3 Irrigation Technician

Because of the highly sophisticated irrigation system to be used on the course and the importance of proper monitoring of water usage, the selection of this technician is critical. The person employed must have a working knowledge of computerized control systems as well as basic electricity, hydraulics, valves, pumps, sprinkler heads, etc. Since efficient water use and conservation of irrigation water are the responsibility of the system operator, a knowledge of turfgrass water requirements and the capabilities of the irrigation system will be needed, also.

3.7.4 Pesticide Technician

Because the appropriate use of pesticides depends not only on proper selection, but also on proper equipment maintenance and calibration and application techniques, it is strongly

recommended that this person is licensed in restricted pesticide usage and experienced in handling pesticides.

3.7.5 Mechanic

The success of all cultural practices is dependent, to a large degree, on the condition of the equipment and tools used. Therefore, it is essential to have a person knowledgeable and capable in the maintenance and repair of the various types of equipment used on golf courses. Their responsibilities include not only keeping all equipment in operational condition at all times, but also includes keeping the service area and maintenance building clean and in accordance with all environmental regulations.

3.8 PESTICIDE SAFETY

An important part of pesticide safety is the maintenance facility that includes appropriate storage, handling, washing and mixing areas. See Section 6.0 for more information about the maintenance facility and pesticides.

3.8.1 Storage

Pesticides will need to be stored in a separate room designated for these materials only and located away from water sources (ponds, streams). The room will be kept locked and posted as required by law, including the courses, 'Hazard Communication Program' (see sample in **Appendix III**). All pesticides will be stored in their original containers with visible labels.

To be prepared for spills and/or leaks, absorbent floor-sweep materials, sawdust or cat litter and activated charcoal will be kept on hand. An inventory of pesticides and other chemicals will be kept, and MSDS and labels for each pesticide used will be readily accessible. A fire extinguisher, protective clothing, respirator and first aid supplies will be kept in an attainable place and in ready condition. Water will be available for both routine and emergency chemical removal, including showers and eye wash facilities.

3.8.2 Handling and Application

When handling pesticides, special attention will be given to warnings and precautions on the label. Applicators will always wear personal protective gear which includes: rubber gloves, goggles or face shields, respirators, protective clothing, and rubber boots when mixing and applying pesticides. Mixing and loading will be done in a designated area so that any spills can be handled effectively.

Chemicals will always be measured out below eye level; and applicators will not stand directly over the tank when adding chemicals, as they frequently splash and emit dusts.

Before mixing chemicals together, their compatibility will be checked as chemical incompatibility could result in reduced effectiveness, increased toxicity to the applicator, or phytotoxicity to the turfgrass. The "quart jar method" will be used to determine compatibility. Spray adjuvants (such as wetting agents, emulsifiers, foaming agents and stickers) will be used in accordance with label recommendations.

3.8.3 Disposal

Empty bottles, drums or cans will be disposed of according to the label which usually states to triple rinse and recycle, recondition or puncture and dispose. Containers will be rinsed before spraying so that the rinsate can be put into the spray tank. When a container has an expired shelf life or is damaged, the manufacturer, supplier or local state agency will be contacted for assistance in disposal.

3.8.4 Pesticide Record Keeping

Proper records of all pesticide applications will be kept according to government requirements. These records will help establish proof of proper use, facilitate comparison of results of different applications and/or find cause of an error. Records will include the following information:

1. Data and time of application
2. Name of applicator
3. Person directing or authorizing the application

4. Weather conditions
5. Target pest
6. Pesticide Used (trade name, active ingredient, amount of formulation, amount of water)
7. Adjuvant/Surfactant and amount applied, if used
8. The area of golf course ornamental plantings number of acres or square feet treated
9. Total amount of pesticide used
10. Application equipment
11. Additional remarks, such as severity of the infestation

A sample pesticide use record is included in **Appendix II.**

3.8.5 Spill Prevention and Response

Prevention

- Mixing of chemicals occurs only at the designated chemical mixing area that is designed to contain any spillage until it is properly treated with the filtration unit.
- Prescribed routes for the transport of mixed, diluted chemicals. Routes are chosen to minimize the likelihood of spills (e.g., steep slopes are avoided) and to avoid sensitive areas (e.g., wetlands), and the routes are known to the applicators.
- Chemicals used on the course are dilute. The only concentrated chemicals at the course are stored in a locked storage facility, and are mixed only in a specially designed mixing area.
- The least toxic materials with the shortest half-life and greatest affinity for soils are used at the course. Thus the affect from any release is minimized.

Training

- Current pesticide operators license will be maintained by the Golf Course Superintendent, Assistant Superintendent, and the Pesticide Spray Technician.
- Safety plans including proper handling and storage as indicated on Material Safety Data Sheets (MSDS) will be followed.
- Training in proper storage, handling, mixing and containment of spills of chemicals will be conducted.

Containment

- Spill containment materials are readily available. Commercially available spill containment kits (containing for example, foam pillows and absorbent material) are kept readily available in the chemical mixing area and in the chemical storage area. Any used kits are correctly disposed of based on the type of chemical.
- A spill or hose leak on the course will result in the following actions.
  - spray technician contacts the superintendent or assistant superintendent.
  - appropriate containment measures are immediately instituted; e.g., use containment kit, create a berm with a shovel, and isolate the area.
  - contact appropriate local and state officials.
- Based on the amount of dilute (mixed) chemical released the following will occur:
  - < 10 gallons. Follow actions as listed above.
  - 10 - 50 gallons. Follow actions as listed above. Additional actions will depend on the chemical's toxicity and location of release.
  - > 50 gallons. Follow actions listed above. Monitor down-gradient and in potentially affected waters. Monitoring duration will depend on degradation properties of the chemical, but will include sampling at the time of release, and at appropriate intervals. Results of the monitoring will dictate future actions.

4.0. WATER CONSERVATION MANAGEMENT

4.1 IRRIGATION

Irrigation is used to supplement, not substitute for, rainfall. At The Hyatt Golf Resort irrigation is one of the cultural practices which will be used, and irrigation management must include water conservation practices. Lack of adequate moisture can result in three possible consequences for the turf as follows: 1) stress; 2) dormancy; or 3) death. Providing the correct amount water at the appropriate time is important so that the golf course, as a recreational facility, can provide reasonable playing quality.

To provide the proper amount of moisture at the right time requires that there be adequate recording of climatic conditions so that determination can be made if soil moisture reserves are adequate or if an irrigation event will be scheduled.

4.2 IRRIGATION WATER MANAGEMENT

Because of the many variables to consider, i.e., slope, soil types, rooting depth, etc., even with the most sophisticated irrigation system available, experience has proven, fine-tuning of the irrigation program by the golf course superintendent and irrigation technician is essential.

Knowledge of the water reserve in the root zone is a key input required for determining irrigation needs. On greens, approximately 75% of the root system may occur in the top four inches of soil. On tees, fairways and roughs the depth of rooting can vary from six to twelve inches, depending on how these surfaces are managed. Therefore, with knowledge of soil water storage, actual daily rainfall and calculated daily evapotranspiration (ET_O) information it is possible to determine when the available soil moisture is depleted and irrigation required. A weather station located at the facility can record information necessary to calculate the daily ET_O. This varies daily based on local climatic conditions of temperature, humidity, solar radiation and vapor pressure. Monthly turfgrass irrigation requirements are given in **Table 4-1**. Keeping in mind that rainfall is rarely uniformly distributed, these are only examples based on long term climatic data for calculation of irrigation volume demands. However, with the use of on-site monitoring of

climatic data, the same approach can be used to schedule irrigation for shorter (weekly or twice-weekly) periods.

Table 4-1. Ft. Myers, Florida Area Putting Green and Tee Irrigation Requirements Based on Long-Term Climatic Records

Month	Mean Temp	Average Rainfall*	Potential ET	Irrigation coefficient	Gross Irrigation Requirement (a)	Net Irrigation Requirement (b)
	°F	inches				
Jan	64	2.01	2.61	1.0	1.61	2.01
Feb	65	2.19	2.56	1.0	1.47	1.84
Mar	69	2.37	3.66	1.0	2.48	3.1
Apr	73	1.82	4.92	1.0	4.01	5.01
May	78	4.29	6.82	1.0	4.68	5.85
Jun	81	8.20	8.31	1.25	5.26	6.58
Jul	83	8.64	9.46	1.25	6.43	8.04
Aug	83	8.20	9.61	1.25	6.89	8.61
Sep	82	8.69	8.61	1.0	4.27	5.34
Oct	76	4.18	6.26	1.0	4.17	5.21
Nov	69	1.47	3.78	1.0	3.05	3.81
Dec	65	1.36	2.85	1.0	2.17	2.71
Total	-	53.33	69.45	-	46.49	58.11
Average	70	-	-	-	-	-

* For Naples, FL based on a 48 year record.
(a) The gross irrigation requirement is determined as the difference in effective rainfall and potential ET multiplied by the Irrigation coefficient.
(b) The net amount of water required by the turfgrasses can then be quantified by the following equation: Irrigation Requirement = $\frac{\text{Gross Irrigation Requirement}}{\text{DU}}$
DU is the uniformity of distribution of the irrigation system, assumed to be 80%.

Since they are the most highly trafficked areas on the golf course, it is important that the putting greens and tees be kept well watered. For this reason an irrigation coefficient of at least 100% is used to guide irrigation requirements. For the summer months, an excess of irrigation is required

to flush salts accumulated from the fertilization and leakage from dead tissues. For the majority of the irrigated acreage on the fairways, an irrigation coefficient of 80% if overseeded and 70% for the remainder of the bermudagrass growing season is used.

Table 4-2. Ft. Myers, Florida Area Fairway and Rough Irrigation Requirements Based on Long-Term Climatic Records

Month	Mean Temp	Average Rainfall	Potential ET	Irrigation coefficient	Gross Irrigation Requirement (a)	Net Irrigation Requirement (b)
	°F	inches			inches	
Jan	64	2.01	2.61	0.7	1.12	1.41
Feb	65	2.19	2.56	0.7	1.02	1.28
Mar	69	2.37	3.66	0..7	1.73	2.16
Apr	73	1.82	4.92	0.8	3.20	4.01
May	78	4.29	6.82	0.8	3.74	4.68
Jun	81	8.20	8.31	0.8	3.37	4.21
Jul	83	8.64	9.46	0.8	4.11	5.14
Aug	83	8.20	9.61	0.8	4.41	5.51
Sep	82	8.69	8.61	0.8	3.41	4.27
Oct	76	4.18	6.26	0.7	2.92	3.65
Nov	69	1.47	3.78	0.7	2.13	2.66
Dec	65	1.36	2.85	0.7	1.52	1.90
Total	-	53.33	69.45	-	32.68	40.88
Average	70	-	-	-	-	-

(a) The gross irrigation requirement is determined as the difference in effective rainfall and potential ET multiplied by the Irrigation coefficient.
(b) The net amount of water required by the turfgrasses can then be quantified by the following equation: Irrigation Requirement = $\frac{\text{Gross Irrigation Requirement}}{\text{DU}}$
DU is the uniformity of distribution of the irrigation system, assumed to be 80%.

Given the imperfect nature of any irrigation system, there is the possibility of different areas of The Hyatt Golf Resort being over watered, correctly watered and under watered. Therefore, only

through careful study and trial and error can the superintendent and irrigation technician achieve the most appropriate balance, preferably on the drier side.

The best method of determining whether the proper amount of water has been applied is to determine the depth of water penetration following irrigation by coring with a soil tube. If water has not penetrated to the desired depth by six to eight hours after an irrigation, then the irrigation time will be increased. If water has moved well beyond the desired irrigation depth, then the irrigation time will be decreased.

To avoid runoff, the application rate must not exceed the soil infiltration rate. If necessary, the irrigation system can be cycled to ensure proper infiltration. In addition, one of the primary responsibilities of the golf course superintendent and irrigation technician will be to monitor the heads frequently to be sure all heads are operating properly and that no head is inadvertently applying water to an environmentally sensitive area.

These conditions apply for what is the largest acreage, fairways, roughs, and non-play irrigated areas. For greens and tees, irrigation must preclude any deficits which would place the turf under any stress, since these are heavily trafficked areas and optimum recovery is necessary.

4.3 WEATHER STATION

A weather station at The Hyatt Golf Resort can be a valuable tool to calculate ET and it will monitor and record the following parameters: 1) air temperature; 2) soil temperature; 3) wind speed; 4) wind direction; 5) barometric pressure; 6) rainfall; 7) humidity; and 8) solar radiation. These are linked with a computer programmed to calculate irrigation requirements based on these parameters. This information is then used by the superintendent and irrigation technician to determine irrigation system operation to apply the amount necessary to replace soil moisture.

In addition to the weather station being used in irrigation water management, the system will record information which can be used in other parts of the IPM program. Information will be used in models for predicting disease development and in calculating degree days for insecticide application and in determining windows of timing for preemergence herbicide application.

4.4 IRRIGATION SYSTEM

Irrigation system design and operational strategy must fulfill all environmental requirements for protecting wetlands, surface water and ground water on and around the golf courses. In addition, the irrigation system will be designed to meet the water requirements of the turf by supplementing natural rainfall. Irrigation will be managed with a computer controlled system. Irrigation is based on measuring weather conditions as described in Section 4.2 Irrigation Water Management.

5.0. WATER QUALITY MANAGEMENT

Maintaining water quality at The Hyatt Golf Resort is important. BMP 'Trains' for surface water protection are designed to provide maximum protection to surface waters, and to groundwater. BMPs coupled with management zones and careful selection of materials for use on the golf course provide protection to waters from unwanted chemical loadings and maintain the habitat potential for wildlife. A review of scientific studies of the movement of nutrients and pesticides from human managed landscapes to surface and groundwater is presented in **Appendix VI.**

Education and notification of golfers of environmentally sensitive areas is also an important part of the overall management strategy for surface waters and wetlands. Appropriate signs will identify areas that are ecologically sensitive, or that golfers should not enter. The scorecard will also identify these areas, and the starter can also notify golfers of the sensitive areas. Information will be posted in the clubhouse and locker rooms.

5.1 SURFACE WATER AND GOLF COURSE CONSTRUCTION AND GROW-IN

Concern with surface runoff is critical during construction and during the "grow-in" period when the bare soil and thin turf cover makes the site most vulnerable.

5.1.1 Construction

Golf course clearing for the Hyatt Golf Resort will include installation of erosion control barriers between the areas being cleared for fairways and the wetlands and ponds. These will include silt fencing, and sedimentation ponds, and locations will be determined and shown in the erosion control plan for the project. These will remain in place after turf buffer strips are established and until all cleared areas have adequate turf cover to prevent erosion. As discussed previously, the effectiveness of turf as a buffer is related to the fibrous nature of the turf root system and the architecture of the turf canopy. Buffer strips will be fully established with a one-inch height of cut before removal of erosion barriers. As the turf matures, potential runoff problems should diminish.

During future construction projects at the golf course, installation of erosion barriers described above will be standard practice.

Care will have to be taken during the grow-in phase with irrigation management to prevent runoff and sediment movement into wetlands areas and allow the buffer areas to adequately filter any possible surface nutrient/sediment movement.

Studies at the Pennsylvania State University and the University of Maryland have shown that for significant runoff to occur on turf areas with slopes up to 14%, rainfall or simulated rainfall had to exceed 3 inches/hour. Grassed areas are extremely effective in reducing soil losses compared to other cropping systems with measured soil losses of only 0.03 tons/acre on grassed areas with a slope of 16% on a silt loam soil. Additionally, any runoff from turf areas will be directed into a buffer area, vegetated sale, or other BMP for filtration, therefore there will be no negative impact on water quality in the wetlands areas.

5.1.2 Grow-In

Controls put in place during golf course clearing will remain in place after turf buffer strips are established and until all cleared areas have adequate turf cover to prevent erosion. Turf buffer strips are an integral part of maintenance of surface water quality (American Water Works Association, 1991; Eaker, 1994). Care will have to be taken during the grow-in phase with irrigation management to prevent runoff and sediment movement into stream and pond areas and allow the buffer areas to adequately filter any possible surface nutrient/sediment movement.

5.2 GOLF COURSE AND POST CONSTRUCTION EFFECTS

The main concerns with surface water, groundwater and golf courses are that transport of sediments, nutrients and pesticides from more intensively maintained turf areas will impact water quality. The proposed Hyatt Golf Resort with the BMPs and management zones makes it difficult for runoff contaminants to adversely affect surface water quality or associated wildlife. Established management zones also prohibit or limit the use of pesticides and fertilizers adjacent to sensitive ecological resources. Additionally, all runoff from impervious surfaces will be filtered through areas which have a vegetative cover, thus providing protection to these resources.

5.3 SUBSURFACE DRAINAGE

The factors that protect surface water and groundwater also form the basis for protection of subsurface waters. Design factors will ensure that there is adequate on-site retention. Subsurface drainage is directed into buffer areas for filtration purposes. This is most critical with putting green drainage lines which may contain trace amounts of nutrients and pesticides.

Careful management of nitrate, as described in the Agronomic Considerations (Section 3.1) of this document, will be required. Management along with effective implementation of Best Management Practices can effectively eliminate problems associated with nutrient loss during runoff or leaching. Careful management of materials (as indicated in this management document) will also reduce the losses of pesticides and nutrients to groundwater.

5.4 WETLANDS

An active wetland management program will be in place at The Hyatt Golf Resort. The monitoring program and criteria for success, baseline monitoring, time zero monitoring, and five annual monitoring reports for the mitigation program at Hyatt Golf Resort are specified in the Mitigation Area Monitoring and Maintenance Plan (WilsonMiller 2000). This management program will be inplace until July 2006. This monitoring program is given in **Appendix VII.**

Once the five year monitoring requirements are completed, a wetland monitoring program will be incorporated into the overall maintenance program for the golf course to ensure that course maintenance activities focus not only on maintaining golf turf quality and course playability but also on maintaining the health and functional characteristics of the existing wetlands, shoreline, and the wetland buffer filter strips. Elements of the wetland management plan include periodic monitoring, maintenance of proposed vegetative conditions, restoration or repair of damaged areas, and record keeping.

5.4.1 Monitoring

All wetlands and waterbodies on the Hyatt Golf Resort site which are located adjacent to the course facilities will be inspected twice annually: once in the spring and once in the autumn. Inspections will focus on examining the condition of vegetation, the color and clarity of surface

waters, exotic vegetation, and the condition of ground cover. In conjunction with the wetland inspections, the condition of vegetated buffer strips will be inspected for the presence of debris, the integrity of vegetative cover, and the existence of channels or other indicators of concentrated stormwater flow.

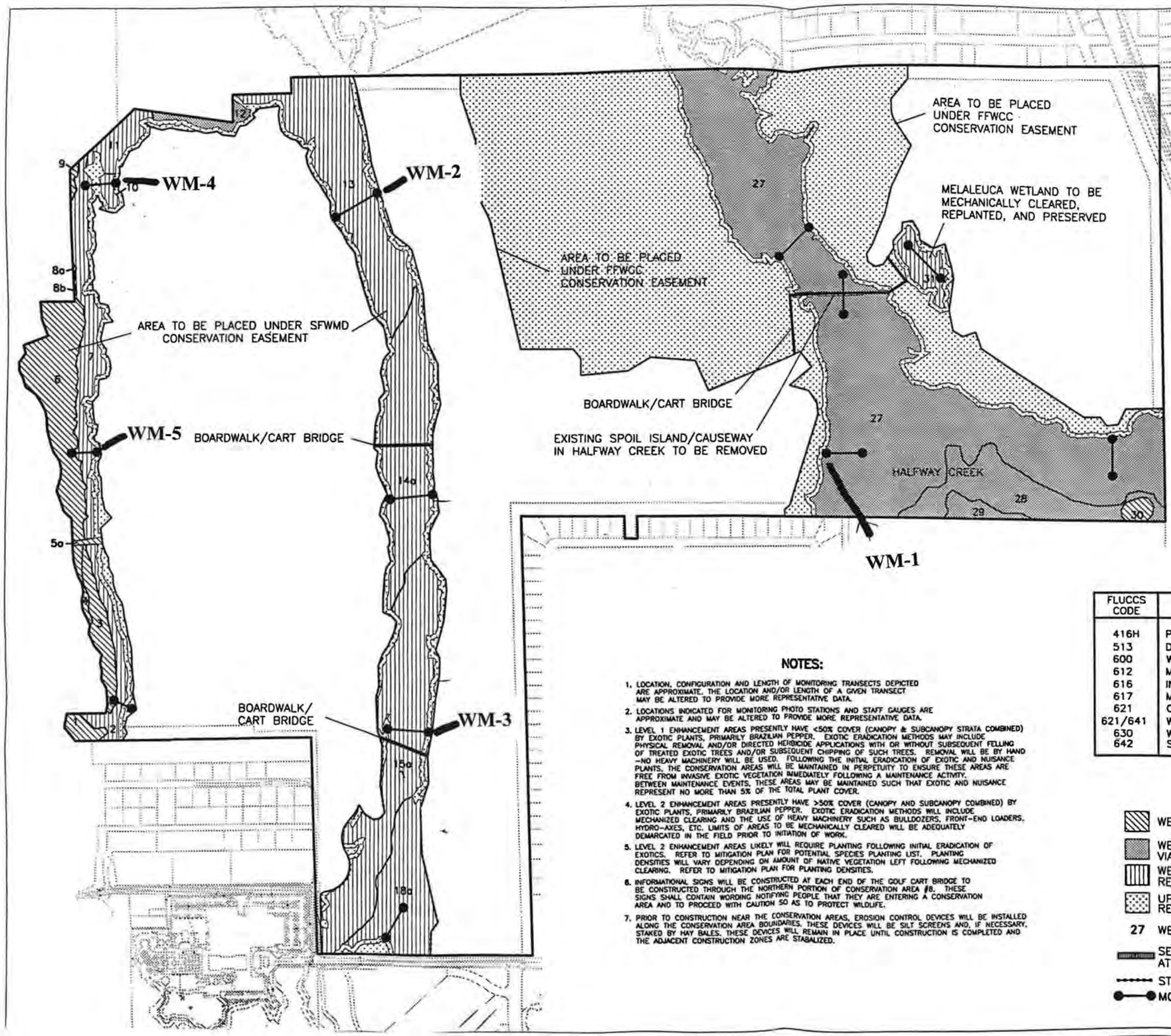
In addition to the annual inspections, selected locations will be more intensely surveyed to ensure the long term viability of the wetlands. Wetland monitoring locations that will be continued after the initial five-year permit requirement are given in **Figure 5-1**. Vegetative cover and exotic vegetation will be assessed, and photographs will be taken at these locations. These surveys should be conducted at the same time as the surface water monitoring.

The following locations will be monitored in the spring and autumn. Stations on **Figure 5-1** are designated as WM to indicate Wetlands Monitoring.

- Wetland Monitoring Station-1 (WM-1). Located in the Halfway Creek wetland.
- Wetland Monitoring Station-2 (WM-2). Located in the central wetland, near the green for golf hole 1C.
- Wetland Monitoring Station-3 (WM-3). Located in the central wetland, near the green for golf hole 7C, and the southern bridge.
- Wetland Monitoring Station-4 (WM-4). Located in the western wetland near the green at golf hole 2W.
- Wetland Monitoring Station-5 (WM-5). Located in the wetland near golf hole 4W.

5.4.2 Maintenance of Vegetative Conditions

Vegetative conditions established after removal of the exotics are to be maintained in the future. The goal of the monitoring program is to 1) ensure that exotic vegetation does not invade the wetlands; 2) to maintain an average survival rate of 80% for planted canopy and sub-canopy species, and 3) maintain an average ground cover of 70%. Cut material will be hand removed from the wetlands. No machinery will be used at any time within the wetland areas of the site. The herbaceous cover of the buffer filter strips will be maintained by mowing at a frequency of twice per year.



WETLAND NO.	POST DEV'T FLUCCS CODE	ACREAGE
1	612	0.60
2	416H	1.74
3	642	1.77
4	612	0.39
5a	513	0.13
6	612	6.45
7	416H	4.49
8a	642	0.03
8b	642	0.02
9	642	0.15
10	416H	0.36
11	416H	1.39
12	416H	0.73
13	617	10.09
14a	617	8.49
15a	630	12.05
18a	630	5.56
27	621	44.49
28	600	6.27
29	621	0.98
30	616	0.49
31	621/641	1.47
TOTAL WETLANDS PRESERVED (ENTIRE SITE)		108.14
TOTAL UPLANDS PRESERVED (ENTIRE SITE)		103.29
TOTAL PRESERVE		211.43

FLUCCS CODE	FLUCCS DESCRIPTION
416H	PINE FLATWOODS-GRAMINOID UNDERSTORY, (HYDRIC)
513	DITCHES
600	WETLANDS
612	MANGROVE
616	INLAND PONDS AND SLOUGHS
617	MIXED WETLAND HARDWOODS
621	CYPRESS
621/641	WETLAND/FRESHWATER MARSH
630	WETLAND FOREST MIXED
642	SALTWATER MARSH

NOTES:

1. LOCATION, CONFIGURATION AND LENGTH OF MONITORING TRANSECTS DEPICTED ARE APPROXIMATE. THE LOCATION AND/OR LENGTH OF A GIVEN TRANSECT MAY BE ALTERED TO PROVIDE MORE REPRESENTATIVE DATA.
2. LOCATIONS INDICATED FOR MONITORING PHOTO STATIONS AND STAFF GAUGES ARE APPROXIMATE AND MAY BE ALTERED TO PROVIDE MORE REPRESENTATIVE DATA.
3. LEVEL 1 ENHANCEMENT AREAS PRESENTLY HAVE <50% COVER (CANOPY & SUBCANOPY STRATA COMBINED) BY EXOTIC PLANTS, PRIMARILY BRAZILIAN PEPPER. EXOTIC ERADICATION METHODS MAY INCLUDE PHYSICAL REMOVAL AND/OR DIRECTED HERBICIDE APPLICATIONS WITH OR WITHOUT SUBSEQUENT FELLING OF TREATED EXOTIC TREES AND/OR SUBSEQUENT CHIPPING OF SUCH TREES. REMOVAL WILL BE BY HAND -NO HEAVY MACHINERY WILL BE USED. FOLLOWING THE INITIAL ERADICATION OF EXOTIC AND NUISANCE PLANTS, THE CONSERVATION AREAS WILL BE MAINTAINED IN PERPETUITY TO ENSURE THESE AREAS ARE FREE FROM INVASIVE EXOTIC VEGETATION IMMEDIATELY FOLLOWING A MAINTENANCE ACTIVITY. BETWEEN MAINTENANCE EVENTS, THESE AREAS MAY BE MAINTAINED SUCH THAT EXOTIC AND NUISANCE REPRESENT NO MORE THAN 5% OF THE TOTAL PLANT COVER.
4. LEVEL 2 ENHANCEMENT AREAS PRESENTLY HAVE >50% COVER (CANOPY AND SUBCANOPY COMBINED) BY EXOTIC PLANTS, PRIMARILY BRAZILIAN PEPPER. EXOTIC ERADICATION METHODS WILL INCLUDE MECHANIZED CLEARING AND THE USE OF HEAVY MACHINERY SUCH AS BULLDOZERS, FRONT-END LOADERS, HYDRO-AXES, ETC. LIMITS OF AREAS TO BE MECHANICALLY CLEARED WILL BE ADEQUATELY DEMARCATED IN THE FIELD PRIOR TO INITIATION OF WORK.
5. LEVEL 2 ENHANCEMENT AREAS LIKELY WILL REQUIRE PLANTING FOLLOWING INITIAL ERADICATION OF EXOTICS. REFER TO MITIGATION PLAN FOR POTENTIAL SPECIES PLANTING LIST. PLANTING DENSITIES WILL VARY DEPENDING ON AMOUNT OF NATIVE VEGETATION LEFT FOLLOWING MECHANIZED CLEARING. REFER TO MITIGATION PLAN FOR PLANTING DENSITIES.
6. INFORMATIONAL SIGNS WILL BE CONSTRUCTED AT EACH END OF THE GOLF CART BRIDGE TO BE CONSTRUCTED THROUGH THE NORTHERN PORTION OF CONSERVATION AREA #8. THESE SIGNS SHALL CONTAIN WORDING NOTIFYING PEOPLE THAT THEY ARE ENTERING A CONSERVATION AREA AND TO PROCEED WITH CAUTION SO AS TO PROTECT WILDLIFE.
7. PRIOR TO CONSTRUCTION NEAR THE CONSERVATION AREAS, EROSION CONTROL DEVICES WILL BE INSTALLED ALONG THE CONSERVATION AREA BOUNDARIES. THESE DEVICES WILL BE SILT SCREENS AND, IF NECESSARY, STAKED BY HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABALIZED.

LEGEND

- WETLAND PRESERVED (10.03 AC.)
- WETLAND PRESERVED AND ENHANCED VIA EXOTIC REMOVAL-LEVEL 1 (52.47 AC.)
- WETLAND PRESERVED, ENHANCED VIA EXOTIC REMOVAL AND REPLANTING-LEVEL 2 (45.64 AC.)
- UPLAND PRESERVE WITH EXOTIC REMOVAL AS NEEDED (103.29 AC.)
- 27 WETLAND POLYGON ID
- SELECTIVE WETLAND CLEARING AT BOARDWALK/CART BRIDGE
- STRUCTURAL BUFFER
- MONITORING TRANSECT AND PHOTOSTATIONS

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FIGURE 1. CONSERVATION AREAS

HYATT GOLF RESORT

Figure 5-1. Locations of Wetland Monitoring (WM) Sample Stations at the Hyatt Golf Resort.

SEC 7,8 TWP 47S RGE 25	
Designed by:	S.K.S./12
Drawn by:	M.W.L./12
Checked by:	
Approved by:	
Date:	JAN. 20
Scale:	1"=60
PIN:	F0250-024-0
File #:	C-0250-

Sha

5.4.3 Restoration and Repair of Damaged Areas

Observed damage to existing wetlands and adjacent ground cover conditions will be remedied immediately. Damage may include, such things as siltation, erosion, and compaction or trampling by golfers. Accumulated silts will be removed, eroded channels will be filled, and compacted areas will be raked. All such repairs will be conducted using hand tools only unless a mechanical tool 'arm' can reach into the wetland to perform a task. Damaged ground cover vegetation will be restored by seeding or planting depending on the vegetation damaged. Channels which form within the buffer filter strips will be filled and immediately reseeded. If additional grading is necessary to prevent the reformation of the channel, such grade adjustments will be implemented to restore sheet flows. Additional level spreaders will be installed as necessary. Trash, golf balls, and other debris will be removed from wetlands and buffers when observed.

5.4.4 Record Keeping

An annual record of all wetland and filter strip inspections and remedial actions will be maintained as part of the maintenance records for the golf course. These records will include the dates of inspection, inspection findings for each wetland and filter strip location, a description of each remedial action taken, and the dates of such actions.

5.5 LAKE AND POND WATER - THE BASIS FOR MANAGEMENT

In a water body, there are several characteristics that are important to its overall health and stability, and thus important to good water quality management. This section is provided to give an overview of lakes and ponds that might be useful in the management of these systems. Characteristics include lake regions, light, heat (thermal stratification) and nutrients. Water quality also dictates the abundance of algae.

5.5.1 Lake/Pond Zones

The lakes and ponds at The Hyatt Golf Resort are divided into regions based on location within the pond. The littoral region is the shore area and it extends from the shoreline to the interior to a point at which aquatic plants no longer grow. Beyond the littoral region is the open water region.

5.5.1.1. ***Littoral Region***. Within the littoral region, plant growth is generally inhibited by wave action or a lack of light. Littoral regions vary in size depending on the depth of the water, clarity, and wave action all of which are a function of basin morphology. The littoral region is an interface zone between the land of the drainage basin and open water.

The littoral region, at the Hyatt Golf Resort ponds, is a "ring"of plants around the shore area with plant communities ordered according to water depth and wave action. Typical near shore vegetation includes emergent macrophytes, such as cattails or rushes; floating leaved plants such as the water lily or lotus which inhabit deeper waters; and submersed plants such as pondweeds which inhabit the deepest water. In the created ponds, wetland and aquatic vegetation will be planted in the littoral regions. Algae in the littoral zone are often attached to the macrophytes. This type of algae often comprise over 90% of all algal species found in ponds and is a more stable population than free-floating algae (Wetzel, 1983). The macrophytes and algae contribute significantly to the productivity of the pond and provide excellent habitats for mircroflora, many zooplankton (small animals including rotifers, protozoans, micro-crustaceans), and larger invertebrates (crayfish, insect larvae, aquatic worms) and vertebrates (fish). This is also the region of any pond or lake that may become infested with weedy plants or an over-abundance of algae. This is particularly true of the plant communities in the panhandle of Florida, where warm temperatures promote year-around growth.

5.5.1.2. ***Open Water Regions***. Beyond the littoral region is the open water. This is the limnetic region, a region in the lake where shore and bottom have lessened influence. Within this region are the upper, well-illuminated layer where photosynthesis by algae occurs, and the lower, non-illuminated area where decomposition and respiration (oxygen consumption) predominate.

Planktonic algae, zooplankton, invertebrates and fish are abundant in the open waters of ponds and lakes. Frequently, larger animals, such as fish that have the ability to move over relatively long distances, use both littoral and open water regions of lakes and ponds.

5.5.2 Light

Solar radiation is of fundamental importance to the dynamics of freshwater ecosystems. Light is the major energy source to aquatic ecosystems. Almost all energy that controls the metabolism of lakes is derived directly from the solar energy utilized in photosynthesis, either within the pond

or in the watershed (Wetzel, 1983). Light is the major source of heat to a pond or lake. Absorption of light and its dissipation as heat effect the thermal structure, water stratification, and circulation patterns of lakes and ponds, and ultimately, the biota.

The upper layers are generally warmer than the lower layers because of heating by solar radiation (light). During summer, temperature differences between upper and lower waters can become great enough that these waters are effectively separated. Separation is due to density differences that are caused by differences in water temperature (called thermal stratification, see below). The upper waters are warm and mixed by the wind to an approximate uniform temperature (called the epilimnion). Bottom waters are cool, heavier waters little affected by wind and, therefore, traditionally considered stagnant (called the hypolimnion). Separating the two regions is an intermediate zone, where temperature drops rapidly with increasing depth (called the metalimnion).

5.5.3 Thermal Stratification

Thermal stratification is a normal phenomenon throughout the country. In many parts of the country, thermal stratification occurs during summer; in Florida, stratification may occur for greater lengths of time because of the warmer temperatures. The primary affect of stratification on the life of a lake or pond is from dissolved oxygen levels. Dissolved oxygen in a pond comes from photosynthesis or from exchanges with the atmosphere at the water's surface. During thermal stratification bottom waters are effectively removed from both of these sources and the waters may become anoxic (low to no oxygen). Under certain conditions in the water, such as a high organic load, oxygen levels may decrease to unacceptable levels. Generally oxygen levels should remain above 4 mg/L. Aquatic organisms require oxygen to survive and in its absence, organisms either move from the anoxic area, or perish. Situations have been documented in which anoxic bottom waters caused a shift from a positive member of the bottom dwelling community (mayflies) to less desirable, pollution tolerant organisms (Beeton 1961; many others).

The lack of dissolved oxygen may also set in motion a series of chemical reactions that further reduces water quality. Here's a sampling of what may happen: sulfate is converted to hydrogen sulfide, insoluble iron is converted to soluble forms, suspended material concentrations increase, decomposition of materials that settle from the surface to the bottom is slowed (for example,

algae), and chemicals tend to move more freely between the sediments and overlying water. This bottom water is not an appropriate medium for supporting aquatic life, nor for irrigating turf.

5.5.4 Nutrients

Nitrogen and phosphorus are macro-nutrients that are most often of interest in lake and pond management, much as they are important in the agronomic management of The Hyatt Golf Resort. Ecological interest in phosphorus stems from its major role in biological metabolism. Phosphorus most commonly limits biological productivity (Vollenweider, 1971; Jones and Bachmann, 1976), and when increased in lakes, biological production increases. Evidence of the increased production is usually observed in increases in algal or other nuisance aquatic vegetation. This increase in organic production in the lake may exacerbate low dissolved oxygen levels in a thermally stratified lake (see above, 5.5.3, for discussion of stratification).

5.5.5 Lake and Pond Weed Management

Aquatic sites are dynamic and responsive and as the availability and nature of the resources change, so will the species diversity and/or amounts of aquatic vegetation. However, at some point a healthy aquatic plant population may actually become an aquatic weed situation detrimental to the lake or pond's ecosystem balance.

The physical environment of lakes coupled with water quality will determine the response of the aquatic ecosystem and influence whether or not aquatic plants will become weed problems. The primary factors involved at any location are the following:

1. **Light** - the quality and amount of light is a most important physical requirement for all aquatic plants. Water clarity will be an important, influencing factor for growth of algae and submerged vegetation;

2. **Nutrients** - while aquatic plants have the same nutrient requirements as land plants, many species can absorb nutrients directly from the water. This means lakes can be used as aquatic filters in certain instances. Freshwater lakes and ponds are particularly sensitive to phosphorus;

3. **Gases** - both oxygen and carbon dioxide are vital to aquatic plants. Daily fluctuations may occur in water oxygen levels in response to photosynthesis. Dissolved oxygen levels at night can be low enough to cause fish kills and extremely low oxygen levels can occur in lakes with extraordinarily dense aquatic vegetation. Low oxygen levels may also occur with decomposition of dead plants by bacteria and fungi, especially after treatment with a herbicide; and

4. **Temperature** - water serves as an excellent buffer against rapid temperature changes and plants growing under water are insulated from the shocks of extreme temperature changes.

Aquatic plants are of four main types including algae, floating weeds, emergent weeds, and submergent weeds. Each has distinct growth characteristics resulting in varying control techniques. However, additional factors besides growth habit must be considered in control practices. Besides proper identification of the weed species, the relative abundance, location within the lake, and age of infestation are important, since these may determine the extent of the problem and how and when to proceed with control measure. Use of the site and fate of the water will determine the appropriate control. Time of year will determine how effective different treatment approaches will be. There are a number of distinct strategies for aquatic weed control. These are summarized in **Table 5-1** below:

Table 5-1. Standard Aquatic Nuisance Plant Control Methods

Method	Description
Prevention	Eliminate nutrient loading. Install aerators to increase water movement and oxygen.
Physical Removal	Hand harvest aquatic vegetation by pulling. rolling, cutting, or digging.
Mechanical Removal	Use specialized mechanical equipment to cut and harvest aquatic weeds.
Environmental Controls	
Bottom barriers	Made of plastic, rubber, or fiberglass, these can be used to inhibit or prevent rooted growth in selected areas.
Shading	Use of black plastic, soluble dyes, or artificial structures will inhibit or shade out aquatic plant growth. Trees can be used to permanently shade certain areas.

Table 5-1. Standard Aquatic Nuisance Plant Control Methods	
Method	**Description**
Drawdown	Periodic lowering of water levels will expose bottom sediments; can control some weeds by desiccating or freezing.
Dredging	Remove existing rooted plants and nutrient rich sediments to reduce nutrient accumulations and create greater water depth to control aquatic growth.
Biological Controls	
Insects	Adults and/or larvae of certain moths and weevils have been introduced to selectively eat plant populations. This method has worked for water hyacinth and alligator weed.
Plant Diseases	Introduction of pathogens such as bacteria, viruses, fungi, and other micro-organisms is a new approach that is working on many courses.
Chemical Controls	The use of chemicals is the most common and versatile management strategy for controlling nuisance aquatic plant populations. However, chemical management often treats the symptom and not causes of weed and algae populations. Chemical controls will be used in conjunction with strategies to control the problem.

Chemical control of aquatic weeds can be considered for certain weed species under specific conditions, but should be considered only as a last measure. Information on the effectiveness of herbicides for aquatic weed control is included in **Table 5-2.** While each of the materials listed is legally labeled as an aquatic herbicide, specific restrictions may be imposed on each chemical or even by manufacturers on specific brand names. At all times, the label must be rigidly followed when using these materials. Additionally, even under specifically allowed and controlled conditions for application, restrictions on use of the water subsequent to application may apply. Examples of these restrictions are given in **Table 5-3.** However, additional or more specific information may be given on the product label.

Table 5-2 . Effectiveness of Herbicides for Aquatic Weed Control in Irrigation Water Supplies (Langeland, 1994)

	Endothall (Not for use at Hyatt Golf Resort)	Diquat	Copper	Fluridone	Glyphosate
FLOATING PLANTS					
Duckweed	*	G	*	E	*
Watermeal	*	*	*	G	*
Alligatorweed	*	*	*	F	G
SUBMERGED PLANTS					
Bladderwort	F	G	*	G	*
Brazilian elodea	*	E	F	G	*
Coontail	E	E	*	E	*
Hydrilla	E	E	F	E	*
Parrotsfeather	E	G	*	F	*
Pondweed	E	G	*	F	*
Slender naiad	E	E	*	E	*
Southern naiad	G	E	*	G	*
Spikerush	*	*	*	G	*
Variable leaf milfoil	G	G	*	G	*
EMERGED PLANTS					
American lotus	*	*	*	G	G
Cattail	*	G	*	F	E
Fragrant waterlily	*	*	*	G	E
Rush	*	*	*	*	G
Spadderdock	*	*	*	G	E
Waterpennywort	*	F	*	*	E
FILAMENTOUS ALGAE	*	G	G	*	*

Effectiveness of control is as follows: * = Not recommended; F = Fair; G = Good; E = Excellent

These materials have been shown not to accumulate in living organism nor concentrate in the food chain (SJRWMD 1989). Dissipation of these materials from photochemical reaction, microbial breakdown, and dilution is rapid.

The application rate of each of the herbicides used for aquatic weed control will vary depending on the amount of active ingredient required to effectively control the targeted weeds and the formulation. Lake volume is also another consideration. With each herbicide information is

available about use precautions and toxicological properties. Of primary concern is the effect of these materials on nontarget plants which may have been intentionally planted as wildlife habitat and the effect on nontarget wildlife. Effects on nontarget plants must be evaluated by a specialist in lake management who can accurately identify the vegetation and mechanism of action of the specific herbicide in question. Each material listed in **Table 5-2** is discussed below for effects on wildlife which inhabits or contact the aquatic environment. Data has been taken from a variety of sources. Values are either for LD_{50} - the dose (quantity) of a substance that will be lethal to 50% of the organisms in a specific test situation expressed in weight of the chemical (mg) per unit of body weight (kg); or for LC_{50} - the concentration of a substance in water that will be lethal to 50% of the organisms in a specific test situation.

Table 5-3. Waiting Period in Days Before Using Water after Application of Herbicides for Aquatic Weed Control.

Common name	Irrigation	Fish Consumption	Swimming
Copper compounds	NR*	NR	NR
Diquat	14	NR	NR
Endothall liquid granular	 14 7	 3 3	 1 1
Fluridone**	7-30	NR	NR
Glyphosate	NR	NR	NR

* NR = No restrictions;
* * See label for specific information.

Fluridone. At recommended application rates concentrations in the water would range from 0.08 to 0.5 ppm. This material has been shown to be non-hazardous to birds (bobwhite oral LD_{50}>2000 mg/kg; bobwhite and mallard duck acute LC_{50} values are both >5000 mg/kg of diet). Fish have excellent tolerance at these concentration with an LC_{50} of 11.7 ppm for rainbow trout, 14.3 ppm for bluegill, and 10 ppm for channel catfish. Aquatic invertebrates also exhibit tolerances above these levels with values for daphnids at 6.3 ppm and midges at 1.3 ppm. No observed effect concentrations (NOEC) are 0.5 ppm for catfish and 0.48 ppm for fathead minnows. Communities of phytoplankton, zooplankton, benthic invertebrate organisms, and fish are unaffected at sites treated with these formulations.

Glyphosate. At recommended application rates the concentrations in the lake water would range from 0.36 to 1.8 ppm. This material has been shown to be extremely safe to wildlife. The LD_{50} for bobwhite quail is > 3850 mg/kg. The tolerance levels as LC_{50}s for aquatic species are as follows: trout, 86 ppm; bluegill, 120 ppm; *Daphnia magna*, 780 ppm; harlequin fish, 168 ppm.

Copper sulfate. Calculated concentrations of copper in the water range from 0.155 to 0.4 ppm depending on the formulation. Environmental guidelines list the hazard to fish at >1 ppm for rainbow trout and 0.884 ppm for bluegills and > 1000 ppm for pheasant.

Diquat. At recommended application rates concentrations in the water would range from 0.36 to 1.5 ppm. It is known to be generally safe to wildlife and fish with the LD_{50} for mallards at 564 mg/kg, LC_{50} for bobwhite quail at 2932 ppm, rainbow trout at > 10 ppm, and *Daphnia* at 7.1 ppm.

Endothall. At recommended application rates concentrations in the water would range from 0.5 to 5.0 ppm. Fish may be killed by dosages in excess of 0.3 ppm as an application of certain formulations of the liquid material. Endothall will not be used for lake management at The Hyatt Golf Resort.

Project plans include numerous new small ponds to be created. The gulf coast is in a unique situation with regard to natural conditions which favor aquatic plant growth. Proliferation of even favorable species can occur in relatively short time periods. The complexity of each aquatic site requires that the design (depth, water circulation, littoral shelves, etc), management, and controls must be determined specifically for each pond. Maintenance of proper conditions which will favor desired species will potentially preempt many aquatic weed problems. Likewise, recognizing potential weed problems early is a critical part of an IPM program for lake management.

5.6 WATER AND SEDIMENT MONITORING PROGRAM

The natural resource management at the Hyatt Golf Resort will include monitoring of surface water, sediments, and groundwater. The monitoring plan, based on sound, scientific principles will:

1. Establish a baseline of water and sediment quality prior to construction,
2. Provide data that will establish environmental conditions, thus providing a basis for measuring compliance with environmental regulations, and
3. Ensure that Integrated Pest Management is functioning properly.

An adaptation from a model proposed by Madhun and Freed (1990) notes that there are four basic types of monitoring which can occur: 1) *Reconnaissance* - periodic observation to disclose changes or trends. With IPM employed this is an integral part of this program; 2) *Surveillance* - to comply with an enforcement program. Pesticide application licensing programs require record-keeping which may be monitored at any time. This will be required by law and serves as a record of a part of the cultural program; 3) *Subjective* - spot-checking for broad or open-ended exploration of problems. A superintendent with training and experience in the golf course management industry has the background and resources to investigate problems and make intelligent decisions; and 4) *Objective* - to provide data for use in developing or confirming the results of on-going programs. Monitoring operations at the Golf Club will focus on maintaining environmental quality and obtaining information on which to make adjustments in cultural programs using all of these approaches.

Results of the monitoring program provide feedback to the golf course superintendent, and thus provide a useful management tool. For example, the results of the program are used in determining the correct application rates and timing of pesticides and fertilizers, and the optimum operation of irrigation programs.

The monitoring program is established in two phases that coincide with golf course development. Phase I is during the background and construction; and Phase II is the post-development, operational golf course.

5.6.1 Phase I: Background and Construction Surface Water, Groundwater, and Sediment Quality

The goal of Phase I is to establish background surface water, groundwater, and sediment quality at The Hyatt Golf Resort. This phase of the monitoring program will be completed and Phase II will begin when grassing begins at the project site.

5.6.1.1. ***Sample Locations.*** Sample locations in Lakes and Ponds will begin in Phase II of the monitoring program, after the water bodies have been constructed.

Surface Water. Surface water will be sampled at locations that are described below and shown on **Figure 5-2** (SW means surface water):

- Sample Station SW-1. Surface water sample location located in the central wetland near the northern most cartpath crossing.
- Sample Station SW-2. Surface water sample location located in Lake 7, near golf holes 1C, 3C, 4C, and 5C.
- Sample Station SW-3. Surface water sample location in Halfway Creek, near the inflow to the property.
- Sample Station SW-4. Surface water sample location in Halfway Creek, near the outflow from the property.

Obtaining water samples from the same location is important so that comparisons can be made. Sample stations will be located and 'permanently' marked in the field, identified on maps, and photographed so that stations are easily located during subsequent sampling efforts. Data from these sample stations will allow an assessment of the quality of the water.

Groundwater. Groundwater will be sampled at locations that are described below and shown on **Figure 5-2** (GW means groundwater).

- Sample Station GW-1. Monitoring well located near the green for golf hole 2W and the tees for golf hole 3W.
- Sample Station GW-2. Monitoring well located near the green for golf hole number 5C, and the tees for golf hole 4C.
- Sample Station GW-3. Monitoring well located along the northern property boundary, near the green for golf hole 3E and tees for 4E.

Obtaining water samples from the same location is important so that comparisons can be made. Sample stations will be located and 'permanently' marked in the field, identified on maps, and photographed so that stations are easily located during subsequent sampling efforts. Data from these sample stations will allow an assessment of the quality of the water.

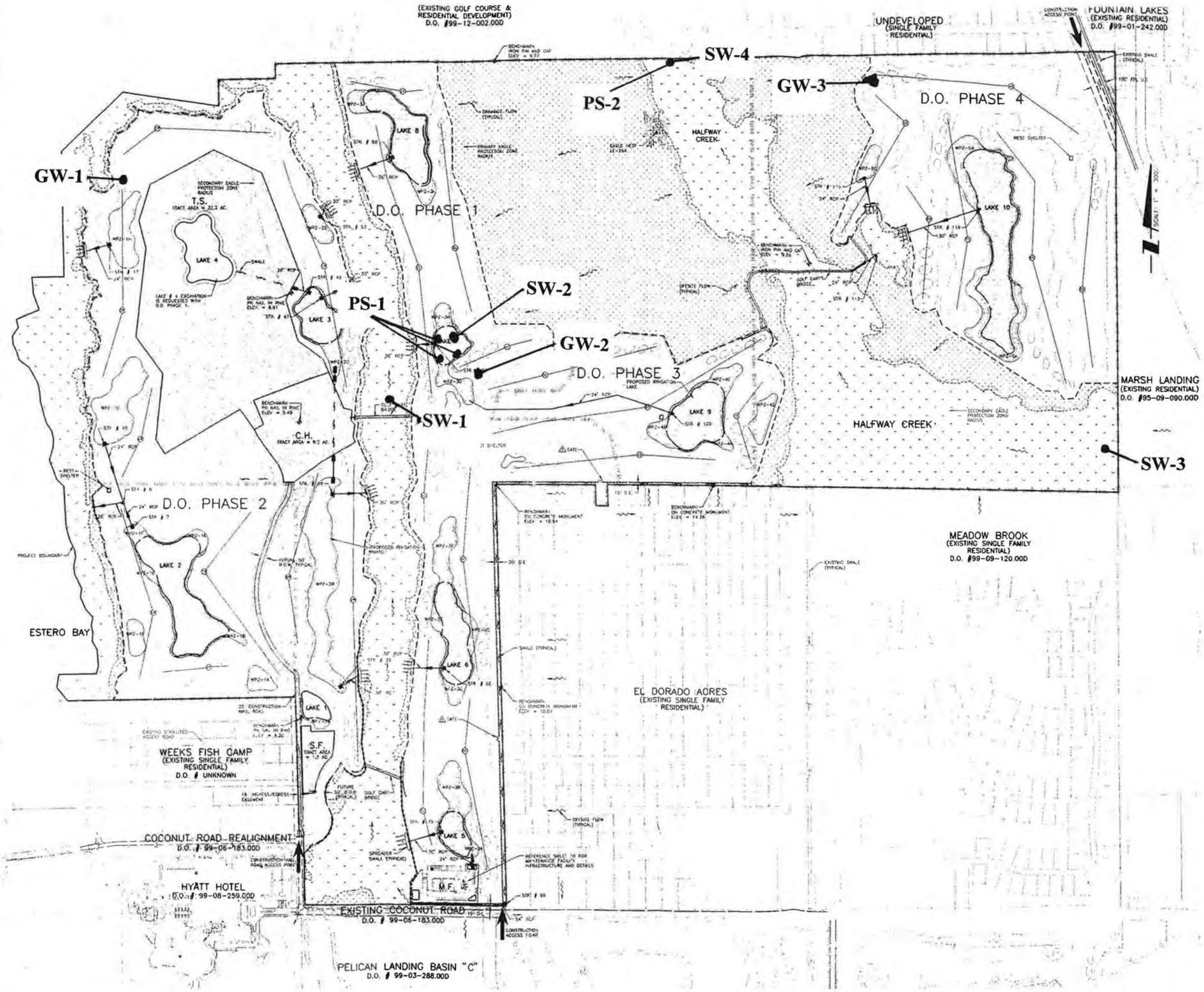

Figure 5-2. Locations of Sample Stations at the Hyatt Golf Course. SW means surface water, GW means groundwater, and PS means pond sediment.

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DESIGNED BY	J.C.E./1025	04/00
DRAWN BY	J.M.B./322	04/00

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APRIL 2000 | 1" = 300'

TITLE: MASTER PLAN

Sediment. Sediment will be sampled at the locations described below, and the locations on the property is given in **Figure 5-2**.

- Sample Station PS 1.Sample location located in Lake 7, near SW-1.
- Sample Station PS 2. Located in Halfway Creek, near SW- 4.

Obtaining water samples from the same location is important so that comparisons over time can be made. Sample locations will be photographed and marked on maps. Data from this sample station will allow an assessment of the quality of the sediment in the pond.

5.6.1.2. ***Sample Frequency.*** The goal of Phase I is to define conditions at the site prior to construction and during construction.

- Surface water samples will be collected a minimum of two times and a maximum of three times prior to beginning Phase II. This is dependent on the construction schedule. One sample event will be in Winter (December, January, February), one in Spring (March, April, May), one in Summer (June, July, August), and one in Autumn (September, October, November). Should water not be available on a given sample date, two additional attempts will be made to obtain a sample within the time period.
- Groundwater samples will be collected a minimum of one time and a maximum of three times prior to beginning Phase II. This is dependent on the construction schedule. One sample event will be in Winter (Dec., Jan., Feb.), one in Spring (March, April, May), one in Summer (June, July, August), and one in Autumn (Sep., Oct., Nov.). Should water not be available on a given sample date, two additional attempts will be made to obtain a sample within the time period.
- Sediment samples will be collected one time prior to the beginning of Phase II. Spring is the preferred sample time.

5.6.1.3. ***Sample Variables.*** Surface water, groundwater and sediments will be analyzed for the variables listed in **Table 5-4.**

Table 5-4. Variables to be Analyzed (x) in Surface Water, Groundwater, and Sediments at The Hyatt Golf Resort.

Variable	Phase I and II		
	Surface Water	Ground-Water	Pond Sediment
Field Analyses			
pH	X	X	
Water Temperature	X	X	
Specific Conductance	X	X	
Dissolved Oxygen	X		
Secchi Disk Transparency (lake only)	X		
Laboratory Analyses			
Nitrate Nitrogen	X	X	
Total Nitrogen	X	X	
Total Phosphorus	X	X	X
Chloride	X		
Turbidity	X		
Dicamba	X	X	
Carbaryl	X	X	X
Propiconazole	X	X	X

5.6.1.4. ***Field Methods.*** Variables, container type, preservation and holding times for water samples are given in **Table 5-5.**

Surface Water. A number of variables will be measured on-site, including pH, water temperature, dissolved oxygen, Secchi disk transparency, and specific conductance. pH will be measured with a pH probe that has been calibrated just prior to use. Specific conductance will be measured with a calibrated specific conductance/salinity meter. Dissolved oxygen will be measured with a dissolved oxygen probe (or by wet chemistry methods) that has been properly calibrated. Water temperature will be measured with a

temperature probe attached to the specific conductance meter or the dissolved oxygen meter. Secchi disk transparency will be measured with a standard secchi disk.

The surface water will be sampled by obtaining 'discrete' grab samples of water from the surface. Samples are taken at approximately 6 inches below the surface, at the correct location, and are then analyzed for the constituents of interest. At the stream sample locations, water will be collected in sample bottles that face upstream. Water that has been collected is transferred to sample containers that include proper preservatives and labels. The sample containers are immediately placed in a cooler with ice and are taken to a laboratory for analysis.

A chain-of-custody program is followed to assure that proper transportation and storage practices are documented and that the appropriate analyses are being conducted.

A field sampling log of surface water sampling and observations will be maintained. The log book documents site conditions, including water depth, weather conditions, and field measurements and observations. An example of a page from a field log is given in **Appendix II**.

Groundwater. Groundwater elevation is determined for each well on each sampling date. After measuring water elevation, the standing water in the well is removed, and replaced by fresh formation water. The quantity of water removed is determined from the well volume and recharge rate. In general, high-yield wells are purged of three well casing volumes of water and low-yield wells are pumped to dryness. Each well is purged using a portable pump or with a bailer that is cleaned between well samplings. Water is suitable for sampling when three consecutive measures of water have stable pH, temperature and specific conductance readings.

Wells are allowed to recharge after purging to allow the system to equilibrate. Depth to the water table is remeasured, recorded and water samples are extracted. Extraction occurs with a pump, or a dedicated Teflon® bailer. Water temperature, pH, and specific conductance are measured in water that will not be used for laboratory analyses. Water samples are taken and decanted or drained into an appropriate sample container that has the proper preservatives and is labeled. Samples are transferred from the sample device

to the sample container in a manner that will minimize turbulence and the loss of volatile compounds. Samples are immediately placed in a cooler with ice and transported to the analytical laboratory. Whenever non-dedicated equipment is used, cleaning procedure outlined by the US EPA (1986) will be instituted. Special attention will be given to thoroughly cleaning samplers, tubing, and other equipment.

A chain-of-custody program is followed to assure that proper transportation and storag practices are documented and that the appropriate analyses are being conducted.

A field sampling log on groundwater sampling and observations will be maintained. log book documents site conditions, including water elevation, observations, weather conditions, and field measurements. An sample field log page is given in **Appendix I**

Table 5-5. Variables, Container Type, Preservation, and Holding Times for Water Samples at The Hyatt Golf Resort

Variable	Container Type	Preservation[a]	Holding Time	Analytical Method[b]
Field Measurements				
pH	not applicable	not applicable	not applicable	EPA 150.1
Water Temperature	not applicable	not applicable	not applicable	EPA 170.1
Specific Conductance	not applicable	not applicable	not applicable	EPA 120.1
Dissolved Oxygen	not applicable	not applicable	not applicable	EPA 360.1
Secchi Disk Transparency	not applicable	not applicable	not applicable	Standard Operating Procedure
Laboratory Measurements				
Nitrate Nitrogen	P,G	Cool, 4°C	48 h	EPA 353.1
Total Nitrogen	P,G	Cool, 4°C	7 d	APHA 4500 or EPA summation for Kjeldahl, nitrate, and ammonia nitrogen
Total Phosphorus	P,G	Cool, 4°C, H_2SO_4 to pH <2	28 d	EPA 365.4
Chloride	P,G	Cool, 4°C	28 d	EPA 325

Table 5-5. Variables, Container Type, Preservation, and Holding Times for Water Samples at The Hyatt Golf Resort

Variable	Container Type	Preservation[a]	Holding Time	Analytical Method[b]
Turbidity	P,G	Cool, 4°C	48 h	EPA 180.1
Dicamba	G	Cool, 4°C	7 d	EPA 8150, GC with ECD Target detection limit= 2.50μg/ℓ
Carbaryl	G	Cool, 4°C	7 d	extraction: EPA 3510 liquid/liquid analysis: EPA 8080 GC ECD Target detection limit= 70μg/ℓ
Propiconazole	G	Cool, 4°C	7 d	EPA 8080 Target detection limit= 45.5 μg/ℓ

From: USEPA, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, updated 1983.
USEPA, Analytical Support Branch, Operations and Quality Control Manual, June 1985.
USEPA, Test Methods for Evaluating Solid Waste, SW-846, 1986, updated in 1987.
USGS. Laboratory Theory and Methods for Sediment Analysis.
40 CFR Part 136 Table II: Required Containers, Preservation Techniques and Holding Times (Water/Wastewater Samples), 1988.
[a] Note that container types are 'G' for glass and 'P' for plastic.
[b] Note that target detection limits are taken from the criteria for management response, and reflect the concentration that is considered less than a toxicologically significant level.

Sediment. Sediment will be collected with a gravity type sediment coring device or by hand. Three cores or grab samples will be taken at three locations around the edge of the pond or wetland and composited to yield one sample on which analyses will be performed. The approximate top 10-cm of the sediment will retained and analyzed for the variables listed in **Table 5-6.**

A chain-of-custody program is followed to assure that proper transportation and storage practices are documented and that the appropriate analyses are being conducted. A field sampling log on sediment sampling and observations will be maintained. The log book documents site conditions, including water depth, sediment texture, observations, and weather conditions. An example of a page from a field log is given in **Appendix II**.

Table 5-6. Variables, Container Type, Preservation, and Holding Times for Sediment Samples at The Hyatt Golf Resort.

Variable	Container Type	Preservation	Holding Time	Analytical Method
Carbaryl	Glass Jar	Cool, 4 °C	14 d	extraction: EPA 3510 liquid/liquid analysis: EPA 8080 GC ECD
Propiconazole	Glass Jar	Cool, 4 °C	14 d	extraction: EPA 3510 liquid/liquid analysis: EPA 8080
Total Phosphorus	P,G	Cool, 4 °C	14 d	EPA 365.4

From:
USEPA, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, updated 1983.
USEPA, Analytical Support Branch, Operations and Quality Control Manual, June 1985.
USEPA, Test Methods for Evaluating Solid Waste, SW-846, 1986, updated in 1987.
USGS. Laboratory Theory and Methods for Sediment Analysis.
40 CFR Part 136 Table II: Required Containers, Preservation Techniques and Holding Times (Water/Wastewater Samples), 1988.

5.6.1.5. ***Laboratory Methods.*** The Laboratory used for sample analysis must retain certification by the Environmental Protection Agency (EPA) or its designated State Agency to conduct chemical analyses on surface water and drinking water. Certification of the laboratory is maintained by successful performance of the EPA Water Pollution Study and EPA Water Supply Study. Sample analyses will follow accepted, standard methods as defined in the laboratories accreditation and detailed in their Quality Assurance and Quality Control procedures. Sample containers, properly cleaned and containing the proper preservative, will be supplied by the analytical laboratory.

In cases where standard methods are not available, the Laboratory will execute method development and follow closely related standard practices, and demonstrate accuracy and precision of the method with at least a 5-point standard curve, sample spikes, and duplicate analyses.

5.6.2 Phase II: Surface Water, Groundwater, and Sediment Quality during Golf Course Operations, and Soils Analysis

The goal of Phase II is to monitor surface water, groundwater and sediment quality during the operation of the golf course. This Phase of the monitoring program begins when grassing begins.

5.6.2.1. ***Sample Locations.***

Surface water - Surface water will be sampled at locations that are described in Phase I, and shown on **Figure 5-2.**

Groundwater. Groundwater will be sampled at the locations described in Phase I and shown on **Figure 5-2.**

Sediment. Sediment will be sampled from the locations described in Phase I. Sample location is shown on **Figure 5-2.**

5.6.2.2. ***Sample Frequency***. The goal of Phase II is to monitor surface water, ground water and sediment quality during operation of the golf course.

- Surface water samples will be collected four times per year. One surface sample will be taken in the Spring, one in the Summer, one in the Autumn, and one in Winter. Should water not be available on a given sample date, two additional attempts will be made to obtain a sample within the time period (Spring, Summer, Autumn, Winter).
- Groundwater samples will be collected four times per year during Spring, Summer, Autumn, and Winter. Should water not be available on a given sample date, two additional attempts will be made to obtain a sample within the time period (Spring, Summer, Autumn, Winter).
- Sediment samples will be collected one time per year at the time of surface water sampling in the Spring.

Sampling will be reduced to Spring and Autumn events after three years of operation, provided that no significant detections of non-pesticide analytes (see subsections under 2.5.7.6, Criteria for Management Response) and no toxicologically significant detections of pesticides (see subsections under 2.5.7.6, Criteria for Management Response) have occurred.

5.6.2.3. ***Sample Variables***. Surface water, groundwater and sediments will be analyzed for the variables listed in **Table 5-1**.

As stated in the IPM Section of this report, soil samples will be taken and used for assessment of fertilization requirements for the golf course. This is an agronomic sampling and will be

conducted by or under the direction of the superintendent. Soil samples will be analyzed for the following constituents: organic matter, nitrogen release, phosphorus, potassium, magnesium, calcium, pH, cation exchange capacity, and base saturation. This list may, however, be modified by the golf course superintendent based on turf response.

Detections of a pesticide listed in **Table 5-4**, will trigger additional analyses as described in the Criteria for Management Response.

5.6.2.4. ***Field Methods.*** Variables, container type, preservation and holding times for water samples are given in **Table 5-5**, and for sediment samples in **Table 5-6.** Field methods for surface water, groundwater, and sediment will follow protocols outlined in Phase I.

5.6.2.5. ***Laboratory Methods.*** Laboratories used for sample analysis will follow the protocols outlined in Phase I.

5.6.3 Data Storage and Reporting

Data generated from this monitoring program will be maintained by the superintendent along with other course records and data on pesticide and fertilizer use, personnel, and training. Monitoring results will be summarized and included as part of an Annual Report.

Monitoring data from field sampling and from laboratory analyses will be entered into a computer spreadsheet (e.g., QuattroPro, Lotus 1,2,3). Data analyses will be performed with this data set. A summary of the results of the surface water and sediment samples, with a list of any remedial actions that were taken will be kept.

5.6.4 Data Analysis

Data generated in the monitoring program will be compared to background concentrations and State surface water and groundwater standards.

Data will also be compared with the USEPA pesticide Health Advisories Limits (HAL's, given in **Appendix I, Table I-1**) that have been reduced by a factor of 0.5. This is a very conservative factor given that HALs have a margin of safety of 100 to 1000 already built into the number. In

Phase II and III , concentrations of water and sediment variables will be compared with background concentrations to determine changes from background conditions.

Soils data will be compared with known requirements for turfgrass and adjustments in the fertilization rates will be made by the golf course superintendent.

Protection of aquatic life will be evaluated by comparing measured concentrations against LC_{50} data (**Appendix I, Table I-1**) that have been reduced by a factor of 10. LC_{50} data exist for most of the chemicals, and the lowest LC_{50} obtained for the pesticide was divided by a correction factor of 10 to obtain a screening criteria (Suter 1989; Warren-Hicks et al., 1989, 1996). This is a conservative factor in that most measured chronic values will be higher than those estimated from this factor (Suter et al. 1983).

5.6.5 Criteria for Management Response

5.6.5.1. ***Non Pesticide Analytes***. If concentrations of non-pesticide variables exceed Applicable State Water Quality Standards, or if an increasing trend is observed (a statistically significant trend), or if measured concentrations of nutrients exceed the standard deviation of background levels by more than two-times, then the media will be resampled and a review of management practices, site conditions and weather conditions will be implemented to determine reasons for increased concentrations. The immediate action will also include a modification in management practices, for example a reduction in fertilizer use and/or an increased proportion of slow-release fertilizers. Following the review cited above, these immediate restrictions may be lifted or modified, as appropriate. Records of all actions taken will be maintained by the superintendent, and included in the annual report.

5.6.5.2. ***Pesticide Analytes***. If a pesticide listed in **Table 5-4** is detected in samples at concentrations below a toxicologically significant level as determined by the USEPA Health Advisories Limits (HAL x 0.5) or by the aquatic toxicity as measured by LC_{50} x 0.1, whichever is lower (see **Table 5-8** for concentrations), the following responses will result:

1. The sample station, from which the exceedance was obtained, will be resampled and reanalyzed for the pesticide.
2. Further testing will be required for an additional suite of pesticides ('secondary level). A list of secondary pesticides is given is **Table 5-7,** and they will be analyzed if they have been used on the golf course during the previous 6 months. Pesticides were included in this second tier based on the results of the Risk Assessment analysis.
3. A review of the use, weather conditions after its application, and possible alternative control measures will be made and a decision made on the continued use of the specific problem pesticide.

Table 5-7. 'The 'Second Level' (Tier II) List of Pesticides To Be Analyzed If Routine Analyses Indicate Concentrations of Pesticides in Samples of Surface Water and Groundwater

Surface Water	Groundwater
chloroneb	bentazon
cyfluthrin	cyfluthrin
bentazon	fenamiphos
diclofop-methyl	mecoprop
dithiopyr	PCNB
fenamiphos	
lambda-cyhalothrin	
mecoprop	

If a pesticide listed in **Table 5-4** is detected in samples at concentration above a toxicologically significant level as determined by the USEPA Health Advisories Limits (HAL x 0.5) or by the aquatic toxicity as measured by LC_{50} x 0.1, whichever is lower, the following responses will result:

1. The pesticide will be immediately removed from the list of recommended pesticides for use on the golf course, and its use will be terminated.
2. Further testing will be required for an additional suite of pesticides ('secondary level). A list of secondary pesticides is given is **Table 5-7,** and they will be analyzed if they have been used on the golf course during the previous 6 months..
3. The sample station, from which the exceedance was obtained, will be resampled and analyzed for the pesticide that exhibited the exceedance. Should subsequent resampling and analysis indicate concentrations below the HAL or LC_{50}, the golf course may reinstate the pesticide on the list of recommended pesticides.

Criteria for management response are summarized in **Table 5-8**.

Table 5-8. Response Thresholds for Variables at the Hyatt Golf Resort†

Variable	Surface Water	Groundwater
pH, Water Temperature, Specific Conductance, Salinity	Florida water quality standard	Florida water quality standard
Dissolved Oxygen, Secchi Disk Transparency	Florida water quality standard	NA[a]
Total Nitrogen, Nitrate-Nitrogen, Total Phosphorus	Florida water standard or two standard deviations above the baseline mean, whichever is lower; or an increasing trend (see text).	Florida water standard or two standard deviations above the baseline mean, whichever is lower; or an increasing trend (see text).
Chloride, turbidity	Florida water standard or two standard deviations above the baseline mean, whichever is lower; or an increasing trend (see text).	NA
Dicamba	HAL x 0.5 = 100 ppb	HAL x 0.5 = 100 ppb
Propiconozole	HAL x 0.5 =45.5 ppb	HAL x 0.5 =45.5 ppb
Carbaryl	LC_{50} x 0.1 =232.8 ppb	LC_{50} x 0.1 =232.8 ppb
Chloroneb	HAL x 0.5 = 45 ppb	HAL x 0.5 = 45 ppb
Bentazon	HAL x 0.5 = 10 ppb	HAL x 0.5 = 10 ppb
Cyfluthrin	LC_{50} x 0.1 =0.014 ppb	LC_{50} x 0.1 =0.014 ppb
Dithiopyr	LC_{50} x 0.1 = 48 ppb .	LC_{50} x 0.1 = 48 ppb
Diclofop-methyl	HAL x 0.5= 5 ppb	HAL x 0.5= 5 ppb
Fenamiphos	HAL x 0.5 = 1 ppb	HAL x 0.5 = 1 ppb
Lambda-cyhalothrin	LC_{50} x 0.1 = 0.021 ppb	LC_{50} x 0.1 = 0.021 ppb
Mecoprop	HAL x 0.5 = 17.5ppb	HAL x 0.5 = 17.5 ppb
PCNB	HAL x 0.5 = 10.5 ppb	HAL x 0.5 = 10.5 ppb

† Note that for non pesticide analytes, if an increasing trend is observed (a statistically significant trend) action will also be triggered. Note that for pesticides, the lower of HAL and LC_{50} is used as the trigger concentration, thus making this very conservative.
[a] NA means not applicable

5.6.6 Field Quality Control and General Water and Sediment Sampling Considerations

The field quality assurance program is a systematic process which, together with the laboratory quality assurance programs, ensures a specified degree of confidence in the data collected for an environmental survey. The field quality assurance program involves a series of steps, procedures and practices which are described below.

5.6.6.1 ***General Measures.***

a. All equipment, apparatus and instruments will be kept clean and in good working condition.
b. Records will be kept of all repairs to the instruments and apparatus and of any irregular incidents or experiences which may affect the measures taken.
c. It is essential that standardized and approved methodologies be used by field personnel.

5.6.6.2. ***Prevention of Sample Contamination.*** The quality of data generated in a laboratory depends primarily on the integrity of the samples that arrive at the laboratory, Consequently, the field personnel must take appropriate measures to protect samples from deterioration and contamination.

a. Field measurements will always be made on a separate sub-sample, which is then discarded once the measurements have been made. They will never be made on the same water sample which is returned to the analytical laboratory for chemical analysis.
b. Sample bottles, new or used, must be cleaned according to recommended procedures.
c. Only the recommended type of sample bottle for each parameter will be used.
d. Water sample bottles will be employed for water samples only.
e. Recommended preservation methods must be used. All preservatives must be of an analytical grade.
f. Solvent-rinsed Teflon liners can be used to prevent contamination from the bottle caps of water samples which are to be analyzed for organic compounds.
g. The inner portion of sample bottles and caps will not be touched with bare hands, gloves, mitts, etc.

h. Sample bottles must be kept in a clean environment, away from dust, dirt, fumes, and grime. Vehicle cleanliness is important.
i. All foreign and especially metal objects must be kept out of contact with acids and water samples. Petroleum products and exhaust fumes will be kept away from samples.
j. Specific conductance will never be measured in sample water that was first used for pH measurements. Potassium chloride diffusing from the pH probe alters the conductivity of the sample.
k. Samples must never be permitted to stand in the sun; they will be stored in an ice chest.
l. Samples must be shipped to the laboratory without delay.
m. The sample collector will keep their hands clean and refrain from smoking while working with water samples.
n. Samplers must wear latex gloves.

5.6.6.3. ***Field Quality Control.*** Quality control is an essential element of a field quality assurance program. In addition to standardized field procedures, field quality control requires the submission of samples to check contamination, sample containers, or any equipment that is used in sample collection or handling, and to detect other systematic and random errors occurring from the time of sampling to the time of analysis. Replicate samples must also be collected to check the reproducibility of the sampling. The timing and the frequency of equipment blanks, duplicate, and replicate samples are listed in **Table 5-9.**

Table 5-9. Number and Types of Samples Taken for Field Quality Control.	
Equipment Blank	one equipment rinsate blank per water medium per day
Duplicate	one per 10 samples
Replicate	one per sample medium per quarter

Equipment Blanks. An equipment blank is prepared in the field at the end of each day's sampling; and one equipment rinsate blank per water medium per day is prepared. An equipment blank is prepared by filling appropriate sample bottles with rinsate from the final cleaning of non-dedicated, sample equipment, and transporting them to the laboratory in the same manner as the water samples for analysis.

Duplicates. Duplicate samples (splits) are obtained by dividing one sample into two sub-samples. One sample in every ten water samples is split. Splits are done periodically to obtain the magnitude of errors owing to contamination, random and systematic errors, and any other variabilities which are introduced from the time of sampling until the samples arrive at the laboratory.

Replicates. Two samples are taken simultaneously in a given location. The samples are taken to measure the cross-sectional variations in the concentration of the parameters of interest in the system. One water sample per quarter will be replicated.

6.0. THE NATURAL RESOURCE MANAGEMENT CENTER (Maintenance Facility)

The maintenance department is responsible for irrigation, mowing, fertilization, pesticide application and general upkeep of the golf course grounds. The maintenance area is where pesticides are loaded into application equipment, mowers and other pieces of equipment are serviced, and pesticides, fuel, fertilizer, and cleaning solvents are stored. This is where there is potential for pollution of soil, surface water, or ground water. Contamination can occur when pesticides are spilled, containers or equipment cleaned and the rinse water dumped on the ground or discharged into surface water, or improperly cleaned containers are stockpiled or buried. Proper management of the maintenance area is an important part of responsible chemical and pesticide use.

Management practices at the Hyatt Golf Resort will be implemented at these maintenance areas that will prevent the contamination of natural resources by the materials that are stored or handled at these sites. The general approach to management of golf course maintenance facilities involves three principles that are:

- Isolate all potential contaminants from soil and water.
- Do not discharge any material other than clean stormwater onto the ground or into surface water bodies.
- Minimize irrigation, fertilizer, and pesticide use requirements through use of Integrated Pest Management and native or naturalized vegetation wherever practicable.

The first principle involves identifying all the materials stored or handled in a golf course maintenance area along with current practices that could cause environmental contamination. The next step is to develop management practices which isolate those materials from soil and water during storage, handling, and disposal. Storing these materials in covered, lockable storage areas, handling them over impermeable surfaces, cleaning up spills promptly and properly, recycling these materials where possible, and otherwise properly managing wastes will keep these materials from contaminating soil or water.

The second principle is an extension of the first. It includes preventing contamination of stormwater and eliminating the discharge of materials such as equipment wash water to ground or surface waters. Discharges to surface or ground water will be eliminated through the containment and collection of equipment wash waters and proper management of collected material.

The third principle, that of minimizing fertilizer, pesticide and irrigation use through use of native vegetation and Integrated Pest Management directly impacts the amount of material handled annually, reduces the annual maintenance budget and encourages good environmental stewardship.

6.1 BEST MANAGEMENT PRACTICES FOR THE NATURAL RESOURCE MANAGEMENT CENTER

The Natural Resource Management Center (NRMC) at the Hyatt Golf Resort will incorporate the following to be as environmentally compatible as possible, and will include Best Management Practices found in documents in **Appendix VIII. Figure 6-1** shows the plan for the NRMC.

6.1.1 Pesticide Storage and Mixing

Pesticide storage and mixing are in a separate room or building designated for these materials only, and it is located away from water sources (wells, ponds, streams). The building will have a concrete floor with a poured concrete lip extending upward into the concrete block walls. The center of the building will be the lowest, and the floor will be sloped to the center. A concrete sump will be located at the low point. This area is for mixing and will provide excellent containment for any inadvertent spills. The building is kept locked and posted as required by law, including the courses "Hazard Communication Program" (see sample in **Appendix III**). Good ventilation will be provided by continuous circulation fans and chemicals will be kept away from direct contact with the concrete floor. Storage is on non-wooden shelving. Other features to include are switches for lights and the fuse box on the outside, explosion proof lights and fans, and a "lip" at the entrance that moves rainwater away from the interior of the facility. All pesticides will be stored in their original containers with visible labels.

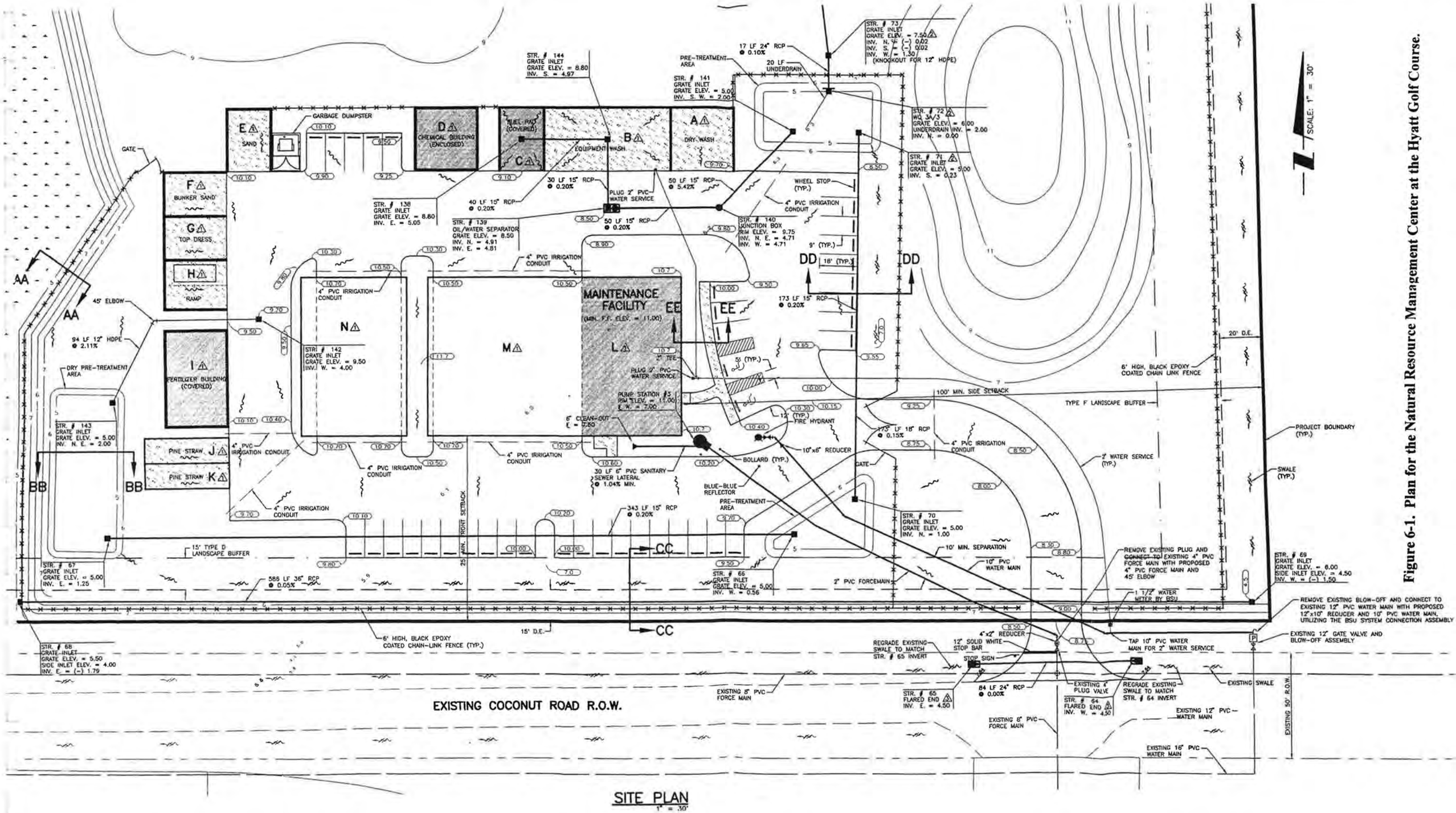

Figure 6-1. Plan for the Natural Resource Management Center at the Hyatt Golf Course.

To be prepared for spills and/or leaks, absorbent floor-sweep materials, sawdust or cat litter and activated charcoal will be kept on hand. An inventory of pesticides and other chemicals will be kept, and MSDS and labels for each pesticide used will be readily accessible. An emergency equipment box is located on the outside of the building. Typically this is a wooden box (perhaps 3 ft by 3 ft with a sloping roof) that stores items for emergency use. Such things as a fire extinguisher, respirator, first aid supplies, goggles, respirators, gloves, rubber boots, and a coverall (perhaps a tyvek suit). These items are placed in the locked box on the outside of the building so they are available in case they are needed.

Water will be available for both routine and emergency chemical removal, including showers and eye wash facilities.

Mixing and loading will be done in the pesticide storage building near the center area where the sloping concrete will provide excellent containment for any inadvertent spills. A sump is located at the base of the sloped area, thus facilitating clean-up of spills or overfill. A system of rinse water tanks will be used to store excess water from the filling or rinsing of sprayers. This is an effective way to deal with the rinse water. The rinse water is pumped into the holding tanks and reused as make-up water the next time that type of material is applied. Three different tanks are used, one for herbicides, one for insecticides and one for fungicides. The rinse water from herbicide applications is pumped to the herbicide tank, rinse water from insecticide applications is pumped to the insecticide tank, and rinse water from fungicide applications is pumped to the fungicide tank. The tanks are located above the mixing/wash area on metal or non-absorbent shelves.

Before mixing chemicals together, their compatibility will be checked as chemical incompatibility could result in reduced effectiveness, increased toxicity to the applicator, or phytotoxicity to the turfgrass. The "quart jar method" will be used to determine compatibility. Spray adjuvants (such as wetting agents, emulsifiers, foaming agents and stickers) will be used in accordance with label recommendations.

Care will be taken to mix only the amount of pesticide needed for the application. As soon as pesticides are loaded, all equipment and apparel used will be washed, rinsed and air dried. Water used in the cleaning process will be dumped into the spray tank.

After the pesticide is applied, the sprayer tank, boom and nozzles will be washed in the designated area where the tank will be refilled with water; and this material (which will have an extremely low concentration of pesticide) will be stored in the holding tanks as described above.

6.1.1.1. *General Considerations.*

- The pesticide storage facility will have a complete alarm system, with battery backup, for burglary and fire.
- Locks and bolts used at the control center will be of the highest quality materials available.
- Materials used inside the control center are comprised of high quality durable plastic, aluminum or concrete to avoid absorption of chemical residues or vapors.
- Install an explosion proof fan and explosion proof light.
- A ventilation design must be an integral part of the control center.
- All pesticides stored on non-absorbent shelving are located at least 6" off the floor.
- All pesticides are segregated by liquid, powder or granular class.
- All powders and granules are stored above liquids.
- All shelving must be sturdy and secured to avoid sagging and falling.
- The entire floor of the control center will be sloped to the center of the room with a recessed sump located at its center.
- A light and fan switch will be located outside of the door entering the control center.
- A sink with potable water and spigot and hand blower (not paper towels) with the drainage funneled back into the sump.
- A mixing table will be attached to the sink at a slightly higher elevation to allow overspill to be washed into the sink.
- A portable eye wash bottle will be located over the sink; immediately outside an eye wash/shower station supplied by potable water will be installed.
- A refill hose will be located above the sump to allow proper and timely filling of spray tanks with water.
- Only qualified personnel will be allowed access to the control center.

6.1.2 Wash Pad

Equipment wash areas have the potential to cause environmental problems; particularly, the runoff associated with wash water and debris. Pesticides can be a serious concern to the

environment, and by washing the pesticide spray equipment in the pesticide storage building, The Hyatt Golf Resort will avoid many of the concerns.

Washing equipment other than pesticide application equipment will take place at a specially constructed wash pad. The wash pad is a concrete pad that is covered and sloped to a center collection area. Grass clippings and sediments are collected in the central collection area. Water is then recycled or discharged to an area for appropriate treatment.

6.1.2.1. ***General Considerations.***

- All water used to wash equipment will have materials such as grease, oil and gasoline removed from the water before disposal.
- Pesticide equipment will not be washed off in this area (done at the IPM Control Center).
- A roof will cover the wash-down area to keep rain off the pad and prevent excessive water from going into the recycling system.
- The pad will be elevated along the outer edges to direct rain water away from the area, but the center area will be recessed from normal ground level to allow for wash water to be collected for recycling and the roof will be high enough to allow golf course equipment the proper amount of clearance, yet low enough to meet any aesthetic requirements (visibility to homeowners, etc.).
- Several air hoses attached to posts prior to the wash-down pad can be used to remove excessive grass residue off equipment prior to moving onto the wash-down pad which will reduce the amount of grass clippings/debris entering the water recycle system.
- The pad will have a screen basket system to prevent an excess of grass clippings and debris from entering the recycling system. Grass clippings will be composted and recycled on the golf course.
- Hoses with attachable spray bottles of liquid wax at the wash-down pad can be utilized so valuable equipment can receive a brief application of liquid wax (cut with water) after each use.
- Concrete in the pad will be impermeable to prevent leaching of any contaminates.
- Installing lightning protection in this area is vital for worker and equipment protection.

6.1.3 Fuel Island

- Cover the fuel island to minimize the effect of sunlight on the equipment as well as possible increased evaporation of fuel and provide protection for employees. The roof will be high enough to allow golf course equipment the proper amount of clearance, yet low enough to meet any aesthetic requirements (visibility to homeowners, etc.).
- Install adequate lighting around and beneath the roof to allow for operation during periods of darkness or inadequate light.
- Install lightning protection on the fuel island roof.
- If possible, all fuel storage and carrying mechanisms will be above ground devices.
- Fuel will be stored in above ground, double vaulted tanks from a reputable manufacturer.
- The pad will be elevated along the outer edges to direct rain water away from the area, but the center area will be recessed from normal ground level to allow for containment in the event of a fuel spill; the recession will be deep enough to contain a few hundred gallons of spillage but not so severe that it presents difficulty for equipment entering and leaving the fuel island.
- Concrete in the pad will be impermeable to prevent leaching of any contaminates.
- Prior to construction of the fuel island the Fire Marshall and other appropriate authorities will review the specifications.

7.0. WASTE MANAGEMENT AND ENERGY PLANNING

7.1 WASTE MANAGEMENT

In order to facilitate a decision-making process relative to waste management planning, developmental areas contained within the project site that will have waste issues connected with their design, development, and management are identified In addition, a Sustainable Development Decision-Making Process can be utilized that will lead to the most sustainable purchases being made over the life of the project. This section includes such a decision process.

Waste management is a key consideration in the Audubon Signature Program. The guiding philosophy for waste management consideration should be: **Reduction, Reuse, Recycling**. Reduction will not only benefit the environment, but the economic bottom-line as well.

Audubon International promotes the concept of establishing water and wildlife as the "litmus paper" test for waste management planning -- water, because it is on the receiving end of every human activity, and wildlife because they are indicators of the overall health of the environment. In addition, possible water and wildlife impacts should be considered both on and off the site, thus truly making the project a nationally significant sustainable development model.

The following twelve step decision-making process should be followed when making decisions about the design, construction or product use at the property site. When going through the 12-step process keep in mind the overall consideration for this process which is:

> *Will the decision you are about to make relative to the siting, design, construction or product acquisition and use effect either water (quantity or quality) or wildlife (food, cover, water, space) on or off the project site. If the answer is yes, and it has potential negative impact, what alternatives have you considered to reduce those impacts? (It would be a rare occurrence if the answer was ever no).*

7.1.1 Product Use Considerations

Two of the most significant sources of environmental impact from building materials are **energy use** in the building and possible impacts on **occupant health**. Considerations of impacts of product use depend not only on the materials in question, but also on the application of the material.

7.1.1.1. ***Step 1: Energy Use.*** Will the material in question (i.e., glazing, insulations, mechanical systems) have a measurable impact on building energy use? If not, proceed to Step 2.

If yes, avoid options that do not minimize energy use. Also take care to design the application to minimize energy use. For materials that can be used in an energy-efficient manner only with the addition of other components, the impact of including those additional components must be factored in. Examples include glazing systems that require exterior shading systems for efficiency, and light gage steel framing that requires foam sheathing to prevent thermal bridging.

7.1.1.2. ***Step 2: Occupant Health***. Might products in the application (i.e., interior furnishings, interior finishes, mechanical systems) affect the health of building occupants? If not, proceed to Step 3.

If yes, avoid materials that are likely to adversely affect occupant health, and design systems to minimize any possible adverse effects when sources of indoor pollution cannot be avoided.

7.1.1.3. ***Step 3: Durability and Maintenance***. Are products in this application likely to need replacement, special treatment, or repair multiple times during the life of the structure (i.e., roofing, coating, sealants)? If not, proceed to Step 4.

If yes, avoid products with short life spans (unless they are made from low-impact, renewable materials and are easily recycled), or products that require frequent, high impact maintenance procedures. Also, design the structure for flexibility so that materials that might become obsolete before they wear out (such as wiring) and can be replaced with minimal disruption and cost.

7.1.2 Product Manufacturing Considerations

The next steps pertain less to the application (how a material or product is used) and more to the material itself. They require knowledge of the raw materials that go into each product.

7.1.2.1. ***Step 4: Hazardous By-Products***. Are significant toxic or hazardous intermediaries or by-products created during manufacture, and if so, how significant is the risk of their release to the environment or risk of hazard to worker health? If these are not significant, proceed to Step 5.

Where toxic by-products are either generated in large quantities or in small, but uncontrolled quantities (smelting of zinc, production of petrochemicals), the building material in question should be avoided if possible, or source from a company with strong environmental standards.

7.1.2.2. ***Step 5: Energy Use***. How energy-intensive is the manufacturing process? If not very intensive, proceed to Step 6.

If the manufacture of a building material is very energy-intensive compared to the alternatives (i.e., aluminum, plastics, etc.), its use should be maximized. It is not the energy use itself that is of concern, however, but the pollution from its generation and use; industries using clean-burning or renewable energy sources have lower burdens than those relying on coal or petroleum.

7.1.2.3. ***Step 6: Waste From Manufacturing***. How much solid waste is generated in the manufacturing process? If not much relative to the quantity of product manufactured, proceed to Step 7.

If significant amounts of solid waste are generated and are not readily usable for other purposes (tailings from mining of copper and other metals), seek alternative materials, or materials from companies with progressive recycling programs.

7.1.3 Raw Materials Considerations

7.1.3.1. ***Step 7: Resource Limitations***. Are any of the component materials from rare or endangered resources? If not, proceed to Step 8.

If yes (endangered or threatened tree species), avoid these products, unless they can be source from recycled material.

7.1.3.2. ***Step 8: Impacts of Resource Extraction.*** Are there significant ecological impacts from the process of mining or harvesting the raw materials? If not proceed to Step 9.

If yes (damage to rainforests from bauxite mining for aluminum, or from certain timber harvesting practices), seek suppliers of material from recycled stock, or those with credible third-party verification of environmentally sound harvesting methods.

7.1.3.3. ***Step 9: Transportation.*** Are the primary raw materials located a great distance from your site (i.e., Italian marble, tropical timber, New Zealand Wool)? If not, proceed to Step 10.

If yes, seek appropriate alternative materials from more local sources.

7.1.4 Disposal and Reuse Considerations

7.1.4.1. ***Step 10: Demolition Waste.*** Can the material be easily separated out for reuse or recycling after its useful life in the structure is over? If yes, proceed to Step 11.

While most materials that are used in large quantities in building construction (i.e., steel, concrete, etc.) can be at least partially recycled, others are less recyclable and may become a disposal problem in the future. Examples include products that combine different materials (such as fiberglass composites) or undergo a fundamental chemical change during manufacture (thermoset plastics such as polyurethane foams). Consider the future recyclability of products chosen.

7.1.4.2. ***Step 11: Hazardous Materials From Demolition.*** Might the material become a toxic or hazardous waste problem after the end of its useful life (i.e., preservative-treated wood)? If not, proceed to Step 12.

If yes, seek alternative products or construction systems that require less of the material in question.

7.1.4.3. ***Step 12: Review the Results.*** Go over any concerns that have been raised about the products under consideration, and look for other life-cycle impacts that might be specific to a particular material. For example, with drywall and spray-in open cell polyurethane foam insulation, waste generated at the site is a potential problem that should be considered.

7.2 CONSERVING ENERGY

You know that energy expenses are part of the cost of doing business. But by choosing low-cost or no-cost energy-efficient measures that fit your situation, you can easily save hundreds or even thousands of dollars annually in energy costs while protecting the environment. Plus, your company's reputation for wise energy use can lead to even greater customer appeal.

7.2.1 Background Information

7.2.1.1. ***Evaluate Energy Use.*** To discover where you can save energy, you'll first need to look at your energy profile–how much energy you use, where you use it, and how much it costs; or how much you expect to use. Maybe you use energy for space heating or cooling or water heating. What about lighting or running office equipment or production machines? Does fuel for transportation make up part of your energy picture?

Next, add all your energy expenses together. You may be surprised to find that the total amounts to several thousand dollars. This section will help you learn about equipment and techniques that can save you 20% or more on energy costs *(From: Hands-On Solutions to Improve Your Profits & Productivity*, U.S. Department of Energy.)

7.2.1.2. ***Six Major Areas for Savings.*** Look for ways to save in six major areas:

- Lighting
- Buildings
- HVAC and Solar
- Equipment & Machines
- Motors
- Vehicles

The following sections provide details on each of these areas for improving energy conservation in your organization. Additional resources and funding options are included at the end to help you get started.

7.2.2 Lighting

Lighting is the largest user of electricity and the easiest area in which to save in commercial buildings. Many businesses and homes are lowering their lighting bills by installing energy-efficient equipment such as fluorescent and compact fluorescent lamps, task lighting, and lighting controls.

Using energy-efficient equipment also reduces the incidence of eyestrain and headaches among employees, actually improving worker productivity. Energy-saving retrofits also can raise the market value of a building and provide an edge in competitive leasing markets.

7.2.2.1. *Lighting Options*.

- *Energy-Efficient Fluorescent Lamps*. These save about 35% of the wattage used by standard fluorescents and last just as long. Although the energy-efficient lamps are more costly than standard bulbs, the energy savings more than compensates for the extra cost.

  Many utilities are helping their customers buy and install efficient lighting equipment. A rebate from your utility can further cut the already short payback periods for investing in energy-efficient lighting. Your local utility can also be a good source of information on designing and purchasing lighting retrofits.

- *Electronic Ballasts*. When replacing standard fluorescents lights with energy-efficient lamps, it's necessary to replace the existing ballasts. When doing so, be sure to specify electronic ballasts. They operate *75%* more quietly than conventional ballasts, eliminating the familiar flicker and hum of older fluorescent lights. Simple payback periods on these improvements can be as short as 1 to 2 years.

- *Task Lighting*. Task lighting is simple–uniformly light the areas where you actually need the light, rather than the entire area. In other words, use smaller, more efficient

lights that bring the light source closer to the work area requiring illumination. This concept applies to such areas as offices, workrooms, and garages.

- *Compact Fluorescent Lamps*. Compact fluorescents are a good alternative to incandescent light bulbs. They last about 10 times longer than incandescent lamps. Lights that operate much of the time, such as in hallways or stairwells, are popular applications for compact fluorescent lamps.

- *Lighting Controls*. Manual controls can be used in spaces that accommodate different tasks or that have access to daylight. In this way, occupants can manually shut lights off when they aren't needed. Automatic controls such as occupancy sensors are convenient for turning lights off when certain areas– such as conference rooms, storage rooms, and restrooms—are unoccupied. Autodimming controls are available that automatically adjust light levels according to existing daylight.

- *Reflectors*. Reflectors can increase the effectiveness of a fluorescent lighting fixture by about 10% in some situations by reflecting additional light on the work space. Reflectors installed with energy-efficient fluorescent lamps and electronic ballasts can reduce lighting energy costs by as much as 70%.

7.2.3 Buildings

Your building or home probably has room for low-cost energy efficiency improvements; or you can build them in if you are building a new facility. Besides saving you money, these improvements lead to greater comfort for staff and customers. When you evaluate how your building is using energy, you may find many opportunities for efficiency improvements.

7.2.3.1. *Better Buildings.*

- *Isolate Unused Spaces*. Often, your building contains space that isn't used by people and may not require space conditioning. Isolate these areas by closing heating and cooling vents and covering exterior windows. Sealing unused exterior windows and doors can represent a valuable security benefit, too.

- *Stop Leaks*. One of the easiest and quickest dollar-saving techniques is caulking leaks in your building. Heat always flows from a warmer environment to a cooler one-when it's cold outside, heat tends to leak outward. Eliminating leaks in your building exterior (like walls, windows, doors, ceilings, and floors) works to your advantage for both heating and cooling. When it's windy outside, your ears or sense of touch may guide you to substantial leaks.

- *Check Doors, Windows, and Other Openings*. A few simple measures can really help prevent leakage. For example, replace any broken or cracked glass. Use automatic door closers, be sure they're adjusted for proper operation, and replace them when necessary. Use an exterior insulating cover on window-mounted or above-door air conditioners during winter. Finally, make certain the space around your air conditioner is thoroughly sealed.

7.2.4 HVAC and Solar

You probably spend many energy dollars on heating and cooling your buildings. Employee comfort is a high priority and product quality may dictate certain temperature requirements. Installing the programmable thermostats and energy-efficient boilers and water heaters described in this section is an easy way to start saving energy; proper maintenance is equally important.

You may also be able to save energy by managing the sunlight that falls on your building. Solar hot water systems and solar heating systems are two potentially economical solar energy technologies you might want to consider.

7.2.4.1. *Heating, Ventilating and Air-Conditioning (HVAC)*. Businesses have found that the following basic steps can save energy, increase comfort, and enhance equipment operation.

- *Programmable Thermostats*. These simple microprocessor-based products offer as much as a 50% rate of return on energy dollars. In addition, these devices will maintain system start-up and set-back schedules for optimum comfort. They can also eliminate unnecessary HVAC use during unoccupied hours.

- *Furnace Maintenance and Repair.* An easy first step is to establish a regime for replacing dirty air filters. The uses of your building or home, as well as location, will dictate how often changing is required. It's often well worth the expense to have a trained specialist inspect and perform needed maintenance on your furnace and cooling system. Also, simple maintenance such as cleaning intake screens, condenser coils, supply registers, and return grills can make a difference in your energy bills.

- *Duct Maintenance and Repair.* Typical duct systems lose energy from your heating and air-conditioning equipment. Use duct tape to seal duct joints and elbows where accessible. Insulate any duct work in unconditioned space, such as roofs, attics, crawl spaces, and basements. Identify and repair damaged or disconnected ducts while you check the system.

- *Boilers.* If your building uses a boiler for heating, follow the factory maintenance schedule and procedures. If you are using a fuel other than natural gas, consider switching to natural gas, which is less expensive. If maintenance costs for your existing boiler have become excessive or you need to replace your boiler, replace it with a high-efficiency model.

- *Ventilation Rate.* Building ventilation is necessary so that your building has a reasonable supply of fresh air. However, excessive ventilation rates increase your heating and cooling costs dramatically. Have a professional engineer or trained specialist optimize your system's ventilation rate.

- *Hot Water Supply.* Your hot water temperature is often set higher than you really need. Gradually set the temperature downward until you reach an optimum. You can also install flow restrictors and self-closing faucets; they will reduce your hot water use. Finally, check your entire system for leaks and repair them.

- *Water Heater.* One of the most effective measures you can use is an insulating jacket for the water heater. These jackets are easily found at large convenience, building, and hardware supply stores. A simple electronic time-of-use controller will ensure that your electric water heater is off when not needed.

7.2.4.2. *Solar Energy.* You can use the sun's energy to maximize natural lighting and heating, which will decrease costs for artificial lighting and space heating. On the other hand, you may live in a very warm, sunny climate where air-conditioning is your building's greatest energy expense. In that case, you'll want to minimize the effects of the sun's energy.

- *Direct Sunlight: Enhancement or Control.* Sunlight striking your building can work for you or against you. When you are trying to cool your building, you don't want sunlight pouring in through windows, doors, and skylights, adding considerably to your air-conditioning bills. However, when you are heating your building, you want the sunlight to enter your building.

  During the air-conditioning season, provide shading to windows, doors, and skylights. This can be done effectively with awnings, sunscreens, shade trees, and shrubbery. During the heating season, you can save money by permitting sunlight to enter the building through windows and other openings.

- *Solar Hot Water Systems.* Many small businesses (for example, restaurants, bars, and dry cleaners) have large water-heating needs that can be economically and reliably met by solar energy. Depending on the cost of your current water-heating system and its energy source (oil, electricity, natural gas, or propane), basic solar water heating or preheating may make economic sense.

- *Solar Heating Systems as Supplements to HVAC Systems.* Most commercial/ industrial warehouses in cold-weather states are heavy users of thermal energy— heat. In most areas, an all-electric heating system will be expensive to operate and will leave you vulnerable to power outages and ever-increasing energy rates.

  Supplemental space heating is efficiently provided by the transpired solar collector, a type of solar collector that heats air for the building. In 1994, this new collector received a "Best of What's New" award from *Popular Science* (February 1994, page 20). This system has been effectively demonstrated, meeting winter head-on in Canada. Check with local or state energy offices, local utilities, energy businesses, universities, or your accountant for the availability of state tax incentives or technical assistance to businesses using solar water heating systems.

7.2.5 Equipment and Machines

Electricity use for office equipment is growing faster than any other category of electricity use in the commercial sector. This category includes computers, monitors, printers, facsimile machines, and copiers. Energy use by office equipment is expected to grow by as much as 500% in the next decade.

It takes less electricity to run energy-efficient office equipment; using energy-saving equipment also saves on air-conditioning costs because the equipment produces less waste heat. More efficient equipment can also increase occupant comfort by cooling areas more uniformly and reducing HVAC system noise.

- *Turn off Equipment.* About 30% to 40% of personal computers and printers are left running at night and on weekends, and these machines are idle as much as 90% of their workday on time.

  Don't be confused by so-called "screen savers." They do not save electricity in computer monitors; they are meant to prevent phosphor "burn-in" on the screen.

  Cycling power on and off to your computer will not harm late-model machines. *Energy Star* computers, monitors, and printers can automatically power down to save electricity when not being used. Don't forget to consider sharing printers and copiers; this will decrease their idle time and provide for more cost-effective use of the equipment.

- *Buy Energy-Efficient Equipment.* Specify energy efficiency as a purchasing criteria to help you select equipment in a sometimes confusing marketplace.

  Also, check your other appliances for energy-saving opportunities. For example, businesses such as restaurants and other food service providers rely heavily on refrigeration equipment and freezers. Refrigeration equipment can be include such efficiency options as hot-gas defrost and evaporative condensers. These options can easily yield a return-on-investment of as much as 50%. High-efficiency, cost-effective equipment is now readily available, so be sure to ask for it when you're shopping.

7.2.6 Motors

Electric motors supply most of the so-called "drive energy" in the United States and consume more than half of the nation's electricity. Electric motors are used in pumps, fans, and compressors, and for materials processing and handling.

A typical industrial motor operating a large percentage of the time consumes five to ten times its capital cost in electricity every year. That is like spending $100,000.00 a year on gas for a $10,000.00 car. This also means that small gains in efficiency translate into big gains in savings.

- *Install Efficient Motors.* Energy-efficient motors are available that use less energy to accomplish the same amount of work. Depending on the size, type, and manufacturer, energy-efficient motors typically cost 10% to 30% more than standard models. Because of superior design and higher quality production, these motors tend to be more reliable, produce less waste heat, and run more quickly than standard models.

- *Downsize Oversized Motors.* Unfortunately, it has been common practice for many years to oversize motors. But because motors are inefficient when running at less than 50% of rated load, oversized and under loaded motors can waste energy and money. This problem is extensive; audits indicate that about 30% of all industrial and commercial motors operate at less than 50% of dull load, resulting in substantial inefficiency costs.

- *Install Variable-Speed Drives.* In applications in which loads fluctuate, replace single-speed motors with variable-speed drives. A variable-speed drive allows equipment output to more exactly match demand. Depending on your circumstances, variable-speed drive can reduce motor energy use by 10% to 70%.

- *Adhere to Proper Maintenance Schedules.* Careful monitoring and maintenance are necessary to keep a high-efficiency motor system operating properly, and the energy savings from good maintenance is significant. Additional benefits include more reliable, trouble-free operation, and extended equipment life.

7.2.7 Vehicles

If your business maintains a vehicle fleet or provides delivery services, you will want to investigate how you can save money on fuel. Businesses such as florists, office supplies, travel agencies, auto parts, plumbing, heating, and electrical contractors, lawn and pool maintenance services, and carpet and drapery cleaning services are good candidates for fuel savings. In addition to achieving money and energy savings, these measures will help lesson transportation-related air pollution.

- *Conventional Fuels*. Each year the U.S. Department of Energy (DOE) publishes a *Fuel Economy Guide,* which lists the miles per gallon (mpg) ratings for all vehicles are likely to save your company money through lower fuel costs.

  Your drivers can also be made more aware of ways in which they can drive more effectively to save on fuel. Combining errands into one trip, turning an engine off rather than letting it idle for more than a minute, getting a tune-up regularly, avoiding jackrabbit starts, and not carrying unnecessary weight in vehicles are all ways to save on gasoline. The *Guide* provides these and other driving hints. The *Fuel Economy Guide* is available through your automobile dealer, or it can be ordered free of charge from the Energy Efficiency and Renewable Energy Clearinghouse.

  Energy Efficiency and Renewable
  Energy Clearinghouse (EREC)
  P.O. Box 3048
  Menifield, VA 22116
  (800) DOE-EREC
  Fax (703) 893-0400

- *Alternative Fuels*. If you have a fleet of 10 or more vehicles, it is possible that you may be required to comply with either the Clean Air Act or the Energy Policy Act requirements for fleets. These requirements have been put in place to help increase U.S. energy security through increased use of alternative fuels, or to improve our country's air quality.

The Energy Policy Act requires the use of alternatives fuels such as natural gas, electricity, methanol, ethanol, or propane in certain percentages for some fleets. The Clean Air Act requires that you vehicles meet certain emissions standards through the use of alternative fuels or reformulated gasoline and clean diesel fuel. To find out more about these fuels and to determine whether your fleet must comply, you can call the DOE Alternative Fuels Hotline at (800) 423-1363.

- *Other Transportation Options.* Other transportation options may be worth evaluating for use in your business. Helping employees take advantage of mass transit, ride sharing, and alternative work schedules often increases employee morale and loyalty. These options may also translate to good community relations because your are supporting efforts to reduce pollution, dependence on foreign oil, and traffic congestion.

- *Mass Transit.* Encouraging your employees to use rail and bus mass transit is the most effective means of alleviating urban gridlock and air pollution from private vehicles.

- *Ride Sharing.* Car or van pooling can be an effective transportation measure. Check with your local mass transit agency,. or your local or state energy office, for information about ride-sharing programs in your area.

- *Alternative Work Schedules.* Continuing to grow in popularity, alternative work schedules shift work hours away from peak *traffic-flow* times, which decreases traffic congestion, commuting time, and driver anxiety. Depending on your type of business, this measure may be appropriate for you.

7.2.8 Getting Organized

Now that you have some idea of how to proceed with energy efficiency improvements, use the following list to aid your planning. Remember, you can use this for a new or existing building:

1. Gather and total all your energy costs. Pull together your past year's bills (or anticipated bills) and total these costs. Be sure you are adding all the bills from

different energy sources (utilities, vendors, and service stations). You may want to keep your heating and cooling costs separate from your transportation-related costs.

2. Get a professional energy audit or do a self-audit. Contact your local utility, municipal services department or local university for technical or financial assistance. Or, based on the information presented here, perform your own assessment of your energy use and areas for improvement. The Energy Conservation Survey at the end of this section will help you get started in finding out what basic conservation measures are in place.

3. Enlist the aid of staff members. They may prove to be your best asset. You can offer employee incentives for substantial savings if you have high energy use or if your operation is large.

4. Develop a list of best options. Assemble a list of options based on the information provided in this book and your investigation of your energy use situation. Use cost and ease of implementation to rank choices. If appropriate, get staff input on selection of action items.

5. Implement your plan and take action. Carry out the action plan and start saving money for an improved bottom line.

6. Track savings and energy use. DO NOT forget this step! Evidence of tangible rewards can help improve staff morale and encourage cooperation.

Energy Conservation Survey

Use this survey to quickly and easily audit
energy conservation measures in place at your business
Or, use this audit to help direct your energy conservation measures at your new building.

Energy Efficiency

Check all that you have installed, or will install:

☐ compact fluorescent lights
☐ 10% ☐ 25% ☐ 50% ☐ 75% ☐ ____ Other

☐ energy-efficient or *Energy Star* appliances
☐ 10% ☐ 25% ☐ 50% ☐ 75% ☐ ____ Other

☐ energy efficient or *Energy Star* computers
☐ 10% ☐ 25% ☐ 50% ☐ 75% ☐ ____ Other

☐ LED exit signs

Energy Conservation

Check all that you have implemented, or will implement:

☐ Hot water thermostat turned down to 120°F
☐ Hot water tank and pipes insulated
☐ Thermostat turned down at night to 55°F
☐ Thermostat set for day-time temperatures of 65° to 68°F
☐ Central air thermostat set at 78°F
☐ Lights turned off when not in use
☐ Task lighting used in place of overhead lighting when possible
☐ Equipment turned off when not in use
☐ Water heater turned off overnight and on weekends

Insulation

Check features where you have upgraded insulation to eliminate drafts or will upgrade:

☐ Windows
☐ Doors
☐ Wall Joints
☐ Attic or roofing
☐ Exterior walls
☐ Outlet and switch plates
☐ Floors

Conservation Maintenance

Check all that are, or will be, part of your regular routine:

☐ Heating pipes and ducts kept in good repair
☐ Appliances cleaned annually as appropriate
☐ Oil or gas burner tuned up annually
☐ Air filters cleaned monthly

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APPENDIX I

Analysis of Pesticides for Use at The Hyatt Golf Resort

Table I-1. Characteristics of the pesticides that were evaluated for Hyatt Golf Resort, Lee County, Florida.

Table I-2. Results of the Risk Assessment to Select Pesticides for Hyatt Golf Resort, Lee County, Florida.

Table I-3. Environmental Impact Quotients for Pesticides that were evaluated for Hyatt Golf Resort, Lee County, Florida.

Table I-1. The Input Variables for the Tier 1 Modeling Used to Select Pesticides at the Hyatt Resort Golf Course, Estero, FL.a

Pesticide	Maximum Application Rate (lbs ai/acre)	Maximum Number of Applications (yr)	Area of course treated (acres)c	Interval Between Applications (days)d	Soil Metabolic Half Life (days)	Is Pesticide Wetted (Y/N)	Width of Spray Buffer (ft)	Method of Application (as/gs/g)e	Water Solubility mg/l	Soil Adsorption Koc	Use Rate for Year (lbs ai/acre)f	Health Advisory Level g ppb	LC_{50} h ppb
Fungicides													
azoxystrobin	1.1	5	90	7.5	15	n	25	gs	6	300	495	nd	259
chlorothalonil	22.7	10	90	15	30	n	25	gs	0.6	1380	20430	2	49
chloroneb	7	5	70	65	130	n	25	gs	8	1650	2450	90	4200000
etridiazole	7.6	2	90	51	103	n	25	gs	50	1000	1368	nd	4000
fenarimol	2.72	10	90	180	360	n	25	gs	14	600	2448	500	900
fosetyl-Al	17.4	10	90	0.05	0.1	n	25	gs	120000	20	15660	21000	75800
flutalonil	4	2	90	7	14	n	25	gs	0.74	70	720	nd	5400
flutalonil	8	1	6	7	14	n	25	gs	0.74	70	48	nd	5400
iprodione	5.4	10	90	7	14	n	25	gs	13.9	700	4860	280	2250
mancozeb	17.4	10	90	35	70	n	25	gs	6	>2000	15660	21	400
maneb	13	10	90	35	70	n	25	gs	6	2000	11700	40	1900
mefenoxam	1.36	3	90	8	16	n	25	gs	8400	50	367.2	420	12500
myclobutanil	0.65	10	90	7	14	n	25	gs	142	500	585	200	4200
PCNB	21.78	10	90	10	21	n	25	gs	0.44	5000	19602	21	770
propamocarb	8.2	10	90	15	30	n	25	gs	700000	1000000	7380	700	235000
propiconazole	1	10	90	55	110	n	25	gs	110	650	900	91	3600
thiophanate-methyl	11	10	90	5	10	n	25	gs	3.5	1830	9900	560	30
thiram	4	10	90	7.5	15	n	25	gs	30	670	3600	40	1.3
triadimefon	11	1	6	13	26	n	25	gs	71.5	300	66	210	1600
triadimefon	5.5	10	90	13	26	n	25	gs	71.5	300	4950	210	1600
vinclozalin	2.75	3	90	10	20	n	25	gs	3	43000	742.5	200	52500
vinclozalin	5.5	2	6	10	20	n	25	gs	3	43000	66	200	52500
Herbicides													
2,4-D amine	0.22	4	90	5	10	n	25	gs	796000	20	79.2	70	1100
benefin	3	10	90	20	40	n	25	gs	0.1	9000	2700	2100	800
bensulide	10	3	90	60	120	n	25	gs	5.6	1000	2700	50	379
bentazon	2	10	90	15	30	n	25	gs	2300000	34	1800	20	635000
bromoxynil	0.5	10	90	3.5	7	n	25	gs	27	1079	450	90	50
dicamba	0.1	4	90	7.5	14	n	25	gs	2300000	2	36	200	28000
diclofop-methyl	3	4	70	20	40	n	25	gs	0.8	16000	840	10	350
dithiopyr	0.5	1	90	8.5	17	n	25	gs	1.38	1638	45	nd	480
fenarimol	2.72	10	90	180	360	n	25	gs	14	600	2448	500	900
glyphosate	4	4	90	24	47	n	25	gs	900000	24000	1440	700	86000
halosulfuron	4.2	4	70	15	30	n	25	gs	0.15		1176	nd	nd
Imazaquin	0.5	1	40	30	60	n	25	gs	160000	20	20	2000	100000
isoxaben	1	10	90	15	30	n	25	gs	2	1400	900	400	100000
mecoprop (MCPP)	1.75	4	90	11	21	n	25	gs	660000	20	630	35	124000

Table I-1. The Input Variables for the Tier 1 Modeling Used to Select Pesticides at the Hyatt Resort Golf Course, Estero, FL.a

Pesticide	Maximum Application Rate (lbs ai/acre)	Maximum Number of Applications (yr)	Area of course treated (acres)c	Interval Between Applications (days)d	Soil Metabolic Half Life (days)	Is Pesticide Wetted (Y/N)	Width of Spray Buffer (ft)	Method of Application (as/gs/g)e	Water Solubility mg/l	Soil Adsorption Koc	Use Rate for Year (lbs ai/acre)f	Health Advisory Level g ppb	LC_{50} h ppb
metolachlor	3.5	4	90	45	90	n	25	gs	530	200	1260	nd	3000
metribuzin	0.67	4	70	20	40	n	25	gs	1220	60	187.6	200	76000
MSMA	6	4	70	12.5	25	n	25	gs	1600	7000	1680	nd	12000
oryzalin	3	10	90	10	20	n	25	gs	2.5	600	2700	400	3260
oxadiazon	3	1	90	30	60	n	25	gs	0.7	3200	270	40	320000
pendimethalin	3	1	40	6	12	n	25	gs	0.275	5000	120	280	138
prodiamine	1	1	90	30	60	n	25	gs	16	200	90	50	72000
pronamide	1	10	90	30	60	n	25	gs	15	800	900	50	72000
simazine	1.1	2	70	30	60	n	25	gs	6.2	130	154	1	2800
Insecticides													
acephate	3	5	90	1.5	3	n	25	gs	818000	2	1350	30	730000
bifenthrin	0.1	5	90	12.5	25	n	25	gs	0.01	240000	45	100	0.15
carbaryl	8	2	90	5	10	n	25	gs	120	300	1440	700	2328
chlorpyrifos	2	5	90	5	10	n	25	gs	0.4	6070	900	105	7.1
cyfluthrin	0.09	5	90	28	56	n	25	gs	0.002	10000	32.4	175	0.14
ethoprop	5	8	90	5	10	n	25	gs	750	70	3600	0.1	13800
fenamiphos	10	3	6	25	50	n	25	gs	400	100	180	2	110
halofenozide	1	5	70	35	71	n	gs	25	12.3	224	350	990	3600
imidacloprid	0.4	2	90	51	101	n	25	gs	510	200	72	400	105000
lambda-cyhalothrin	0.2	2	40	15	30	n	25	gs	0.005	180000	16		0.21
permethrin	2	2	90	15	30	n	25	gs	0.006	100000	360	350	4.1
spinosyn	0.25	2	90	8.5	17	n	25	gs	235	323	45		1400
trichlorfon	0.185	2	90	5	10	n	25	gs	120000	10	33.3	1250	18

a we assume that a golf area will be treated in a year. We assume normal weather conditions and player traffic.

b Maximum recommended application rate (lb ai/acre)

c acreage is for greens, tees and fairways, or roughs.

d means that we assumed that the second application would be made at one-half of the half life.

e as is aerial spray, gs is ground spray, g is granular

f total yearly use was calculated by Application rate x Area Treated x number of applications.

g The lifetime Health Advisory Level or equivalent (HAL) provides a measure of pesticide toxicity to humans. The lifetime health advisory level as defined by EPA is the concentration of a chemical in drinking water that is not expected to any adverse health effects over a lifetime exposure (70 yrs) with a margin of safety.

h LC50 is a measure of the aquatic toxicity and values are for the most sensitive species.

i blanks indicate no data

Table I-2. Results of the Tier 1 Modeling to Evaluate Pesticides for Use at the Hyatt Resort Golf Course, Estero, FL.a

Pesticide	Health Advisory Level g ppb	LC_{50} h ppb	GEENEC Output Peak Runnoff ppb	GEENEC Output Avg 4 day Runnoff ppb	GEENEC Output Avg 21 day Runnoff ppb	GEENEC Output Avg 56 day Runnoff ppb	SCI-GROW Output Drinking H2O ppb	Tier 1: Acute Aquatic	Tier 1: Chronic Aquatic	Tier1: Health
Fungicides										
azoxystrobin	nd	259	3.66	2.27	0.74	0.47	0.265	0.01	0.03	nd
chlorothalonil	2	49	127.37	40.61	10.01	5.49	4.92	2.60	2.04	2.46
chloroneb	90	4200000	63.251	54.982	48.642	40.236	18.63	0.00	0.00	0.21
etridiazole	nd	4000	17.77	6.31	1.59	0.89	1.42	0.00	0.00	nd
fenarimol	500	900	28.39	12.67	3.5	2.1	12.27	0.03	0.04	0.02
fosetyl-Al	21000	75800	53.03	51.83	41.69	30.6	0.03	0.00	0.01	0.00
flutalonil	nd	5400	16.328	12.554	8.967	6.669	2.258	0.00	0.02	nd
flutalonil	nd	5400	16.328	12.554	8.967	6.669	2.258	0.00	0.02	nd
iprodione	280	2250	13.32	5.74	1.64	1.02	11.93	0.01	0.01	0.04
mancozeb	21	400	120.34	34.89	8.19	4.26	5.9	0.30	0.20	0.28
maneb	40	1900	109.36	66.4	54.26	33.25	6.33	0.06	0.29	0.16
mefenoxam	420	12500	10.71	9.74	6.35	4.24	0.638	0.00	0.01	0.00
myclobutanil	200	4200	45.685	22.361	12.321	10.587	2.374	0.01	0.03	0.01
PCNB	21	770	29.26	7.71	1.74	0.86	2.08	0.04	0.02	0.10
propamocarb	700	235000	7.39	1.88	0.39	0.17	0.006	0.00	0.00	0.00
propiconazole	91	3600	9.03	3.89	1.06	0.63	1.65	0.00	0.00	0.02
thiophanate-methyl	560	30	24.27	7.26	1.82	1.01	1.3	0.81	0.61	0.00
thiram	40	1.3	1.045	1.021	0.896	0.663	0.950	0.80	0.51	0.02
triadimefon	210	1600	17.44	10.61	3.46	2.16	1.05	0.01	0.02	0.01
triadimefon	210	1600	31.9	19.92	6.53	4.08	5.27	0.02	0.04	0.03
vinclozalin	200	52500	1.87	0.47	0.1	0.04	0.006	0.00	0.00	0.00
vinclozalin	200	52500	2.89	0.73	0.15	0.06	0.006	0.00	0.00	0.00
Herbicides										
2,4-D amine	70	1100	2.69	2.58	2.11	1.61	0.065	0.00	0.02	0.00
benefin	2100	800	3.08	0.79	0.16	0.07	2.28	0.00	0.00	0.00
bensulide	50	379	20.93	7.46	1.9	1.08	3.09	0.06	0.05	0.06
bentazon	20	635000	17.050	15.950	11.650	8.220	2.600	0.00	0.00	0.13
bromoxynil	90	50	6.98	5.67	4.92	4.22	3.71	0.00	0.08	0.04
dicamba	200	28000	5.72	5.69	5.54	5.31	0.157	0.00	0.00	0.00
diclofop-methyl	10	350	32.584	25.219	18.765	16.553	0.258	0.09	0.54	0.03
dithiopyr	nd	480	36.486	22.325	11.532	17.94	0.009	0.08	0.24	nd
fenarimol	500	900	28.39	12.67	3.5	2.1	12.27	0.03	0.04	0.02
glyphosate	700	86000	3.89	0.99	0.2	0.09	0.006	0.00	0.00	0.00
halosulfuron	nd	nd						nd	nd	nd
Imazaquin	2000	100000	4.210	4.040	3.300	2.530	1.660	0.00	0.00	0.00
isoxaben	400	100000	22.365	18.632	11.387	7.149	0.999	0.00	0.00	0.00
mecoprop (MCPP)	35	124000	36.34	34.88	28.46	21.81	3.27	0.00	0.00	0.09
metolachlor	nd	3000	4.256	4.11	3.087	2.885	0.449	0.00	0.01	nd

Table I-2. Results of the Tier 1 Modeling to Evaluate Pesticides for Use at the Hyatt Resort Golf Course, Estero, FL.a

Pesticide	Health Advisory Level g ppb	LC_{50} h ppb	GEENEC Output Peak Runnoff ppb	Avg 4 day Runnoff ppb	Avg 21 day Runnoff ppb	Avg 56 day Runnoff ppb	SCI-GROW Output Drinking H2O ppb	Tier 1: Acute Aquatic	Tier 1: Chronic Aquatic	Tier1: Health
metribuzin	200	76000	2.119	1.648	0.785	0.552	0.325	0.00	0.00	0.00
MSMA	nd	12000	21.334	16.238	12.684	10.668	1.694	0.00	0.01	nd
oryzalin	400	3260	1.98	1.66	1.21	0.99	2.23	0.00	0.00	0.01
oxadiazon	40	320000	2.37	0.64	0.14	0.07	0.057	0.00	0.00	0.00
pendimethalin	280	138	1.910	0.500	0.110	0.050	0.024	0.01	0.01	0.00
prodiamine	50	72000	1.94	1.37	0.51	0.32	0.356	0.00	0.00	0.01
pronamide	50	72000	18.3588	17.545	12.98	11.475	2.1	0.00	0.00	0.04
simazine	1	2800	14.589	13.658	11.306	8.324	0.028	0.01	0.04	0.03
Insecticides										
acephate	30	730000	85.34	84.91	82.68	79.13	0.06	0.00	0.00	0.00
bifenthrin	100	0.15	0.012	0.006	0.001	0.665	0.268	0.08	0.07	0.00
carbaryl	700	2328	20.17	12.31	4.02	2.51	0.406	0.01	0.02	0.00
chlorpyrifos	105	7.1	3.34	0.86	0.18	0.08	0.071	0.47	0.25	0.00
cyfluthrin	175	0.14	0.045	0.031	0.009	0.012	0.034	0.32	0.64	0.00
ethoprop	0.1	13800	16.852	15.229	12.471	10.985	0.258	0.00	0.01	2.58
fenamiphos	2	110	63.29	52.61	26.31	16.69	17.04	0.58	2.39	8.52
halofenozide	990	3600	2.56	2.13	1.88	1.54	18.67	0.00	0.01	0.02
imidacloprid	400	105000	0.025	0.014	0.006	0.006	0.124	0.00	0.00	0.02
lambda-cyhalothrin		0.21	0.032	0.028	0.019	0.014	0.022	0.15	0.90	nd
permethrin	350	4.1	0.15	0.1	0.05	0.09	0.148	0.04	0.12	0.00
spinosyn		1400	2.58	2.056	1.554	1.387	0.542	0.00	0.01	nd
trichlorfon	1250	18	6.57	6.42	5.73	4.83	0.084	0.37	3.18	0.00

a we assume that a golf area will be treated in a year. We assume normal weather conditions and player traffic.

b Maximum recommended application rate (lb ai/acre)

c acreage is for greens, tees and fairways, or roughs.

d means that we assumed that the second application would be made at one-half of the half life.

e as is aerial spray, gs is ground spray, g is granular

f total yearly use was calculated by Application rate x Area Treated x number of applications.

g The lifetime Health Advisory Level or equivalent (HAL) provides a measure of pesticide toxicity to humans. The lifetime health advisory level as defined by EPA is the concentration o

h LC50 is a measure of the aquatic toxicity and values are for the most sensitive species.

i blanks indicate no data

Table I-3. Environmental Impact Quotients for Pesticides That Were Evaluated for the Hyatt Resort Course.a

Pesticide	EIQ	EIQ FUR
Fungicides		
azoxystrobin	15.9	87
chlorothalonil	46	10442
chloroneb	nd	
etridiazole	38.3	582
fenarimol	27.33	743
fosetyl-Al	13.7	2384
flutalonil	nd	
flutalonil	nd	
iprodione	26.6	1436
mancozeb	62.33	10845
maneb	64.08	8330
mefenoxam	29.17	119
myclobutanil	41.21	268
PCNB	21.84	4757
propamocarb	16.4	1345
propiconazole	26.1	261
thiophanate-methyl	51.5	5665
thiram	54.52	2181
triadimefon	33.3	366
triadimefon	33.3	1831
vinclozalin	28.4	234
vinclozalin	28.4	312
Herbicides		
2,4-D amine	56.3	50
benefin	32.2	966
bensulide	26.5	795
bentazon	38.7	774
bromoxynil	23	115
dicamba	30	12
diclofop-methyl	29	348
dithiopyr	nd	
fenarimol	27.33	743
glyphosate	32.4	518
halosulfuron	nd	
Imazaquin	nd	
isoxaben	nd	nd
mecoprop (MCPP)	31.7	222
metolachlor	18	252
metribuzin	35.3	95
MSMA	nd	
oryzalin	17.7	531
oxadiazon	nd	
pendimethalin	25.8	77
prodiamine	nd	
pronamide	36	360
simazine	15.7	31.2
Insecticides		
acephate	17.9	269
bifenthrin	36	18
carbaryl	22.6	362
chlorpyrifos	52.8	528

Table I-3. Environmental Impact Quotients for Pesticides That Were Evaluated for the Hyatt Resort Course.a

Pesticide	EIQ	EIQ FUR
cyfluthrin	41.9	19
ethoprop	44.58	1783
fenamiphos	78.9	2367
halofenozide		
imidacloprid	37.2	30
lambda-cyhalothrin	24.4	10
permethrin	56.43	226
spinosyn	19.5	10
trichlorfon	31.2	12

EIQ is the Environmental Impact Quotient
EIQ FUR is the Environmental Impact Quotient Field Use Rating.

APPENDIX II

IPM and Scouting Report Forms
and
Data Reporting Forms

Sample of Pesticide Use Record

Application Date: _____

Time of Day: _____

Operator: _____

Supervisor: _____

PEST: _____

Weather Conditions

Temperature _____ degrees F

Humidity _____ %

Wind Speed _____ MPH

Wind Direction _____

Rainfall _____ inches

Soil Moisture _____

Pesticide	Active Ingredient	Amount of Formulation	Amount of Water

Adjuvant/Surfactant _____

Amount of Formulation _____

Area Treated: _____ Acres _____ Square Feet

Amount of Pesticide Used: _____

Application Equipment: Sprayer _____ Spreader _____

Remarks:

_____

_____

_____

_____

_____

a. Surface Water Field Sampling Sheet

Station Number: _____ Samplers: _____

Description:

_____

_____

Date of Sampling: _____ Time of Sampling: _____

Weather: _____

Field Measurements

Water Temp (°C) _____ Air Temp (°C) _____

pH _____ Specific Cond (μS) _____

Depth of Water (m) _____ Depth Sample Taken (m) _____

Wetted Area (m) _____ Water Flow (m/sec) _____

Calibration of Instruments

Specific Conductance: Meter _____

Reading in IKC1 soln: _____

pH meter Model: _____ Calibration Buffers used: _____

Sample Apparatus: _____

Mode of Trasport: _____

Shipping Date: _____

Remarks: _____

_____

_____

_____

b. Sediment Sampling Sheet

Station Number: _____ Samplers: _____

Description: _____

Date of Sampling: Day _____ Month _____ Year _____

Time of Sampling: Hour _____ Minute _____

Field Measurements

Water Temp (°C) _____ Air Temp (°C) _____

pH _____ Specific Cond (μS) _____

Depth of Water at which sample taken (m) _____

Calibration of Instruments

Specific Conductance: Meter _____ Meter Reding in KC1 soln: _____

pH Meter Model: _____ Calibration buffers used: _____

Sample Apparatus:

_____

Mode of Transport:

_____

Shipping Date:

_____

Remarks:

_____

_____

_____

_____

c. Ground Water Field Sampling Sheet

Well Number: _____ Samplers: _____

Description: _____

Weather: _____

Date of Sampling: Day _____ Month _____ Year _____

Time of Sampling: Hour _____ Minute _____

Field Measurements

Water Temp (°C) _____ Air Temp (°C) _____

pH _____ Specific Cond (μS) _____

Depth of Water at which sample was taken (m): _____

Calibration of Instruments

Specific Conductance: Meter _____ Meter Reading in KC1 soln: _____

pH Meter Model: _____ Calibration buffers used: _____

Sample Apparatus:

_____

Mode of Transport:

_____

Shipping Date:

_____

Remarks:

_____

_____

_____

_____

d. Soils Field Sampling Sheet

Station Number: _____ Samplers: _____

Description:

_____

Weather:

_____

Date of Sampling: Day _____ Month _____ Year _____

Time of Sampling: Hour _____ Minute _____

Mode of Transport:

_____

Shipping Date:

_____

Remarks:

_____

_____

_____

_____

Turf IPM Field History Report Form

Hole Number _____ Scout _____ Date: _____

Site	Turf Species	Area	Mowing Schedule	Soil Analysis			Soil Drainage	Fertilization (N/1000 sq.ft.)				Irrigation Schedule
				pH	P	K		Spring	Summer	Fall	Winter	
Green												
Tee												
Fairway												
Rough												
Driving range												
Nursery green												
Practice green												

Comments on specific topics such as shade, weather, irrigation, etc.

Turf IPM Field Infestation Report

Hole _____ Scout _____ Date _____

Site (turf species)	Mowing Height	Soil Moisture	Weeds Species No. or %	Diseases Kind %	Insects Species No. or %	Nematodes Species No. or %
Green						
Tee						
Fairway						
Rough						
			1. Crabgrass 2. Other grasses 3. Broadleaves 4. Sedges 5. Others	1. Dollar spot 2. Brown patch 3. Pythium 4. Leaf spot 5. Other	1. Sod webworms 2. Grubs 3. Hyperodes Weevils	1. Sting 2. Lance 3. Ring. 4. Stubby-root 5. Others

APPENDIX III

Example of a Hazardous Communication Program

HAZARD COMMUNICATION PROGRAM

_____

(NAME OR COMPANY)

_____

(LOCATION-DIVISION)

It is the intent of _____, _____
(Name of Company) (Address-Location-Division)

to comply with the requirements of the Hazard Communication Standard in our continuing effort to provide a healthy and safe workplace for our employees.

This program is designed to provide employee information and training (1) the hazardous chemicals known to be in the workplace, (2) the methods that will be employed to protect workers, (3) the precautionary methods employees must follow to protect themselves from hazardous chemicals, (4) the detection of a release of hazardous chemicals and (5) emergency procedures to follow should there be a release of hazardous chemicals and/or employee exposure to them.

WRITTEN HAZARD COMMUNICATION PROGRAM: Copies of the written Hazard Communication Program are available from the office of _____.
(Name of Office or Person)
program is reviewed annually and is updated as needed. All present or new employees will be given a copy of the program. Employees and/or their authorized representative may obtain an additional copy of the program during normal working ours at a cost of $0.10 per page.

MATERIAL SAFETY DATA SHEETS: Following is a listing of all hazardous chemicals known to be in the workplace; the location(s) of the chemical are also provided:

	HAZARDOUS CHEMICAL	LOCATION	USE
1.			
2.	(List all known or suspected hazardous chemicals.)		
3.	(If you do not have copies or all MSDS's, you will need to contact your suppliers for the necessary copies).		

A Material Safety Data Sheet (MSDS) and/or label of each hazardous chemical is filed in the office of _____. Employees
(Name of Office or Person)
and/or their representative may obtain a single copy of an MSDS and/or label during normal working hours at a cost of $0.10 per page. The relevant information on the MSDS will be shared with employees during the hazard communication training program. The MSDS will be

available in the workplace to all employees who are urged to review them whenever they have a question regarding the chemical.

NOTIFICATION OF OTHER EMPLOYERS: When other employers bring a work crew onto our property they will be supplied with a copy of the Hazard Communication Program and with copies of the MSDS for hazardous chemicals which could be encountered in their work area. It shall be their responsibility to train their employees, provide personal protective equipment and handle employee emergencies. Any releases or spills of hazardous chemicals shall within minutes, be brought to the immediate attention of

_____.
(Name of Office, Person or Position Title)

USE OF LABELS: Whenever possible hazardous chemicals will be kept in their original containers. Should an original container ever become defective (leak) the chemical will be transferred to a similar type container. The label will be transferred to the replacement container and be securely attached. If the label is non-transferrable, a replacement label with all significant information will be prepared and be securely and prominently placed on the new container. This container of a chemical will be used for its intended use as soon as possible.

Placards will be placed on all containers in which hazardous chemicals are used, such as storage tanks for chemicals, solvent tanks for cleaning parts, etc.

EMPLOYEE INFORMATION AND TRAINING: All employees will be provided with information and training on hazardous chemicals in their workplace:

- ✓ At the time of their initial employment.
- ✓ Whenever a new hazardous chemical is brought into their workplace.
- ✓ At least annually.

All affected employees are required to participate in this training. The training will be provided or arranged by_____.
(Name of Office or Person or Position Title)

The employees will be provided with the following information:

- ✓ The requirements of the Hazard Communication Standard.
- ✓ Operations in their work area where hazardous chemicals are present, used or stored.
- ✓ Location and availability of the written Hazard Communication Program and MSDS files.

Employee training will include:

- ✓ Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring

conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.)

- ✓ The physical and health hazards of the chemicals in the work area.
- ✓ The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used and
- ✓ The details of the hazard communication program developed by the employer, including an explanation of the labeling system and the Material Safety Data Sheet, and how employees can obtain and use the appropriate hazard information.

HAZARD CHEMICAL RELEASE, SPILL OR EXPOSURE

Employees will immediately, within minutes, notify their immediate supervisor of any release, spill or human exposure to a hazardous chemical. If it is a significant release into the atmosphere, a spill on non-owned property or into a surface or ground water supply, notify the local emergency service agency and/or fire department (telephone 911) and/or the State Emergency Response Commission.

If a person or persons are exposed to a hazardous chemical, emergency treatment as specified by the MSDS or label will be immediately applied and whenever a question of further medical treatment may be required, the individual(s) will be transported to

_____
(Name of Doctor or Emergency Treatment Center)

A copy of the MSDS and/or label will be transmitted with the exposed individual(s).

The supervisor of an area in which a hazardous chemical release, spill or exposure occurs will, immediately after emergency action, notify _____ of the event.
(Name of Office or Person)

EMPLOYEE REQUIREMENTS: Employees are required to follow all standard operating procedures in the handling of hazardous chemicals, including the use of protective equipment. Failure to do so shall provide sufficient reason for reprimands, suspension or termination of employment.

INFORMING OUTSIDE CONTRACTORS

There may be instances where tasks will be performed by contractors that are not company employees. Should there be a hazardous substance in the work area, it is the obligation or our company to make the contractor aware of the situation. This may be accomplished by:

1. A list hazardous substances in the work area.

2. A diagram of the work area with the locations designated where hazardous substances are used and/or stored.

The contractor will be advised that MSDS are on file and available upon request. The contractor will sign an acknowledgment of receipt of information.

ACKNOWLEDGMENT OF RECEIPT

DATE:_____

ON THE ABOVE DATE, I _____
(CONTRACTOR'S NAME)

RECEIVED A LIST OF HAZARDOUS SUBSTANCES USED AND/OR STORED IN THE WORK AREA FROM_____.

I UNDERSTAND THAT MSDS ARE AVAILABLE FOR ALL SUBSTANCES LISTED, UPON REQUEST. I ALSO MAY OBTAIN A DIAGRAM OF THE WORK AREA DESIGNATION USE AND/OR STORAGE OF HAZARDOUS SUBSTANCES.

_____
(CONTRACTOR'S SIGNATURE)

HAZARDS OF NON-ROUTINE TASKS

A non-routine task is defined as one or more of the following:

1. A task not done frequently
2. A task not listed on your job description
3. A task for which you are not trained

Should your Supervisor/Foreman call upon you to perform a non-routine task involving hazardous chemical handling or working in an area where hazardous chemicals are used or stored, the following steps will be taken by the him\her:

1. Give the employee a complete description of the task
2. Brief on hazardous chemicals in the work place
3. Brief on the effects the chemicals may have on the person
4. Determine if the employee is allergic to the chemicals present
5. Brief on proper handling of the chemicals
6. Brief an first aid procedures to take concerning the chemicals
7. State that there will be mandatory use of safety equipment
8. The Supervisor/Foremen will closely monitor the employee while working in the area of hazardous chemicals

RECOMMENDED POSTERS AND RECORDS IN MAINTENANCE AREA

1. OSHA JOB SAFETY AND PROTECTION POSTER
   U.S. Department of Labor
   Occupational Safety and Health Administration

2. EQUAL EMPLOYMENT OPPORTUNITY POSTER
   Equal Employment Opportunity Commission

3. WORKERS' COMPENSATION POSTER
   Obtain from Insurance carrier

4. BE SAGE WITH PESTICIDES POSTER
   Environmental Protection Agency

5. RIGHT-TO-KNOW LAW POSTER
   Toxic Substances Information Center

6. MATERIAL SAFETY DATA SHEETS (MSDS)
   Obtain from distributor for each hazardous chemical used and/or stored.

7. PESTICIDE LABELS
   Obtain from distributor of each pesticide used and/or stored.

8. HAZARD COMMUNICATION PROGRAM
   A written program prepared by the course.

9. RESTRICTED USE PESTICIDE APPLICATION RECORD
   Date and location of application.
   Product name and quantity (pounds or gallons) of pesticide applied
   Area treated and application rate method of application

10. RESTRICTED PESTICIDE CERTIFICATION LICENSE
    Test is given at the Westchester County Cooperative Extension service.
    Required only for individuals purchasing and using restricted pesticides.

APPENDIX IV

Regional Plant List for The Hyatt Golf Resort

DRAFT

NATIVE PLANTS FOR CENTRAL AND SOUTH FLORIDA

Common Name	Scientific Name	Soil Preference
TREES		
Red maple	*Acer rubrum*	T
Summer hawthorn	*Crataegus flava*	T
Loblolly bay	*Gordonia lasianthus*	M
Holly	*Ilex attenuata*	D
Dahoon holly	*Ilex cassine*	M
Yaupon holly	*Ilex vomitoria*	T
Red cedar	*Juniperus silicicola.*	D
Sweetgum	*Liquidambar styraciflua*	T
Southern magnolia	*Magnolia grandiflora*	D
Sweetbay	*Magnolia virginiana*	M
Red mulberry	*Morus rubra*	M
Simpsons stopper	*Myrcianthes fragrans*	M
Wax myrtle	*Myrica cerifera*	T
Black gum/Swamp Tupelo	*Nyssa sylvatica var. biflora*	T
Saw Thatch Palm	*Paurotis wrightii*	W
Red bay	*Persea borbonia*	T
Slash pine	*Pinus elliottii*	T
Blackbead	*Pithecellobium* spp.	D
Chickasaw plum	*Prunus angustifolia*	D
Sand live oak	*Quercus geminata*	D
Laurel oak	*Quercus laurifolia*	T
Live oak	*Quercus virginiana*	D
Cabbage palm	*Sabal palmetto*	T
Mastic	*Sideroxylon foetidissiumum*	T
Willow bustic	*Sideroxylon salicifolium*	T
Necklace pod	*Sophora tomentosa*	D
Mahogany	*Swietenia mahagoni*	T
Pond cypress	*Taxodium ascendens*	T
Bald cypress	*Taxodium distichum*	T
Winged elm	*Ulmus alata*	T
Florida elm	*Ulmus americana*	M
Walters viburnum	*Viburnum obovatum*	T
Additional Coastal Species		
Gumbo-limbo	*Bursera simaruba*	T
Spicewood	*Calyptranthes pallens*	M
Jamaican caper	*Capparis cynophallophora*	D
Cocoplum	*Chrysobalanus* spp.	D
Satinwood	*Chrysophyllum oliviforme*	D
Fiddlewood	*Citharexylum fruticosum*	D
Pigeon plum	*Coccoloba diversifolia*	D
Sea grape	*Coccoloba uvifera*	D
Silver Buttonwood	*Conocarpus e. Sericeus*	T
Green Buttonwood	*Conocarpus erectus*	T

Common Name	Scientific Name	Soil Preference
Geiger tree	*Cordia sebestena*	D
Seven-year apple	*Genipa clusiifolia*	D
Blolly	*Guapira discolor*	D
Crabwood	*Gymnanthes lucida*	D
Black ironwood	*Krugiodendron ferreum*	T
White mangrove	*Laguncularia racemosa*	M/W
Tough bumelia	*Sideroxylon tenax*	D
Thatch palm	*Thrinax* spp.	T

SHRUBS

American beautyberry	*Callicarpa americana*	D
Strawberry-bush	*Calycanthus floridus*	M
Buttonbush	*Cephalanthus occidentalis*	M
Stopper	*Eugenia* spp.	M
Florida privet	*Forestiera segregata*	T
Firebush	*Hamelia patens*	D
Gallberry	*Ilex glabra*	T
Anise	*Illicium parviflorum or floridanum*	M
Sweetspire	*Itea virginica*	M
Rusty lyonia	*Lyonia ferruginea*	T
Shiny lyonia	*Lyonia lucida*	T
Dwarf wax myrtle	Myrica pusilla	T
Wild coffee	*Pyschotria* spp.	M
White indigo berry	*Randia aculeata*	D
Myrsine	*Rapanea punctata*	T
Needle palm	*Rhapidophyllum hystrix*	M
Scrub palmetto	*Sabal etonia*	D
Dwarf palmetto	*Sabal minor*	T
Elderberry	*Sambucus simpsonii*	M
Green saw palmetto	*Serenoa repens*	T
Silver saw palmetto	*Serenoa repens*	T
Blue porterweed	*Stachytarpheta jamaicensis*	D
Shiny blueberry	*Vaccinium myrsinites*	D
Walter's Viburnum	*Viburnum obovatum*	T
Spanish bayonet	*Yucca aloifolia*	D
Beargrass	Yucca filamentosa	D

Additional Coastal Species

Sea ox-eye	*Borrichia arborescens*	D
Florida boxwood	*Schaefferia frutescens*	D

GROUNDCOVER AND GRASSES

Leather fern	*Acrostichum danaeifolium*	M
Bluestems	*Andropogon* spp.	T
Wiregrass	*Aristida beyrichiana*	D
Butterfly weed	*Ascleopias* sp.	D
Begger-ticks	*Bidens mitis*	D
Swamp fern	*Blechnum serrulatum*	M
Florida paintbrush	*Carphephorus corymbosus*	D

Common Name	Scientific Name	Soil Preference
Conradina	*Conradina* spp.	D
Tickseed	*Coreopsis* spp.	D
Love grass	*Eragrostis* spp.	T
Golden creeper	*Ernodea littoralis*	D
Blanket flower	*Gaillardia pulchella*	D
Narrow-leaf sunflower	*Helianthus angustifolius*	M
Dune sunflower	*Helianthus debilis*	D
Spider lily	*Hymenocallis latifolia*	M
St. Johns wort	*Hypericum* spp.	T
Iris	*Iris* spp.	M
Blazing star	*Liatris* spp.	D
Gopher apple	*Licania michauxii*	D
Muhly grass	*Muhlenbergia capillaris*	T
Nolina	*Nolina brittoniana*	D
Cinnamon fern	*Osmunda cinnamomea*	M
Royal fern	*Osmunda regalis*	M
Pennyroyal	*Piloblephis rigida*	D
Silkgrass	*Pityopsis graminifolia*	D
Swamp rose	Rosa palustris	W
Black-eyed Susan	*Rudbeckia hirta*	D
Wild petunia	*Ruellia caroliniensis*	D
Sage	*Salvia* spp.	D
Lizard's tail	*Saururus cernuus*	M/W
Blue-eyed grass	*Sisyrinchuim* spp.	T
Lopsided Indiangrass	*Sorghastrum secundum*	T
Cordgrass	*Spartina bakerii*	T
Blue porterweed	*Stachytarpheta jamaicensis*	D
Fakahatchee grass	*Tripsacum dactyloides*	T
Florida gamagrass	*Tripsacum floridanum*	T
Coontie	*Zamia pumila*	D
Additional Coastal Species		
Beach sunflower	*Helianthus debilis*	D
Sea purslane	*Sesuvium portulacastrum*	D
Smooth cordgrass	*Spartina alterniflora*	M
Saltmeadow cordgrass	*Spartina patens*	M
Sea oats	*Uniola paniculata*	D
AQUATICS		
Yellow canna	*Canna flaccida*	W
Soft rush	*Juncus effusus*	W
White water lily	*Nymphaea odorata*	W
Pickerelweed	*Pontedaria cordata*	W
Duck potato/Arrowhead	*Sagittaria* spp.	W
Giant bulrush	*Scirpus* spp.	W
Alligator flag	*Thalia geniculata*	W
VINES		
Carolina jessamine	*Gelsemium* spp.	M
Railroad vine	*Ipomoea pes-caprae*	D

Common Name	Scientific Name	Soil Preference
Beach morning glory	*Ipomoea stolonifera*	D
Coral honeysuckle	*Lonicera sempervirens*	M

D = Prefers drier or more well-drained soils

M = Prefers mesic to wetter soils

T = Will survive in a variety of soil types

W = Wet soils or in water such as lake or pond edge

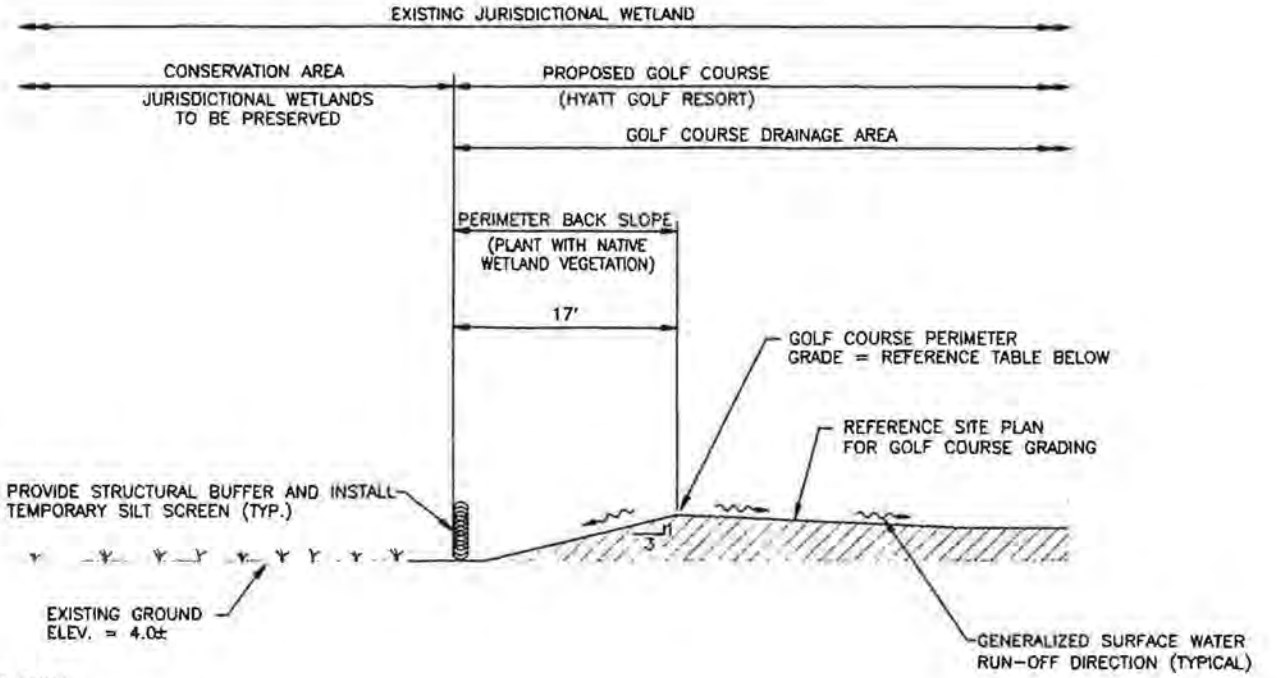
Exotic Landscape Plant Species	Native Substitution Species					
	Dry Soil	**Wet Soil**	**Shady Locale**	**Sunny Locale**	**Low pH**	**High pH**
1 Bougainvillea	Firebush *Hamelia patens*	Swamp Rose *Rosa palustris*	Firebush *Hamelia patens*	Firebush *Hamelia patens*	Swamp Rose *Rosa palustris*	Fire Bush *Hamelia postens*
2 Thryalis	St. John's Wort *Hypericum reductum* St. Andrew's Cross *Hypericum hypericoides*	St. John's Wort *Hypericum fasciculatum* Hypericum galioides	St. Andrew's Cross *Hypericum hypericoides*	St. Andrew's Cross *Hypericum hypericoides* Pineland trailing lantana *Lantana depressa*		
3 Pink Ixora	Pink Muhlygrass *Muhlenbergia capillaris*	Pink Muhlygrass *Muhlenbergia capillaris*	----	Pink Muhlygrass *Muhlenbergia capillaris*		
4 Wax Jasmine	Florida Privet *Forestiera segregata*	Walter's Viburnum *Viburnum obovatum*	Walter's Viburnum *Viburnum obovatum*	either		
5 Parson's Juniper	Conradina *Conradina grandiflora or canescens* Tampa Verbena *Glanduleria tampensis*	Dwarf Wax Myrtle *Myrica pusilla*	----	Horizontal. Cocoplum *Chrysobalanus icaco* Conradina *Conradina grandiflora or canescens*	Dwarf Wax Myrtle *Myrica pusilla* Little Blueberry *Vaccinium myrsinites*	Horiz. Cocoplum *Chrysobalanus icaco* Coontie *Zamia pumila*

Exotic Landscape Plant Species	Native Substitution Species					
	Dry Soil	**Wet Soil**	**Shady Locale**	**Sunny Locale**	**Low pH**	**High pH**
6 Evergreen Giant Liriope	Beargrass *Yucca filamentosa* Nolina *Nolina brittoniana*	Blue Eyed Grass *Sisyrinchium angustifolia*	Creeping Grass *Pharus glaber*	Bear Grass *Yucca filamentosa* Nolina *Nolina brittoniana* Purple Lovegrass *Eragrostis spectabilis*		
7 Chinese Fan Palm	Thatch Palm *Thrinax radiata* Scrub Palmetto *Sabal etonia*	Needle Palm *Rhapidophyllum hystrix*	Needle Palm *Rhapidophyllum hystrix*	Thatch Palm *Thrinax radiata* Scrub Palmetto *Sabal etonia*		
8 Xanadu Philodendron	Coontie *Zamia pumila*	----	Coontie *Zamia pumila*	Coontie *Zamia pumila*		Coontie *Zamia pumila*
9 Split Leaf Philodendron	----	----		----		
10 Pygmy Date Palm	Key Thatch Palm *Thrinax morrisii* Thatch Palm *Thrinax radiata*	----	either	either		either
11 Varigated Pittosporum	----	----	----	----		
12 Pittosporum	Cocoplum *Chrysobalanus icaco*	----	Simpson's Stopper *Myrcianthes fragrans*	either		either

Exotic Landscape Plant Species	Native Substitution Species					
	Dry Soil	**Wet Soil**	**Shady Locale**	**Sunny Locale**	**Low pH**	**High pH**
13 Indian Hawthorn	Dwarf Walter's Viburnum *Viburnum obovatum* Horizontal Cocoplum *Chrysobalanus icaco*	----		either	Dwarf Walter's Viburnum *Viburnum obovatum*	

APPENDIX V

Schematics of Structural Buffers and Phytozones



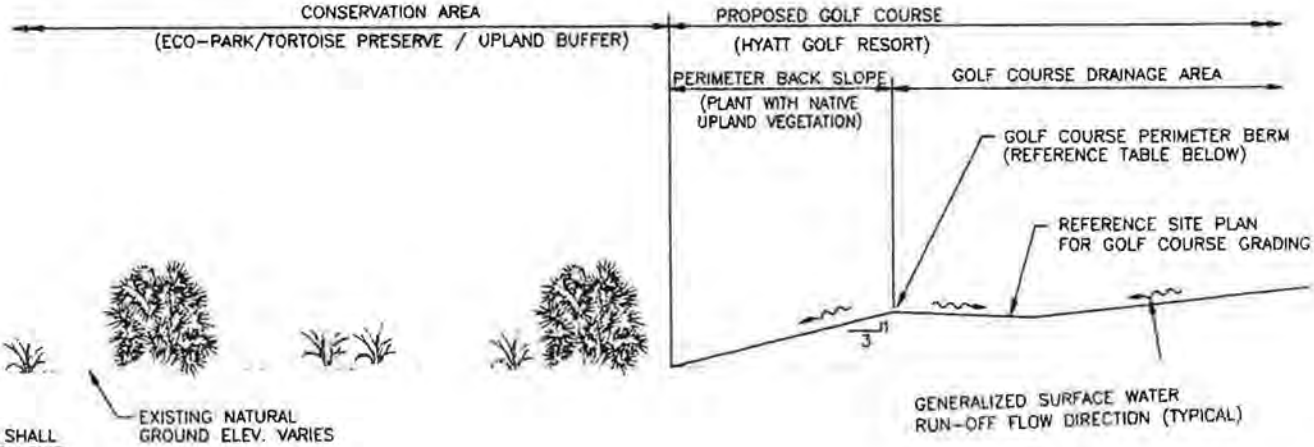
NOTE:

1. SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
   RIP-RAP – 1:1
   •GROUND COVER – 1:3
   NATIVE GRASS COVER – 1:4 OR LESS STEEP

   •GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.

2. ALL GOLF COURSE RUN-OFF SHALL BE GRADED TO DRAIN INTO THE HYATT GOLF RESORT SURFACE WATER MANAGEMENT SYSTEM.

3. PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.



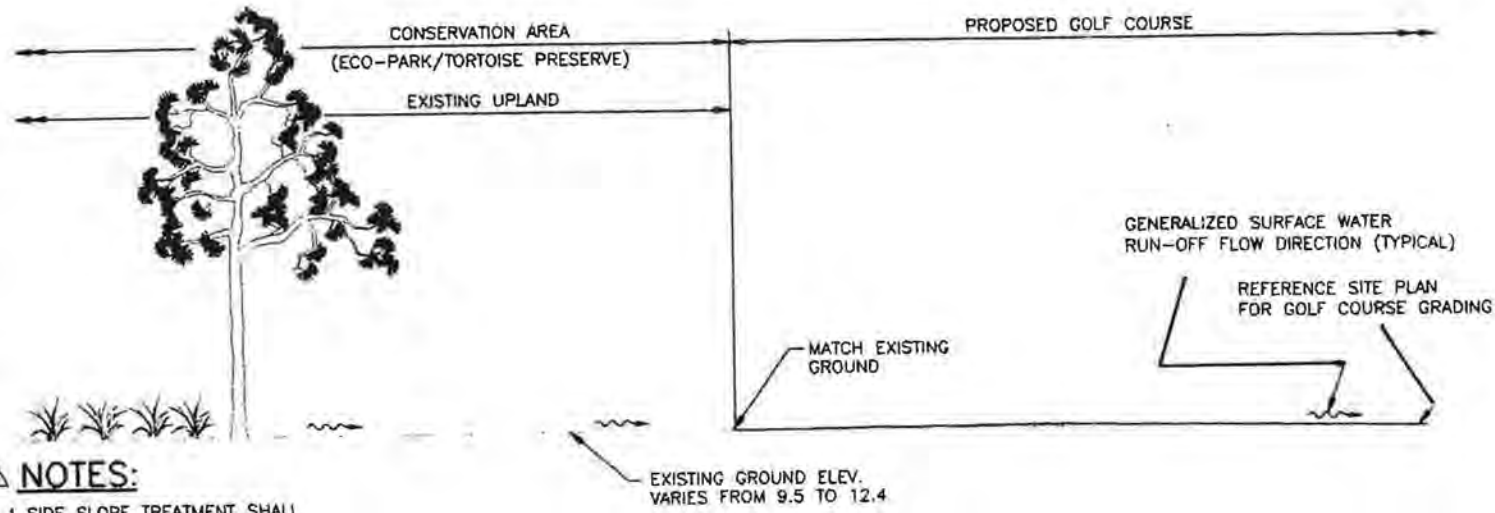
NOTE:

SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
RIP-RAP – 1:1
•GROUND COVER – 1:3
NATIVE GRASS COVER – 1:4 OR LESS STEEP

•GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.

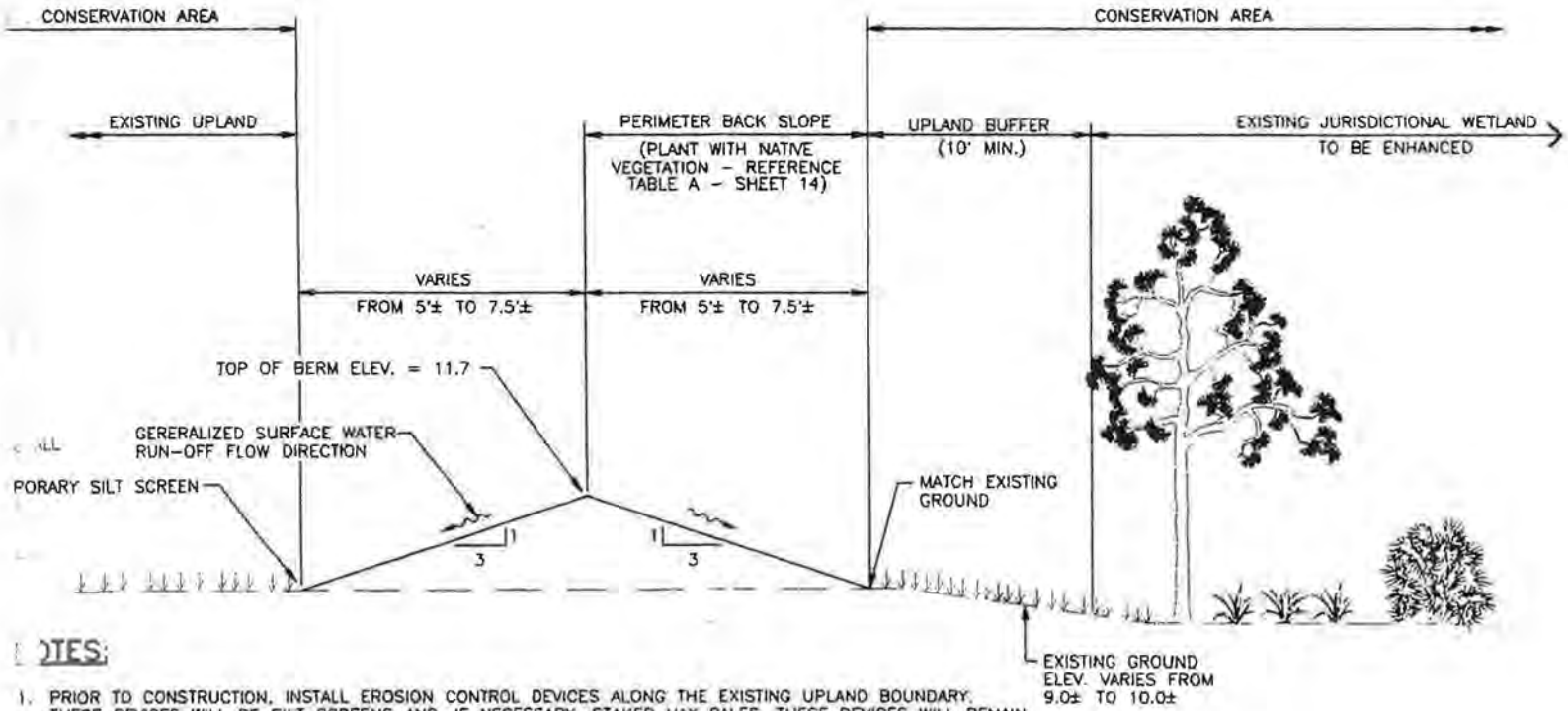
ALL GOLF COURSE RUN-OFF SHALL BE GRADED TO DRAIN INTO THE HYATT GOLF RESORT SURFACE WATER MANAGEMENT SYSTEM.

PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.



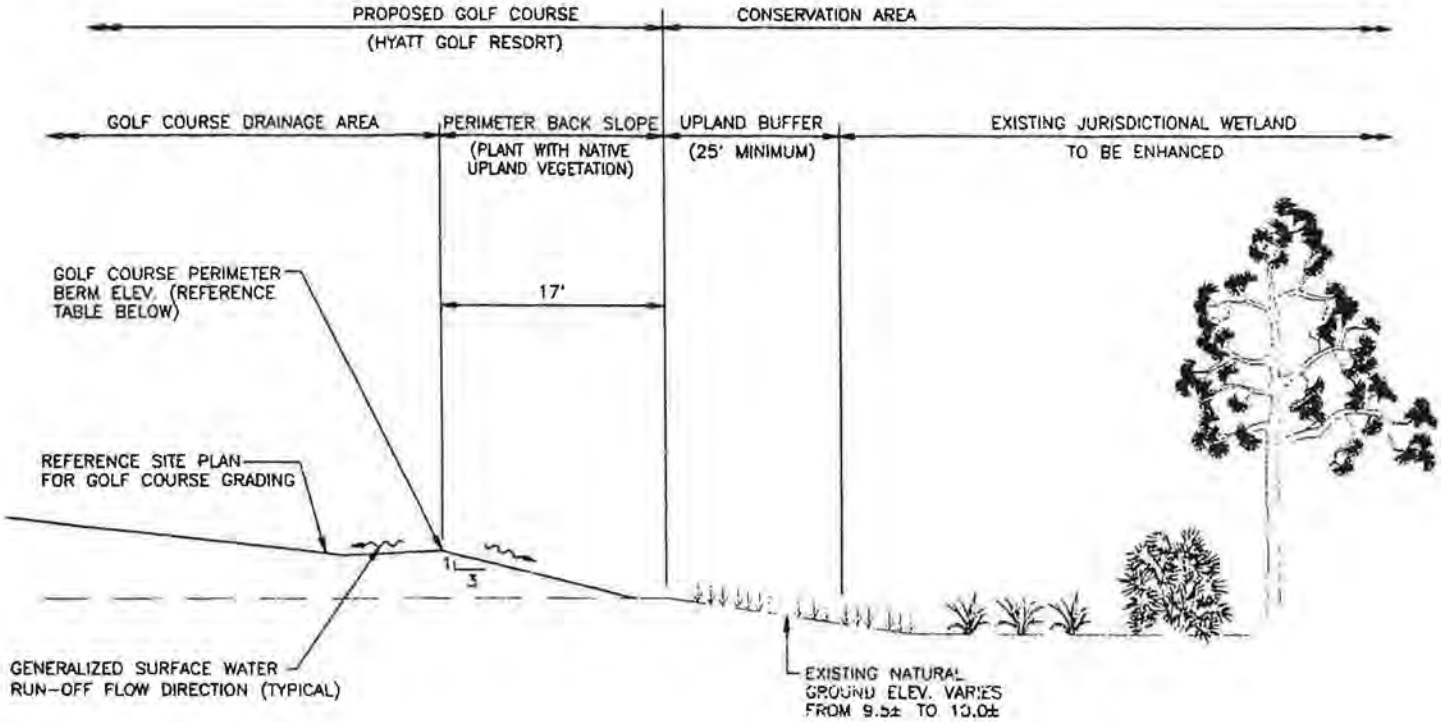
⚠ NOTES:

1. SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
   RIP-RAP – 1:1
   • GROUND COVER – 1:3
   NATIVE GRASS COVER – 1:4 OR LESS STEEP
   • GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.
2. WHERE EXISTING GROUND IS HIGHER THAN THE REQUIRED MINIMUM PERIMETER BERM, A BERM OF NO LESS THAN 6" IN HEIGHT ABOVE EXISTING GROUND MUST BE CONSTRUCTED.
3. ALL GOLF COURSE RUN-OFF SHALL BE GRADED TO DRAIN INTO THE HYATT GOLF RESORT SURFACE WATER MANAGEMENT SYSTEM.
4. PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.



NOTES:

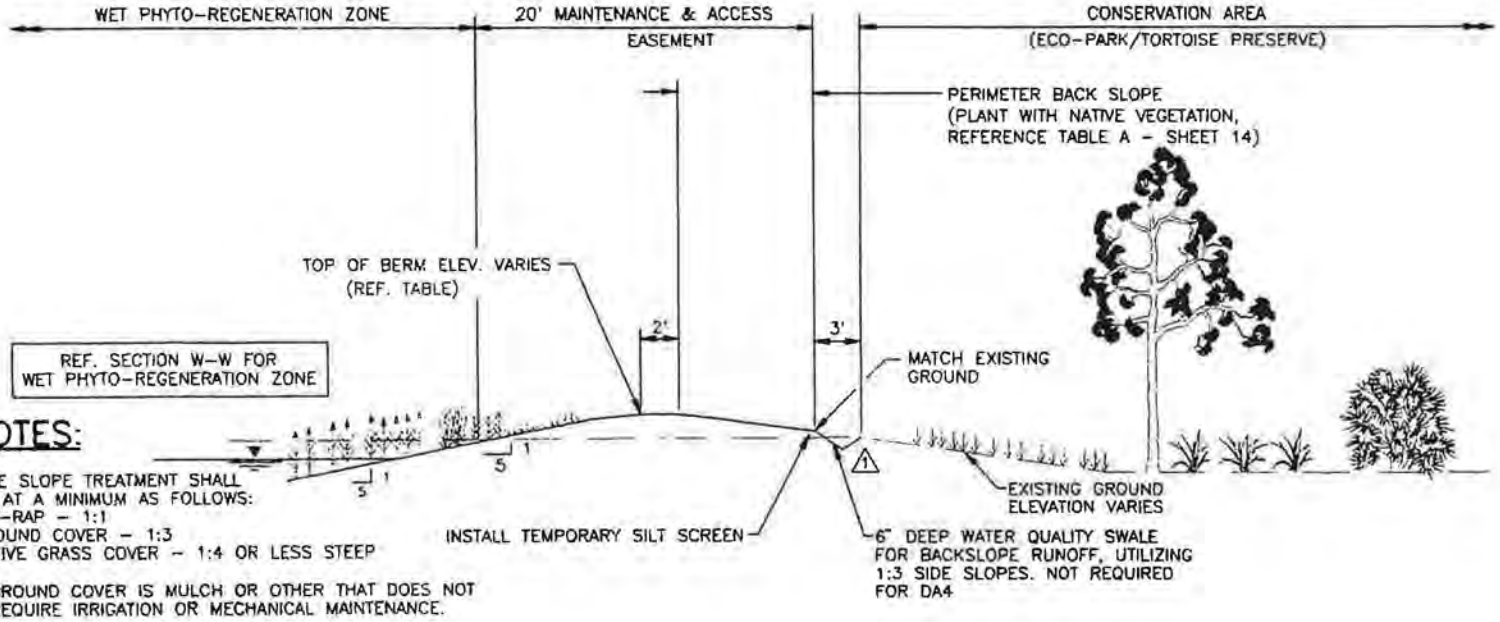
1. PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE EXISTING UPLAND BOUNDARY. THESE DEVICES WILL BE SILT SCREENS AND, IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.
2. STABILIZE BERM SLOPES WITH NATIVE GRASSES.
3. PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.



NOTE:

1. ALL GOLF COURSE RUN-OFF SHALL BE GRADED TO DRAIN INTO THE HYATT GOLF RESORT SURFACE WATER MANAGEMENT SYSTEM.

2. PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.



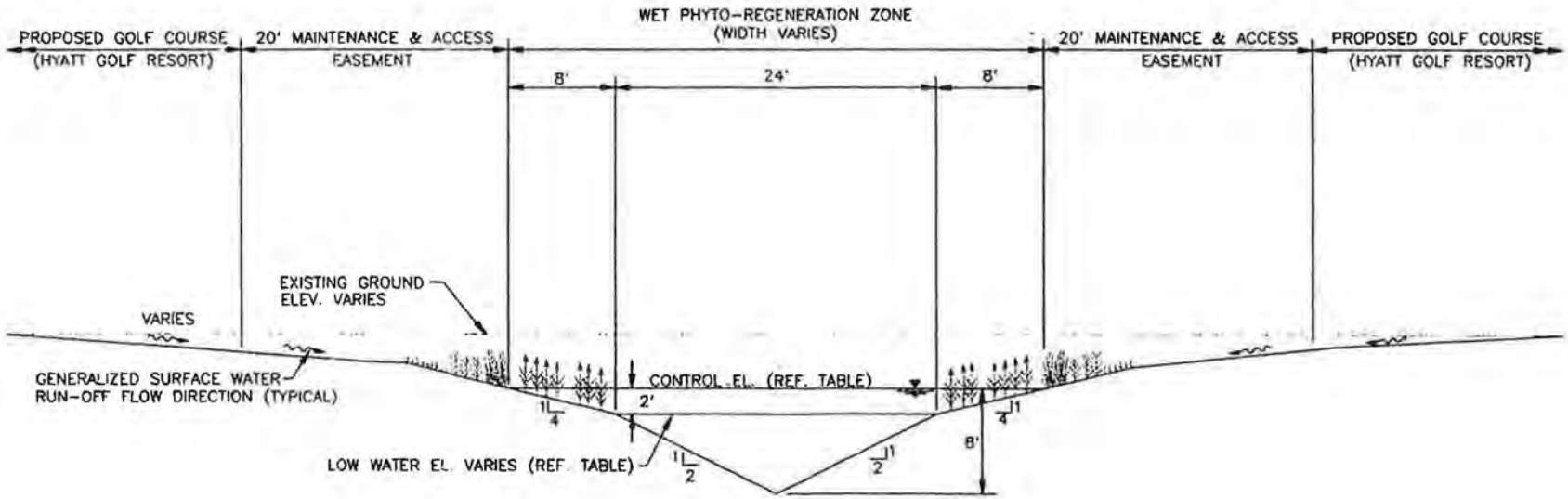
REF. SECTION W-W FOR WET PHYTO-REGENERATION ZONE

NOTES:

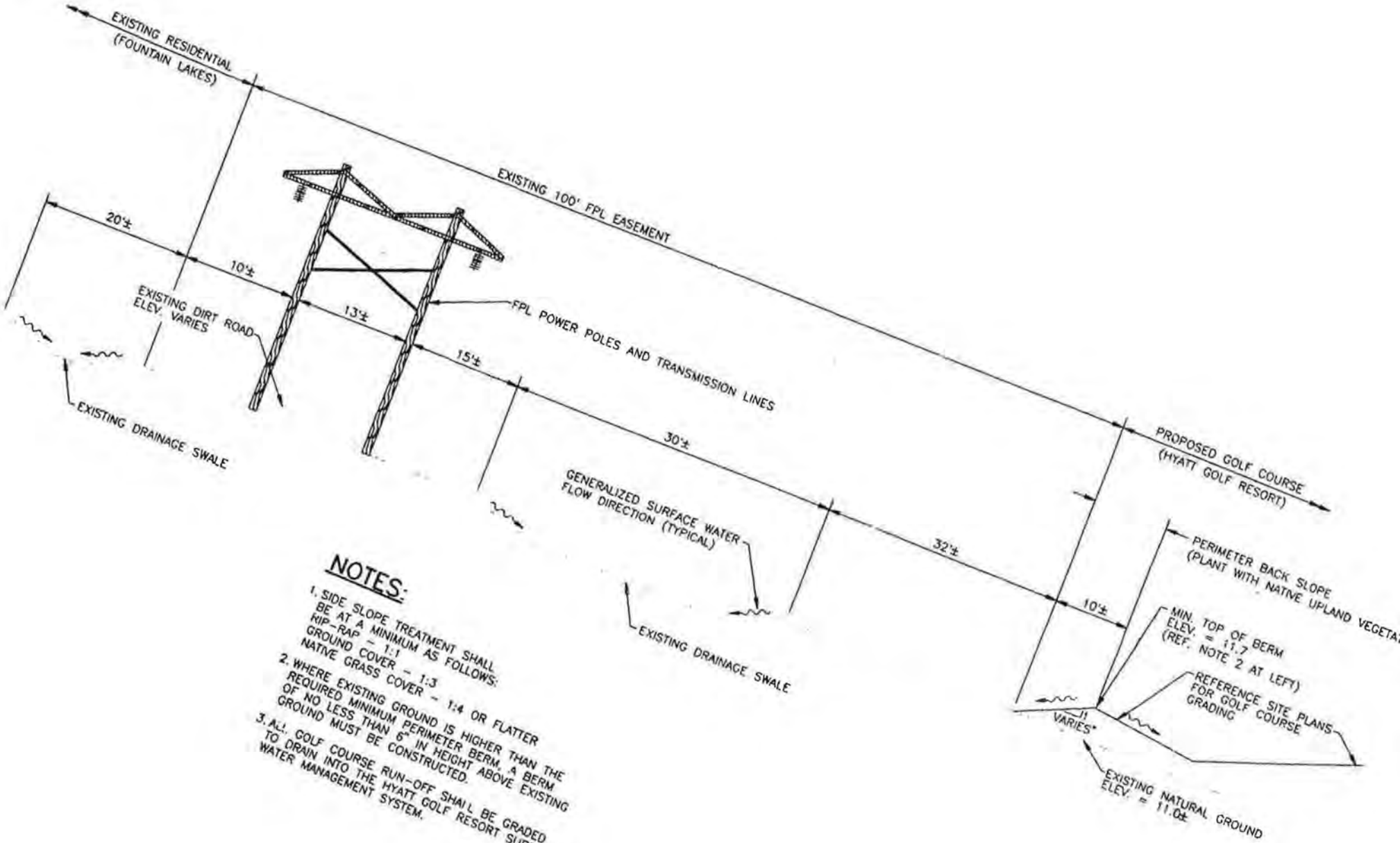
SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
RIP-RAP - 1:1
• GROUND COVER - 1:3
NATIVE GRASS COVER - 1:4 OR LESS STEEP

• GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.

PRIOR TO CONSTRUCTION, INSTALL EROSION CONTROL DEVICES ALONG THE CONSERVATION AREA BOUNDARY/PROPERTY BOUNDARY. THESE DEVICES WILL BE SILT SCREENS, AND IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE STABILIZED.

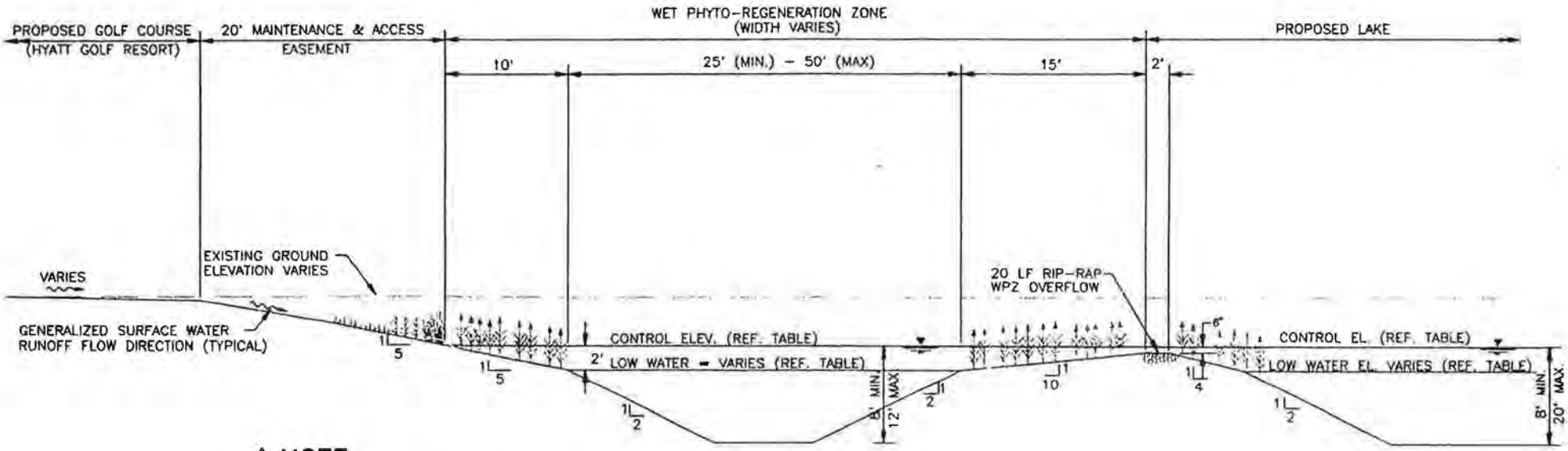

PROPOSED GOLF COURSE
(HYATT GOLF RESORT)
20' MAINTENANCE & ACCESS
EASEMENT
WET PHYTO-REGENERATION ZONE
(WIDTH VARIES)
8'
24'
8'
20' MAINTENANCE & ACCESS
EASEMENT
PROPOSED GOLF COURSE
(HYATT GOLF RESORT)
EXISTING GROUND
ELEV. VARIES
VARIES
GENERALIZED SURFACE WATER
RUN-OFF FLOW DIRECTION (TYPICAL)
CONTROL EL. (REF. TABLE)
2'
1/4
1/4
8'
LOW WATER EL. VARIES (REF. TABLE)
1/2
1/2

Phytozones



NOTES:

1. SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
   RIP-RAP – 1:1
   GROUND COVER – 1:3
   NATIVE GRASS COVER – 1:4 OR FLATTER
2. WHERE EXISTING GROUND IS HIGHER THAN THE REQUIRED MINIMUM PERIMETER BERM, A BERM OF NO LESS THAN 6" IN HEIGHT ABOVE EXISTING GROUND MUST BE CONSTRUCTED.
3. ALL GOLF COURSE RUN-OFF SHALL BE GRADED TO DRAIN INTO THE HYATT GOLF RESORT SURFACE WATER MANAGEMENT SYSTEM.

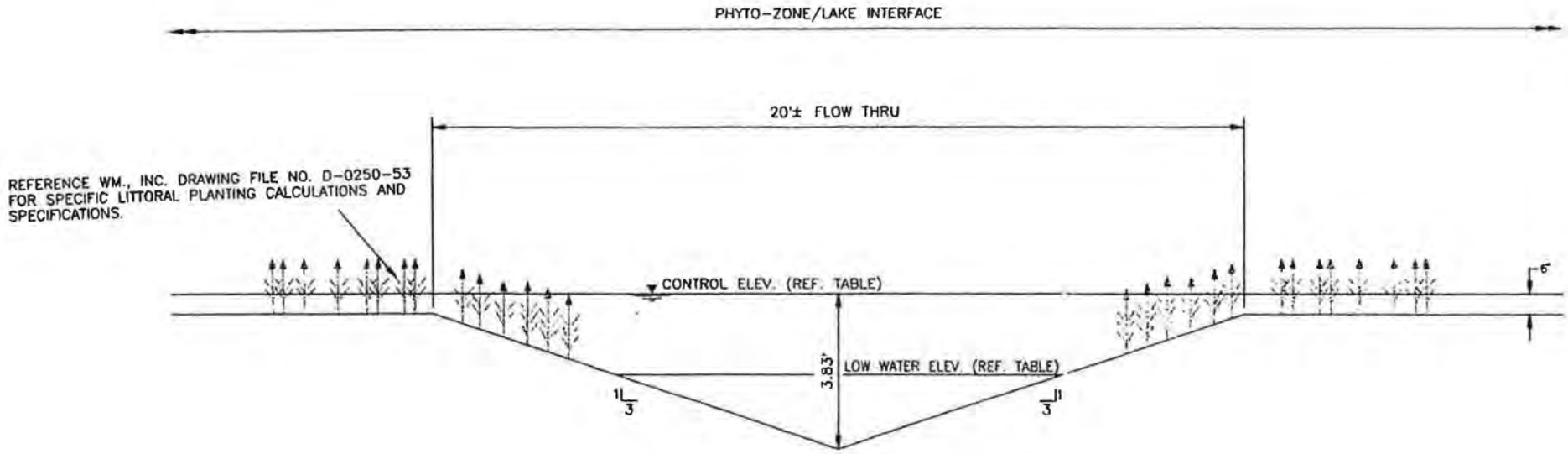


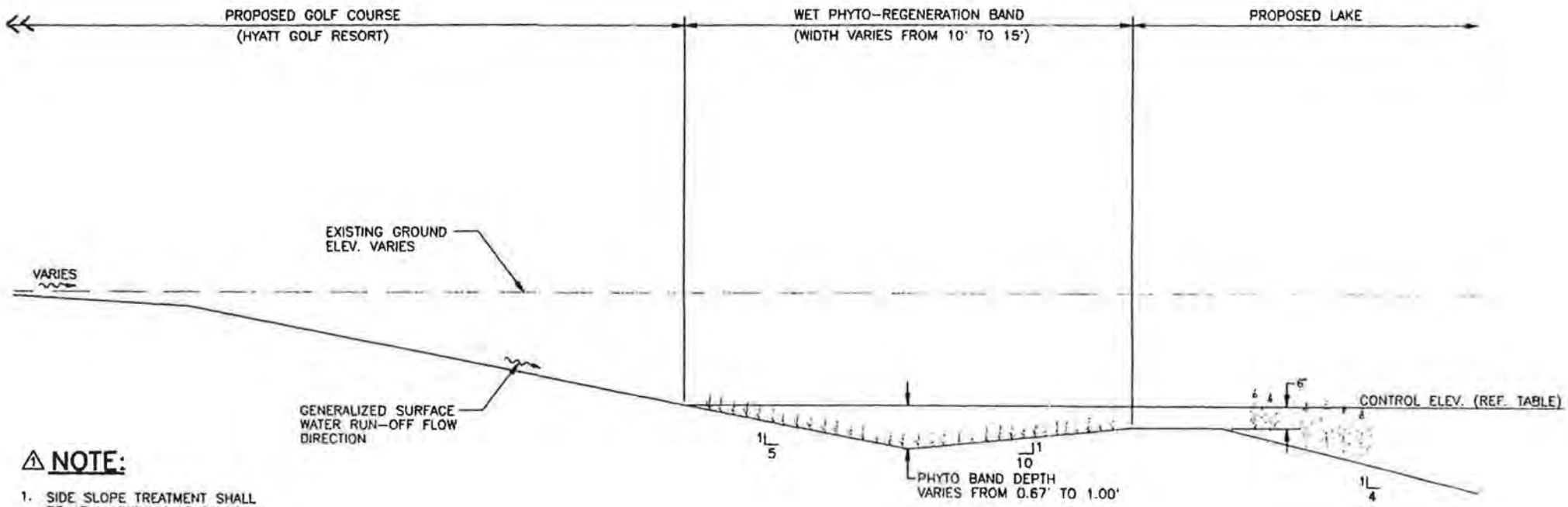
⚠ NOTE:

1. SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
   RIP-RAP - 1:1
   •GROUND COVER - 1:3
   NATIVE GRASS COVER - 1:4 OR LESS STEEP

   •GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.

2. REFERENCE WM., INC. DRAWING FILE NO. D-0250-53 FOR SPECIFIC LITTORAL PLANTING CALCULATIONS AND SPECIFICATIONS.


PHYTO-ZONE/LAKE INTERFACE
20'± FLOW THRU
REFERENCE WM., INC. DRAWING FILE NO. D-0250-53 FOR SPECIFIC LITTORAL PLANTING CALCULATIONS AND SPECIFICATIONS.
CONTROL ELEV. (REF. TABLE)
3.83'
LOW WATER ELEV. (REF. TABLE)
1/3
1/3
6'



⚠ NOTE:

1. SIDE SLOPE TREATMENT SHALL BE AT A MINIMUM AS FOLLOWS:
   RIP-RAP – 1:1
   •GROUND COVER – 1:3
   NATIVE GRASS COVER – 1:4 OR LESS STEEP

   •GROUND COVER IS MULCH OR OTHER THAT DOES NOT REQUIRE IRRIGATION OR MECHANICAL MAINTENANCE.

2. REFERENCE WM., INC. DRAWING FILE NO. D-0250-53 FOR SPECIFIC LITTORAL PLANTING CALCULATIONS AND SPECIFICATIONS.

APPENDIX VI

Summary of Studies on Water Quality and Nutrients and Pesticides

Surface Water

Nutrients and Pesticides - Review of Scientific Studies. The major concern over contamination of surface waters from runoff at golf courses, including The Hyatt Golf Resort, focuses on nutrients and pesticides. From turf areas, the major concern over contamination of surface waters from runoff containing nutrients is for phosphorus and nitrate nitrogen.

Phosphorus. Phosphorus is unlikely to create problems at the golf course except under very specialized conditions in ponds and streams. Excessive phosphorus in surface waters may cause unwanted algal blooms and deteriorate water quality. Even though the granular phosphorus fertilizer carriers are greater than 88% water soluble and totally water soluble forms exist for liquid application, the phosphorus becomes rapidly fixed within the soil profile and vertical movement in most soils is only 0.3 to 1.2 inches/year (Young et al., 1985). Possible phosphate movement due to soil erosion could be a point source of pollution in turf systems (Walker, 1990). However, these instances will be very site specific and nonexistent where BMPs are employed and runoff is retained to be filtered within the golf course. Also, by matching the nutrient requirements of the turf with applications of fertilizer, the probabilities for runoff are reduced. Besides the work previously discussed, recent research at Pennsylvania State University by Watschke and Mumma (1989) found no sediment loss associated with runoff from turfed plots and observed phosphate losses which averaged only 0.5 lb/acre when runoff did occur. Their study was conducted on slopes ranging from 9 to 14% under intense precipitation simulations. Total phosphorus loss in surface runoff for the entire growing season from a tall fescue/Kentucky bluegrass turf was only 0.0178 lbs/acre (Gross et al., 1990). More recent work at Pennsylvania State University found that in runoff from creeping bentgrass and perennial ryegrass turf conditions phosphate loss was reduced compared to the initial concentrations in the irrigation water by up to 94%. Similarly, phosphate concentration in leachate from the same turf areas found up to a 77% reduction (Linde et al., 1994). This indicates the turf is acting as a filter to remove nutrients from the water source prior to runoff or leaching occurring. The most vulnerable time for phosphate to be lost is immediately following fertilization when excess irrigation or heavy rainfall will cause movement. This occurrence can be avoided by 1) not fertilizing when rain is predicted; and 2) making certain that fertilizer is irrigated to remove the material from the leaves into the soil immediately following application.

Nitrogen. Nitrate-nitrogen (NO_3-N) movement in surface runoff can also be minimized by management decisions. Research has shown that the total nitrogen loss from a fertilizer application can be reduced from 9.5% of the total amount applied using urea as the nitrogen carrier to 0.26% by changing to a slowly available carrier such as sulfur coated urea (Dunigan et al., 1976).

In evaluations of the loss of nitrogen in surface runoff under nominal environmental conditions, Morton et al. (1988) found that surface runoff occurred on only two storm events on a Kentucky bluegrass turf in Rhode Island during 2 years of monitoring. Previous environmental factors

(rainfall on frozen ground with snow cover and saturated soils from prior rainfall) helped generate the runoff. Nitrogen losses from these events were 0.089 and 0.356 lbs./acre or only 0.16% of that applied. Gross et al. (1990) observed that the loss of nitrogen in the surface runoff from a tall fescue/Kentucky bluegrass turf was only 0.12 lbs/acre for an entire growing season (0.05% of that applied) compared to 10.4 lbs/acre for tobacco, almost 90 times greater. Meisinger and Randall (1991) noted that nitrogen losses in surface runoff are usually small and depend on degree of soil cover, source of nitrogen applied, rainfall intensity immediately after application and soil properties. They also noted that the largest losses will occur when a soluble nitrogen source is applied to a bare soil and a significant runoff event occurs within one day of application. Linde et al. (1994) found that nitrate-N in concentrated runoff from experimental turfgrass plots never exceeded the drinking water standard of 10 ppm and there was actually a decrease of up to 96% in the nitrate-N found in runoff compared to nitrate-N found in the irrigation water. Similar results were found in the leachate with up to 80% of the nitrogen removed compared to amounts found in the irrigation water. Best Management Practices if implemented effectively can effectively eliminate problems associated with nutrient loss during runoff or leaching. Although less than drinking water standards, nitrate concentrations greater than approximately 0.5 mg/l are of concern to the ecological health of an ecosystem (Wetzel 1982).

Pesticides-Review of Scientific Studies. Movement of pesticides into surface water during runoff events at The Hyatt Golf Resort depends on the following: 1) pesticide characteristics such as solubility, adsorption, and persistence; 2) soil characteristics such as soil texture, permeability, water holding capacity, pH, organic matter; 3) site conditions including depth to groundwater, slopes, distance to environmental features, and climate; and 4) management practices such as selection of pesticide, application methods, pesticide rates, timing, and irrigation management. Watschke and Mumma (1989) reported on the potential for surface movement of selected pesticides in undiluted runoff on research plots under an extremely high irrigation rate of 6 inches/hour. They monitored for pendimethalin (a commonly used preemergence herbicide); 2,4-D, 2,4-DP, and dicamba (commonly used postemergence herbicides); and chlorpyrifos (an insecticide). For pendimethalin and chlorpyrifos, no chemical was detected in any of the runoff on all 24 sample dates. These materials based on their chemistry become fixed in the soil after application and do not move. For 2,4-D and dicamba, the amounts in the concentrated runoff exceeded federal water standards on 4 sample dates (2,4-D), and 1 sample date (dicamba) out of 24 sample events, despite these materials being more water soluble and made as foliar applications. However, these levels were only found when runoff occurred within 2 days after application. They noted that under natural storm water runoff conditions and subsequent dilution outfall concentrations will be considerably less. Similar findings with 2,4-D applications were noted by Thompson et at. (1984). Under field conditions the greatest dislodgeable leaf residues of 2,4-D on Kentucky bluegrass were less than 4.5% of the total applied at time 0, immediately after application, indicating very rapid adsorption to the leaf surface and a strong affinity for adsorption. No dislodgeable residues were detected at 3 days after application. Hurto (1991) noted that the dissipation rate of foliarly applied pesticides

depends on volatilization, plant absorption and photodecomposition. He summarized that research has found that less than 10% of the applied rate amount can be found as foliar residue the day after application and that within 1 to 3 days after application levels drop to between 1 and 3%. Careful attention to application timing with respect to rainfall and irrigation management can minimize removal of materials which could become nonpoint pollutants. Smith (1995) found that approximately 8% of the applied amount of a 2,4-D+mecoprop+dicamba herbicide application left treated plots due to runoff over a 25-day collection period. Eighty percent of this amount moved during the first irrigation event following application. Since only 6 hours are required after treatment for maximum efficacy, it was suggested that an irrigation 6 to 12 hours after application to wash the excess pesticide from the foliage into the thatch and/or soil would negate the possibility of runoff. Watschke and Mumma (1989) concluded that nutrient and/or pesticide concentrations in storm water and the impact on surface water will be considerably less than other urban pollutants not associated with well managed turfgrass areas.

Groundwater

The major concern over contamination of groundwater from infiltration also focuses on nutrients and pesticides. From turf areas, the major concern over contamination of ground waters from leaching is for nitrates and pesticides.

Nitrates - Review of Scientific Studies. Most of the significance associated with nutrient leaching is focused on nitrate nitrogen (NO_3-N). Because nitrates are anions, they do not respond to the exchange capacity of the soil. Consequently, if not taken up by the plant, or fixed in the soil organic fraction through microbial activity, they can become a potential pollution problem in the percolating water. Reviews of the currently published research on nitrogen fertilizers applied to turfgrasses (Balogh and Walker, 1992; Petrovic, 1990) has determined that nitrate-nitrogen concentrations in soil water leaching through the surface soil exceeds drinking water standards of 10 ppm on sandy soils when one of the following conditions exist: 1) high levels of soluble nitrogen are applied, greater than 3 lbs. N/1000 sq.ft. at one time; or 2) very frequent (daily) irrigation is practiced coupled with application of large concentrations of water soluble nitrogen sources. Petrovic further noted that the degree of nitrate leaching is influenced by soil type, irrigation practices, nitrogen source and rate, and season of application. Gilliam (1988) noted that if all of the nitrogen applied to crops in North Carolina in one year went into groundwater, then based on percolating water volumes, the nitrate-N concentration would only be 4 ppm, far below the World Health Organization drinking water standard of 10 ppm. Although less than drinking water standards, nitrate concentrations greater than approximately 0.5mg/l are of concern to the ecological health of an ecosystem.

Anderson et al. (1981) demonstrated that a soil-turf filter can remove applied nitrogen from municipal wastewater at a very efficient level (> 52 % on a 95 % sand: 1 % silt: 4 % clay mix and > 64 % on a 89 % sand: 5 % silt: 4 % clay: 2 % organic matter mix). Minimizing nitrate

movement is directly related to best management practices by efficiency in rate and timing of nitrogen inputs through choice of materials and efficiency in rate and timing of irrigation.

All of these factors when addressed will reduce or eliminate nonpoint source losses of nutrients from golf course areas at The Hyatt Golf Resort as a direct result of management by the golf course superintendent.

Pesticides - Review of Scientific Studies. Pesticide contamination concerns are based on findings of several surveys which were conducted in the mid-1980s on drinking water wells and ground water sources which identified agricultural pesticides in the water (Nesheim, 1986; Rao et al., 1988). A number of factors determine the potential for pesticide movement and ground water contamination. Pesticide factors include reactivity with the soil, half-life, and time and rate of application. Soil factors also influence vulnerability with sandy soils low in organic matter having a greater tendency for problems. Soil pH and the presence of channels which may provide macropore flow also are factors influencing movement. The application site itself is also more vulnerable if it has a shallow depth to the ground water table, is in a particularly wet climate or extensive irrigation is practiced or if the pesticides are injected into the soil through the turf canopy (Anonymous, 1989). As part of the overall interaction of management practices, Weber and Keller (1989) have shown that plant water use will slow the leaching of pesticides and allow for more interaction within the root zone where material degradation is faster.

A review of specific studies which have investigated turf application of materials and monitoring for surface and ground water problems have found that the majority of research from currently labeled materials have not exceeded acceptable limits. A recent US Geological Survey study in Florida documented several pesticides that exceeded the MCL (Maximum Contaminant Level) or guidance concentration (USGS, 1996). Findings from other studies have indicated concentrations below regulatory levels. A study by Mitchell et al. (1976) in Delaware found that dicamba (a commonly used postemergence herbicide) leached in putting green soils, but only at a 100 parts per billion (ppb) maximum concentration which did not exceed drinking water standards of 210 ppb. A similar study by Gold et al. (1988) in Rhode Island showed that under home lawn application conditions, dicamba concentrations in the soil water exceeded 1 ppb in less than 10 % of the samples and were in the 5 to 10 ppb range in only 4% of the samples. In this same study, concentrations of 2,4-D (also a postemergence herbicide) exceeded 1 ppb in only 4% of the samples and in 83 % of the samples it was below detection limits. The conclusions from these studies were that the turf, due to its dense thatch layer and high soil organic matter content attenuated herbicide movement. The Rhode Island study concluded that the herbicide concentrations did not exceed drinking water standards at any time during the growing season.

In a Florida study, ground water test wells on two golf courses in Palm Beach county were tested for 37 different pesticides. One of these wells was located between two putting greens where the highest incidence of pesticide use on golf courses occurs. Test results indicated that none of the chemicals targeted for detection were found in the water samples from the two golf courses

(Kahler, 1990). Additional sampling has also found that no chemicals were detected in any of the water samples from the test wells (Jarrell, 1991, personal communication). Additionally, the EPA has released results of a well water survey conducted over a period of two years. They tested 1,347 randomly selected wells for 126 pesticides and their metabolites. Among the materials used on turf, only atrazine, bentazon, simazine, and dacthal were found and only atrazine was occasionally found at levels above those considered minimal to protect human health (Kahler, 1990).

A study conducted in Florida on 8 golf courses found nutrients and traces of pesticides in ground water, surface water and irrigation ponds (USGS, 1996). This is in a sensitive ecosystem where sandy soils, high rainfall and heavy uses of pesticides and fertilizers occurs. From an ecological view, the majority of the detection were below 1 ppb, and those which were higher were mostly for pesticides that are not toxic to aquatic organisms. However, human health standards were violated when Acephate and Simazine in surface waters, and Bentazon, Arsenic, Atrazine and Acephate exceeded the MCL (maximum contaminant levels) or a guidance concentration. Another recent study in North Carolina also found pesticides in groundwater from a golf course operation. Simazine was found at concentrations of 1.6, 3.1 and 7.4 ppb on three different sample dates (NC Interagency Task Force, 1996). These studies point out the need for judicious use of pesticides, correct selection of pesticides, and for an IPM program.

Balogh and Anderson (1992), in a literature review, summarized results of pesticide studies and indicated that the rate and timing of pesticide application in relation to precipitation/irrigation that produces runoff or leaching episodes is a critical management consideration. No pesticide application will be made when the possibility of rain is imminent. Materials which require water for activation are best watered into the soil with controlled irrigation. Based on this assessment, a well developed management plan, properly implemented, will provide the environmental protection and enhancement desired with golf course development.

APPENDIX VII

Monitoring Program for the Hyatt Golf Resort

Mitigation and monitoring is taken from Wilson Miller (2000), Hyatt Golf Resort Mitigation area monitoring and maintenance plan.

MITIGATION AREA MONITORING

1.0 FIELD MONITORING METHODOLOGY

Monitoring transects will be established throughout the preserved wetlands to monitor the development and success of mitigation. The majority of each transects length will be located in wetland areas and generally a small portion will overlap the adjacent upland buffer. Figure 1 (Figure 5-1 in the NRMP) shows the approximate locations of the monitoring transects. At the time of baseline monitoring, the specific location and length of qualitative and quantitative transects will be established such that they maximize the collection of pertinent data.

Qualitative data regarding the success of the wetland enhancement efforts will be collected from at least two observation stations along each transect. Qualitative data to be collected will include plant species composition in each vegetative stratum, estimated percent cover by exotic/nuisance species, and general condition of native vegetation. General information on wetland hydrology (e.g., water depth, areal extent of inundation, degree of soil saturation, etc.) will also be recorded during each monitoring event. At least two (2) photostations will be established along each transect. Photostations, the ends of each transect, and at least two diagonal corners of sampling plots will be adequately marked in the field for reliable location from one monitoring event to another.

Approximately 50% of the transects will serve as quantitative transects at which data is collected on planting survivorship and percent cover by exotic/nuisance species. Quantitative transects will be situated at permanent locations and will be employed to gather the following data:

(1) For transects in Level 1 enhancement areas, sampling plots will be established at roughly equally spaced increments along each transect (minimum 4 plots per transect). Each sampling plot will be approximately 5 meters X 5 meters or larger. Parameters measured in each plot will include average percent cover by exotic species and average percent cover by nuisance species. Data from all sampling plots along a transect will be averaged for reporting.

(2) For transects in Level 2 enhancement areas, additional sampling quadrats will be established (minimum of 3). Each sampling quadrat will be approximately 2 meters X 2 meters. Parameters measured in each quadrat will include average percent cover in the groundcover stratum by non-nuisance native species, by exotic species, and by nuisance species. Data from these sampling quadrats will be averaged for reporting.

(3) For transects in Level 2 enhancement areas that pass through intensive exotic eradication areas that have been replanted with native trees and shrubs, estimates of the average percent survival of planted trees and shrubs will be made. These data will be gathered from a 'belt" established along a given transect where it passes through

the planted area (e.g., belt transect sampling method). A belt will have a minimum width of approximately 30 feet along the transect's length. If the belt transect sampling approach does not appear viable in a given area, estimates of tree and shrub survival will be made by taking a random sample of the planted area.

2.0 MONITORING EVENTS AND REPORTS

The monitoring of the success of mitigation area enhancement will consist of one (1) baseline monitoring event, one (1) time-zero monitoring event, and five (5) annual monitoring events. Baseline monitoring will document existing conditions on-site prior to the initial exotic plant species eradication effort. Time-zero monitoring will be conducted immediately after the initial eradication is complete. The annual monitoring event wills document changes from the baseline conditions as well as the success of the exotic eradication program at annual intervals following the completion of initial eradication. The proposed schedule for monitoring events is provided in Section 4 below.

Monitoring reports will be submitted within 45 days following the completion of monitoring and will provide the following information:

(1) Brief description of maintenance work performed since the previous report along with discussion of any other significant occurrences.

(2) Brief description of anticipated maintenance work to be conducted prior to the next monitoring event.

(3) A summary of the results of qualitative and/or quantitative monitoring.

(4) Photographs documenting conditions in mitigation areas at the time of monitoring.

(5) A plan view drawing of the mitigation area showing monitoring stations and photo stations.

(6) A summary assessment of data/observations along with recommendations as to actions necessary to achieve mitigation success.

3.0 MITIGATION SUCCESS CRITERIA

3.1 Level I Enhancement Areas

The following success criteria will apply to the Level 1 enhancement areas depicted in Figure 5-1 of the NRMP:

(1) Recording of a Conservation Easement.

(2) Completion of initial eradication of exotic and nuisance plant species.

(3) Completion of necessary maintenance such that: a) the mitigation area is exotic-free immediately following maintenance activities, and b) exotic and nuisance plants constitute an average of no more than five (5) percent of the groundcover, midstory, and canopy strata combined at the end of the fifth year following the completion of initial exotic eradication.

3.2 Level 2 Enhancement Areas

The following success criteria will apply to the Level 2 enhancement areas depicted in Figure 5-1 of the NRMP:

(1) Recording of a Conservation Easement.

(2) Completion of initial eradication of exotic and nuisance plant species.

(3) Completion of initial planting of native trees, shrubs and ground cover in areas with minimal native vegetation following initial exotic eradication.

(4) Completion of necessary maintenance such that: a) the mitigation area is exotic-free immediately following maintenance activities, and b) exotic and nuisance plants constitute an average of than five (5) percent of the groundcover, midstory, and canopy strata combined at the end of the fifth year following the completion of initial exotic eradication.

(5) Within approximately 3 years of the completion of initial plantings, at least an average 60% ground cover by desirable native plant species (e.g., non-nuisance plants). Thereafter, maintain at least this much cover by desirable native plants.

(6) One year following initial planting of trees and shrubs or replanting of trees and shrubs, maintain a minimum average survival rate of 80 percent for these plantings.

4.0 MONITORING AND MAINTENANCE SCHEDULE

The following is the proposed schedule for the Hyatt Golf Resort project:

Task	Duration
Submit FWC Conservation Easement to SFWMD for Approval	April 2000
Baseline Monitoring[1]	May 2000
Initiate Construction	June 2000

Task	Duration
Submit FWC & SFWMD Conservation Easements to Corps for Approval	June 2000
Record FWC & SFWMD Conservation Easements	Sep 2000
Exotic Eradication in Level 1 Enhancement Areas[2]	Oct 2000-Nov 2000
Exotic/Nuisance Species Maintenance - Level 1 Areas	May 2001
Exotic Eradication in Level 2 Enhancement Areas[2]	May 2001-June 2001
Planting of Level 2 Enhancement Areas	June 2001-July 2001
Time Zero Monitoring - Level 2 Enhancement Areas[1]	July 2001
Exotic/Nuisance Species Maintenance	Oct 2001
Exotic/Nuisance Species Maintenance	May 2002
1st Annual Monitoring[1]	July 2002
Exotic/Nuisance Species Maintenance	Oct 2002
Exotic/Nuisance Species Maintenance	May 2003
2nd Annual Monitoring[1]	July 2003
Exotic/Nuisance Species Maintenance	May 2004
3rd Annual Monitoring[1]	July 2004
4th Annual Monitoring[1]	July 2005
5th Annual Monitoring[1]	July 2006
NOTES: [1] Reports will be submitted within 45 days of completion of field monitoring. [2] Initial exotic eradication activities are straddled around bald eagle nesting season.	

The permittee shall retain the ability to modify this monitoring program and monitoring schedule should it become necessary to make the program/schedule consistent with the progression of development, with monitoring requirements of-other government agencies, or to improve the information provided by the monitoring program. Any modification must first be approved by the Southwest Florida Water Management District and the U.S. Army Corps of Engineers.

APPENDIX VIII

Maintenance Facility Best Management Practices

MWPS-37

Designing Facilities for Pesticide and Fertilizer Containment

Revised First Edition

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6. PESTICIDE AND FERTILIZER STORAGES[6]

Pesticide and fertilizer storage facilities serve several functions. A well designed and managed storage facility protects human health, wildlife, the surface environment and groundwater from accidental and working exposure to pesticides. Segregate dry and liquid pesticides and fertilizers in the storage area. The primary design objective is to prevent spills or contaminated water from entering groundwater and surface water and guard human safety. The type and size of a storage facility depends on the size of the present (and future planned) operation and the type and amounts of pesticides and fertilizers used.

Pesticide Storage and Safety

Federal law, implemented by EPA Regulation 40CFR, requires full strength pesticides be stored in a secured facility to provide human safety, reduce vandalism and theft, and to protect groundwater and the surface environment (surface water, ground cover and airspace), and neighboring communities from leak and spill pollution and poison crises. Pesticide security can range from heavy-gauge, minimum-height chain-linked steel security fences with locked gates, to heated, locked, steel cargo containers, modular transportable pesticide and fertilizer storage buildings or custom designed pesticide storage buildings. In all cases, lockable storage and containment for liquid leaks/spills are required.

Packaged Product Pesticide Storage

Keep pesticides dry, cool and out of direct sunlight. Some pesticides require protection from freezing and temperature extremes. Check the labels for shelf life. The temperature range recommended for most liquid pesticides is 40 F-100 F.

Pesticide containers used once and then disposed, or one-way containers, are the most common types of pesticide containers. Inspect packages for broken or leaking containers prior to purchase and immediately after delivery. Store only clean, unopened packages or containers with no exterior residues to lessen the danger of contamination through the skin. Wear the recommended PPE even while handling clean, unbroken pesticide packages to reduce the chance of accidental contact.

Store boxes, jugs and other small packages of pesticides on shelves sized for the appropriate container, usually 12"-15" wide and approximately 18" apart. Lips on shelf perimeters prevent containers from accidentally sliding off the shelf. Steel shelves are easier to clean in the event of a spill. Paint wooden shelves with a chemically resistant epoxy paint or similar finish that is easier to clean. Store containers within easy reach and protect them from damage by sharp objects. A shelf height of 60" allows for lifting containers while standing on the floor. Do not use step stools, ladders or boxes to stand on to reach shelves.

Store herbicides, fungicides and insecticides in separate locations of the storage area to prevent cross contamination. Store dry bagged pesticides on shelves or pallets off the floor to keep them dry. To prevent leaking liquid pesticides from contaminating dry bagged product, store dry pesticides in a separate area and/or above liquid pesticide containers.

Several manufacturers package pesticides in refillable or returnable containers (small volume returnables, SVR) ranging in size from 15-30 gal. Minibulk containers range from 60-300 gal. Using SVR and minibulk containers reduces the problem of unused pesticide and container disposal if the dealer is willing to take back unused product.

Store 55 gal drums and minibulk containers on floor pallets, allowing for easy transport to and from storage buildings. Provide adequate space for forklifts to move minibulks in the storage area. One alternative for minibulk storage is to provide a concrete curbed containment pad large enough to hold the entire contents of the largest minibulk container. Chapter 7, Secondary Containment, gives areas required for containment of minibulk containers.

Tanks storing pesticides and rinsates must be compatible with the product. Some pesticides may attack the material in the tank causing it to soften, weaken and eventually fail. Check with the manufacturers of tanks and pesticides to determine the type of tank material best suited for a specific product.

The space required to store pesticides depends on the type of materials stored and the number and type of containers used. Table 2 shows the dimensions of several types of containers. Use this information to determine the amount of storage space required for the facility.

Planning and Layout

Build the pesticide storage facility as a separate, isolated structure used only for pesticide storage to prevent accidental contamination of feed, seed and fertilizers. Do not store pesticides near food, feed, fertilizers, seed, veterinary supplies and other products. Store pesticides only in original containers. Include an area for storing properly rinsed, empty containers until disposal.

6 David W. Kammel, Agricultural Engineering Department, University of Wisconsin Cooperative Extension, Madison.

Table 2. Pesticide container sizes.

Container	Size[a]
One way containers	
1 gal jug	4"x7"x12"
2.5 gal jug	6"x10"x18"
25 lb bags	2"x10"x15"
50 lb bags	4"x15"x25"
5 gal cans	12" dia. x 14" high
55 gal drums	20" dia. x 30" high
Refillable containers	
15 gal SVR[b]	16" dia. x 27" high
60 gal minibulk	40"x24"x33"
110 gal minibulk	36" dia. x 30" high
140 gal minibulk	50"x37"x36"
200 gal minibulk	43" dia. x 53" high
300 gal minibulk	44" dia. x 73" high
500 gal bulk	48" dia. x 75" high
1,000 gal bulk	64" dia. x 87" high
2,500 gal bulk	95" dia. x 117" high

[a]Container dimensions are LxWxH: L=length; W=width; H=height.
[b]Small volume returnable.

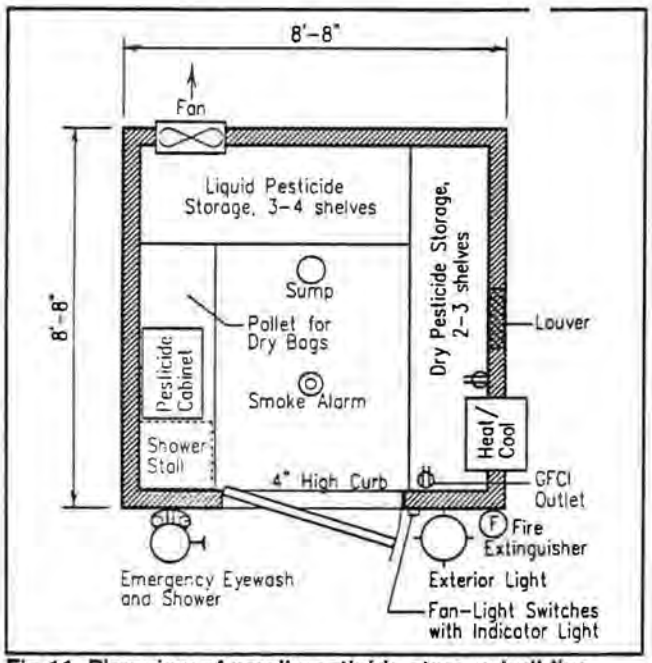


Fig 11. Plan view of small pesticide storage building.

Locate a storage building on a well drained site elevated approximately 12" above surrounding soil elevation. An example of a small storage building layout is shown in Fig 11.

Security

Security is required to prevent accidental poisoning of children, livestock and wildlife. Security also minimizes unauthorized access to pesticides and fertilizers, reducing the potential for accidental spills, vandalism and/or theft. Install a 12-gauge, chain-link fence, a minimum of 6′ high, around an open storage area such as pesticide secondary containment. If the fence is on top of a concrete wall, erect the fence so there are no ledges on the outside to allow someone to climb over the fence. If a concrete ledge is available at the base of the fence, install 6′ fence above the ledge. Provide locks on storage buildings or locked storage cabinets for small quantities of pesticide. Do not install door locks that must be unlocked from the inside. Also, store rinsate storage tanks and empty containers in a secure area.

Post signs on buildings or fences stating "**Danger-Pesticides**", "**Keep Out!**", "**No Smoking Area**". Signs should be legible at least 50′ from the building and located at each entrance to the pesticide storage area. These signs should be visible from all access points to the storage area. Post yellow, orange or red signs at approximately eye level containing words "**Pesticide Storage Area**" in black letters at least 3" high. The state pesticide coordinator can also provide information on signing requirements. Use exterior lights to illuminate warning signs and identify the building at night. A motion sensor or light sensor turns lighting on automatically and saves electricity.

Management

A management plan combined with facility design ensures a safe total system that provides proper storage, plus disposal of empty containers, unused product and rinsates. A well designed and managed storage and handling facility can be considered "good insurance" and could be a factor in reduced insurance policy costs. The cost of building a well designed facility is far less than the potential costs associated with cleanup of a large spill or fire, or with litigation of a lawsuit. Inventory, record keeping, worker safety and emergency action plans are all part of the management plan.

Siting and Setbacks

Setbacks of pesticide storage buildings to property lines or to other buildings on the site should provide as much separation from other use areas as can be reasonably allowed. Locate the storage building (with 1-hr fire wall) at least 50′ from other buildings or property lines. For a 2-hr fire wall with no doors, the setback can be 25′ from the adjoining building or property line. For a 4-hr fire wall with no doors, there is no minimum setback distance.

When siting a building, consider:

- Prevailing wind directions.
- Residential area proximity and exposure.
- Commercial area proximity and exposure.
- Environmental exposure.
- Fire hazard to surroundings.
- Emergency response services.

Provide access to the storage building site from all directions, if possible, for emergency and fire fighting equipment. A 12′ wide road accommodates emergency and fire fighting equipment.

Building Design and Construction

The storage facility design should consider both the potential for fire from flammable vapors and the toxicity to humans from contact with pesticides or

vapors. Select construction materials that are chemically resistant to the products stored. Ventilate areas to prevent vapor buildup.

General Construction

Building construction depends on the types of pesticides and fertilizer stored. Steel frame, post frame, stud frame, concrete and masonry can all be used. Design roof and walls for local snow and wind loads and any other loads applied to the building such as shelving loads and support of equipment. Check with insurance carriers for insurance requirements and fire officials on the building code requirements for construction of the storage facility.

Floor and Wall Surfaces

Choose interior floor and wall surfaces that are impervious to pesticides and easily cleaned and decontaminated. Painted steel, aluminum, fiberglass or high density plastic reinforced plywood panels are all good choices for wall liners. Storage building floors should also be watertight, chemically impervious and skid resistant. Concrete floors with an impervious sealant or an equivalent material that provides strength and impermeability must be used.

Secondary Containment

For inside storage rooms, secondary containment consists of a raised sill or ramp at least 4" high. An alternative is an open grate trench across the entire width of the door opening. Drain the trench to a sump where liquids can be temporarily collected and transferred to storage for reuse or disposal. Buildings can have a curb around their perimeter to prevent spills and fire fighting water from entering or leaving the area. Do not connect drains or sumps to a sewer or septic system or other open discharge. See Chapter 7, Secondary Containment, for more detail.

Fire Safety Design

Fire prevention is the first and most cost effective way of limiting fire hazard. A properly designed building with proper storage of flammables, a management plan and good housekeeping minimizes fire potential.

Design the storage building to protect against potential fire caused by the storage of flammable and combustible liquids inside the building and from fire in adjacent buildings. Many factors determine the advisability and use of fire walls; check your local fire codes for design requirements. Facility design can reduce the need for fire walls. Separate areas of high risk (warehouse) from other areas (office, retail space).

Codes and Regulations

Design requirements for the safe storage and handling of flammable and combustible liquids are covered by several different codes. National Fire Protection Association (NFPA) 30 "Flammable and Combustible Liquids Code", NFPA 395 "Storage of Flammable and Combustible Liquids on Farms and Isolated Construction Projects", and NFPA 43D "Storage of Pesticides in Portable Containers" all cover building construction requirements applicable to flammable and combustible pesticide storage and handling buildings. The National Electric Code (NEC) also covers electrical design for these facilities. See Appendix A for a list of other codes that may be consulted on flammable/combustible liquid storage.

Code Compliance

Many local codes reference or adopt certain national codes, Appendix A, as their own, but may also impose stricter requirements.

Commercial facilities usually fall under local zoning and building codes. On-farm storage of agricultural pesticides may be technically exempt from satisfying code requirements, but following these guidelines ensures a safer facility. **NOTE:** Always check with local zoning and building code officials to determine requirements for siting and constructing a pesticide or fertilizer storage facility.

In general, codes require certain standards for building construction and electrical design to reduce the risk of accidental fire resulting from the storage of flammable and combustible liquids. Proper building construction prevents rapid spread of fire. Proper electrical system design reduces the source of high temperatures or sparks that could ignite a flammable vapor or building materials.

Codes deal with the hazards of storage for flammable pesticides in several ways. One way is to limit the amounts of pesticides stored in a room or building; the larger the amount stored, the higher the risk and the more requirements on fire rated construction. Another way to reduce the fire hazard is to provide automatic fire suppression systems. Automatic dry chemical or similar systems are recommended for pesticide storage. Water sprinkler systems could pose more of a cleanup problem than the fire itself because pesticide contaminated water would have to be cleaned up after the fire.

Area Classification

Another way codes deal with the hazards of pesticide storage is to classify the use of the building. Generally, storage buildings that contain closed containers have less risk from fire than mixing/loading areas where pesticide containers are open and vapors are present.

The fire rating of the building construction and electrical design is based on the classification of the area by NFPA and NEC. Area classification depends on the amount and type of stored material and the use of the area (i.e. storage or dispensing). Container size and classification of liquids influence the quantity of material that can be safely stored in a specific size of building.

Building Use Classification

Storage building construction and electrical design depends on the use of the building. Buildings from which flammable or combustible liquids are *dispensed* are classified differently than buildings that *store* flammable or combustible liquids. Dispensing areas are more likely to have ignitable vapors than storage areas, thus more stringent fire safety design is required.

Classification of Liquids

The risk of fire from a stored liquid pesticide is based on the liquid's flash point. Flash point is the minimum temperature at which a pesticide gives off sufficient vapor to form an ignitable mixture within the air near the surface of the liquid or within the container. Liquids are classified as flammable or combustible according to the following NFPA definitions.

Flammable liquid

A liquid having a flash point below 100 F and having a vapor pressure not exceeding 40 lbs/in^2 absolute at 100 F is a Class I liquid.

Class I liquids are subdivided as follows:

- Class IA liquids include those having flash points below 73 F and having a boiling point below 100 F.
- Class IB liquids include those having flash points below 73 F and having a boiling point at or above 100 F.
- Class IC liquids include those having flash points at or above 73 F and below 100 F.

Combustible liquid

A liquid having a flash point at or above 100 F.

Combustible Liquids are subdivided as follows:

- Class II liquids include those having flash points at or above 100 F and below 140 F.
- Class IIIA liquids include those having flash points at or above 140 F and below 200 F.
- Class IIIB liquids include those having flash points at or above 200 F.

Some agricultural pesticides may have low flash and boiling points classifying them as flammable or combustible liquids. **NOTE:** Always check the label or MSDS of the pesticide to determine its flashpoint.

Separate liquids by class so that only certain areas require the class-specific design suggested by codes. For example, flammable materials require certain fire rated construction while nonflammable products do not. If flammable pesticides are stored with nonflammable pesticides, the building construction and electrical design must still consider the fire hazard of the flammable pesticide. The storage building construction recommendations relative to a fire hazard do not have to be followed if the pesticides stored are not flammable or are stored at temperatures below their flashpoint.

Some pesticides may be incompatible with one another producing toxic fumes or a flammable mixture if they become mixed accidentally. This poses a human safety hazard in the event of a fire or spill.

Explosion Venting

Where class IA or IB liquids are dispensed or where Class IA liquids are stored in containers larger than 1 gal, an exterior wall or roof construction should provide explosion venting design such as light weight roof assemblies, roof hatches or windows. NFPA has more information on requirements for explosion venting. Most pesticides are not flammable according to NFPA definitions, but always verify the flashpoint and class of each pesticide at a facility.

Storage Areas

Storage Container Size

Sizes of containers stored are considered in the safe design of the storage area. NFPA defines several sizes of containers and the corresponding safe storage practices for those containers. Containers are defined as any vessel containing 60 gal or less. A portable tank is a vessel with a capacity of 60-660 gal and designed to be movable. A tank is a vessel with a capacity greater than 60 gal designed for permanent placement.

Pesticide Storage

Provide separate areas for the different classes of pesticides. For example, a small separate storage area for flammable pesticides may be incorporated into a large warehouse for pesticides that are not flammable.

Do not store pesticides below grade or in basements. Many flammable vapors are heavier than air. The vapors can accumulate to a concentration that could be ignited by a spark or other source of ignition.

The storage arrangement of flammable/combustible liquids affects facility design. Consider:

- Aisle width (36" minimum).
- Height of shelves (60" maximum).
- Width of shelves (18" maximum).
- Separation of different classes of materials.
- Individual containment tub for each pesticide.

Storage Cabinets

According to NFPA guidelines, when storing flammable and combustible liquids, size storage cabinets to store no more than 120 gal of Class I, II, and IIIA liquids combined. Of this 120 gal, not more than 60 gal may be of Class I and II liquids. Locate no more than three cabinets in a single storage area. Maintain a 100' separation between three-cabinet groupings.

Use storage cabinets with metal or wood shelves designed with 2" high door sill to contain spilled liquid. Construct wooden cabinets from 1" thick exterior grade plywood and finish with a chemically resistant product that permits easy cleanup. See Fig 12 for a small wood cabinet design. Choose metal cabinets constructed from No. 18 gauge sheet metal with

double walls spaced 1.5" apart. Several safety supply companies manufacture metal cabinets. Shelving can be metal or 1" nominal thickness wood.

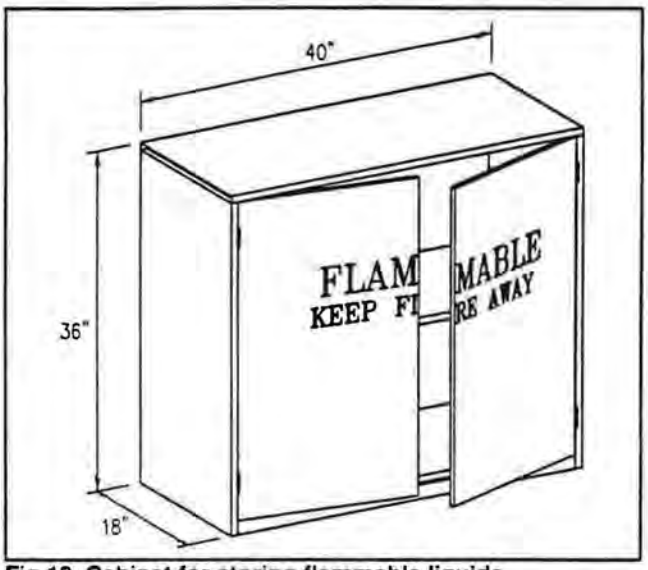


Fig 12. Cabinet for storing flammable liquids.

Fire Rated Construction

Fire walls or partitions separate areas of different uses and fire hazards. A fire wall slows the spread of fire from one area to another area. For example, mixing/loading areas may be separated from retail areas or office with a fire wall. All construction materials for walls, floors, roof, doors and partitions of a pesticide storage area should be constructed of fire resistant materials that meet or exceed local building and fire codes for a minimum of 1-hr fire resistant construction. Provide a parapet which extends at least 3' above the roof line on exterior walls within 10' of a property line or other building.

Concrete, masonry, and steel or wooden stud walls with Type X gypsum wallboard are commonly used types of building construction that have specific fire ratings. Fig 13 shows several .ross sections of different fire rated wall construction.

Door Construction

A 36" wide exterior door opening to the outside with a self-closing exit lock allows safe exit and security. Select doors that do not have to be unlocked from

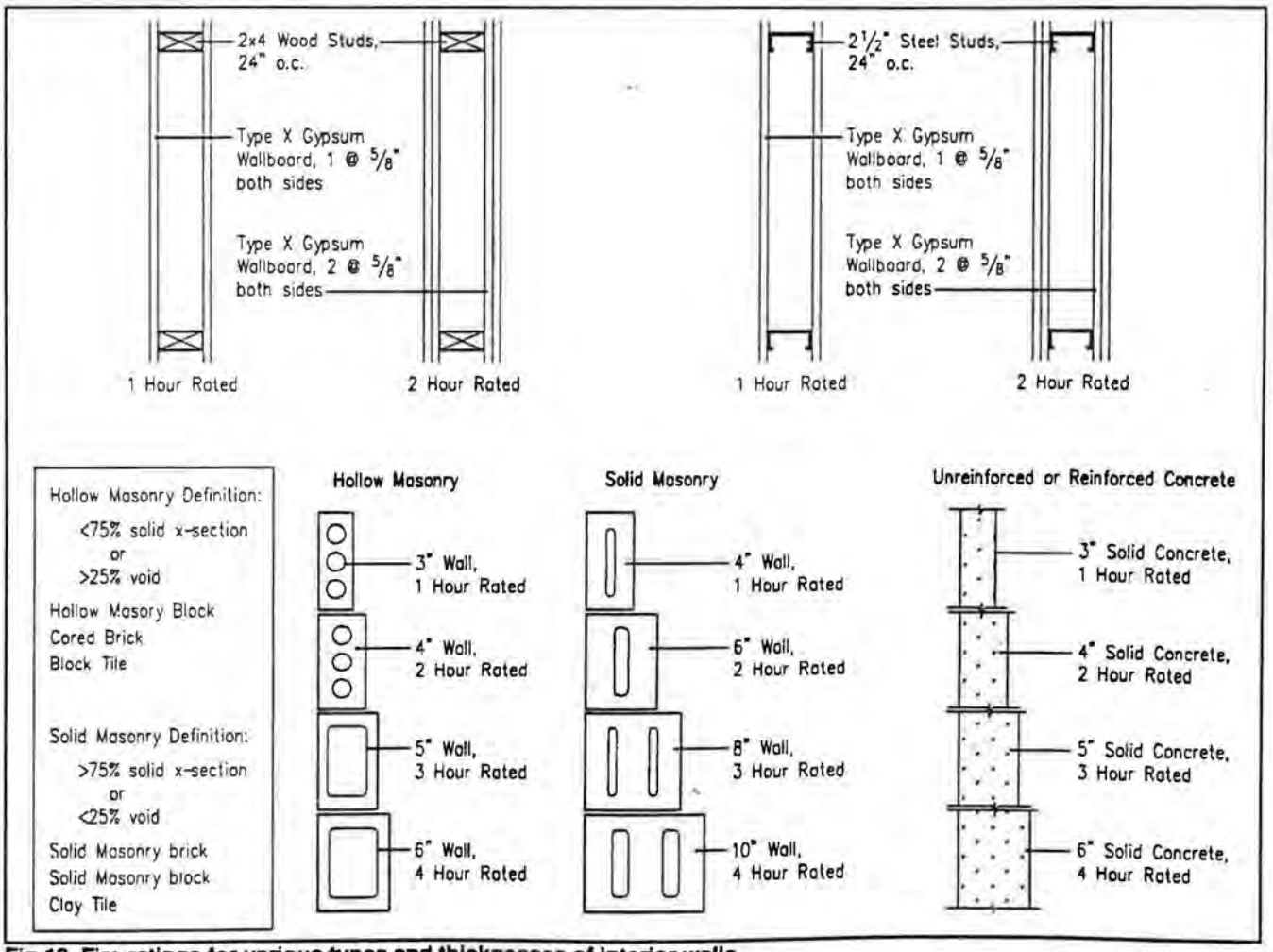


Fig 13. Fire ratings for various types and thicknesses of interior walls.

inside. A metal solid core door with metal jamb and weather seal is recommended. Select a U.L. listed fire rated door according to Table 3.

Table 3. Selecting fire rated doors.

If fire wall rated construction is:	Choose fire rated door of:
4-hr	3-hr
3-hr	3-hr
2-hr	1.5-hr
1-hr	0.75-hr

Use exit doors with panic hardware such as a push bar or plate. Hold-open hardware for the door provides easy access while carrying pesticide containers. In the event of a fire, doors should close automatically. Install an automatic self-closing device such as a fusible link on the hold-open door hardware. In large buildings space exit doors no more than 75′ apart.

Separate Inside Storage

NFPA 30 defines several different categories of separate inside storage. Fig 14 shows a schematic of how these areas are defined and Table 4 lists specific requirements that must be met according to NFPA 30. Inside storage rooms have no exterior walls. A cutoff storage room has at least one exterior wall. An attached storage building shares a common wall with an adjacent building with a different use (e.g. office).

For inside storage rooms with no automatic fire protection system and an area of up to 150 ft^2, a 1-hr fire rated construction is recommended. For an inside storage room with no automatic fire protection system and an area greater than 150 ft^2 but less than 500 ft^2, a 2-hr fire rated construction is recommended. A maximum total quantity of liquids stored in these areas is also suggested; consult NFPA 30 for specific recommendations.

For cutoff storage rooms and attached storage buildings of 300 ft^2 or less, a 1-hr fire rated construction is recommended. Cutoff storage rooms and attached storage buildings of areas greater than 300 ft^2 should have a 2-hr fire rated construction. The wall separating a cutoff storage room or attached storage building and another use area (e.g. office) should have a 2-hr fire rated construction. A maximum total quantity of liquids stored in these areas is also suggested; consult NFPA 30 for specific recommendations.

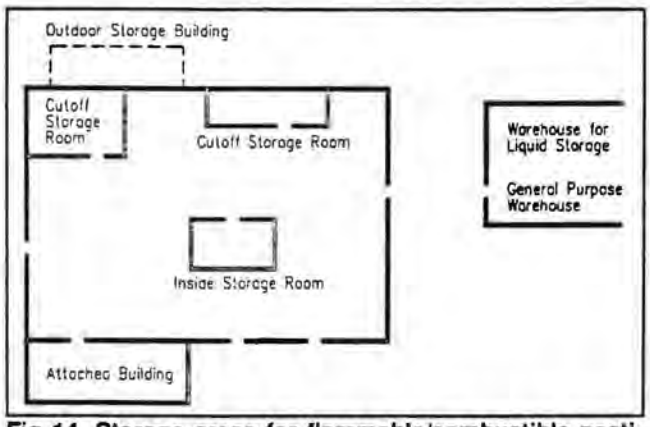


Fig 14. Storage areas for flammable/combustible pesticides—NFPA 30.

General Purpose Warehouse Storage

According to NFPA, a general purpose warehouse can be a separate, single story, detached building, or a portion of a building used for storage only, Fig 14 and Table 4. Separate the pesticide storage area from other storage areas such as fertilizer and feed storage and office or retail space.

NFPA 30 recommends limiting the total quantity of flammable liquids stored in a general purpose warehouse and also recommends the fire construction classification. Refer to NFPA 30 for more specific quantity recommendations.

Warehouse for Liquid Product Storage

According to NFPA, a liquid warehouse can be a separate, single story, detached building or an attached building used for storage of liquids only, Fig 14 and Table 4. NFPA does not restrict the total quantity of liquids stored in a liquid warehouse, but does recommend limiting height and quantity per stack.

Table 4. Storage area check list.
See NFPA 30 for specific requirements on the items listed below.

	Cutoff room and attached buildings	Inside room	Warehouse	
			Liquid	General purpose
Access openings	x	x		
Fire ratings	x		x	x
Explosion venting	x			
Containment	x	x		
Quantity of storage	x	x		
Drainage	x			
Square footage		x		
Venting		x		
Aisle width		x		
Distance separation			x	
Attached liquid warehouse			x	
Separation of liquids				x
Restrictions				x

If a liquid warehouse is located less than 10′ from a building or a property line, the exposed wall should be a 4-hr fire wall with a U.L. listed 3-hr fire door.

If a liquid warehouse is located more than 10′ but less than 50′ from a building or property line, the exposed wall should be a 2-hr fire wall with a U.L. listed 1.5-hr fire door.

Portable Storage Lockers

NFPA defines a hazardous material storage locker as a relocatable prefabricated structure that is transported assembled or ready to assemble at the final location. The design and construction of the storage lockers should meet all applicable local, state and federal regulations. The floor area of the locker should not be greater than 1,500 ft^2. The secondary containment system built into the structure should hold 10% of the total volume of containers or the volume of the largest container in storage, whichever is greater. Consult NFPA for recommended separation distances for these buildings.

Mixing/Loading Area

Mixing/loading areas are a higher risk for potential fire than pesticide storage areas. Building, construction, electrical design and setbacks from property lines and other buildings are more restrictive.

According to NFPA, mixing/loading areas where flammable liquids are dispensed from open containers should be separated from other use areas greater than 150 ft^2 by a 2-hr fire rated wall. Use automatically closing, U.L. listed 1.5-hr doors. Do not mix or handle flammable liquids in a basement or below grade.

Electrical Design

Electrical design for a storage/handling building is covered under the NEC also referred to as NFPA 70 and is typically incorporated into many state and local codes. Size the electrical system to accommodate the load from all lighting, heating and ventilating systems, and other installed equipment for the facility. Include starting demand or motor in-rush current from pumps, mixing equipment and other processing equipment when sizing the electrical systems. Provide an exterior electrical service disconnect in a locked, NEMA rated, weather proof cabinet. Provide duplex outlets with ground-fault circuit-interrupters (GFCI) and locate them outside flammable storage areas. Use vapor proof fluorescent or incandescent lighting fixtures. On small buildings, provide an exterior switch to control both the ventilation fan and the lights. An exterior operation light that indicates when the lights and fan are on is a convenient feature.

Choose electric equipment and wiring designed to prevent a spark from igniting a flammable vapor. Avoid sources of high temperature and sparks in storage and dispensing areas. Duplex outlets, switches, fan blades and motors are all potential sources of sparks. Use U.L. and NEMA listed anti-spark equipment.

Area Classification

Chapter 5 article 500 of NEC defines the area classification for hazardous locations such as pesticide storage/handling facilities. The hazard classification used by NEC depends on the type of material handled (material classification) and the use of the area (storage vs. dispensing).

A stored liquid, considered flammable, requires a Class I designation. If a stored liquid is considered combustible, a Class I determination is required only if the liquid is stored or handled at temperatures above its flash point. If combustible liquids are stored at temperatures below their flash points, no area classification is necessary and the electrical design and installation require no special provisions.

Degrees of Hazard—Division Classification

The NEC recognizes two degrees of hazard. Class I, Division 1 has more restrictive electrical design requirements than Class I, Division 2 because there is a higher risk of an ignitable air/fuel mixture present in the area. Class I, Division 1 wiring is usually referred to as explosion proof. Class I, Division 2 does not require explosion proof wiring and equipment. Article 500-5 of NEC lists the following definitions of Division 1 and Division 2.

In **Division 1**, an ignitable mixture is likely to be present continuously or intermittently under normal conditions of operation, repair, maintenance or leakage. A Class I, Division 1 location is a location in which:

- Ignitable concentrations of flammable gases or vapors can exist under normal operating conditions; or
- Ignitable concentrations of such gases or vapors may exist frequently because of leakage; or
- Breakdown or faulty operation of equipment or processes might release ignitable concentrations of flammable gases or vapors, and might also cause simultaneous failure of electric equipment.

In **Division 2**, an ignitable mixture is likely to be present only under abnormal conditions, such as failure of process equipment. A Class I, Division 2 location is a location in which:

- Volatile flammable liquids or flammable gases are handled, processed or used, but in which the liquids, vapors, or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment; or
- Ignitable concentrations of gases or vapors are normally prevented by positive mechanical ven-

tilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment; or

- A Class I, Division 1 location is adjacent, and to which ignitable concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

Classification of Storage Areas

NFPA 30, Chapter 4, Flammable and Combustible Liquids Code also addresses container and portable tank storage area classification for electrical design. Where the room or facility is used only for storage of Class I pesticides in sealed containers—that is, no opening of containers—the only special requirement is that inside rooms (with no exterior walls) contain electrical wiring and equipment classified Class I, Division 2.

Electrical wiring and equipment for indoor storage areas in separate or attached buildings, rooms with exterior walls, rooms for storage of Class II and Class III liquids and outdoor drum storage is normally classified as general use.

A mixing/handling area where flammable liquid pesticides are used could be considered Class I, Division 2, if in the judgement of the authority involved, the location would become hazardous only in the event of an accident or emergency other than normal operating procedures. The quantity of flammable material that could escape in an accident, the adequacy of ventilation, the size of the building, and the record of the industry with respect to explosions or fires are all factors considered in determining the classification of the area.

A mixing/loading area where flammable pesticides are transferred from one container to another might be classified as Class I, Division 1 if the local authority considers it to be a special hazard.

Areas adjoining a classified area, but separated by a wall with openings is classified under the more restrictive requirements, as if the wall did not exist. Where the areas are separated by a solid wall, the classified area does not extend beyond the wall. Consult an engineer or code official to help determine the classification of the designed facility, and the extent of classified areas.

If the area is not adequately ventilated, the classification of the electrical design will be more restrictive. For example an adequately ventilated storage area may be classified as Class I, Division 2. An inadequately ventilated storage area would be classified as Class I, Division 1.

Install a lightning protection system to prevent a potential ignition source. Consult NFPA 78 Lightning Protection Code for specific design information.

Explosion-Proof Electrical Systems

Article 501, NEC, describes the requirements for explosion-proof electrical installations in Class I, Division 1 areas. Explosion-proof equipment is designed to withstand an internal explosion while not allowing ignition of surrounding gas or vapor through the release of hot gases or sparks or by an external temperature that would ignite the surrounding atmosphere. In general, a Division 1 area requires:

- Threaded steel conduit (or mineral-insulated metallic sheathed cable).
- Explosion-proof enclosures.
- Conduit seals at any enclosure containing a sparking device or surface temperatures.
- Conduit seals at the boundary between a Division 1 and Division 2 area.
- Approved or U.L. listed lighting and other electrical fixtures.

Requirements for Division 2 areas are relaxed to the extent that explosion-proof enclosures are only required for devices that have hot surfaces or generate sparks during normal operation. Additional types of electrical cable are also allowed for wiring in a Division 2 area.

Equipment approved for use in a Class I area must be marked to show the Class, Division and operating temperature of the piece of equipment. U.L. listed equipment has such markings. All electrical equipment installed in other classified areas must be approved or listed for the appropriate Class and Division.

Sources of Ignition

In areas where flammable vapors may be present, take precautions to prevent sources of ignition such as open flame, smoking, hot surfaces, sparks, friction heat, radiant heat, cutting and welding, spontaneous ignition, lightning, static electricity, ovens, furnaces or heaters. In addition, the surface temperature of equipment installed in Class I areas must not have an exposed surface temperature in excess of the ignition temperature of the surrounding gas or vapor. Use aluminum, bronze or plastic fan blades to reduce the possibility of sparks.

Fire Safety

Place clearly visible exit signs above all points of exit. A red, illuminated, translucent sign with "**EXIT**" in plain letters not less than 5" high is common in commercial facilities.

Make fire and spill control equipment readily available, including:

- Fire extinguisher.
- First-aid kit.
- Spill clean-up kit.

Locate a portable multi-purpose dry chemical fire extinguisher, having a rating not less than 20-B, on

the outside and not less than 10' from the storage entrance door.

Include a non-spark type fire and/or smoke detector with audible alarm in the design. If possible, equip the alarm to sound at a remote site as well as the facility site.

Fire Suppression

In large facilities, automatic fire suppression systems may be a viable fire safety option. Types of fire protection systems include:

- Water sprinkler.
- Foams.
- Dry chemical.
- Inert gas.
- Carbon dioxide.
- Halon.
- Nitrogen.

Design fire suppression systems to be area specific so water is not spread across the entire facility due to a small fire in an isolated area. More damage may result from deluge type sprinkler systems than the fire itself. Cleanup of a contaminated site from a fire and the contaminated fire fighting water may be more costly than allowing the building to burn itself out. **NOTE:** Discuss the proper way to deal with a fire with the local fire official, emergency responders and the insurance carrier for each facility based on the types and volumes of products handled.

Ventilation

Ventilation minimizes a fire or explosion hazard by reducing the accumulation of significant quantities of ignitable or explosive vapors. Also, ventilation reduces worker-exposure to a hazardous level of fumes or dust from the pesticides during handling.

Provide ventilation at all times by natural or mechanical means. Warm-weather ventilation reduces temperature extremes and vapor buildup. Do not store pesticides in basements or below grade level where vapors might accumulate.

Natural Ventilation

Natural ventilation results from a combination of wind pressure and the natural buoyancy of warm air. Two or more inlet/outlet vents positioned on opposite walls allows cross ventilation. In unheated storage areas, natural ventilation may be the best alternative. In heated storage areas, natural ventilation is more difficult to control and heating costs may be high because of over ventilation.

Provide a minimum of two vents, each 8"x8" (64 in^2) on opposite sides of the building and within 12" of the floor because most flammable vapors are heavier than air. For larger buildings, design the size of the inlet/outlet vents to allow 6 air changes/hr. For mixing areas, size natural ventilation openings to provide 1 ft^2/20 ft^2 of floor area.

Mechanical Ventilation

Mechanical ventilation allows more control of the air quality and temperature in storage and handling facilities, especially in heated storage areas. Locate the fan on the east or south side of the room if possible. If the fan is placed high on the wall duct it to within 12" of the floor. Position air inlets opposite the fan and within 12" of the floor to remove heavier-than-air vapors.

Use explosion proof rated mechanical ventilation in areas where Class I liquids are dispensed from open containers. Use either natural or mechanical ventilation in other storage and mixing areas.

Mechanical Ventilation Rates

When mechanically ventilating pesticide storage areas during occupancy, provide at least 1 cfm/ft^2 of floor area or provide 6 air changes/hr. NFPA 30 recommends a minimum of 150 cfm for any size facility. When facilities are unoccupied, provide 1 air change/hr. (NFPA gives no recommendations for unoccupied storage areas.) Table 5 shows the required ventilation for various sizes of storage and handling areas. If a mechanical exhaust system is used, control it with a switch located outside of the storage area. The ventilation rate for larger buildings can be calculated using the following equation:

$$6 \text{ air changes/hr} \times \text{Building volume, ft}^3\text{/60 min} = \text{Ventilation rate, cfm}$$

Table 5. Mechanical ventilation rates and inlet size for pesticide storage and handling areas during occupancy.

Building[a] volume, ft^3	Six air changes/hr Rate, cfm	Six air changes/hr Inlet size, in^2	NFPA recommendation Rate of 1 cfm/ft^2 cfm	NFPA recommendation Rate of 1 cfm/ft^2 Inlet size, in^2
1,000	150[b]	30	150[b]	30
2,000	200	40	250	50
3,000	300	60	375	75
4,000	400	80	500	100
5,000	500	100	625	125
6,000	600	120	750	150
7,000	700	140	875	175
8,000	800	160	1,000	200
9,000	900	180	1,125	225
10,000	1,000	200	1,250	250

[a] Assumes a ceiling height of 8'.
[b] 150 cfm minimum recommended for any size facility, NFPA 30.

Multiple fans and inlets spaced at intervals along walls provide uniform air movement throughout storage and handling areas.

The NFPA 30 recommendation for ventilation of mixing and handling areas using Class I liquids (or Class II or III liquids above their flash points) is not less than 1 cfm/ft^2 of floor area. A higher ventilation rate may be required to limit flammable vapor-air mixtures during normal operating conditions.

Provide at least 25 cfm/occupant from an outside air source in pesticide storage areas where there are workers. Install a dedicated exhaust over work areas to minimize worker exposure to fumes. Consider a fume hood over work areas or sinks for worker safety; use a dedicated exhaust providing fresh air at a velocity of 80-100 fpm blowing at the face level.

In mixing and handling areas, equip ventilation systems with an alarm that sounds automatically in the event of a failure of the ventilation system. Provide a manual shutoff control for the ventilation system outside the room or building entrance.

Use a time delay switch to turn the fan and lights on but does not allow the door to be opened until the room has been ventilated adequately (at least one air change).

Duct exhaust away from work areas, offices or public areas to prevent human exposure to the exhaust air. Do not recirculate exhaust in the room or building, otherwise vapors and fumes can build up.

Air Inlets

Locate air makeup inlets on the opposite side of the room from the fan and also within 12" of the floor. If makeup air is taken from within the building, equip the inlet with a listed fire door or damper to prevent the spread of fire.

The air makeup inlet should provide 20 in^2/100 cfm capacity. Table 5 shows the area required for different ventilation system capacities. The inlet area can also be calculated using the following equation:

$$\text{Ventilation rate, cfm} \div 720 \text{ fpm} = \text{Inlet area, ft}^2$$

Heated Storage

An insulated, heated building may be needed if pesticides are subject to freezing. Some pesticides can freeze and remain viable while others may be rendered useless if frozen. **NOTE:** Read the label to determine the storage temperatures required for the products stored. In some areas, the storage building may require ventilation or even air conditioning in the summer to prevent pesticides from volatilizing and creating a safety hazard. A storage temperature range of 40 F-90 F for environmentally controlled storage is recommended.

Insulate the walls and ceiling and provide a continuous 6 mil vapor barrier on the warm side of the building, usually the inside wall. Minimum recommended insulation levels are R-11 for walls and R-19 for ceilings.

Do not place packages close to or in direct contact with heaters. Provide heat by low pressure steam, hot water or electric heaters that are U.L. listed for Class I hazardous locations. Never use or allow open flames or smoking in storage or handling areas.

Liquid Fertilizer Storage and Handling

Liquid fertilizer storage tanks must be inside a properly sized walled or bermed leak-proof secondary containment structure. Although it is not mandatory, liquid fertilizer storage should have locked security fencing to avoid vandalism damage. Keep tank drain valves locked except during transfers. See Chapter 7, Secondary Containment.

Impregnation of Pesticides on Dry Fertilizer

Large, dry bulk fertilizer storages are popular in the midwest. Design for ease of customer access and to keep precipitation away from the structure and area. Locate the building on elevated ground with all rain, snow melt or flood water diverted away. Consider railroad access when planning a facility, as it provides an economical means of transporting incoming dry fertilizer. Also, special handling equipment must be used due to the corrosiveness of the material. Fertilizer must be kept dry until used to avoid caking.

Impregnation of dry fertilizer with liquid herbicides has been done in fertilizer plants for a number of years. In the past, pesticides have usually been added to the fertilizer mix while in the blender. This creates problems with contamination of the blender and the immediate area, creating human safety problems.

Some problems that exist with impregnating pesticide on fertilizer granules are:

- Operator may be exposed to pesticide dust and fumes.
- Fertilizer with pesticide requires special handling after it leaves the blender.
- The blender, elevating equipment and applicating equipment require special cleaning.
- Adding pesticide to dry fertilizer may require the use of drying agents to reduce the problem of fertilizer caking.

One new method developed to impregnate pesticide on fertilizer is an impregnater that mounts on the blender unloading elevator. It adds the pesticide as it is being loaded into the applicator or service truck, eliminating contamination of the blender and elevator. The applicator or service tank must still be cleaned.

A newer impregnation method involves injecting pesticide into the fertilizer delivery tubes on pneumatic fertilizer applicators or the feed augers on other models. These systems use a peristaltic or variable displacement piston pump to continuously meter pesticide into each air delivery tube or feed auger on an applicator. This method helps reduce the equipment that comes in contact with the pesticide and must be

cleaned. Some pesticides work well with this method of impregnation while others do not. Impregnation of pesticides on the applicator is relatively new and has several advantages. Less equipment comes in contact with pesticides, the amount of fertilizer with pesticide impregnated on it at one time is reduced, and the impregnation takes place away from the storage and blending plant.

If impregnation of fertilizer is done at the blending plant, a catch/containment area must be provided to clean up spilled fertilizer. Alternatively tarping areas under impregnating equipment and conveyors allows easy cleanup of dry impregnated fertilizer. Excess pesticide impregnated fertilizer must be stored separately from fertilizer for later use because it is considered a pesticide.

8. MIXING/LOADING FACILITIES AND EQUIPMENT[8]

Surface water, groundwater and soil can be contaminated in areas where pesticides and fertilizers are stored, mixed and loaded into applicator tanks, or unloaded from sprayers and transferred into rinsate holding tanks. If not contained, accidental spills or overflows, unused mixtures and flush water for applicator tanks, plumbing and booms, create a pesticide and fertilizer build-up in surrounding soil that can cause serious contamination. The pesticides and fertilizers used and the mixture characteristics determine if water used to rinse sprayer tanks and plumbing is a hazardous waste. Operators are liable for expensive cleanup, even long after selling the property, if mishandling of pesticides and fertilizers results in environmental contamination.

Facility Planning and Layout

To protect surface environments and groundwater, install permanent concrete pads (or equivalent) at mixing/loading facilities. Plan for present and future storage, security and mixing/loading functions when planning, renovating or retrofitting liquid fertilizer and/or pesticide handling and storage facilities. Personnel and environmental safety, as well as state and federal regulations must be taken into account as facilities are designed.

Precipitation is a major concern when using open concrete mixing/loading pads. Transfer of precipitation may create a future legal problem. Roofed mixing/loading facilities are recommended in all areas of the U.S. to minimize disposal of potentially large volumes of contaminated precipitation which might be considered hazardous waste. Complete buildings with hangar- or garage-type drive-through doors provide the maximum protection against having to handle large volumes of precipitation that might contain dilute solutions of pesticides.

Local weather factors in each geographic location affect structural as well as functional designs. Non-roofed facilities in dry southwestern climates like Arizona may need a containment holding volume of 125% of the largest pesticide or liquid fertilizer tank.

Concrete facilities in warm, high-precipitation areas, like the southeastern and south central U.S., may only require open-sided roofed structures with large roof overhangs over concrete pads to keep precipitation out of containment and loading pads. Operators in central and northern U.S. should install open-front or fully enclosed containment facilities to minimize precipitation handling and provide indoor storage of spray equipment in the off-season. Open-sided roof overhangs should be at least a 30° angle from vertical from the edge of the mixing/loading pad(s) in all directions, Fig 36, to minimize precipitation blow-in. Saving one or two large pesticide hazardous waste disposal bills can pay for a major part of roof construction or even the cost of a complete building.

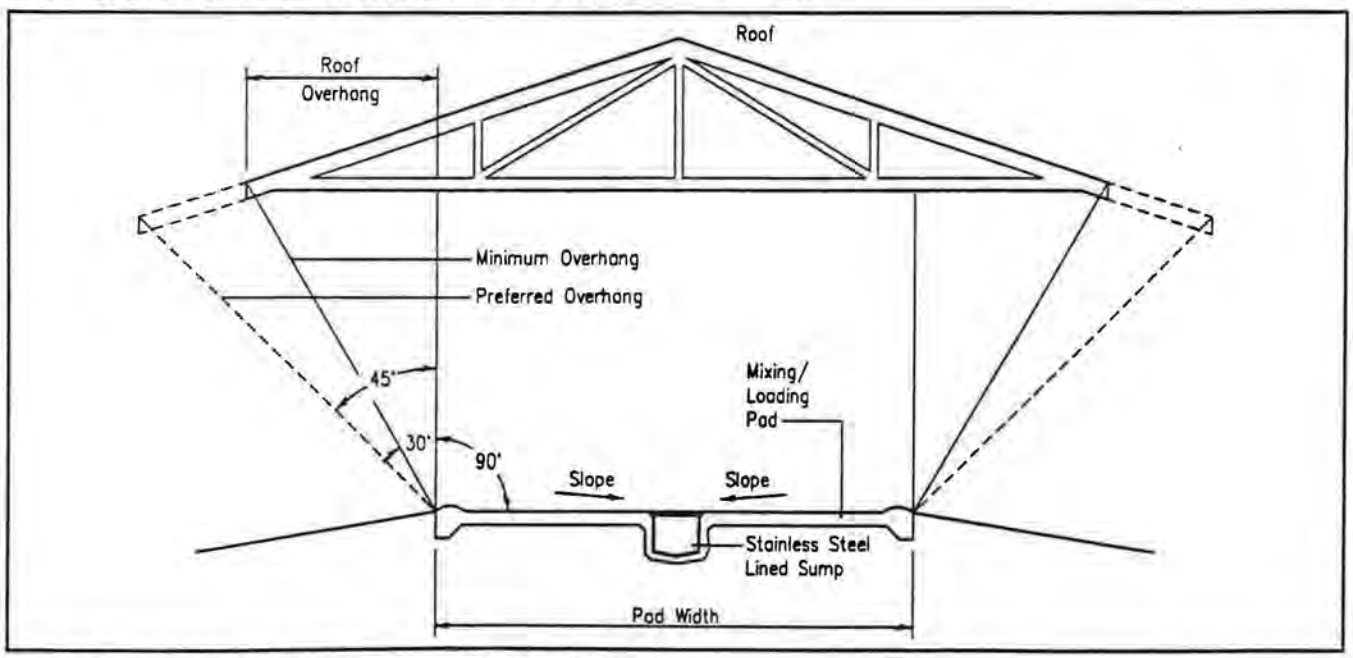


Fig 36. Open-sided roof structure over mixing/loading pad.

8 Ronald T. Noyes, Agricultural Engineering Department, Oklahoma State University, Stillwater.

Mixing/Loading Pad Layout

The layout of mixing/loading pads can improve operational and worker efficiency while reducing personnel and environmental safety risks. Incorporate the following features into a mixing/loading pad:

- Sealed, liquid-tight, reinforced concrete pad to form an impervious barrier between the pesticide or liquid fertilizer handling area and the surrounding earth. Slope mixing/loading pads to drain liquids to shallow pump recovery sumps.
- Sloped pad surfaces plus watertight walls and curbs around the perimeter form shallow depressions to temporarily contain pesticides and fertilizers, rinsate, washwater and precipitation that leak or fall on the pad.
- Independent shallow sumps in each functional containment area for col .cting liquids for pumping. Thus, different types of pesticide or liquid fertilizer leaks can be handled without cross-contamination. If properly filtered and managed, liquids recovered from each sump may be reused in subsequent, appropriate field applications. Liquid level alarms may be installed to alert operator when liquid enters a sump.
- Concrete pads designed and constructed to facilitate the addition of open sided roofs or complete buildings over part or all of the concrete pad. Design the outer three sides of the pad to have 4"-6" of level concrete surface before floor slopes start for ease in installing wall sills or for good door seals.
- Roof structures and pad sites, surface dikes and drainage to keep storm water from entering the pad and groundwater from collecting under concrete pads.
- Approach ramps to minimize dust and trash accumulation on pad (especially important for aircraft taxiing).

Functional Organization

Mixing, loading and secondary containment pad sizes and shapes depend on the functions performed, and the orientation and boom width of the equipment. Design pads to extend at least 5′ beyond the edges of sprayer equipment's extended boom on each side to catch any splashed water or boom sprays. Consider space needed for workers to get around and between pieces of equipment easily. Fig 37 illustrates a 45′x70′ aerial applicator concrete mixing/loading pad with security fence. This facility has aircraft tie downs and asphalt approach and departure ramps to minimize dust blowing during taxi operations. Mixing/loading equipment plus pesticide and rinsate storage tanks are secured by a chain-link fence and automatically activated security lights at night.

Fig 37 also shows a mixing/loading pad system with a secondary pesticide containment area. Pesticide storage is located on one side of the mixing/loading equipment station, positioned near the secondary containment sump. Rinsate holding and minibulk tanks are located on the other side of the containment sump.

The loading pad area is designed so aircraft or ground sprayers can enter from either side or enter the pad from the front. The loading pad floor has a variable slope that increases uniformly from a level surface along the outer edges to a maximum slope at the sump against the containment divider wall. The centerline valley has a constant slope toward the sump.

Level outer edges along the sides and front of the loading pad are designed for attaching building wall sills or to seal against large overhead or sliding doors. Slope approach ramps or drives away from the pad to ensure that surrounding watershed storm drainage stays outside the mixing/loading pad. Roofed loading pads are highly recommended.

Single Sump Concrete Mixing/Loading Pad Facility

For smaller or less complex pesticide or liquid fertilizer facilities, a simple concrete pad that drains to a single sump in the center of the pad, Figs 38 and 39, may meet the containment needs. Such pads can incorporate a small pesticide storage building on, or adjacent to them. These buildings, when connected as an extension to the pad with its own containment, provide needed storage without increasing the pad size, Fig 39.

A small (10′x12′) pesticide storage building can be located on one corner of a 30′x40′ or larger pad, Fig 38, or placed in optional positions adjacent to the loading pad, Fig 39. A fenced area for mixing/loading equipment and rinsate tanks can be located close to the storage building. Rectangular pads can be arranged with the storage building and mixing/loading area plus pesticide and rinsate storage tanks in a fenced off section across one end of the elongated pad. This provides similar function with less forming expense as the two-sump pad shown in Fig 37.

Sumps and Drainage

Some state regulations do not allow underground storage of pesticides or rinsates. Shallow sumps are not considered underground storages as they are designed with small holding volumes (usually about 15-50 gal) to be used for immediate liquid recovery and transfer, not storage. Some states require sumps to be stainless steel lined. California requires double walled stainless steel sumps with inspection ports, that are to be checked daily for leaks when the facility is handling pesticides.

Some states require that all sumps be drained with an operator controlled pump to guard against contaminated water inadvertently entering groundwater or surface water channels. Other states do not allow discharge of liquids at any time from containment pads. All liquids have to be recovered and con-

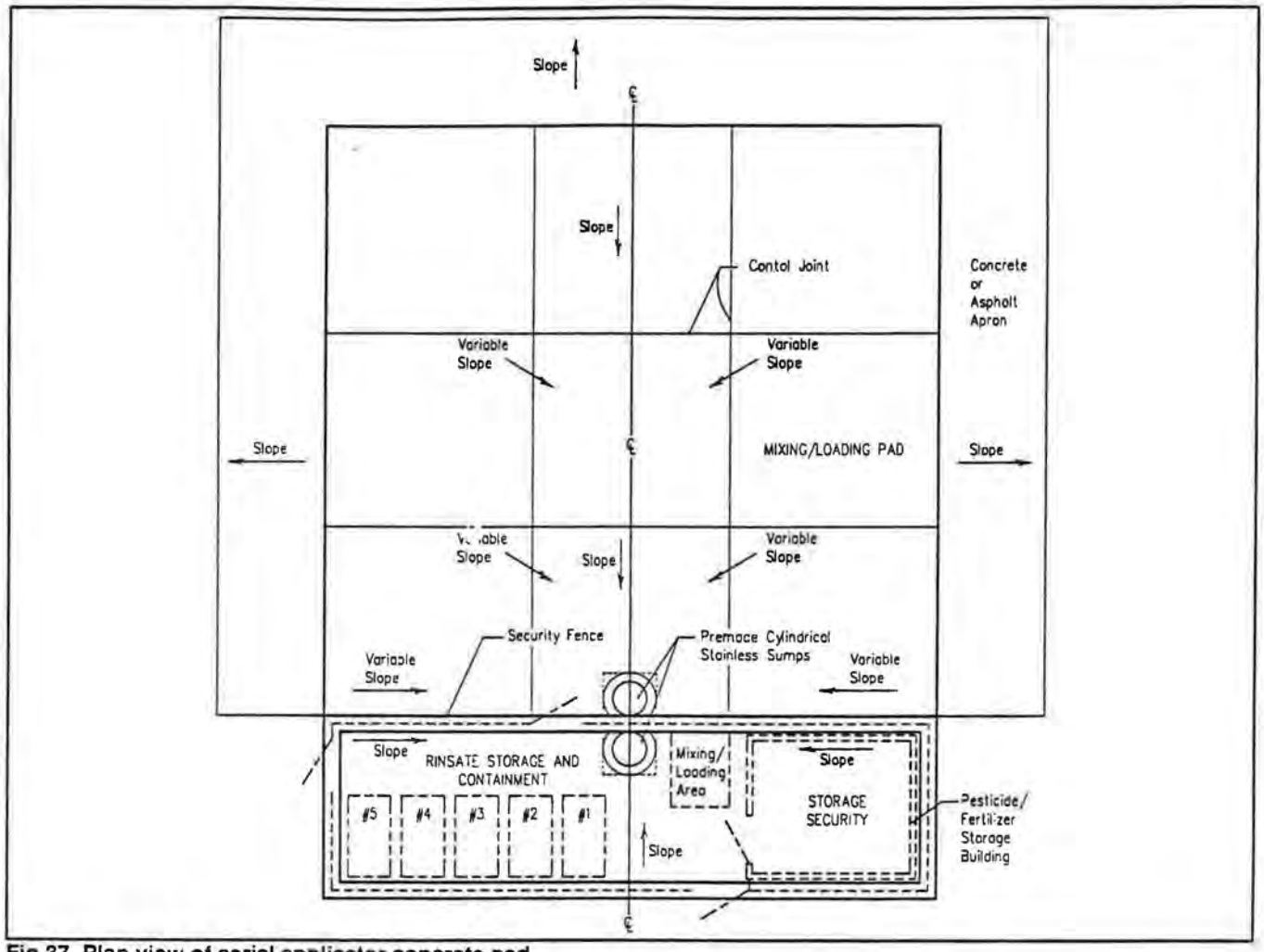


Fig 37. Plan view of aerial applicator concrete pad.

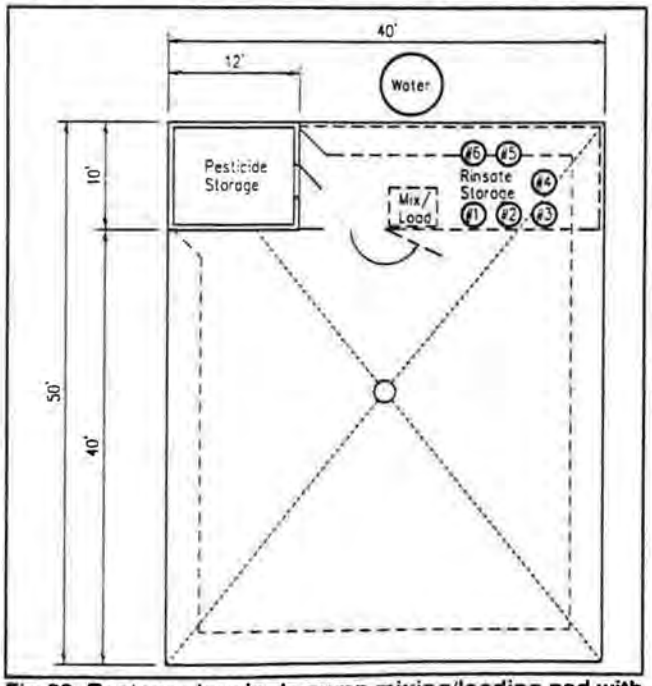


Fig 38. Rectangular single sump mixing/loading pad with storage building and fenced pesticide security area.

tained in holding tanks or be allowed to evaporate. Roofed or completely enclosed concrete pads greatly minimize non-process liquid handling at facilities.

The secondary containment sump recovers leaks and spills and is used to pump out accumulated liquids such as rainwater. Cover the sump with a structural grate for safety; a dust cover over the grate minimizes dust and debris blowing in. Choose load pad sump grates that can support vehicle wheel loading.

Keep sumps covered and cleaned out, especially during spraying seasons. Soil and debris in sumps create a serious disposal problem of potentially hazardous waste. This problem reinforces the value of enclosing the mixing/loading pad area to avoid solid hazardous waste problems resulting from blowing soil and debris. According to EPA regulation, transporting pesticide contaminated soil for disposal requires a licensed hauler of hazardous materials, regardless of whether the pesticide applicator is private or commercial.

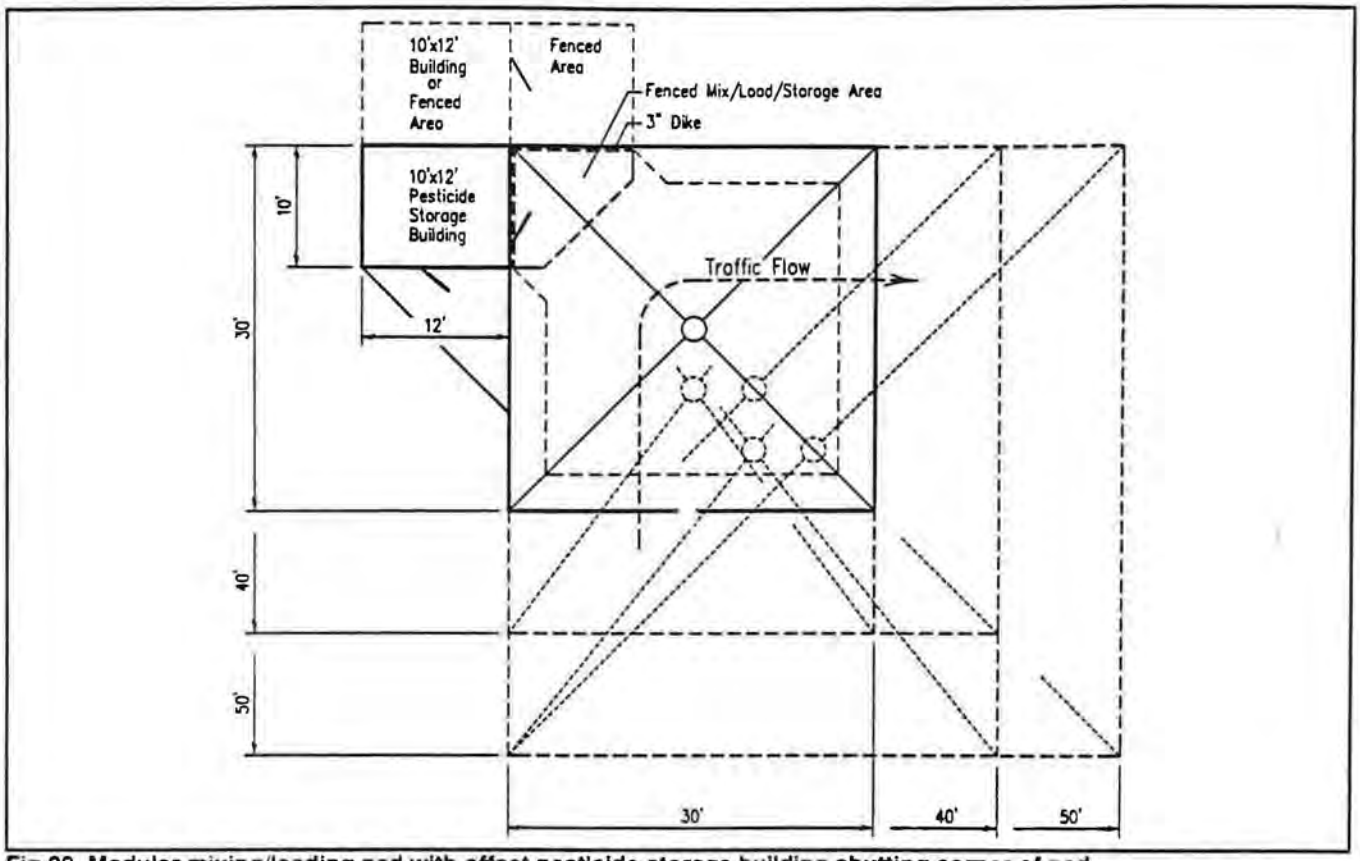


Fig 39. Modular mixing/loading pad with offset pesticide storage building abutting corner of pad.

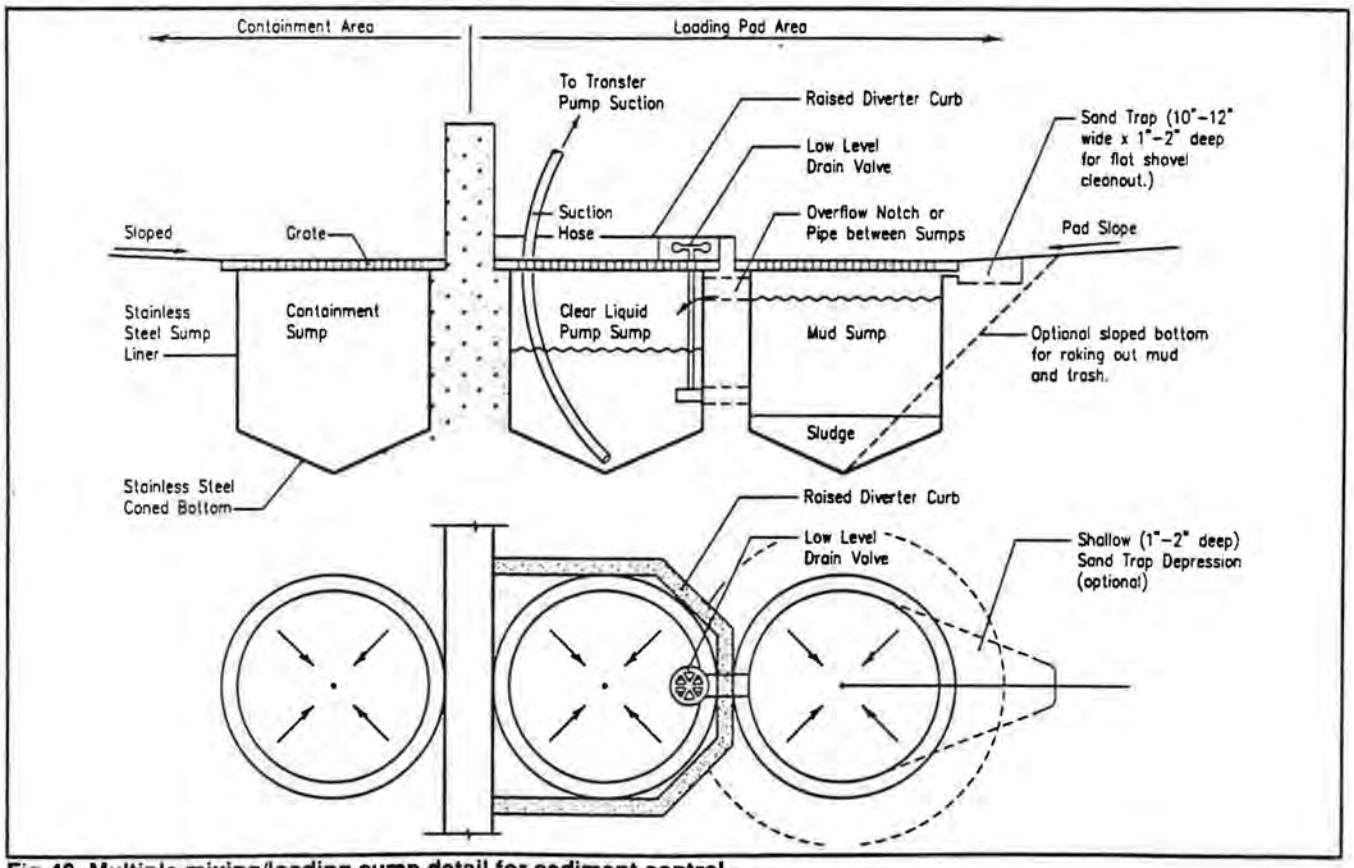


Fig 40. Multiple mixing/loading sump detail for sediment control.

Sump Designs

There are several sump designs that can be used in the mixing/loading pad. A single sump is the simplest and can either be placed monolithically with the mixing/loading pad or a precast concrete or prefabricated stainless steel sump could be installed before the concrete pad is placed. To reduce sludge problems in mixing/loading pad sumps where applicator vehicles are washed, some facilities may need two sumps in series, Fig 40. **NOTE:** Washing sprayers in the field is recommended, but avoid repeated washing in the same location and stay clear of wells, surface water bodies and field tiles and inlets.

Use of a double sump allows segregation of pesticide water and contaminated solids. The first sump acts as a sediment trap or settling basin where larger solids settle out before the liquids overflow into the second sump. Design the first sump for easy sludge cleanout. Water drains around the raised concrete diverter curb into the first sump, then is decanted off the first sump and flows into the second sump. The sump pump or suction hose is placed in the second sump. This water is filtered and transferred into a rinsate storage or waste water holding tank.

A double lined stainless steel sump design is shown in Fig 41. This design allows monitoring of potential leaks from the sump by inspecting the outer sump through the port between inner and outer sump liners. This sump can be fabricated in a range of sizes or dimensions. Install a "stand pipe riser" in the inspection port of a double walled sump so that it can be inspected when liquid covers the sump grate. Lock to prevent vandalism or accidental liquid entry through the unsecured port.

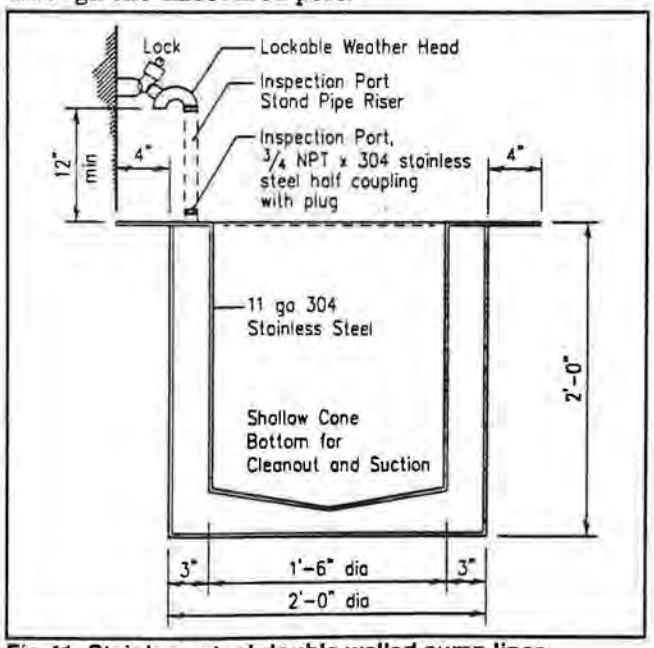


Fig 41. Stainless steel double walled sump liner.

An alternative sump design is shown in Fig 42. A pair of prefabricated stainless steel containers act as primary settling sump and a secondary pump-off sump. Locate these containers in a sump pit or secondary containment area. This design allows easy removal of the sump liner containers when they need to be cleaned out or decontaminated. In this design, by extending the pit design to hold additional removable sump liners, different types of pesticide rinsate can be segregated by diverting to selected sumps. **NOTE:** The secondary sump pit concrete must be carefully sealed.

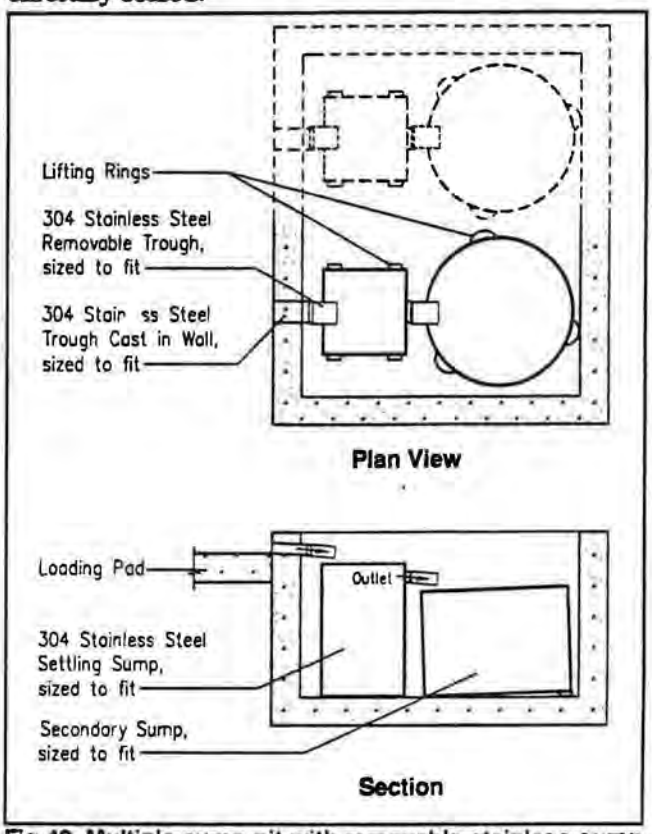


Fig 42. Multiple sump pit with removable stainless sump containers.

Mixing/Loading Equipment Area

Locate batch mixing tanks, water and pesticide transfer pumps and plumbing in the mixing/loading area, Fig 37. Closed mixing system components like pesticide metering tanks, punch/drain/rinse/crush units, rinsing vacuum probes and pesticide container holding, rinsing and drainage equipment, adjuvant venturi eductor and venturi injector plumbing are components that should be considered in planning an efficient, safe mixing/loading system. Position mixing equipment near the containment sump as shown in Fig 43.

Pumps and Pump Containment

In bulk handling systems, install transfer pumps inside their own individual containment dike areas, Fig 44. If a seal in the pump leaks, only the small pump containment area becomes contaminated and requires cleanup. Mount the pump motor base at containment wall height or higher to prevent flooding

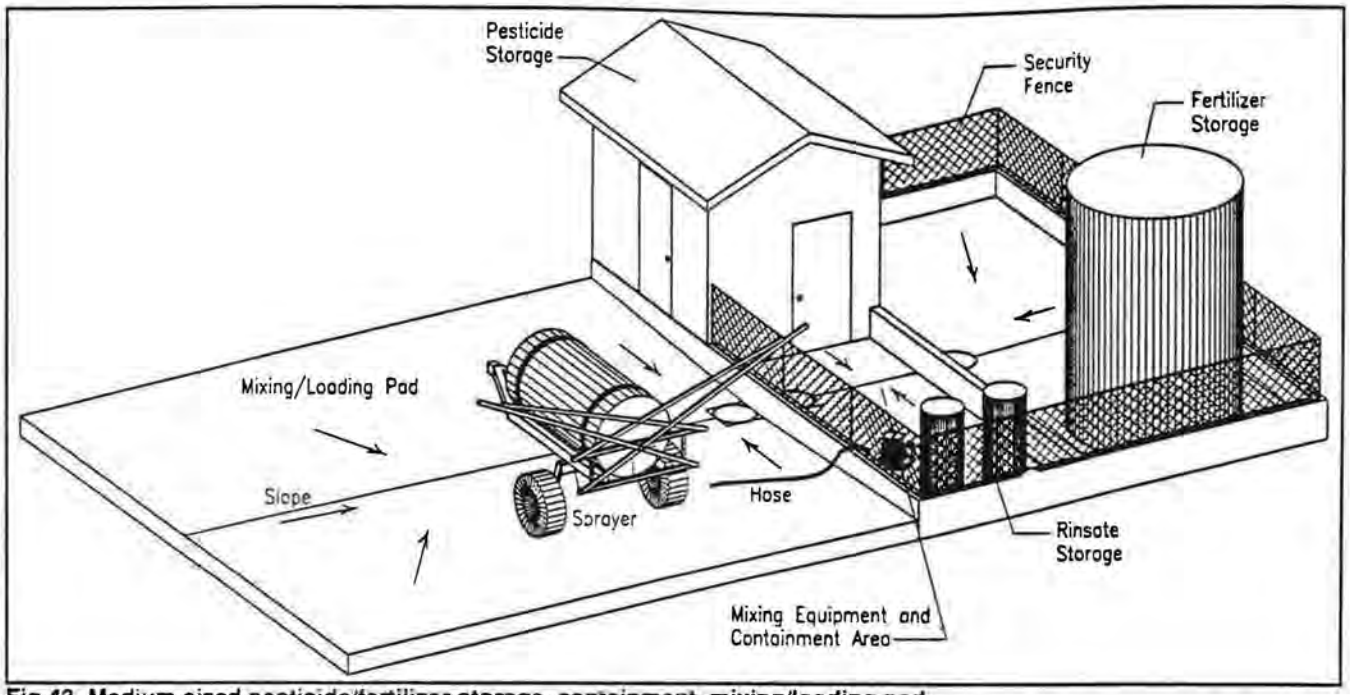


Fig 43. Medium sized pesticide/fertilizer storage, containment, mixing/loading pad.

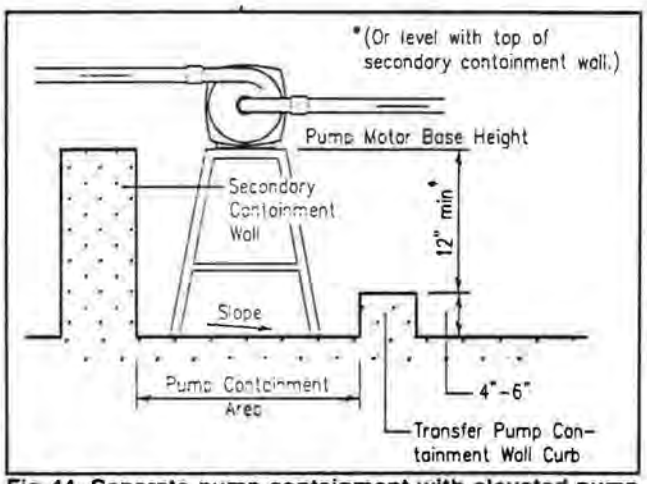


Fig 44. Separate pump containment with elevated pump mount.

the pump, damaging motor windings, and creating an electrocution hazard for workers. A disadvantage of elevating pumps is that higher levels of liquid are needed in water supply tanks to prime pumps.

An alternative to separate pump containment is to place chemical resistant rubber, plastic or stainless steel "drip" pans or tubs under elevated pumps to catch intermittent drips that often occur from pump seals or plumbing connections, especially when switching transfer hoses from suction to discharge connections periodically. Use dry-break hose connectors to minimize drips during frequent hose changes. Install shutoff valves and unions on each side of pumps so they can be easily drained for minimum leakage and removed for repairs. These equipment components help reduce pesticide contamination on floors.

Plumbing Components and Seals

An important part of designing a bulk handling system is selecting metal parts, gaskets and hoses that resist corrosion. Expect high initial cost if low maintenance costs, long life and excellent performance are required. Using the highest quality, most corrosive resistant material is usually the best long-term investment.

Pesticide formulations often contain solvents and surfactants that cause some seal and gasket materials to swell, shrink, soften or dissolve with continuous contact over time. Deterioration is often accelerated by elevated temperatures; this is especially critical when the component is subject to mechanical stress. Select the most chemically resistant materials, such as Teflon, for seals or gaskets that come in direct contact with concentrated pesticides. **NOTE:** Teflon may be incompatible with some pesticides, such as "Prowl" and "Treflan".

Hoses must also be compatible with the pesticides being handled. Hoses manufactured with an inside layer of a cross-linked high-density polyethylene material usually are chemically compatible. Flush hoses and piping after use to extend service life and minimize cross-contamination. Suction hoses must be reinforced for negative pressure or vacuum operation. Collapsed suction hoses can cause cavitation damage to pumps.

Select stainless steel or polypropylene quick-release, dry-break couplers or air-break connectors for plumbing that must be connected on a regular basis, such as hose couplings connecting to pumps, applicator vehicles, bulk tanks or mix tanks. Fit couplings with pesticide or fertilizer resistant "O" rings, seals or gaskets manufactured from Teflon, stainless steel

springs or other chemically resistant material. Check pesticide and fertilizer resistance charts to select appropriate materials, Appendices H, I and J.

Valves

Use corrosion resistant valves made from stainless steel, polypropylene or Kevlar. Minimize the number of valves to operate the system to reduce cost and potential leaks. Mount them in easy-to-reach locations for operator convenience. Use quick shutoff ball valves or plug valves. Provide lockable shutoff valves on outlets of all bulk liquid fertilizer and pesticide storage tanks for security. Use detachable hoses instead of hard plumbing to isolate storage tanks from other plumbing.

Rinsate Storage and Handling

Mark or color-code individually dedicated hoses by the pesticide handled for transfer of rinsates into and out of each individual rinsate holding tank. If dedicated hoses are not used, flush hoses with clean water immediately after handling each pesticide rinsate to avoid cross-contamination of non-compatible pesticides. **NOTE:** Plain water may not clean plumbing satisfactorily. Check product label for proper cleaning and neutralizing procedures.

Do not "hard plumb" or rigidly manifold pesticide rinsate transfer pumps directly to the inlets or outlets of rinsate storage tanks. When using permanent pipe manifolds, rinsate from one tank can accidentally mix with rinsate from other tanks in the collecting manifold. Cross-contamination with rinsate from several tanks could cause serious damage to non-targeted crops or sites. Use hoses with quick release dry-break connectors, cam-lock couplers or other suitable quick couplers so that operators have to make specific decisions and choices when connecting hoses to pump rinsate into and out of each tank. This deliberate process provides more opportunity to evaluate each separate management decision than if complex plumbing manifolds with several valves are used.

Fit rinsate tanks with quick release dry-break and/or cam-lock type fittings for filling into the top and withdrawing from the bottom. Select and position (slope) tanks so that bottom outlets drain the entire tank. Each time a tank is emptied, immediately and thoroughly flush it out to prevent pesticides from drying on tank walls and to wash bottom sediment out. Permanently mount 360° rotating rinsing nozzles in the top of each tank for thorough rinsing and worker safety. Dedicate each tank to only one pesticide or one crop. Cone or hopper bottom tanks make management simpler by improving drainage of all products, including particles that settle out. Hopper bottom tank rinsing and cleanout are easier, compared to flat bottom or horizontal cylindrical tanks. Select tanks with large top access openings for ease of cleanout and inspection.

Use individual hoses to pumps or flexible manifold systems for liquid fertilizer tanks. In case of a major leak or spill, or unusually heavy thunderstorms (25-yr, 24-hr storm) where accumulated rainwater causes liquid fertilizer or rinsate tank flotation, rigid PVC, polypropylene or steel piping manifolds could fracture, causing massive releases and co-mingling of liquid fertilizers or rinsates. Even with a valve directly connected to each tank base outlet, leverage on connected plumbing manifolds could cause pipe nipples to break between the tank wall and the valve. Anchoring tanks and using flexible plumbing are major design requirements.

Keep mixing/loading equipment inside a security fence. Security fences, walls, buildings or other safety measures are needed to keep unauthorized personnel, children or animals from pesticide and fertilizer storage areas. Operators are responsible for contamination and injury caused by vandals, even if a reasonable level of security is provided, but locked tank base shutoff valves and fences can help minimize legal risk and possibly reduce insurance rates.

Closed Mixing Systems—CMS

Closed mixing systems (CMS) greatly minimize human exposure to concentrated pesticides. Ideally, closed system transfer is accomplished by vacuum. With vacuum transfer, hose or plumbing leaks allow air into the system, which slows handling rates, but does not result in spray or rupture-type failures of pressurized handling systems. True closed systems:

- Allow removal of pesticides from sealed containers.
- Allow measuring and transferring pesticides to mixing or sprayer tanks and rinsing empty containers.
- Allow handling of system plumbing and hoses without exposing personnel to pesticide vapors, mists, splashes or spills.
- Provide improved accuracy in pesticide measuring.
- Reduce mixing/loading site contamination.
- Reduce the risk of back siphonage of pesticides into water supplies.
- Reduce the need for full protective suits. Protective gloves, full face shield or goggles and clean clothes are still recommended.

Fig 45 is a diagram of a modular vacuum powered pesticide CMS. It uses a venturi injector mounted on the pressure side of the pump to develop vacuum. This venturi design has a high-flow bypass. When pesticide measuring and transfer is complete, the by-pass valve provides a much higher handling rate (2-3 times increase) for rapid completion of sprayer tank filling.

Where small mixtures are needed, use a supplemental vacuum pump to evacuate the metering tank and draw pesticides into the tank pump to keep from having to pump excessive water through the venturi. Then use the venturi injector with by-pass valve for transfer and mixing/loading operations, Fig 45.

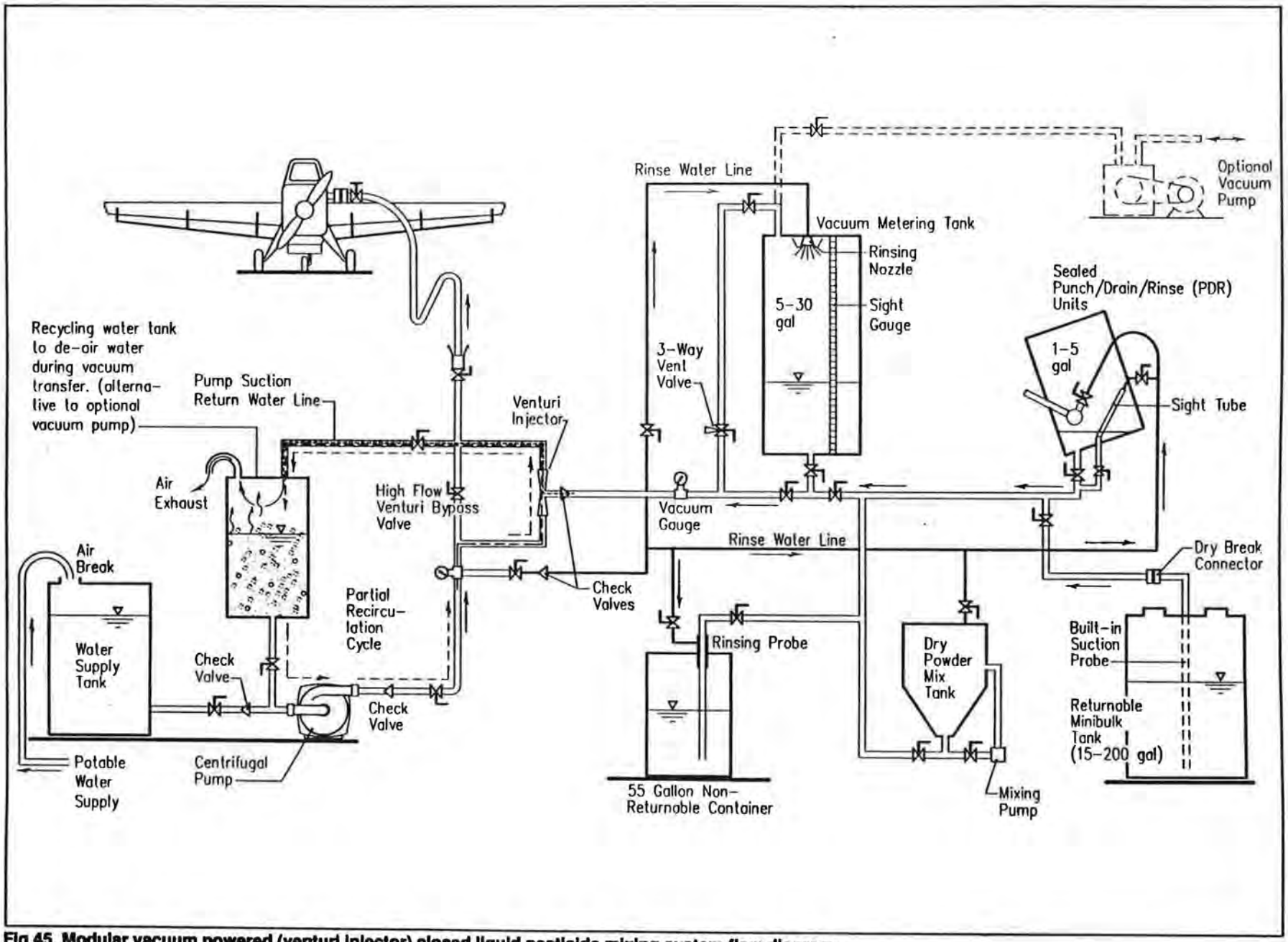


Fig 45. Modular vacuum powered (venturi injector) closed liquid pesticide mixing system flow diagram.

An alternative is to pump makeup water in a closed loop from and back to a small enclosed water holding "de-airing" tank that is vented to the atmosphere, and dedicated for vacuum transfer use. Thus, the amount of water initially pumped into the applicator tank is significantly reduced. This is very important where total transfer volume and available transfer time is limited when making up small batch mixes and pesticide must be transferred initially from shipping or minibulk containers to the metering tank. Plumb this "de-airing" tank to use this water first when filling the applicator tank as pesticide vapors may be absorbed by the closed loop water, so this water must be used immediately to finish making up that load.

NOTE: If a de-airing tank bypass plumbing loop is used as part of the CMS, the discharge hose valve to the spray tank or aircraft hopper may still need to be partially open so that 1/3-1/2 of the liquid flow continues to the applicator tank. Complete recycling of water through the return loop air separator tank (discharge hose valve completely closed) may cause the return line water to be partially aerated (partially filled with air bubbles) from the vacuum tank if the air separator tank volume is marginal. If this occurs, pump pressure will drop, pump cavitation may occur and venturi vacuum level may remain low, slowing or stalling evacuation of the metering tank.

Venturi injectors

Venturi injectors, Fig 46, are static devices that create a vacuum to pull liquid pesticides from containers. The venturi is placed on the outlet (pressure) side of a pump and as the motive liquid (usually makeup water) flows through the venturi restriction, line pressure drops, creating a vacuum that evacuates air from piping and the metering tanks. With appropriate valve settings, pesticides and rinse water are also transferred by the venturi suction.

Venturi injector systems are simple, economical and can rapidly transfer relatively low viscosity pesticides effectively. They are easily incorporated into existing pesticide handling systems. Choose venturi injectors constructed of polypropylene, stainless steel or other corrosion resistant material. Flush injectors (with clean water after each use) to minimize cross-contamination of pesticides. **CAUTION: Plumbing connected to plastic venturi injector side inlets must be flexible or carefully braced because side inlets are structurally weak and break easily.**

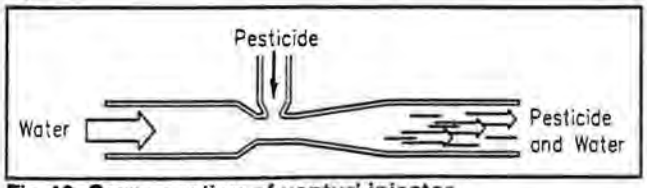


Fig 46. Cross-section of venturi injector.

Venturi injector systems are naturally safer than pressure transfer systems because full strength pesticides are drawn from containers by vacuum or suction. Then, pesticides are mixed with water in the injector, so a dilute strength pesticide/water mixture is transferred under low pressure into applicator tanks.

Metering tanks

Vacuum metering tanks measure or meter the amount of pesticide needed for sprayer tank mixtures. Metering tank sizing depends on the amount of pesticide to be transferred from shipping containers as well as the amount needed for a full sprayer load. Pesticide is evacuated from "one-way" containers with external self-rinsing probes, or from SVR or minibulk returnable tanks with non-rinsing internal suction probes connected by dry break connectors to suction hoses.

Punch/drain/rinse (PDR) containers as shown in the upper right hand corner of Fig 45 are non-pressurized metering tank systems. These units allow 1, 2.5 or 5 gal plastic or metal containers to be set inside, and the cover latched and sealed. The side lever operates a sharp probe that punches a hole in the container bottom. The pesticide drains into the base of the stainless steel tank. A sight tube is used for measuring the pesticide.

After the pesticide has been drained from the PDR, either to the metering tank or the applicator tank, the container is power-rinsed with clean water forced through the side lever pivoting hole punch mechanism, which is rotated during container rinsing, and the rinsate is transferred directly to the sprayer. The empty, power-rinsed container is removed and the next pesticide container is set into the unit for draining. Because holes are punched in the bottom of each container, PDR unit use is limited to completely draining and transferring the liquid from each container.

An area that needs additional operator attention and maintenance on metering tanks are metering sight tubes or sight glasses. These devices are usually clear or opaque plastic or glass tubes about 3/8"-5/8" I.D. that are externally mounted to the top and bottom of metering tanks to allow a visual indication of internal fluid levels. With some pesticides or fertilizers, sight tubes often quickly "cloud up" due to repeated dried residue layers. Connect a power-rinsed water line to the top of each metering tank sight tube to flush it out each time the tank is rinsed so pesticide layers do not obscure the visual tank liquid levels and to minimize cross-contamination of pesticides.

Rinsing probes/internal probes

Self-rinsing probes are used to withdraw pesticides from shipping containers. When containers are empty, rinse water is sprayed inside, washing down pesticide residues that remain as a film inside on the top and walls of containers, plus a few ounces of pesticide in the bottom. Rinsewater is evacuated out of the container and transferred directly into the sprayer, Fig 47.

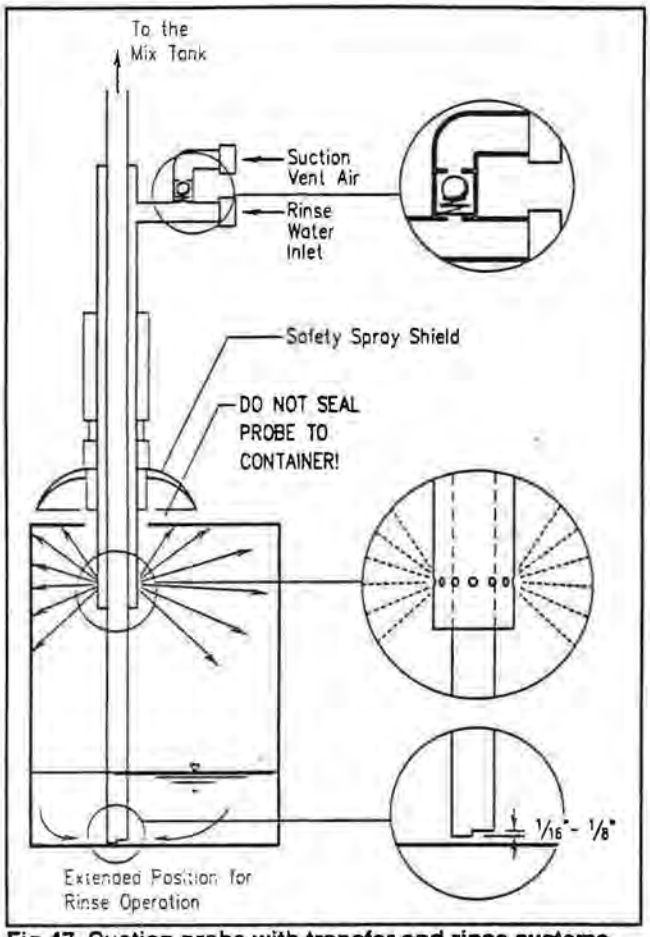


Fig 47. Suction probe with transfer and rinse systems.

External rinsing suction probes are not "true" closed mixing system components because containers must be opened and the probe inserted. Some probes are screwed to the container threaded pour spout creating a seal while others have an air gap between the container opening and probe tube through which vapors can escape and air can enter to ventilate the container volume above the liquid level during withdrawal of pesticide. Thus, even though rinsing probes are used with "closed mixing systems", workers are at some risk while using most external probes.

Care must be used with all probes when removing pesticides, during rinsing and during probe insertion and removal. In cases where the probe body is screwed to the container threaded pour spout, high vacuum build-up can collapse the container sides inward if probe suction air venting is inadequate. This may cause the container sides to crack and leak. Another hazard may occur while rinsing the container at water line or pump pressure (30-60 psi). Without adequate container venting, the internal pressure can cause the container to rupture, with the potential of spraying pesticide or rinsate on workers.

CAUTION: Before using probes that seal to containers, be sure the probe has adequate vent air flow for positive and suction pressure relief during both withdrawing and rinsing operations. Periodic stopping of suction or rinsing operations may be required if the vent air relief volume is marginal. If vent air flow is inadequate or not provided, it is safer to leave the probe disconnected from the container opening to allow vent air movement through the connector opening during suction and rinsing operations.

Another safety hazard that must be considered when using rinsing probes to rinse empty (or partially empty) containers is overfilling containers and flushing rinsate out through the open container inlet gap. Common practice is to operate suction valves and rinse-water line valves simultaneously so initial highly concentrated rinsate is sucked out immediately. Usually 30-45 sec is adequate for power rinsing at rinse water flow rates of 5-8 gpm.

Refillable bulk containers

EPA is encouraging the agricultural pesticide industry to use two-way or refillable containers and to adopt two or three common fittings for shipping containers. Pesticide and fertilizer companies and associations are moving toward standardizing bulk and/or minibulk shipping container fitting designs.

Minibulk or refillable containers have built-in internal suction probes with dry-break connectors to prevent external drips on and around the container. Some companies supply these containers with a pump and meter. At least one repackaging company is using compressed air tanks connected to minibulk or SVR containers to transfer pesticides by pressure. Refillable containers are permanently marked for use with only one type of pesticide and are not rinsed by the applicator or dealer. They are returned to the manufacturer or repackaging agent and repeatedly refilled with the same pesticide on a continuous recycling basis. Refillable containers comprise true closed system components when used with a vacuum/suction type pressure tank transfer system or CMS.

Mechanical Transfer/Open Mixing Systems

Dry pesticides are mixed with water in batch mix tanks by adding part of the required water, pouring in the dry pesticide, stirring into a slurry, adding the balance of the mix water, then recirculating the mixture in the tank for thorough mixing. Batch mixtures are then transferred into applicator tanks, mix tanks are rinsed and the rinsate transferred to the applicator tanks. Although batch mixers vary from fully open topped tanks to units with full hinged covers, they are not sealed and therefore are considered open mixing systems and should be in well ventilated areas. Protective clothing and full face respirator with appropriate canisters for the pesticides being mixed are recommended when using open mixing systems.

Liquid pesticides are often mixed with the carrier before they are added to an applicator tank. A simple method is shown in Fig 48. In this system, the liquid pesticide is removed from a container with a suction

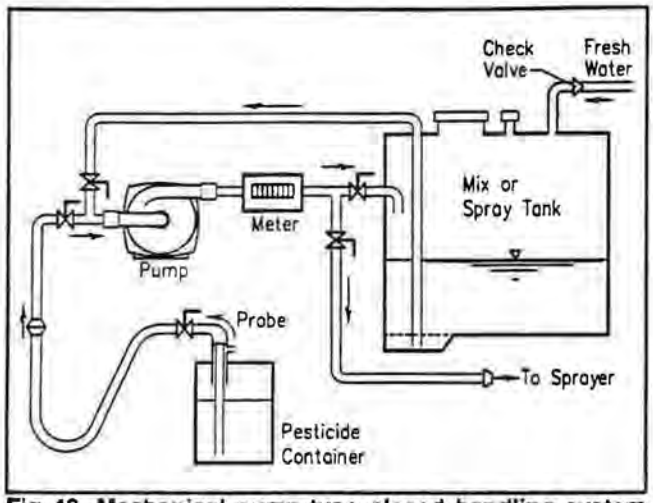


Fig 48. Mechanical pump-type closed handling system with mixing tank.

probe using the pump suction and is pumped through a meter into a mix tank. Then the mixture is recirculated from the tank through the pump and an agitator nozzle in the bottom of the tank for mixing. When completely mixed, the pesticide is transferred to the sprayer. Variations of this system, such as the use of different probes for removing the material from the container, measuring columns, metering tanks or measuring probes in place of in-line flow meters, and venturi injectors can be incorporated. Batch mixing tanks are usually designed with jet agitators on 300-600 gal tanks or mechanical mixing paddles on larger mixing tanks (500-1,000 gal).

Pesticide measurement

Accurate methods of pesticide measurement are essential to good pesticide application management. Pesticide liquid meters similar to those used on fuel pumps are fast, easy to use and operate on the principle of positive displacement. However, accuracy and repeatability may be a problem on less expensive rotary vane or "turbo" meters. All rotary vane meters are inaccurate when used on the vacuum side of pumps or venturi injectors because of air entrained during suction.

For pressure systems, more expensive meters are usually the most accurate and provide the best corrosion resistance. Mechanical or electronic digital readout meters are available that indicate volumes in tenths or hundredths of a gal. Meters must be certified when they are used to measure products that are to be sold and require retesting or calibration at least yearly by state government testing and measures departments. Because the specific gravity of products varies with temperature, it is sometimes necessary to recalibrate meters to control accuracy, but meters that require calibration are usually the best type. Some meters require recalibration by referring to the operator's manual for each significant change of viscosity used.

Sight tubes on measuring columns are simple and easy to use but are only accurate if the container is level. Small-diameter sight tubes (1/4"-3/8" I.D.) may indicate a different level than what is in the container due to viscosity and surface tension of the liquid against the tube wall. Larger tubes (1/2"-5/8" I.D.) provide faster, more accurate metering response. A small-diameter, tall container improves metering accuracy for a given volume metering tank. Use side guards to protect external glass tubes or plastic tubing from breakage or damage to reduce the hazard of contacting a concentrated pesticide. All sight tubes must have a valve at the base of the column that can be closed for emergencies in case the tube is leaking or broken. Plastic or Tygon sight tubes cloud over and require periodic replacement, but are safer than glass tubes from a breakage standpoint. Where plastic sight tubes are desired, choose nylon or polypropylene materials. Power-rinsed water lines connected at the top of sight tubes may eliminate or reduce the frequency of replacement. Select tubes for rinsing and easy replacement.

Metering tanks made of stainless steel with one or more glass windows mounted in the side are available commercially. These must also be kept level to be accurate. Measuring tanks with windows have an advantage over tanks with only sight tubes, as the liquid level is directly visible, and the viscosity of the pesticide and liquid surface tension does not affect measurement as much as sight tubes. But tanks with glass windows are usually more expensive and windows are subject to leakage. All measuring or metering tanks must be equipped with internal rinsing nozzle provisions. Rinse tanks and sight glasses immediately after use before pesticides dry on inside surfaces to avoid cross-contamination problems.

Pesticides are also measured or metered by weight. The unit weight of the active ingredient (AI) is listed on the pesticide container as a ratio or percent of the pesticide product weight. A measuring container can be mounted on a scale platform or suspended on a load-cell and filled by vacuum or pressure transfer to the desired weight. Tank fill and discharge hoses must be flexible on these units to minimize measurement inaccuracies. Fig 49 shows a platform load-cell type scale. Fig 50 shows a single load-cell suspension or tension mounting system. For larger facilities, load-cells or strain gauges can be placed on the mixing tank to eliminate the need for intermediate weighing equipment. On portable load-cell measuring systems, lock load-cells rigidly and remove load while transporting. Moving this type of system may require frequent calibration of load-cell readout units. If used outdoors, wind shields and horizontal stability brackets must be used to minimize wind pressure/swaying effects. Load-cells, control/readout units and connecting electrical or control circuitry wiring cables must be designed for use in pesticide and outdoor environments.

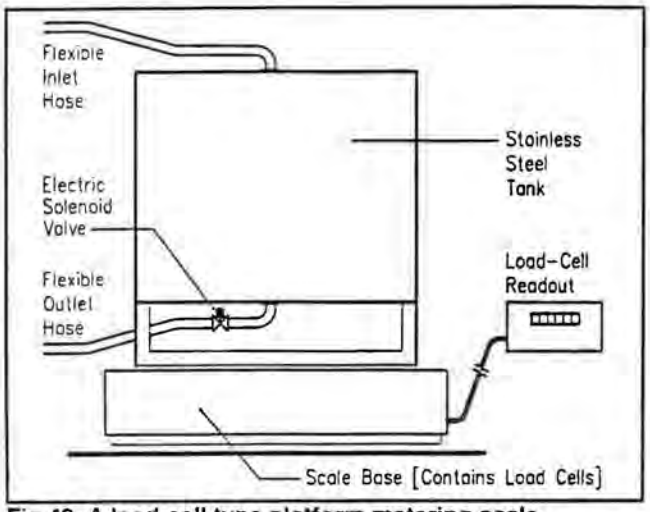


Fig 49. A load-cell type platform metering scale.

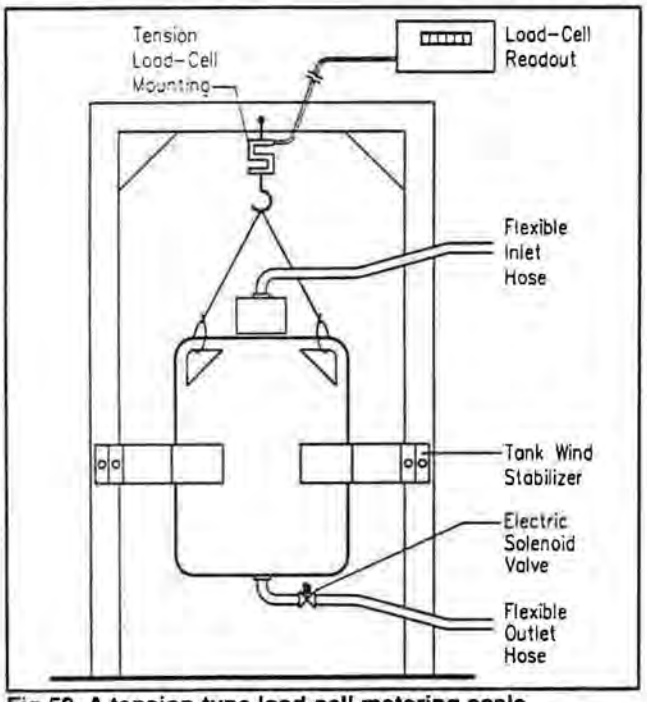


Fig 50. A tension-type load-cell metering scale.

Container Rinsing for Disposal

One-way containers must be pressure-rinsed or "triple hand-rinsed" prior to disposal. Pressure-rinsing for 30-45 sec immediately after initial draining is usually far more effective than triple hand-rinsing. Fig 51 illustrates a method that can be used for pressure-rinsing pesticide containers. Fig 47 illustrates a rinsing probe transfer system. A disadvantage of both rinsing methods is that container caps are not rinsed during container rinsing. A bucket with detergent can be used with a screen basket to rinse one-way pesticide container caps.

The pressure-rinse system shown in Fig 51 is designed to rinse containers inverted over a pesticide mixing tank fill opening. This rinser contains a sharp probe that can punch through the bottom of small

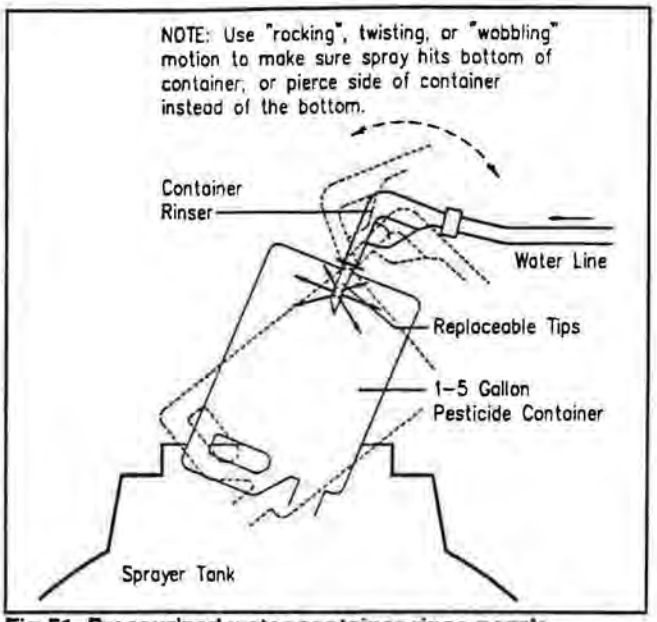
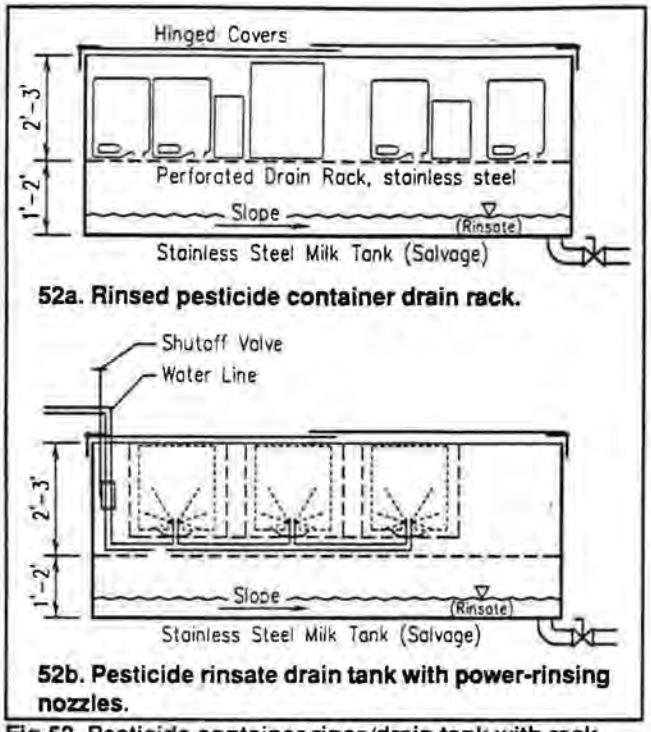


Fig 51. Pressurized water container rinse nozzle.

plastic or metal containers (5 gal or less). The probe contains a series of holes around the nozzle shaft that must be inside the container. With the container inverted over the spray tank fill hole, water is turned on to rinse the container. Flush the container for 30-45 sec as soon as it is emptied to soak and remove residues from container. Avoid letting products dry out before rinsing. When rinsing with hand held pressure rinse nozzles, piercing the side of the inverted container allows better flushing of container bottom. Use a rocking, twisting and wobbling motion during rinsing to direct water jet impact to all interior surfaces.

The rinsing probe transfer system shown in Fig 47 is not a pressure rinse system. It is designed to drain the container of pesticide, then discharge clear water from the rinsing probe water chamber through a series of holes directly below the fill cap. At the same time the probe evacuates the rinsate out and transfers it into the spray tank. One-way pesticide containers are not designed to withstand vacuum or pressure. Caution must be used to prevent collapse or rupture of the container if adequate venting air relief is not provided when the probe body is sealed to the container opening.

Invert freshly rinsed containers on a draining rack in a rinsate drain tank, Fig 52a, to allow all rinsate to drain from containers for easier rinsate recovery and reuse. Power rinse nozzles can be added to rinsate drain tanks, Fig 52b. Several companies have developed portable hose mounted rinse nozzles (utility and commercial models) that pierce the side of plastic or metal containers for pressure rinsing and draining. For heavy use, commercial versions are more rugged and last longer than utility models, and are better suited for metal containers. Most nozzles have replaceable steel piercing probe tips. Make sure nozzle probe tip holes direct spray back toward the



52a. Rinsed pesticide container drain rack.

52b. Pesticide rinsate drain tank with power-rinsing nozzles.

Fig 52. Pesticide container rinse/drain tank with rack.

part of the container that is pierced for complete rinsing. Some early models use only four holes drilled perpendicularly to the probe tube, which provides an inadequate spray pattern. All pressure rinsers must be equipped with a backflow prevention device.

Rinsate Storage Tanks

Rinsate tanks are used for temporary separation and holding of diluted pesticide field mixture rinsate (typically 10:1 dilution ratio from field mixtures). After using each rinsate, wash the inside of the tank and transfer that liquid to the sprayer tank as makeup water along with the field mix rinsate as a continuing management process throughout the spraying season. Strategies to minimize rinsate storage, handling and disposal are discussed in Chapter 11, Rinsate Management and Waste Disposal.

When selecting storage tanks, check with both the pesticide manufacturer and tank manufacturer to be sure the tank is resistant to corrosion from the pesticide being stored. Cross-linked, high density polyethylene or fiberglass tanks of 200-600 gal volumes are usually a good economical selection for rinsate storage. The ability to view liquid levels through plastic or fiberglass tank walls improves management. Inspect polyethylene tanks annually for signs of aging and deterioration to avoid a structural failure. Tanks that are under-roof and protected from direct sunlight and weather usually have a longer service life than those stored in the open.

Galvanized or standard mild steel tanks are not recommended because they corrode quickly causing rust and metal scalings to plug strainers and plumbing. Type 304 or 306 stainless steel tanks are suitable, but are more expensive. Mount pesticide, rinsate and fertilizer storage tanks 3"-6" above the concrete floor for easy location and identification of leaks. Mount the tanks high enough to allow full operation of valves and other equipment. Some operators elevate rinsate holding tanks so they can gravity-flow into mix tanks or sprayer tanks. Setting up to use gravity flow may be expensive so conduct a cost/benefit analysis, comparing gravity flow to pumping.

Water Supply Tanks

Place water storage tanks close to mixing/loading equipment, outside and adjacent to primary and secondary containment pads. Water tanks do not require containment space, but may be stored inside fenced containment to minimize vandalism if space is available and containment volume is properly sized. However, containment volume must be sized for the water tank if it is the largest tank.

Air Gaps, Check Valves and Reduced Pressure Backflow Prevention Devices

Water lines connected to pesticide mixing and rinsate storage tank systems are vulnerable to backflow of pesticides and fertilizers into the water system. Install positive back-flow or anti-siphon protection on water systems that provide water to agricultural pesticide and fertilizer storage and handling operations.

Two accepted methods of backflow protection are the air-break separation and an approved backflow prevention assembly. Individual conventional check valves will not provide reliable backflow protection of water supply lines.

An air-break separation is a vertical air gap between the free flowing discharge end of a water supply line and the fill opening of a water storage tank. This method requires removal and replacement of the tank opening cover each time the tank is filled. An approved separation should be at least 1" or two times the diameter of the supply line measured vertically above the overflow rim of the tank. The supply line is usually fitted with a float controlled shutoff.

A reduced pressure principle backflow prevention assembly is usually approved for use between the water supply line and the pesticide handling facility. Check local regulations to be sure they are permitted.

Install check valves, Figs 53 and 54, in all rinse water or mixture handling lines. Valves for horizontal piping must be spring loaded, Fig 54. Valves in vertical piping can be gravity activated valves such as pump type foot valves, Fig 53. The spring-loaded valve can be used in any position. Check valves usually work well but are known to fail occasionally due to dirt particles or rust scale wedged between the valve and the seat. Check for good operating and proper back flow sealing prior to operating the complete system. Provide shutoff valves to isolate system components for maintenance or emergencies.

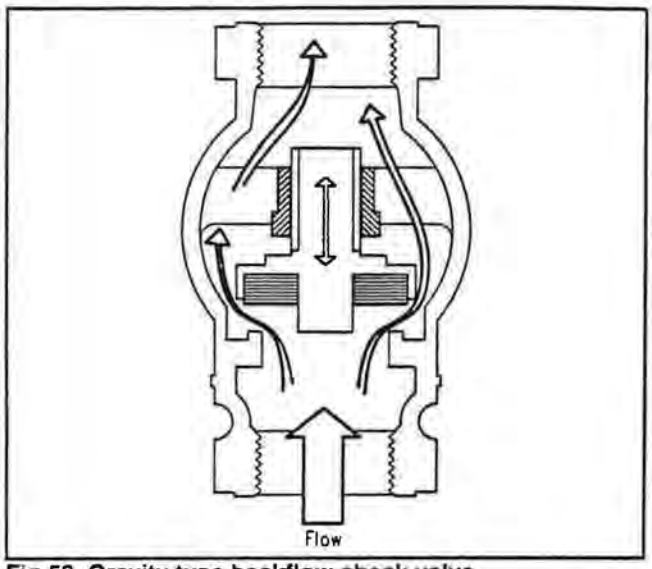


Fig 53. Gravity type backflow check valve.

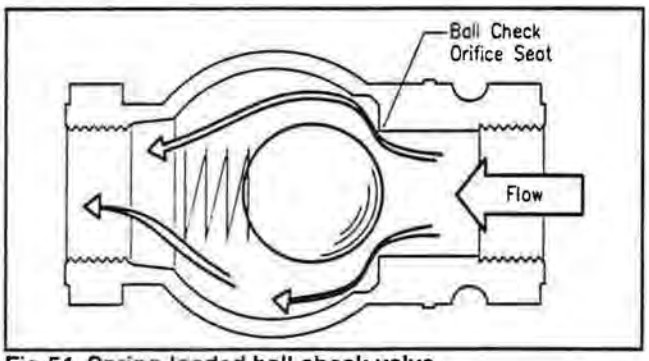


Fig 54. Spring-loaded ball check valve.

Alternative Mixing/Loading Facilities

Watertight, high-strength, reinforced concrete is the preferred material for constructing pesticide and fertilizer mixing/loading pads. Reinforced concrete with flexible chemical resistant surface sealers for pesticide and fertilizer containment, with surface sealed asphalt drives and approach ramps are suitable for use with liquid pesticides and fertilizers. Engineering designs in special circumstances may incorporate alternative materials such as prestressed or post-stressed transportable or in-place concrete modules, asphalt, steel, plastics (polyurethane, polyurea, advanced technology synthetic materials) depending on the type of pesticide and fertilizer, the use of the construction material and the facility use.

Temporary/transportable synthetic facilities

Several manufacturers market portable, flexible or inflatable walled, synthetic, drive-over mixing/loading pads that fold up for transport. Use these units only at remote or satellite operations for temporary field mixing/loading to catch drips and spills, not for permanent mixing/loading facilities. Use small AC or DC powered sump pumps to recover diluted pesticide spills and rinsate.

There are also several types of shallow, rigid-walled plastic or fiberglass trays on the market, approximately 8'x16' and 6" high, with elevated vehicle tracks or ramps that allow truck or field sprayers to be driven into the containment for loading. These are also suitable for temporary use only. There may be more development and use of portable mixing/loading systems as applicators try to reduce the risk of field spills.

Deeper (18"-24") fiberglass containment units are available that can be transported to permanent facility sites in sections for on-site assembly. They are field "seamed" or joined together to use for pesticide rinsate recycling and containment of mixing/loading equipment. Multiple units can also be incorporated for liquid fertilizer tank, pesticide storage and rinsate tank secondary containment.

Bulk Unloading Facility

Large liquid fertilizer outlets may need a separate area for receiving bulk truck shipments while the primary load-out pad is in use, Fig 7. For bulk unload facilities, use a drive pad with level side curbs or walls and floors that slope to a shallow trough at the center (6"-9" deep) which drains to a small, shallow sump to provide the required containment volume. Locate it along one side of the liquid fertilizer bulk storage containment pad. The bulk truck unloading pad should contain more holding volume than the largest transport load plus the storm water level from at least a 25-yr, 24-hr storm.

One company is now prefabricating three-section modular concrete containments for field assembly that are connected and seams are sealed on site. This may be a suitable solution for loading/unloading bulk transport trucks or liquid fertilizer applicator trucks.

Best Management Practices for Golf Course Maintenance Departments

Florida Department
of
Environmental Protection
Agricultural Source and Water Well Management Section

May, 1995

Best Management Practices for Golf Course Maintenance Departments

Introduction

The maintenance department is responsible for irrigation, mowing, fertilization, pesticide application and general upkeep of the golf course grounds. The maintenance area is where pesticides are loaded into application equipment, mowers and other pieces of equipment are serviced, and pesticides, fuel, fertilizer, and cleaning solvents are stored. This is where pollution of soil, surface water, or ground water is most likely to occur. Contamination can occur when pesticides are spilled, containers or equipment cleaned and the rinsewater dumped on the ground or discharged into surface water, or improperly cleaned containers are stockpiled or buried. Proper management of the maintenance area is an important part of responsible chemical and pesticide use. Poor handling and disposal practices at these sites can lead to serious environmental problems, expose the ownership to extensive legal liability for contamination and cleanup, including penalties and fines, and can create a poor public image for the golf course.

Management practices should be implemented at these maintenance areas that will prevent the contamination of soil, surface water, and ground water by the materials stored and handled at these sites. This document describes a number of "Best Management Practices", or BMPs, which can be put into practice through proper design and operation of the golf course maintenance facilities and equipment.

Best Management Practice Principles

The general approach to best management practices for golf course maintenance departments involves three principles :

- Isolate all potential contaminants from soil and water, and,
- Do not discharge any material other than clean stormwater onto the ground or into surface water bodies.
- Minimize irrigation, fertilizer, and pesticide use requirements through use of Integrated Pest Management and native or naturalized vegetation wherever practicable.

The first principle involves identifying all the materials stored or handled in a golf course maintenance area along with current practices that could cause environmental contamination. The next step is to develop management practices which isolate those materials from soil and water during storage, handling, and disposal. Materials that

may contaminate soil and water include pesticides, fuels, solvents, fertilizers, paints, etc. Storing these materials in covered, lockable storage areas, handling them over impermeable surfaces, cleaning up spills promptly and properly, recycling these materials where possible, and otherwise properly managing wastes will keep these materials from contaminating soil or water.

The second principle is an extension of the first. It includes preventing contamination of stormwater and eliminating the discharge of materials such as equipment wash water to ground or surface waters. Discharge to surface waters can occur directly through dumping to a lake or canal, or indirectly through discharge to a ditch, storm drain or swale. Discharge to ground water may occur by percolation through highly permeable soils, such as the fine sandy soils found in much of Florida, or by flowing into sinkholes, improperly constructed wells or other direct conduits to ground water. Discharges to surface or ground water should be eliminated through the containment and collection of equipment washwaters and proper management of the collected material. Where allowed by the local Department of Environmental Protection (DEP) District office or local authorities, stormwater, and washwater other than that from pesticide application equipment, may be discharged to a swale or retention area that does not connect to a surface water body or provide a direct conduit to the ground water.

Several specific BMPs for golf course maintenance areas are described below which comply with these two general principles. If a material handled or a maintenance practice employed at a golf course maintenance area is not addressed below, golf course managers can use these principles to devise their own BMP for that activity or material.

The third principle, that of minimizing fertilizer, pesticide and irrigation use through use of native vegetation and Integrated Pest Management directly impacts the amount of materials handled annually, reduces the annual maintenance budget, and encourages good environmental stewardship. An example of how a golf course owner or operator can obtain assistance in this area is through the Audubon Cooperative Sanctuary Program (ACSP), a progam of the Audubon Society of New York State, Inc., sponsored by the the United States Golf Association. This voluntary program offers extensive planning, guidance, and technical assistance while requiring no restrictions on the property. All decisions to act on ACSP suggestions are made by the golf course superintendent and course officials.

Specific Best Management Practices

Specific BMPs for golf course maintenance areas are listed below by the type of material handled or the maintenance activity conducted. These are summarized at the

end of this section. Sources for the references provided in each section are detailed at the end of the document.

1.0 Pesticides

1.1. Storage

Storage of pesticides should be in a lockable concrete or metal building, located at least 50 feet from other types of structures to allow fire department access. The pesticide storage area should be separate from other buildings or at least separate from areas used to store other materials, especially fertilizers. Shelving should be plastic or reinforced metal. Metal shelving should be kept painted to avoid corrosion. Wood shelving should never be used because it may absorb spilled pesticide materials.

Figure 1 Storage and Mix/load facility. Courtesy of Collier's Reserve Country Club, Naples, FL.

Floors should be seamless metal or concrete and sealed with a chemical-resistant paint. The floor should have a continuous sill to retain spilled materials and it should have no drains, although a sump may be included. Sloped ramps should be provided at the entrance to allow wheeled handcarts to move material in and out of the storage area safely. Automatic exhaust fans and an emergency wash area should be provided. Explosion proof lighting may be required. It is recommended that the light/fan switch be located outside the building so that both are on when entering or leaving the building. Personal protective equipment should be easily accessible and stored immediately outside of the pesticide storage area. An inventory of the pesticides kept in the storage building and the Material Safety Data Sheets (MSDS) for the chemicals used in the operation should be accessible on the premises, but not kept in the pesticide storage room itself (since that would make them unavailable in time of emergency).

Flammable pesticides should be separated from non-flammable. Dry bags should be raised on pallets to ensure that they do not get wet. Liquid materials should always be stored below dry materials, never above them. Labels should be clearly legible. Herbicides, insecticides and fungicides should be separated to prevent cross

contamination and minimize the potential for misapplication. (Since cross contaminated pesticides often cannot be applied in accordance with the labels, this makes it necessary to dispose of the contaminated materials as wastes. This may require the services of a consultant and hazardous waste contractor, depending on the materials involved.)

Storage building plans are available from several sources, including the Midwest Plan Service, the University of Florida Institute of Food and Agricultural Sciences (IFAS), and the United States Department of Agriculture-Soil Conservation Service (SCS).

1.2 Mixing and Loading

Loading of pesticides and mixing with water or oil dilutents should be done over an impermeable surface (such as lined or sealed concrete) so that spills can be collected and managed. Refer to the DEP publication *D.E.P. Minimum Construction and Operation Standards for Chemical Mixing Centers used for Pesticide Mixing and Loading*. Although use of a chemical mixing center (CMC) is not mandatory, adherence to the standards in the above publication is strongly encouraged.

Figure 2 Typical golf course mix/load facility. Courtesy of John's Island West, Sebastian, FL.

The purpose of a CMC is to provide a place where the operator can perform all operations where pesticides are likely to be spilled in concentrated form, or where even dilute formulations may be repeatedly spilled in the same area, over an impermeable surface. Such a surface should provide for easy cleaning and recovery of spilled materials. In its most basic form, a CMC is merely a concrete pad treated with a sealant and sloped to a liquid-tight sump where all of the spilled liquids can be recovered. For small spills, absorbents such as cat litter or sand may be used for clean up of the spill and then applied as a top dressing in accordance with the label rates, or disposed of as a waste. Solid materials, of course, can be swept up and reused.

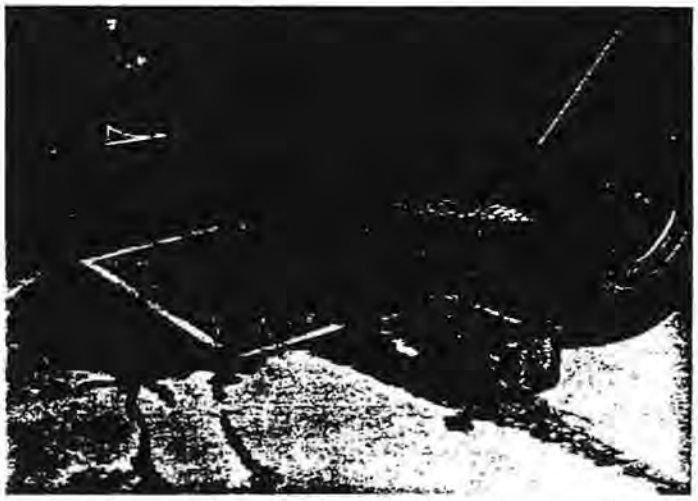


Figure 3 Spills flow into sump, not onto the ground. Courtesy of John's Island West.

Materials other than concrete, such as tough synthetics, may also be used in some cases. These materials are often used for portable CMCs where a permanent facility is not practicable.

Figures 1 through 4 depict some actual CMCs used at golf courses in Florida. Designs for CMCs are available from several sources including the Midwest Plan Service, USDA-SCS, and IFAS.

The first principle of CMC management is that any material that collects on the pad must be applied as a pesticide or disposed of as a waste. Since any water, including rain, that collects on the pad must be used as a pesticide or disposed of as a waste, a roof with a substantial overhang (minimum 30 degrees)

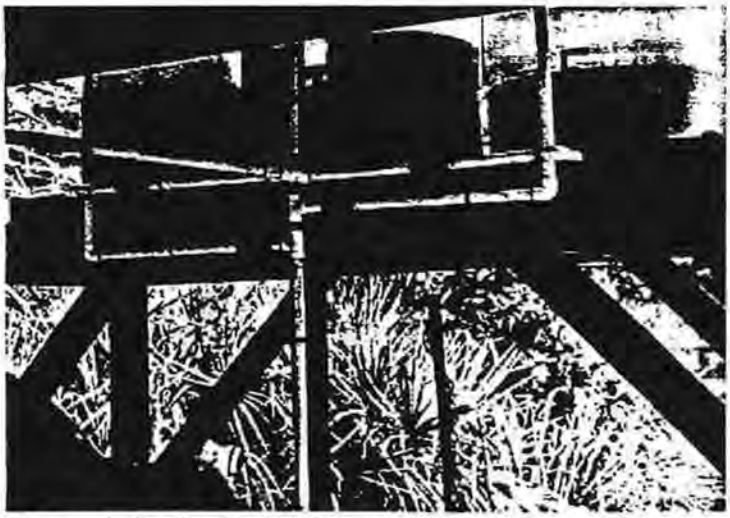


Figure 4 Tanks are used to hold rinsewater until reuse. Note separate H, I, and F tanks. Courtesy of John's Island West.

on all sides is strongly recommended to protect against windblown rainfall. In addition, most CMCs will have a provision for pumping out the sump to storage tanks, one for each general type of pesticide (ie. herbicide, insecticide, or fungicide). In this way, spills and rinsate can be saved and used as make-up water for the next time that type of material is applied. *All spills should be cleaned up immediately, and the sump should be pumped dry at the end of each day, or more frequently when materials are changed to something which is incompatible with that previously used.* Provisions should be made to clean the tires and particularly dirty areas of the equipment exterior prior to bringing it into the pad area to minimize a build up of sediment in the sump. Sediments should be removed from the sump any time materials are changed to incompatible types so that the sediments can be applied as a pesticide to the turf at less than the label rate, instead of requiring disposal as a (possibly hazardous) waste.

It is extremely important to pump out the sump and remove all sediments when changing pesticides in order to avoid disposal problems due to cross-contamination.

Small spills may also be cleaned up by using an absorbent such as cat litter and then applying the absorbent to the turf as a pesticide in accordance with the label instructions, for example, by mixing with dry fertilizer where permitted by the label. Very small operations may find this method preferable at small mixing areas where hand sprayers are loaded.

Pesticide containers should be cleaned immediately upon emptying. Containers should be properly cleaned by pressure-rinsing or triple-rinsing and the rinse water dumped into the sprayer as part of the make-up water. Non-rigid bags should be shaken clean so that all dust and material falls into the application equipment. The clean containers should be stored in a clean area, out of the rain and weather, until they can be disposed of or recycled. Storing the containers in large plastic bags is one popular option to protect the containers from collecting rainwater. *The cleaned containers should be recycled in counties where such a program is available*, or they may be taken to a landfill for disposal. If you are unable to locate information about pesticide container recycling programs in your area, you may contact the University of Florida Pesticide Information Office at (904)-392-4721.

1.3 Pesticide Application Equipment Washwater

Washwater from pesticide application equipment must be managed properly since this washwater will contain pesticide residues. The best management practice for this material is to collect it and use it as a pesticide in accordance with label instructions for that pesticide. This applies to washwater from both the inside and outside of the application equipment. Often, the easiest way to do this is to wash the equipment in the CMC. The pad should be flushed with clean water after washing equipment, and

the captured washwater should be pumped into the rinsate storage tank for use in the next application, or it may be applied to the labeled site as a dilute pesticide. The applicator is allowed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 2(ee) to apply a pesticide at *less* than the labeled rate. *The sump should then be cleaned of any sediment before another type of pesticide is handled.*

1.4 Pesticide Management Summary

The appropriate practice for the management of pesticide materials depends on the type of material. The proper practice for each type of pesticide material is listed below.

Empty containers	Transport to an approved pesticide container recycling facility after proper cleaning (pressure rinsing or triple rinsing). If no recycling facility is available, after proper cleaning dispose of as solid waste.
Excess formulation	Return to manufacturer, use as a pesticide in accordance with the label, use a hazardous waste contractor to remove and dispose.
Excess mixture	Use as a pesticide in accordance with label.
Material used to contain or collect spills or leaks	Use as a pesticide by applying to a labeled site at *or below* application rate in accordance with label directions for use. If is it necessary to dispose of the material as a waste, contact the DEP District office for information.

Application equipment washwater	Reuse as a dilutant in subsequent applications. Use as a pesticide by applying to a labeled site at *or below* application rate in accordance with label directions for use. Alternatively, treat in a permitted treatment facility, such as an evaporation/degradation system. This requires a DEP industrial wastewater permit. Contact the DEP District office for more information.

2.0 Solvents and Degreasers

2.1. Storage

Solvents and degreasers are generally flammable and toxic and should be stored in lockable metal cabinets in an area away from ignition sources and with adequate ventilation. Do not store near an area where welding or other similar activities are performed. Never store with pesticides or fertilizers. An inventory of the solvents stored and the MSDS sheets for these materials should be kept on the premises, but not in the solvent storage area. Any emergency response equipment recommended by the manufacturer of the solvent should be kept accessible to the storage area, but not inside the area itself.

2.2. Use

Solvents and degreasers should be used over a collection basin or pad that can collect all used material. The collected material should be stored in marked containers until it can be recycled or legally disposed of. There are a number of private firms that provide a service that includes solvent wash basins that drain into recovery drums. These drums are then picked up and the contents recycled or properly disposed of. Solvents should never be allowed to drain onto pavement or soil, or discharged into storm drains, sewers or septic systems, even in small amounts. Routine discharge of even small amounts of solvents can result in the accumulation of contaminants in soil or ground water over time, with serious environmental and liability consequences.

2.3. Disposal

Used solvents and degreasers should be collected, placed into containers marked with the contents and the date and then picked up by a service that will properly recycle or dispose of these materials. An IFAS publication, DSP-2, has more information on this.

3.0 Fertilizers

3.1. Storage

Fertilizers should be stored separately from solvents, fuels, and pesticides since many fertilizers are oxidants and can accelerate a fire. Ideally, fertilizer should be stored in a concrete building with a metal or other-flame resistant roof.

Care must be taken when storing fertilizer to prevent contamination of nearby ground and surface water. Fertilizers should always be stored in an area that is protected from rainfall. Storage of dry bulk materials on a concrete or asphalt pad may be acceptable if the pad is adequately protected from rainfall and from water flowing across the pad. Secondary containment of liquid fertilizer tanks larger than 550 gallons is addressed in 62-762 Florida Administrative Code (F.A.C.). Even where not required, the use of secondary containment is a best management practice.

3.2. Loading

Areas where fertilizers are loaded into application equipment should be protected from rainfall and spilled material cleaned up immediately. Collected material can be applied to the golf course as a fertilizer. If rainfall protection is not available or practical for the loading area, thorough cleaning is essential. Cleaning of the area can be through dry collection methods such as sweeping or vacuuming, or washing down the loading area. Any washwater generated would have to be collected and applied to the course. Discharge of this washwater to storm drains or septic systems is illegal.

4.0 Grass Clippings

Grass clippings removed from mowers should be handled separately from other waste materials and equipment washwater. Many manufacturers now recommend the use of compressed air to blow off equipment. This is more protective of hydraulic seals on the equipment, eliminates the washwater, and produces dry clippings that are easy to

handle. Another method is to clean mowers over a separate concrete or asphalt pad that allows water to run off onto turf or soil, but not into a surface water body or canal. *The CMC should not be used for this purpose, in order to keep clippings and other debris from becoming contaminated with pesticide residue.* The grass clippings will collect on the pad. After drying on the pad, the clippings can be collected and composted or spread in a wooded area or rough.

5.0. Used oil, antifreeze, and lead-acid batteries

Used oil and antifreeze should be collected in marked containers and offered for recycling. *In Florida, recycling is the only legal option for handling used oil. Antifreeze must be recycled or disposed of as a hazardous waste.* There are commercial services that will collect this material. The IFAS publication DSP-2 has information on this subject.

Lead-acid storage batteries, such as used in golf carts and for starting other equipment, are classified as special wastes and must be recycled. All lead-acid battery retailers are required by law to accept returned batteries for recycling. Used acid from these batteries contains high levels of lead and must be disposed of as hazardous waste, unless contained within a battery being recycled.

6.0. Gasoline, Diesel fuel

Fuel storage tanks should be in compliance with DEP storage tank regulations (Chapter 62-761 F.A.C. for underground tanks and 62-762 F.A.C. for aboveground tanks). Call the nearest DEP District office for information on these requirements. In general, underground tanks with volumes over 110 gallons and above-ground tanks with volumes over 550 gallons must be registered and located within secondary containment systems.

Figure 5 Fueling area. Note the continuous curb. Courtesy of John's Island West.

Fuel dispensing areas should be designed and managed to prevent soil and water contamination. Concrete or

asphalt surfaces should be provided near the fuel pumps. The pumps should not be located where a spill or leak would cause fuel to flow onto the ground or into a storm drain or surface water body.

Secondary containment structures are required for above-ground fuel tanks over 550 gallons. The best practice is for these structures to be roofed to keep out rainfall. Building the containment structure so that it is tall rather than wide will also help with minimizing rainfall accumulation by reducing the amount of surface area of the structure. If the structure is not roofed, then water that accumulates must be managed properly. *If the structure has a discharge port, make certain that it is closed and locked except when uncontaminated rain water is to be drained. The best option is to have* ***no*** *discharge port and to use a portable sump pump to remove water when it is necessary. A discharge port invites the possibility that it may be left open when a leak occurs.*

The first line of management is to minimize the need to discharge. If the containment volume is adequate, evaporation of accumulated rainfall will often be sufficient. Critical levels at which discharge is considered should be established for each facility and the levels marked on the containment wall. This will prevent frequent and unnecesary discharge of small volumes.

The water to be discharged must always be checked for contamination. This can be done by looking for an oil sheen, observing any smell of fuel or oil, or through the use of commercially available test kits. *Never discharge any water that is contaminated.* Contaminated water must be treated on site using commercially available treatment systems, or discharged to an off-site treatment system directly or by being transported by tanker truck to a treatment facility. Never discharge to a sewer system without written permission from the utility. For more information on treatment options, contact the appropriate DEP District office.

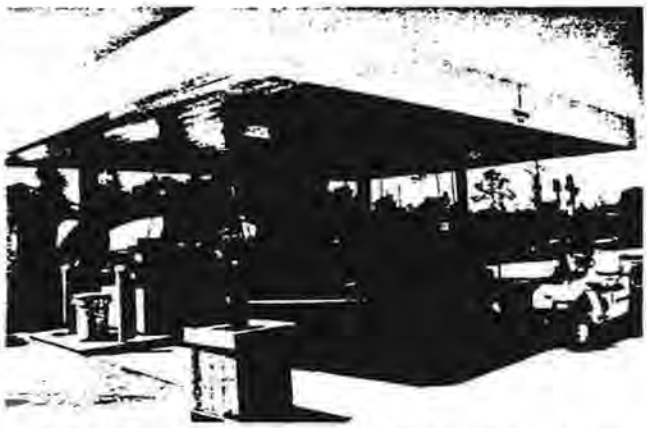


Figure 6 Fueling and general equipment wash station. Courtesy of Collier's Reserve.

If the water is not contaminated, it can be discharged to a stormwater system, retention area, or grassed swale. Do not discharge it during a rain event, since the added flow may cause it to run-off to a sensitive area.

7.0. General Equipment Washing

Washwater generated from the cleaning of equipment other than pesticide application equipment does not have to be collected and applied to the course. This washwater must not, however, be discharged to surface water either directly or through ditches, storm drains or canals. Equipment washwater can contain soaps, fertilizer residues, solids, and lubricating oil residues. This washwater should not contain solvents and degreasers. These materials should be used in a separate operation. See section 2.0 above for information on solvents and degreasers.

BMPs for washwater from other than pesticide application equipment depend on the quantity generated. If quantities less than 500 gallons per day are generated, the DEP District office may allow the washwater to drain to a grassed retention area or swale, as long as no direct contact with a surface water body occurs. Discharge to a septic system is not legal.

Figure 7 Wash water recycling system. Courtesy of Collier's Reserve.

For larger quantities, the options are:

- use of a washwater recycling system, or
- discharge to a treatment system that has been permitted under DEP industrial wastewater rules, or
- discharge to a domestic sewer system (with written permission from the utility).

If you decide to use a wash water recycling system, care must be taken to operate it properly. *Do not clean pesticide application equipment using these systems.* The introduction of pesticide residues into these systems can result in contamination of the systems and high costs for disposal of contaminated filters and sludges.

If you generate more than 100 gallons per day, you should contact the DEP District Office that is responsible for your area. In many cases, the District office will allow discharges up to 500 gallons per day without a permit provided that the washwater is not going to a surface water body or other sensitive area.

For all quantities generated, the amount of detergents used should be minimized. The amount of water used to clean equipment can be minimized by using spray nozzles that generate high pressure streams of water using low volumes.

Oil/water separators can be used, but must be managed properly to avoid problems. First, *do not wash equipment used to apply pesticides on pads using oil/water separators*, since the pesticide residues will contaminate the oil that is salvaged. Second, be aware that the oil collected in these systems may be classified as a hazardous waste, depending on its composition, making disposal expensive. Oil water separators are not necessary unless the water from the system is to be reclaimed for some particular end use, or large volumes of water are generated and the industrial wastewater permit or receiving utility requires such a system.

8.0 Equipment Storage

Equipment used to apply pesticides and fertilizers should be stored in an area protected from rainfall. Rain can wash pesticide and fertilizer residues from the exterior of this equipment and these residues can contaminate soil or water. Pesticide application equipment can be stored in the Chemical Mixing Center, but fertilizer application equipment should be stored separately.

9.0 Summary

Material or Activity to be Managed	Best Management Practice
Pesticide Mixing and Loading	Chemical Mixing Center and proper operation and maintenance. See summary in section 1.4.
Solvents from equipment washing	Separate solvent collection systems such as solvent wash baths.
Soaps, other non-solvent materials used to wash equipment, oils washed off of vehicles	For less than 500 gallons per day - Washwater areas that allow water to seep into grassed retention areas or swales not connected to surface water. For more than 500 gallons per day - Industrial wastewater treatment system, water recycling systems (provided no pesticide residues enter system), or, with written permission, hook-ups to waste water treatment plants.
Fertilizer storage	Covered fertilizer storage areas with curbs or berms to prevent water from entering. Secondary containment should be used even where not required.
Pesticide storage	Covered, locking concrete or steel buildings with adequate ventilation and metal shelving, no floor drains, and a berm or sill to contain spills.
Used oil, antifreeze	Collection and recycling.
Gasoline, diesel fuel	Compliance with DEP regulations for above-ground and below-ground tanks, closing of stormwater drains in immediate vicinity of fueling point.

Additional Sources of Information

Agricultural Engineering Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida, 32611. Phone: (904)-392-2468.

Audubon Society of New York State, Inc. 46 Rarick Road, Selkirk, NY 12158. Phone: (518)-767-9051

Florida Department of Environmental Protection, Agricultural Source and Water Well Management Section, MS-3515, 2600 Blair Stone Rd., Tallahassee, Florida, 32399-2400. Phone: (904)-488-3601.

Golf Course Superintendents Association of America. 1421 Research Park Drive, Lawrence, KS 66049 Phone: (913)-841-2240.

Midwest Plan Service, 122 Davidson Hall, Iowa State University, Ames Iowa 50011-3080. Phone: (515)-294-4337.

Pesticide Information Office, University of Florida Institute of Food and Agricultural Sciences, Gainesville, Florida, 32611. Phone (904)-392-4721

University of Florida Institute of Food and Agricultural Sciences, Palm Beach County Cooperative Extension Service. 2976 State Road 15, Belle Glade, Fl. 33430. Phone: (407)-996-1655.

United States Department of Agriculture-Soil Conservation Service. P.O. Box 141510, Gainesville, FL 32605. Phone: (904)-338-9555.

United States Golf Association, P.O. Box 708, Far Hills, NJ 07931, Phone: (908)-234-2300

Publications

Audubon Cooperative Sanctuary Program for Golf Courses. Audubon Society of New York State, Inc. 46 Rarick Road, Selkirk, NY 12158. Phone: (518)-767-9051

Designing Facilities for Pesticide and Fertilizer Containment. MWPS-37. MidWest Plan Service.

Disposal Options for Agricultural Wastes. DSP-2. IFAS Palm Beach County Cooperative Extension Service.

Conference Proceedings from the National Symposium on Pesticide and Fertilizer Containment: Design and Management. MWPS-C1. MidWest Plan Service.

Conference Proceedings from the National Symposium on Pesticide and Fertilizer Containment: Design and Management 2. MWPS-C2. MidWest Plan Service.

Minimum Construction and Operation Standards for Chemical Mixing Centers used for Pesticide Mixing and Loading. Florida Department of Environmental Protection, Agricultural Source and Water Well Management Section

FDEP District Offices

Northwest (Pensacola)	(904)-444-8300
Northeast (Jacksonville)	(904)-448-4300
Central (Orlando)	(407)-325-2290
Southeast (W. Palm Beach)	(407)-433-2650
Southwest (Tampa)	(813)-744-6100
South (Ft. Myers)	(813)-332-6975
FDEP Agricultural Source and Water Well Management Section (Tallahassee)	(904)-488-3601

Acknowledgements

The Florida Department of Environmental Protection extends its gratitude to the following for their assistance and advice in producing this document. The staff and management of Collier's Reserve and St. John's Island West golf courses, the Audubon Society of New York State, Inc., the United States Golf Association, the Golf Course Superintendents Association of America, and the Florida Department of Agriculture and Consumer Services.

APPENDIX IX

Audubon International Signature Program

Audubon International

Late in the 1980s, Audubon International created the Audubon Cooperative Sanctuary System, a program for schools, backyards, corporate and business properties, and golf courses. As enthusiasm, support, and visibility increased for these programs, requests for environmental assistance surfaced from a different area -- landowners of properties that were in the planning and development stages. In response to that need, The Audubon Gold Signature Program was created to provide a comprehensive, integrated approach to environmental planning for proposed developments.

We recognize that working with nature, and not against it, makes both environmental and economic sense. Working with nature means making sound decisions about how to manage the land. It means finding out what will work with the land given its physical and chemical characteristics. It also means weaving nature into our vision of a landscape.

In order to attain our mission, Audubon International has created and manages programs that promote biological diversity, ecosystem management, ecological restoration, and sustainability. Through policy development and implementation, environmental education, conservation assistance, research, and environmental planning, Audubon International promotes stewardship action and positive environmental change.

Audubon International works with people in all walks of life and with all types of properties--backyards, a variety of corporate and business properties, school properties, golf courses, and other types of managed lands, as well as land that is targeted for development--to search for continuous environmental improvement in economically feasible ways.

Principles of Sustainability

The essence of the Audubon Signature Program is sustainability – using natural resources, without depleting them, in ways that will support human activity. Audubon International believes that progress must be redefined and become synonymous with sustainable. To that end, Audubon International created a set of principles to guide land management toward better compatibility and harmony with the environment. This guidance document is called the *Audubon Principles for Sustainable Resource Management*. In addition, the *Landscape Restoration Handbook*, written under the direction of Audubon International, includes the "Principles for Ecological Restoration" and "Principles for Natural Landscaping." These three documents provide the foundation for Audubon's philosophy of sustainable development and sustainable resource management.

The following list of principles establishes the foundation for Audubon International's belief in a more sustainable system of resource management.

We support resource management decisions that have the least impact on wildlife, water, and the ecosystems that sustain life.

- We support the use of renewable resources.
- When resources are not renewable, we support reducing, minimizing, or eliminating their use.
- We support human activities that identify and enhance existing resources as well as the exploration of new resources and technologies that may be used by future generations to maximize the positive impacts on the overall quality of the environment.
- We support human activities that conserve water and continually enhance water quality on a global basis.
- We support human activities and land use that sustains ecosystems and enhances biological diversity.
- We support resource management within natural limitations and opportunities defined by ecosystems and geographic boundaries.

Goals of Audubon International Programs

The primary goals of Audubon International are to conserve and enhance biological diversity (bio-diversity), and promote sustainability, ecosystem management, and ecological restoration.

Bio-diversity is the variety of life in all its forms and processes including the diversity of genes, populations, natural community types, and ecosystems. Because bio-diversity increases ecosystems' productivity and long term growth, it is the cornerstone of defending and improving the environment. In order to identify and protect areas of rich biological diversity, we must work with all types of landowners to provide information, encouragement, and recognition for developing and managing land in ways that are sensitive to bio-diversity.

Bio-diversity is the variety of life in all its forms and processes.

Sustainability means using natural resources, without depleting them, in ways that will support human activity. It means living in a way that does not negatively impact future generations. Sustainability is at least partially achieved when natural resources can be conserved, recycled, reused, or obtained from renewable resources. In addition, Audubon International believes that we must use current technology and continue to support research and development to provide sustainable alternatives for the future.

Sustainability means using natural resources indefinitely without depleting

Ecosystem management is a method of managing the natural resources on earth.

Ecosystem management is a method of managing the earth with the recognition that all land, water, and natural resources are interconnected. Ecosystem management focuses on the interrelationship between an ecological community and its environment. It is based on the premise that focusing on the management of a single resource (such as a tree, a bird, or a stream) may be a less effective way of addressing the health of the entire system that supports life on earth.

Ecological restoration and natural landscaping contribute to a sustainable world in a variety of ways including: creating a healthier mosaic of land uses; enhancing the diversity of plants and animals; improving water quality; minimizing erosion; creating lower maintenance landscapes thus reducing our dependency on water and chemical use; and promoting the concept that "natural" is a beautiful and positive part of our landscape.

Ecological restoration is an effort to return degraded lands and waters to their natural state.

ATTACHMENT V

DEPARTMENT OF TRANSPORTATION

Memo

To: Beth Workman, Principal Planner

From: Lili Wu, Principal Planner

Date: Feb. 28, 2025

Subject: Pelican Landing MPD (DCI2023-00052) Transportation-Related Analysis

Proposed Development

This application requests to rezone 430+/- acres of land from CPD/RPD to a unified Mixed Use Planned Development (MPD) within the Pelican Landing DRI. The applicant proposes to eliminate 147,000 sf of commercial uses, 100,389 sf of office uses and one golf court hole and increase 488 residential dwelling units and 318 hotel rooms.

Site Location

The subject site is located north of Coconut Road and west of US 41 adjacent to the City of Bonita Springs and the Village of Estero.

Site Access

Access to the subject site will continue to be maintained from Coconut Road.

Coconut Road is a major collector maintained by County.

Trip Generation Review

There will be to reduce 264 trips per hour in the trip generation due to the requested change in this rezoning application.

Since this rezoning application will reduce the traffic from the development, no further traffic analysis is required.

Deviation Determination

Lee County DOT have no objection to the Deviation #14 since the proposed access on Coconut Road is an existing driveway and aligned with Via Veneto Blvd to the south.

PELICAN LANDING MPD
STORMWATER MANAGEMENT PLAN NARRATIVE

LDC Section 34-373(b)(1)
a. The runoff characteristics of the property in its existing state;

Portions of the property have been previously cleared and an existing stormwater management system is in place for the golf course. Existing runoff currently discharges offsite.

b. In general terms, the drainage concept proposed, including the outfall to canals or natural water bodies including how drainage flow from adjacent properties will be maintained;

Conceptually, the stormwater management system for the redevelopment areas will provide an on-site water detention system through a series of dry detention areas and stormwater management lakes. Storm water runoff will be treated and attenuated on site prior to discharging into wetlands. The anticipated outfall will be subject to SFWMD Environmental Resource Permitting. The proposed water management system will be designed in accordance with the SFWMD Applicants Handbook and Lee County Land Development Code.

Existing flows from halfway creek are not proposed to be changed and are not incorporated into the surface water system within the development area. Existing flow patterns are demonstrated on the MCP.

Existing drainage from the Hyatt flows into existing lakes and no changes or impacts to those connections are proposed. This existing drainage pattern is addressed in ERP permit #36-03813-P.

Existing drainage from other adjacent communities are not incorporated into the surface water system and a perimeter berm also prevents discharge into adjacent communities.

c. The retention features (including existing natural features) that will be incorporated into the drainage system and the legal mechanism which will guarantee their maintenance;

The existing stormwater management system will be incorporated into the overall drainage system for the MPD. On-site attenuation per SFWMD requirements will be provided through the expansion of the lake system into the redevelopment tracts. Perimeter berms will be located between the wetland areas and development areas to ensure that historic wetland connections and hydroperiods are maintained. The applicant will prepare and obtain an ERP approval prior to or concurrently with the Local Development Order. The ERP modification will include required maintenance provisions.

d. How existing natural features will be preserved. Include an estimate of the ranges of existing and post development water table elevations, where appropriate;

The RPD includes existing wetland and upland preserve areas. These areas are demonstrated in the Master Concept Plan and will ensure preservation of the natural features.

e. If the property is subject to seasonal inundation or subject to inundation by a stream swollen by the rains of a 100-year storm event, indicate the measures that will be taken to mitigate the effects of expectable flooding.

Seasonal inundation is currently discharged off site. The proposed surface water management plan will treat and attenuate stormwater runoff from development areas on-site prior to discharging into on-site wetlands.

ATTACHMENT X

PELICAN LANDING MPD
PROTECTED SPECIES SURVEY

Revised April 2024

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Project No. 23LBR4024

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INTRODUCTION

This report documents the Lee County protected species survey conducted by Passarella & Associates, Inc. (PAI) within the Pelican Landing Mixed Planned Development (MPD) (Project). The Project includes an inactive portion of the Raptor Bay golf course, golf course areas under construction, future development areas, and existing preserve areas previously placed under conservation easement (i.e., South Florida Water Management District (SFWMD) conservation area and Eco Park). The survey was conducted to meet the requirements of the Lee County Land Development Code (LDC) Chapter 10, Article III, Division 8 (Protection of Habitat) Standards.

The Project is located in Sections 5, 6, 7, and 8; Township 47 South; Range 25 East; Lee County (Figure 1). The Project totals 430.93± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41, and 2.28± miles south of Corkscrew Road. The surrounding land uses and features include the West Bay Club to the northeast; Coconut Road, the Hyatt Coconut Point Resort, and undeveloped land to the south; El Dorado Acres residential development to the east; and Estero Bay to the west.

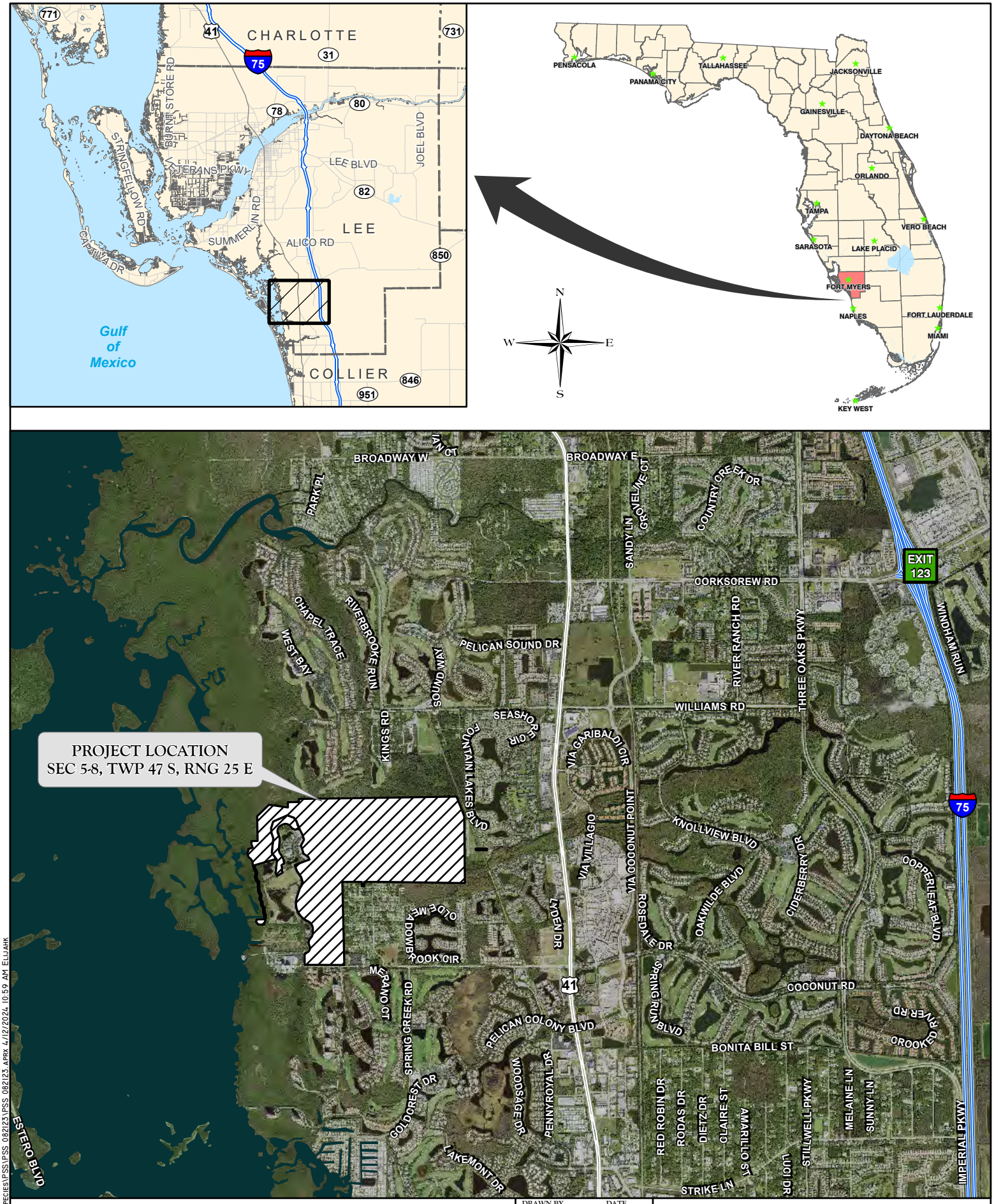
LAND USES AND VEGETATION ASSOCIATIONS

Vegetation and land cover mapping for the Project was initially conducted by PAI in June 2020, August 2021, and May 2022 using Lee County 2019 and 2021 rectified aerials. Vegetation mapping was subsequently updated by PAI in July 2023 to reflect current site conditions. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD Map 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial photograph of the property with FLUCFCS overlay is provided as Appendix A.

A total of 25 vegetative associations and land uses (i.e., FLUCFCS codes) were identified within the Project site. The Inactive Golf Course (FLUCFCS Code 180) and Golf Course Under Construction (FLUCFCS Code 182) combined occupy 159.32± acres (approximately 43 percent) of the Project site. The Project contains one rare and unique upland habitat type: Scrubby Pine Flatwoods, Disturbed (FLUCFCS Codes 4169 and 4169 E1). Table 1 provides a breakdown of the FLUCFCS codes by acreage.

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage (±)	Percent of Total
180	Inactive Golf Course	35.92	9.7
182	Golf Course Under Construction	123.40	33.3
411	Pine Flatwoods	7.46	2.0



DRAWN BY	DATE
E.K.	8/22/23
REVIEWED BY	DATE
P.S.	8/22/23
REVISED	DATE

FIGURE 1. PROJECT LOCATION MAP
PELICAN LANDING MPD

Consulting Ecologists
PASSARELLA & ASSOCIATES INC

J:\2023\23.BN.024\SPECIES\PSS\PSS 082123\PSS 082123.APRX 4/12/2024 10:59 AM ELIJAHK

Table 1. (Continued)

FLUCFCS Code	Description	Acreage (±)	Percent of Total
4119	Pine Flatwoods, Disturbed	16.56	4.5
4119 E1	Pine Flatwoods, Disturbed (0-24% Exotics)	8.10	2.2
4119 E2	Pine Flatwoods, Disturbed (0-24% Exotics)	0.65	0.2
4119 E3	Pine Flatwoods, Disturbed (50-75% Exotics)	4.17	1.1
4119 E4	Pine Flatwoods, Disturbed (76-100% Exotics)	2.00	0.5
4169	Scrubby Pine Flatwoods, Disturbed	56.81	15.3
4169 E1	Scrubby Pine Flatwoods, Disturbed (0-24% Exotics)	0.43	0.1
4241	Melaleuca, Hydric	2.76	4.5
427	Live Oak	0.12	<0.1
4279	Live Oak, Disturbed	0.26	0.1
4279 E1	Live Oak, Disturbed (0-24% Exotics)	4.50	1.2
4349	Hardwood/Conifer Mixed, Disturbed	0.33	0.1
4349 E1	Hardwood/Conifer Mixed, Disturbed (0-24% Exotics)	1.17	0.3
439	Mixed Exotics	0.57	0.2
525	Shallow Pond	25.34	6.8
617	Mixed Wetland Hardwoods	13.31	0.4
621	Cypress	28.36	7.6
630	Mixed Wetland Forest	1.41	0.4
6309	Mixed Wetland Forest, Disturbed	27.19	7.3
641	Freshwater Marsh	8.10	1.7
740	Disturbed Land	1.92	0.5
N/A	SFWMD Conservation Area	60.00	13.9
Totals		**430.93**	**100.0**

Inactive Golf Course (FLUCFCS Code 180)
This land use type includes inactive portions of the Raptor Bay golf course.

Golf Course Under Construction (FLUCFCS Code 182)
This land use type includes the Raptor Bay golf course renovation under construction.

Pine Flatwoods (FLUCFCS Code 411)
The canopy of this habitat type includes slash pine (*Pinus elliottii*) and scattered cabbage palm (*Sabal palmetto*). The sub-canopy contains slash pine, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), muscadine grapevine (*Vitis rotundifolia*), climbing cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia (*Acacia auriculiformis*). The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (FLUCFCS Code 4119)
This habitat type is similar to FLUCFCS Code 411 but with more open areas resulting from recent exotic removal activities.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)
This habitat type is similar to FLUCFCS Code 4119, but with zero to 24 percent melaleuca coverage in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)
This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)
This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)
The canopy of this habitat type is similar to FLUCFCS Code 4119 E3, but with 76 to 100 percent melaleuca in the canopy and sub-canopy.

Scrubby Pine Flatwoods, Disturbed (FLUCFCS Code 4169)
The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Q. myrtifolia*), Chapman's oak (*Q. chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), and saw palmetto. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)
This habitat type is similar to FLUCFCS Code 4169, but contains zero to 24 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)
The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak (FLUCFCS Code 427)
The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Live Oak, Disturbed (FLUCFCS Code 4279)
This habitat type is similar to FLUCFCS Code 4279 but with more open areas resulting from recent exotic removal activities.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)
This habitat type is similar to FLUCFCS Code 427, but with zero to 24 percent earleaf acacia in the canopy and sub-canopy.

Hardwood/Conifer Mixed, Disturbed (FLUCFCS Code 4349)
The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)
This habitat type is similar to FLUCFCS Code 4349 but contains zero to 24 percent Brazilian pepper in the canopy and sub-canopy.

Mixed Exotics (FLUCFCS Code 439)
The canopy of this habitat type contains melaleuca, Brazilian pepper, and scattered cabbage palm. The sub-canopy consists primarily of Brazilian pepper with scattered cabbage palm, myrsine, and laurel oak (*Quercus laurifolia*). The ground cover contains muscadine grapevine.

Shallow Pond (FLUCFCS Code 525)
This man-made surface water feature has an open canopy and sub-canopy. The edges of the surface water features contain spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods (FLUCFCS Code 617)
The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Hymenachne hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Cypress (FLUCFCS Code 621)
The canopy of this habitat type includes bald cypress and scattered cabbage palm. The sub-canopy contains bald cypress, wax myrtle, buttonbush, and pond apple. The ground cover contains swamp fern, sawgrass (*Cladium jamaicense*), and little blue maidencane (*Amphicarpum muehlenbergianum*).

Mixed Wetland Forest (FLUCFCS Code 630)
The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (FLUCFCS Code 6309)
This habitat type is similar to FLUCFCS Code 630 but with more open areas resulting from recent exotic removal activities.

Freshwater Marsh (FLUCFCS Code 641)
The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)
The canopy of this habitat type is mostly open with live oak, cabbage palm, and Java plum (*Syzygium cumini*) along the margins. The sub-canopy is mostly open with Brazilian pepper, saw palmetto, and earleaf acacia along the margins. The ground cover includes bahiagrass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), spermacoce (*Spermacoce verticillata*), ragweed (*Ambrosia artemisiifolia*), carpetweed (*Phyla nodiflora*), and smutgrass (*Sporobolus indicus*).

METHODOLOGY AND DISCUSSION

Surveys for protected species are based on the presence of specific vegetation associations and habitat types outlined in the Lee County LDC. The frequency of transects performed in these habitats was designed to meet the 80 percent minimum coverage requirement instituted by the City and Lee County LDC. Table 2 outlines those protected species that may inhabit or utilize a particular vegetation association.

Table 2. Potential Protected Species by Habitat Type

FLUCFCS Code	Description	Potential Protected Species
180*	Inactive Golf Course	N/A
182*	Golf Course Under Construction	American alligator (*Alligator mississippiensis*)
		Gopher tortoise (*Gopherus polyphemus*)
		Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
411	Pine Flatwoods	Beautiful pawpaw (*Deeringothamnus pulchellus*)
		Big Cypress fox squirrel (*Sciurus niger avicennia*)
		Eastern indigo snake (*Drymarchon corais couperi*)
		Fakahatchee burmannia (*Burmannia flava*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida coontie (*Zamia floridana*)
		Florida panther (*Puma concolor coryi*)
		Gopher frog (*Rana capito*)
		Gopher tortoise (*Gopherus polyphemus*)
		Red-cockaded woodpecker (*Picoides borealis*)
		Satinleaf (*Chrysophyllum olivaeforme*)
		Southeastern American kestrel (*Falco sparverius paulus*)

Table 2. (Continued)

FLUCFCS Code	Description	Potential Protected Species
4119 4119 E1 4119 E2 4119 E3 4119 E4*	Pine Flatwoods, Disturbed (0-100% Exotics)	Beautiful pawpaw (*Deeringothamnus pulchellus*)
		Big Cypress fox squirrel (*Sciurus niger avicennia*)
		Eastern indigo snake (*Drymarchon corais couperi*)
		Fakahatchee burmannia (*Burmannia flava*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida coontie (*Zamia floridana*)
		Florida panther (*Puma concolor coryi*)
		Gopher frog (*Rana capito*)
		Gopher tortoise (*Gopherus polyphemus*)
		Red-cockaded woodpecker (*Picoides borealis*)
		Satinleaf (*Chrysophyllum olivaeforme*)
		Southeastern American kestrel (*Falco sparverius paulus*)
4169 4169 E1	Scrubby Pine Flatwoods, Disturbed (0-49% Exotics)	Gopher tortoise (*Gopherus polyphemus*)
4241*	Melaleuca, Hydric	N/A
427	Live Oak	Eastern indigo snake (*Drymarchon corais couperi*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Hand adder's tongue fern (*Ophioglossum palmatum*)
		Simpson's stopper (*Myrcianthes fragrans* var. *simpsonii*)
		Twisted airplant (*Tillandsia flexuosa*)
4279 4279 E1	Live Oak, Disturbed (0-24% Exotics)	Eastern indigo snake (*Drymarchon corais couperi*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Hand adder's tongue fern (*Ophioglossum palmatum*)
		Simpson's stopper (*Myrcianthes fragrans* var. *simpsonii*)
		Twisted airplant (*Tillandsia flexuosa*)
4349 4349 E1	Hardwood/Conifer Mix, Disturbed (0-24% Exotics)	N/A
439*	Mixed Exotics	N/A
525	Shallow Pond	American alligator (*Alligator mississippiensis*)
		Everglades mink (*Mustela vison evergladensis*)
		Limpkin (*Aramus guarauna*)
		Little blue heron (*Egretta caerulea*)
		Reddish egret (*Egretta rufescens*)
		Roseate spoonbill (*Platalea ajaja*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)

Table 2. (Continued)

FLUCFCS Code	Description	Potential Protected Species
617	Mixed Wetland Hardwoods	Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Gopher tortoise (*Gopherus polyphemus*)
		Limpkin (*Aramus guarauna*)
		Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)
621	Cypress	American alligator (*Alligator mississippiensis*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Limpkin (*Aramus guarauna*)
		Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)
		Wood stork (*Mycteria americana*)
630	Mixed Wetland Forest	American alligator (*Alligator mississippiensis*)
		Everglades mink (*Mustela vison evergladensis*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Gopher frog (*Rana capito*)
		Limpkin (*Aramus guarauna*)
		Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)
		Wood stork (*Mycteria americana*)
6309	Mixed Wetland Forest, Disturbed	American alligator (*Alligator mississippiensis*)
		Everglades mink (*Mustela vison evergladensis*)
		Florida black bear (*Ursus americanus floridanus*)
		Florida panther (*Puma concolor coryi*)
		Gopher frog (*Rana capito*)
		Gopher tortoise (*Gopherus polyphemus*)
		Limpkin (*Aramus guarauna*)
		Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)
		Wood stork (*Mycteria americana*)
641	Freshwater Marsh	American alligator (*Alligator mississippiensis*)
		Everglades mink (*Mustela vison evergladensis*)
		Everglade snail kite (*Rostrhamus sociabilis plumbeus*)
		Florida sandhill crane (*Grus canadensis pratensis*)
		Limpkin (*Aramus guarauna*)

Table 2. (Continued)

FLUCFCS Code	Description	Potential Protected Species
641	Freshwater Marsh (Continued)	Little blue heron (*Egretta caerulea*)
		Snowy egret (*Egretta thula*)
		Tri-colored heron (*Egretta tricolor*)
740*	Disturbed Land	N/A

*Habitat surveyed for the species noted, although not required per the LDC

PAI conducted protected species surveys on June 24, 2020; August 26 and 31, 2021; September 1, 2, 8, and 9, 2021; May 3, 2022; and July 25, 2023. Weather conditions during the survey periods were seasonal with partly cloudy to cloudy skies, temperatures ranging from the low 70s to the low 90s, and winds ranging between zero and 14 miles per hour.

The survey utilized linear belt and meandering pedestrian transects per the WilsonMiller, Inc. methodology. Visibility on the surveyed habitats varied due to the density of vegetation. A summary of the limits of visibility, total length of transects walked, and the percent coverage by habitat type is provided in Table 3. An aerial with the FLUCFCS overlay and approximate locations of walked transects is provided as Appendix B.

Table 3. Summary of Habitat Coverage

FLUCFCS Code	Description	Total Area (Acres ±)	Transect Length (Feet ±)	Average Visibility (Feet ±)*	Percent Coverage
180	Inactive Golf Course	35.92	14,082	50	90
182	Golf Course Under Construction	123.40	48,377	50	90
411	Pine Flatwoods	7.46	4,178	35	90
4119	Pine Flatwoods, Disturbed	16.56	9,274	35	90
4119 E1	Pine Flatwoods, Disturbed (0-24% Exotics)	8.10	4,536	35	90
4119 E2	Pine Flatwoods, Disturbed (25-49% Exotics)	0.65	481	25	85
4119 E3	Pine Flatwoods, Disturbed (50-75% Exotics)	4.17	4,844	15	80
4119 E4	Pine Flatwoods, Disturbed (76-100% Exotics)	2.00	3,485	10	80
4169	Scrubby Pine Flatwoods, Disturbed	56.81	30,049	35	85
4169 E1	Scrubby Pine Flatwoods, Disturbed (0-24% Exotics)	0.43	227	35	85
4241	Melaleuca, Hydric	2.76	1,277	40	85
427	Live Oak	0.12	56	40	85

Table 3. (Continued)

FLUCFCS Code	Description	Total Area (Acres ±)	Transect Length (Feet ±)	Average Visibility (Feet ±)*	Percent Coverage
4279	Live Oak, Disturbed	0.26	120	40	85
4279 E1	Live Oak, Disturbed (0-24% Exotics)	4.50	2,083	40	85
4349	Hardwood/Conifer Mixed, Disturbed	0.33	144	45	90
4349 E1	Hardwood/Conifer Mixed, Disturbed (0-24% Exotics)	1.17	510	45	90
439	Mixed Exotics	0.57	662	15	80
525	Shallow Pond	25.34	9,382	50	85
617	Mixed Wetland Hardwoods	13.31	7,040	35	85
621	Cypress	28.36	12,354	45	90
630	Mixed Wetland Forest	1.41	870	30	85
6309	Mixed Wetland Forest, Disturbed	27.31	25,280	20	85
641	Freshwater Marsh	8.10	5,293	30	90
740	Disturbed Land	1.92	883	45	95

*Average visibility to each side of transect

SURVEY RESULTS

Protected species surveys were conducted on the Project site June 24, 2020; August 26 and 31, 2021; September 1, 2, 8, and 9, 2021; May 3, 2022; and July 25, 2023. A total of 1 American alligator (*Alligator mississippiensis*), 424 gopher tortoise (*Gopherus polyphemus*) burrows, 3 gopher tortoises, 3 little blue herons (*Egretta caerulea*), and 2 snowy egrets (*Egretta thula*) were observed on the Project site during the protected species survey. The gopher tortoise and little blue heron are listed as threatened by the Florida Fish and Wildlife Conservation Commission (FWCC) (2021). The American alligator is listed as threatened by the FWCC due to similarity of appearance to the American crocodile (*Crocodylus acutus*). The snowy egret was delisted by the FWCC in January 2017 but is protected under Florida's Imperiled Species Management Plan 2016-2026. Additionally, one bald eagle (*Haliaeetus leucocephalus*) nest was observed on the property; however, there is no development proposed within the U.S. Fish and Wildlife Service and FWCC recommended 660-foot buffer protection zone for active and alternate bald eagle nests (FWCC 2008). The bald eagle has been delisted at the state and federal levels but is still protected under the Bald and Golden Eagle Protection Act and Lee County Bald Eagle Ordinance No. 08-25. The locations of observed Lee County protected species, bald eagle nest, and approximate walked survey transects are depicted on Appendix B. Due to the density of gopher tortoise burrows on the Project site, a separate map depicting the burrow locations is provided as Appendix C.

Of the 424 gopher tortoise burrows located during the protected species survey, 257 burrows were located within the development area. These burrows were previously excavated, and gopher tortoises were relocated to an FWCC-approved off-site recipient area, per FWCC Permit No. GT-22-00058B. This includes the three gopher tortoises observed within the development footprint during the protected species survey. The remaining 167 gopher tortoise burrows were located within the existing conservation area and were left undisturbed.

ABUNDANCE OF PROTECTED SPECIES OBSERVED

Density calculations are provided for each protected species documented within each habitat type. Separate calculations will be provided if more than one of the same protected species is observed within different habitat types. Please note that density estimates for wildlife species are only provided for Lee County protected species. Also, density estimates were not provided for those gopher tortoises and gopher tortoise burrows located within the development footprint since tortoises were previously relocated per FWCC Permit No. GT-22-00058B.

The protected species abundance calculations are provided in Table 4, while Table 5 summarizes the Protected Species Survey findings.

Table 4. Protected Species Abundance Calculations

$$\text{Protected Species Density} = \{n\,(C)/[L\,(W_1+W_2)]\}\ (43{,}560\ ft^2/ac)$$

Where n = number of individuals observed or active plus inactive gopher tortoise burrows
L = length of transect
W_1 = distance of visibility to the right of transect
W_2 = distance of visibility to the left of transect
C = gopher tortoise conversion factor (0.5)*

*Used for gopher tortoise calculation only. Conversion only applied when gopher tortoise burrow, not gopher tortoise itself, is documented.

<u>American Alligator (AA)</u>
FLUCFCS Code 182
$= \{1\ AA/[(48{,}377ft)\ (50\ ft + 50\ ft)]\}\ (43{,}560\ ft^2/ac)$
$= \{1/4{,}837{,}700\}\ (43{,}560\ ft^2/ac)$
$= \{2.1 \times 10^{-7}\ AA/ft^2\}\ (43{,}560\ ft^2/ac)$
= 0.009 American alligators/acre

<u>Gopher Tortoise (burrow) (GT)</u>
FLUCFCS Code 4169 E1
$= \{(163\ GT)(0.5)/[(30{,}049ft)\ (35\ ft + 35\ ft)]\}\ (43{,}560\ ft^2/ac)$
$= \{81.5/2{,}103{,}430\}\ (43{,}560\ ft^2/ac)$
$= (3.90 \times 10^{-5}\ GT\ burrows/ft^2)\ (43{,}560\ ft^2/ac)$
= 1.69 Gopher tortoise (burrows)/acre

Table 4. (Continued)

FLUCFCS Code 617
= {(1 GT)(0.5)/[(7,040ft) (35 ft + 35 ft)]} (43,560 ft^2/ac)
= {0.5/492,800} (43,560 ft^2/ac)
= (1.0x 10^{-6} GT burrows/ft^2) (43,560 ft^2/ac)
= 0.04 Gopher tortoise (burrows)/acre

FLUCFCS Code 6309
= {(3 GT)(0.5)/[(25,280ft) (20 ft + 20 ft)]} (43,560 ft^2/ac)
= {1.5/1,011,200} (43,560 ft^2/ac)
= (1.48x 10^{-6} GT burrows/ft^2) (43,560 ft^2/ac)
= 0.06 Gopher tortoise (burrows)/acre

<u>Little Blue Heron (LBHE)</u>
FLUCFCS Code 182
= {1 LBHE/[(48,377ft) (50 ft + 50 ft)]} (43,560 ft^2/ac)
= {1/4,837,700} (43,560 ft^2/ac)
= (2.1 x 10^{-7} LBHE/ft^2) (43,560 ft^2/ac)
= 0.009 Little blue herons/acre

FLUCFCS Code 525
= {2 LBHE/[(9,382ft) (50 ft + 50 ft)]} (43,560 ft^2/ac)
= {2/938,200} (43,560 ft^2/ac)
= (2.13 x 10^{-6} LBHE/ft^2) (43,560 ft^2/ac)
= 0.09 Little blue herons / acre

<u>Snowy Egret (SNEG)</u>
FLUCFCS Code 182
= {2 SNEG/[(48,377ft) (50 ft + 50 ft)]} (43,560 ft^2/ac)
= {2/4,837,700} (43,560 ft^2/ac)
= (4.13 x 10^{-7} SNEG/ft^2) (43,560 ft^2/ac)
= 0.02 Snowy egrets / acre

Table 5. Protected Species Survey Summary

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Reptiles and Amphibians					
American alligator (*Alligator mississippiensis*)	182	90	X		0.009
	525	90		X	
	621	90		X	
	630	85		X	
	6309	85		X	
	641	90		X	

Table 5. (Continued)

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Reptiles and Amphibians (Continued)					
Eastern indigo snake (*Drymarchon corais couperi*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
	427	85		X	
	4279	85		X	
	4279 E1	85		X	
Gopher frog (*Rana capito*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
	427	85		X	
	4279	85		X	
	4279 E1	85		X	
	630	85		X	
	6309	85		X	
Gopher tortoise (*Gopherus polyphemus*)	182	90	X		N/A
	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
	4169	85		X	
	4169 E1	85		X	
Gopher tortoise (burrows)	182	90			
	411	90			
	4119	90			
	4119 E1	90			
	4119 E2	85			
	4119 E3	80			
	4119 E4	80			
	4169	85	X		1.69
	4169 E1	85			

Table 5. (Continued)

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Reptiles and Amphibians (Continued)					
Gopher tortoise (burrows) (Continued)	617	85	X		0.04
	6309	85	X		0.06
Birds					
Everglade snail kite (*Rostrhamus sociabilis plumbeus*)	641	90		X	
Florida sandhill crane (*Grus canadensis pratensis*)	641	90		X	
Limpkin (*Aramus guarauna*)	525	85		X	
	617	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
	641	90		X	
Little blue heron (*Egretta caerulea*)	182	90	X		0.009
	525	85	X		0.09
	617	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
	641	90		X	
Reddish egret (*Egretta rufescens*)	525	85		X	
Roseate Spoonbill (*Platalea ajaja*)	525	85		X	
Red-cockaded woodpecker (*Picoides borealis*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Snowy egret (*Egretta thula*)	182	90	X		0.26
	525	85		X	
	617	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
	641	90		X	

Table 5. (Continued)

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Birds (Continued)					
Southeastern American kestrel (*Falco sparverius paulus*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Tri-colored heron (*Egretta tricolor*)	621	90		X	
	630	85		X	
	6309	85		X	
Wood stork (*Mycteria americana*)	525	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
	641	90		X	
Mammals					
Big Cypress fox squirrel (*Sciurus niger avicennia*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Everglades mink (*Mustela vison evergladensis*)	525	90		X	
	641	90		X	
Florida black bear (*Ursus americanus floridanus*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
	427	85		X	
	4279	85		X	
	4279 E1	85		X	
	617	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
Florida panther (*Puma concolor coryi*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	

Table 5. (Continued)

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Mammals (Continued)					
Florida panther (*Puma concolor coryi*) (Continued)	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
	427	85		X	
	4279	85		X	
	4279 E1	85		X	
	617	85		X	
	621	90		X	
	630	85		X	
	6309	85		X	
Plants					
Beautiful pawpaw (*Deeringothamnus pulchellus*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Fakahatchee burmannia (*Burmannia flava*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Florida coontie (*Zamia floridana*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	
Hand adder's tongue fern (*Ophioglossum palmatum*)	427	85		X	
	4279	85		X	
	4279 E1	85		X	
Satinleaf (*Chrysophyllum olivaeforme*)	411	90		X	
	4119	90		X	
	4119 E1	90		X	
	4119 E2	85		X	
	4119 E3	80		X	
	4119 E4	80		X	

Table 5. (Continued)

Protected Species	FLUCFCS Code	Percent Area Surveyed	Present	Absent	Density (Per Acre)
Plants (Continued)					
Simpson's stopper (*Myrcianthes fragrans*)	427	85		X	
	4279	85		X	
	4279 E1	85		X	
Twisted airplant (*Tillandsia flexuosa*)	427	85		X	
	4279	85		X	
	4279 E1	85		X	

MANAGEMENT PLAN

Before issuing a development order, a protected species management plan per Lee County LDC 10-474 will be prepared as part of the development review process for the Project. The protected species management plan will outline protection measures for the protected species documented on the Project site.

REFERENCES

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System (FLUCFCS). Procedure No. 550-010-001-a. Third Edition.

Florida Department of Agriculture and Consumer Services. Florida's Federally Listed Plant Species. Chapter 5B-40, F.A.C.

APPENDIX A

AERIAL WITH FLUCFCS AND WETLANDS

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
180	INACTIVE GOLF COURSE	35.92 Ac.±	8.3%
182	GOLF COURSE UNDER CONSTRUCTION	123.40 Ac.±	28.6%
411	PINE FLATWOODS	7.46 Ac.±	1.7%
4119	PINE FLATWOODS, DISTURBED	16.56 Ac.±	3.8%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	8.10 Ac.±	1.9%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	0.65 Ac.±	0.2%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	4.17 Ac.±	1.0%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	2.00 Ac.±	0.5%
4169	SCRUBBY PINE FLATWOODS, DISTURBED	56.81 Ac.±	13.2%
4169 E1	SCRUBBY PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	0.43 Ac.±	0.1%
4241	MELALEUCA, HYDRIC	2.76 Ac.±	0.6%
427	LIVE OAK	0.12 Ac.±	0.0%
4279	LIVE OAK, DISTURBED	0.26 Ac.±	0.1%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	4.50 Ac.±	1.0%
4349	HARDWOOD/CONIFER MIXED, DISTURBED	0.33 Ac.±	0.1%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	1.17 Ac.±	0.3%
439	MIXED EXOTICS	0.57 Ac.±	0.1%
525	SHALLOW POND	25.34 Ac.±	5.9%
617	MIXED WETLAND HARDWOODS	13.31 Ac.±	3.1%
621	CYPRESS	28.36 Ac.±	6.6%
630	MIXED WETLAND FOREST	1.41 Ac.±	0.3%
6309	MIXED WETLAND FOREST, DISTURBED	27.31 Ac.±	6.3%
641	FRESHWATER MARSH	8.10 Ac.±	1.9%
740	DISTURBED LAND	1.92 Ac.±	0.4%
	SFWMD CONSERVATION AREA	60.00 Ac.±	13.9%
	TOTAL	**430.93 Ac.±**	**100.0%**

LEGEND:

- WETLANDS (81.24 Ac.±)
- SURFACE WATERS (25.34 Ac.±)
- SFWMD CONSERVATION AREA (60.00 Ac.±)

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2023.

PROPERTY BOUNDARY PER RVI, INC. DRAWING NO. 704203BNDY (2023-07-10).DWG DATED JULY 10, 2023.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999)

THE LIMITS OF THE MELALEUCA, HYDRIC AREA (FLUCFCS CODE 4241) HAVE NOT BEEN REVIEWED BY AN REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

THE BALANCE OF THE PROJECT'S UPLAND/WETLAND LIMITS PER SFWMD ERP NO. 36-03813-P

REVISIONS	DATE

DRAWN BY E.K.	DATE 09/12/23	13620 Metropolis Avenue Suite 200 Ft. Myers, FL 33912 Phone (239) 274-0067 Fax (239) 274-0069
DESIGNED BY P.S.	DATE 09/12/23	
REVIEWED BY S.J.	DATE 09/12/23	

PASSARELLA & ASSOCIATES INC. Consulting Ecologists

PELICAN LANDING MPD

AERIAL WITH FLUCFCS AND WETLANDS

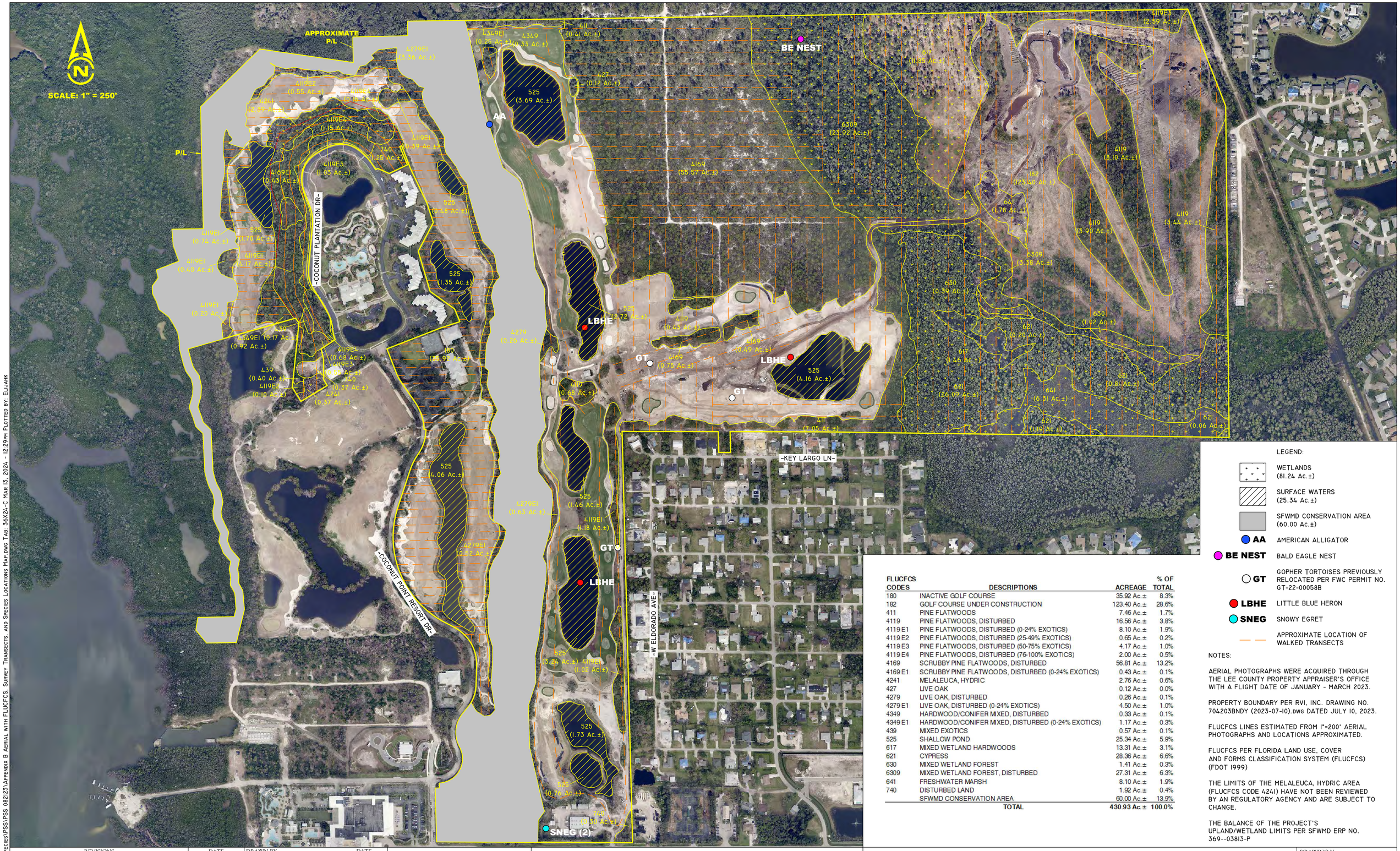
DRAWING No. 23LBR4024

SHEET No. APPENDIX A

J:\2023\23LBR4024\SPECIES\PSS\PSS 082123\APPENDIX A AERIAL WITH FLUCFCS AND WETLANDS MAP.DWG TAB: 36X24-C MAR 13, 2024 - 12:29PM PLOTTED BY: ELIJAHK

APPENDIX B

AERIAL WITH FLUCFCS, SURVEY TRANSECTS, AND SPECIES LOCATIONS MAP



FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
180	INACTIVE GOLF COURSE	35.92 Ac.±	8.3%
182	GOLF COURSE UNDER CONSTRUCTION	123.40 Ac.±	28.6%
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4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	8.10 Ac.±	1.9%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	0.65 Ac.±	0.2%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	4.17 Ac.±	1.0%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	2.00 Ac.±	0.5%
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4169 E1	SCRUBBY PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	0.43 Ac.±	0.1%
4241	MELALEUCA, HYDRIC	2.76 Ac.±	0.6%
427	LIVE OAK	0.12 Ac.±	0.0%
4279	LIVE OAK, DISTURBED	0.26 Ac.±	0.1%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	4.50 Ac.±	1.0%
4349	HARDWOOD/CONIFER MIXED, DISTURBED	0.33 Ac.±	0.1%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	1.17 Ac.±	0.3%
439	MIXED EXOTICS	0.57 Ac.±	0.1%
525	SHALLOW POND	25.34 Ac.±	5.9%
617	MIXED WETLAND HARDWOODS	13.31 Ac.±	3.1%
621	CYPRESS	28.36 Ac.±	6.6%
630	MIXED WETLAND FOREST	1.41 Ac.±	0.3%
6309	MIXED WETLAND FOREST, DISTURBED	27.31 Ac.±	6.3%
641	FRESHWATER MARSH	8.10 Ac.±	1.9%
740	DISTURBED LAND	1.92 Ac.±	0.4%
	SFWMD CONSERVATION AREA	60.00 Ac.±	13.9%
	TOTAL	**430.93 Ac.±**	**100.0%**

LEGEND:

- WETLANDS (81.24 Ac.±)
- SURFACE WATERS (25.34 Ac.±)
- SFWMD CONSERVATION AREA (60.00 Ac.±)
- **AA** AMERICAN ALLIGATOR
- **BE NEST** BALD EAGLE NEST
- **GT** GOPHER TORTOISES PREVIOUSLY RELOCATED PER FWC PERMIT NO. GT-22-00058B
- **LBHE** LITTLE BLUE HERON
- **SNEG** SNOWY EGRET
- APPROXIMATE LOCATION OF WALKED TRANSECTS

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2023.

PROPERTY BOUNDARY PER RVI, INC. DRAWING NO. 704203BNDY (2023-07-10).DWG DATED JULY 10, 2023.

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THE BALANCE OF THE PROJECT'S UPLAND/WETLAND LIMITS PER SFWMD ERP NO. 369--03813-P

REVISIONS	DATE

	DATE
DRAWN BY E.K.	08/29/23
DESIGNED BY P.S.	08/29/23
REVIEWED BY S.J.	08/29/23

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PASSARELLA & ASSOCIATES INC
Consulting Ecologists

PELICAN LANDING MPD

AERIAL WITH FLUCFCS, SURVEY TRANSECTS, AND SPECIES LOCATIONS MAP

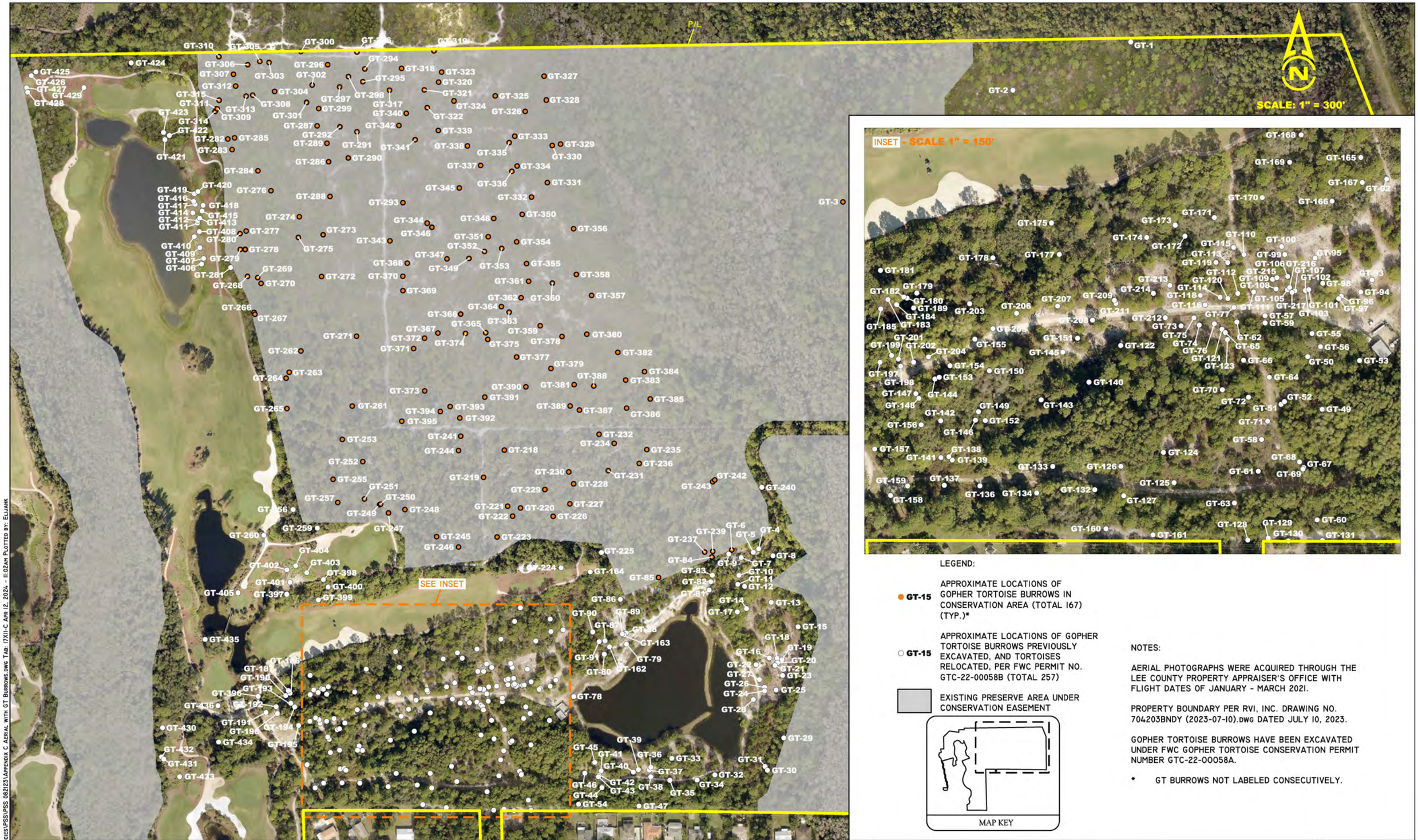
DRAWING No. 23LBR4024

SHEET No. APPENDIX B

J:\2023\23LBR4024\SPECIES\PSS\PSS 082123\APPENDIX B AERIAL WITH FLUCFCS, SURVEY TRANSECTS, AND SPECIES LOCATIONS MAP.DWG TAB: 36X24-C MAR 13, 2024 - 12:29PM PLOTTED BY: ELIJAHK

APPENDIX C

AERIAL WITH GOPHER TORTOISE BURROWS



LEGEND:

● GT-15 — APPROXIMATE LOCATIONS OF GOPHER TORTOISE BURROWS IN CONSERVATION AREA (TOTAL 167) (TYP.)*

○ GT-15 — APPROXIMATE LOCATIONS OF GOPHER TORTOISE BURROWS PREVIOUSLY EXCAVATED, AND TORTOISES RELOCATED, PER FWC PERMIT NO. GTC-22-00058B (TOTAL 257)

EXISTING PRESERVE AREA UNDER CONSERVATION EASEMENT

MAP KEY

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH FLIGHT DATES OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER RVI, INC. DRAWING NO. 704203BNDY (2023-07-10).DWG DATED JULY 10, 2023.

GOPHER TORTOISE BURROWS HAVE BEEN EXCAVATED UNDER FWC GOPHER TORTOISE CONSERVATION PERMIT NUMBER GTC-22-00058A.

* GT BURROWS NOT LABELED CONSECUTIVELY.

REVISIONS	DATE	DRAWN BY	DATE
		E.K.	08/29/23
		DESIGNED BY	DATE
		P.S.	08/29/23
		REVIEWED BY	DATE
		S.J.	08/29/23

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PASSARELLA & ASSOCIATES INC
Consulting Ecologists

PELICAN LANDING MPD

AERIAL WITH GOPHER TORTOISE BURROWS

DRAWING No. 23LBR4024

SHEET No. APPENDIX C

J:\2023\23LBR4024\SPECIES\PSS\PSS 08\23\APPENDIX C AERIAL WITH GT BURROWS.DWG TAB: 17X11-C APR 12, 2024 - 11:02AM PLOTTED BY: ELIJAHK

ATTACHMENT X

RAPTOR BAY GOLF COURSE RENOVATION INDIGENOUS PRESERVE AND PROTECTED SPECIES MANAGEMENT PLAN

Revised December 2022

Prepared For:

LBRaptor, LLC
2210 Vanderbilt Beach Road, Suite 1300
Naples, Florida 34109
(239) 449-1550

Prepared By:

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Project No. 20LBR3290

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Appendix J. Florida Black Bear Informational Pamphlet J-1

1.0 INTRODUCTION

The following outlines the Lee County Indigenous Preserve and Protected Species Management Plan for Raptor Bay (Project) located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Appendix A). This plan has been prepared to meet the requirements outlined in Section 10-415(b)(4) of the Lee County Land Development Code (LDC). The Project totals 306.89± acres and is located north of Coconut Road, approximately 1.5 miles west of U.S. 41 and approximately 2.28 miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by Coconut Road, El Dorado Acres, and Meadowbrook; to the east by an existing Florida Power & Light easement; and to the west by existing conservation lands, the Raptor Bay Golf Club, and the Hyatt Residence Club. Halfway Creek bisects the eastern portion of the Project.

The Project's preserve area totals 143.95± acres and was previously placed under conservation easement per South Florida Water Management District (SFWMD) and Florida Fish and Wildlife Conservation Commission (FWCC) requirements. The preserve area contains a mosaic of native forested and herbaceous upland and wetland habitats (Appendix B). The proposed conservation areas will contain the following:

- Preservation and enhancement of 61.54± acres of indigenous wetlands and 57.74± acres of indigenous uplands (existing forested and herbaceous habitats with less than 75 percent exotics).
- Restoration of 16.44± acres of indigenous wetlands and 6.74± acres of indigenous uplands through the removal of exotic vegetation (existing forested and herbaceous habitats with greater than 75 percent exotics) and supplemental plantings.
- Previously permitted golf cart path and bridge (1.49± acres).

The protected species management plan contained in this report pertains to the American alligator (*Alligator mississippiensis*), gopher tortoise (*Gopherus polyphemus*), listed wading birds, bald eagle (*Haliaeetus leucocephalus*), Florida black bear (*Ursus americanus floridanus*), and Big Cypress fox squirrel (*Sciurus niger avicennia*).

2.0 EXISTING INDIGENOUS VEGETATION HABITATS

Pursuant to LDC Section 10-1, indigenous native vegetation means those plant species that are characteristic of the major plant communities within Lee County. Native habitats where invasive exotic vegetation has exceeded 75 percent coverage are not considered to be indigenous vegetation.

The Project site includes 159.41± acres (combined pre-development wetland and upland acres) of existing indigenous native vegetation. The indigenous areas occur on-site as wetland and upland herbaceous and forested habitats with less than 75 percent coverage by exotics. These indigenous areas are surrounded by golf course and existing development. An aerial with Florida Land Use, Cover and Forms Classification System (FLUCFCS) is attached as Appendix B and depicts the existing indigenous wetland and upland vegetation communities.

The indigenous wetland habitats total 62.32± acres and consist mostly of mixed wetland hardwood, mixed wetland forests, cypress, and freshwater marsh habitats. The indigenous uplands total 97.09± acres and consist mostly of pine, pine flatwoods, and scrubby flatwood habitats.

A total of 119.28± acres (61.54± acres of wetlands and 57.74± acres of uplands) of indigenous vegetation will be preserved and enhanced. Listed below are the FLUCFCS descriptions of the indigenous wetland and upland habitats proposed for preservation and enhancement.

2.1 Indigenous Wetland Habitats

Mixed Wetland Hardwoods, Disturbed (0-24%) (FLUCFCS Code 6179 E1)
The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Cypress, Disturbed (0-24%) (FLUCFCS Code 6219 E1)
The canopy of this habitat type includes bald cypress, scattered cabbage palm (*Sabal palmetto*), and widely scattered melaleuca (*Melaleuca quinquenervia*). The sub-canopy contains bald cypress, wax myrtle (*Morella cerifera*), buttonbush, pond apple, and scattered Brazilian pepper (*Schinus terebinthifolia*). The ground cover contains swamp fern, sawgrass (*Cladium jamaicense*), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Mixed Wetland Forest, Disturbed (25-49%) (FLUCFCS Code 6309 E2)
The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Freshwater Marsh, Disturbed (0-24%) (FLUCFCS Code 6419 E1)
The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail (*Typha* sp.), sawgrass, fireflag (*Thalia geniculata*), leather fern (*Acrostichum danaeifolium*), and maidencane.

2.2 Indigenous Upland Habitats

Pine Flatwoods, Disturbed (0-24%) (FLUCFCS Code 4119 E1)
The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle, myrsine (*Myrsine guianensis*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine

grapevine (*Vitis rotundifolia*), climbing cassia (*Senna pendula*) and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Scrubby Flatwoods (0-24%) (FLUCFCS Code 4169 E1)
The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

3.0 EXISTING NON-INDIGENOUS VEGETATION HABITATS

Approximately 147.48± acres of the Project site consist of vegetation communities and land cover types that do not meet the LDC's definition of indigenous vegetation. The non-indigenous areas are predominantly golf course, hydric melaleuca, excavated ponds, and forested habitats with greater than 75 percent exotics. Existing non-indigenous wetlands on the site total 31.99± acres and consist of melaleuca areas, excavated ponds, and wetland habitats with greater than 75 percent coverage by exotics, primarily Brazilian pepper and melaleuca. Non-indigenous uplands on the Project site total 115.49± acres and consist primarily of golf course, disturbed land, and pine flatwoods with greater than 75 percent exotics. The non-indigenous wetland and upland vegetation communities are depicted in Appendix B.

A total of 23.18± acres (16.44± acres of wetlands and 6.74± acres of uplands) with greater than 75 percent exotics will be restored. Listed below are the FLUCFCS descriptions of the non-indigenous areas proposed for restoration.

3.1 Non-Indigenous Wetland Habitats

Melaleuca, Hydric (FLUCFCS Code 4241)
The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern, royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Exotics Wetland Hardwoods (FLUCFCS Code 619)
The canopy and sub-canopy of this habitat type contain Brazilian pepper, climbing cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (76-100%) (FLUCFCS Code 6219 E4)
This habitat type is similar to FLUCFCS Code 6219 E1, but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (76-100%) (FLUCFCS Code 6309 E4)
This habitat type is similar to FLUCFCS Code 6309 E2, but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

3.2 Non-Indigenous Upland Habitats

Pine Flatwoods, Disturbed (76-100%) (FLUCFCS Code 4119 E4)
This habitat type is similar to FLUCFCS Code 4119 E1, but contains 76 to 100 percent melaleuca in the canopy and downy rose-myrtle (*Rhodomyrtus tomentosa*) in the sub-canopy.

4.0 INDIGENOUS VEGETATION PRESERVE AND ENHANCEMENT

A total of 119.28± acres (61.54± acres of wetlands and 57.74± acres of uplands) with less than 75 percent existing exotic vegetation will be preserved and enhanced by the hand-removal/treatment of exotic and nuisance species. The locations of the indigenous preservation areas are shown on Appendix C.

4.1 Methods to Remove and Control Exotic and Nuisance Plants

Exotics to be eradicated include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

Table 1. Prohibited Invasive Exotics

Common Name	Scientific Name
Air potato	*Dioscorea alata*
Australian pines	All *Casuarina* species
Bishopwood	*Bischofia javanica*
Brazilian pepper	*Schinus terebinthifolia*
Carrotwood	*Cupaniopsis anacardioides*
Chinese tallow	*Sapium sebiferum*
Cork tree	*Thespesia populnea*
Cuban laurel fig	*Ficus microcarpa*
Downy rose-myrtle	*Rhodomyrtus tomentosus*
Earleaf acacia	*Acacia auriculiformis*
Japanese climbing fern	*Lygodium japonicum*
Java plum	*Syzygium cumini*

Table 1. (Continued)

Common Name	Scientific Name
Melaleuca	*Melaleuca quinquenervia*
Murray red gum	*Eucalyptus camaldulensis*
Old World climbing fern	*Lygodium microphyllum*
Rose apple	*Syzygium jambos*
Rosewood	*Dalbergia sissoo*
Tropical soda apple	*Solanum viarum*
Wedelia	*Wedelia trilobata*
Weeping fig	*Ficus benjamina*
Woman's tongue	*Albizia lebbeck*

Exotic vegetation removal activities will be coordinated with Lee County's Department of Community Development (DCD) staff and will be conducted prior to the issuance of a Certificate of Compliance for the development. Exotic vegetation removal methods will be conducted using hand-removal methods consistent with the previously approved WilsonMiller Habitat Management Plan (See Section 6.0 of Appendix D). This includes the following for the wetland portions of the preserve:

- Wetland habitats will be initially managed by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose-myrtle). Exotic eradication and maintenance will be accomplished via hand removal; no mechanized clearing or use of heavy equipment will occur within wetland conservation areas. Hand removal exotic clearing methods will include the use of implements such as chainsaws, axes, and machetes to cut down exotic vegetation. Vehicles such as trucks, trailers, and chippers to process the debris will also be used.

- Plants that are visible 50 feet from the conservation area perimeter will be cut down and removed from the mitigation area. Stumps of cut plants will be chemically treated within 15 minutes of cutting. Debris generated during this phase of removal will be temporarily stockpiled in adjacent upland areas for later burning, chipping/spreading, or transport off-site for disposal. If utilized, chipping will be conducted within the development footprint and not within the preserve areas. Chipped material will be burned on-site or hauled off-site for disposal.

- Interior plants (>50 feet from conservation area perimeter) will primarily be eradicated by chemical treatment of standing trees in order to minimize disruption and impacts to existing native wetland vegetation. Smaller individuals will be eradicated through completed removal, cut and treat, or foliar herbicidal treatment. Only Environmental Protection Agency-approved herbicides will be utilized, and a visual tracer dye will be added if not already contained in the specific herbicide mixture. All herbicides will be applied in accordance with label specifications. Such applications will be conducted by or under the direction of an appropriately licensed applicator. Felled material that

is not removed from the interior of conservation areas will be handled in general accordance with the SFWMD publication Draft Guidelines for Melaleuca Removal date September 14, 1998.

- On-going control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods. Ongoing maintenance will consist solely of hand-removal; no heavy equipment will be operated within conservation areas.

- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to ensure that site wetlands are not unduly damaged by fire (e.g., installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.)

For clarification, vehicles utilized to process vegetative debris such as trucks, trailers, and chippers will be kept outside of the preserve area. In addition, no stockpiling of vegetative debris will occur within the preserve. Exotic vegetation that has been removed from the preserve will be stockpiled within the Project's development footprint.

Exotic vegetation removal activities in the upland portions of the preserve will utilize similar hand removal methods consistent with Gopher Tortoise Incidental Take Permit (ITP) No. LEE-9, which is attached to Appendix D.

4.2 Debris Removal

The preserve areas will be inspected annually for trash/garbage. Any trash/garbage located within the preserve areas will be removed and disposed of by hand.

4.3 Method and Frequency of Pruning and Trimming

Exotic removal is scheduled to begin after the applicable permits and approvals have been attained. After the initial removal of exotics, semi-annual inspections of the preserves will occur for the first two years. During these inspections, the Project area will be traversed by a qualified ecologist. Locations of nuisance and/or exotic species will be identified for immediate treatment with an appropriate herbicide. Any additional potential problems will also be noted and corrective actions taken. Once exotic/nuisance species levels have been reduced to acceptable limits (i.e., less than five percent cover), inspections of the Project area will be conducted annually.

Maintenance will be conducted in perpetuity to ensure that the conservation areas are free of exotic vegetation, including the prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

As specified in Gopher Tortoise ITP No. LEE-9, maintenance in the upland preserve areas will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment method would include mowing and bush

hogging, which would be conducted when daytime temperatures are below 75 degrees Fahrenheit. Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level. The frequency of maintenance activities specific to xeric scrub and pine flatwoods habitats is outlined in Gopher Tortoise ITP No. LEE-9, which is attached to Appendix D.

5.0 INDIGENOUS VEGETATION RESTORATION

Restoration and re-establishment of indigenous vegetation communities will be conducted in areas with greater than 75 percent coverage by exotic vegetation within the conservation areas. Restoration activities will include 23.18± acres of exotic removal and supplemental plantings within areas containing greater than 75 percent coverage by exotic vegetation. The restoration area locations are shown on Appendix C.

In addition to restoring the wetland and upland areas containing 75 percent coverage by exotic vegetation, the temporary road needed to construct the golf cart path and gain access to the eastern portion of the site will be restored with native vegetation plantings once construction is completed.

5.1 Removal of Exotics and Supplemental Plantings

Approximately 16.44± acres of wetlands and 6.74± acres of uplands with greater than 75 percent exotics will be restored by the removal of exotic species and supplemental plantings of native vegetation. Following the removal of exotics, supplemental wetland plantings will be installed in the 16.44± acres of wetland habitats. Wetland plantings will be selected based on the type of native vegetation that occurs in the adjacent or nearby wetland habitats. Tree, shrub, and ground cover species will be planted according to the specifications in Table 2. A minimum of three tree species, two shrub species, and five ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree, shrub, and ground cover species may be included in the planting table with approval from Lee County staff.

Table 2. Supplemental Indigenous Wetland Plantings

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
Trees (minimum three species)				
Bald cypress	*Taxodium distichum*	5 ft.	3 gal.	15 ft.
Cabbage palm	*Sabal palmetto*	5 ft.	3 gal.	15 ft.
Dahoon holly	*Ilex cassine*	5 ft.	3 gal.	15 ft.
Laurel oak	*Quercus laurifolia*	5 ft.	3 gal.	15 ft.
Pond apple	*Annona glabra*	5 ft.	3 gal.	15 ft.
Red maple	*Acer rubrum*	5 ft.	3 gal.	15 ft.
Slash pine	*Pinus elliottii*	5 ft.	3 gal.	15 ft.
Swamp bay	*Persea palustris*	5 ft.	3 gal.	15 ft.

Table 2. (Continued)

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
Shrubs (minimum two species)				
Buttonbush	*Cephalanthus occidentalis*	3 ft.	1 gal.	10 ft.
Gallberry	*Ilex glabra*	3 ft.	1 gal.	10 ft.
Myrsine	*Myrsine guianensis*	3 ft.	1 gal.	10 ft.
Saltbush	*Baccharis* sp.	3 ft.	1 gal.	10 ft.
Wax myrtle	*Morella cerifera*	3 ft.	1 gal.	10 ft.
Ground Cover (minimum five species)				
Alligator flag	*Thalia geniculata*	12 in.	1 gal.	3 ft.
Arrowhead	*Sagittaria lancifolia*	12 in.	1 gal.	3 ft.
Blue flag iris	*Iris virginica*	12 in.	1 gal.	3 ft.
Blue maidencane	*Amphicarpum muhlenbergianum*	12 in.	1 gal.	3 ft.
Golden canna	*Canna flaccida*	12 in.	1 gal.	3 ft.
Gulfdune paspalum	*Paspalum monostachyum*	12 in.	1 gal.	3 ft.
Maidencane	*Panicum hemitomon*	12 in.	1 gal.	3 ft.
Muhly grass	*Muhlenbergia capillaris*	12 in.	1 gal.	3 ft.
Pickerelweed	*Pontederia cordata*	12 in.	1 gal.	3 ft.
Sand cordgrass	*Spartina bakeri*	12 in.	1 gal.	3 ft.
Sawgrass	*Cladium jamaicense*	12 in.	1 gal.	3 ft.
Soft-stem bulrush	*Scirpus validus*	12 in.	1 gal.	3 ft.
Spikerush	*Eleocharis interstincta*	12 in.	1 gal.	3 ft.
Swamp fern	*Telmatoblechnum serrulatum*	12 in.	1 gal.	3 ft.

Following the removal of exotics, supplemental upland plantings will be installed in the 6.74± acres of upland habitats. Upland plantings will be selected based on the type of native vegetation that occurs in the adjacent or nearby upland habitats. Upland tree, shrub, and ground cover plantings will be installed according to the specifications listed in Table 3. A minimum of three tree species, two shrub species, and four ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree, shrub, and ground species may be included in the planting table with approval from Lee County staff.

Table 3. Supplemental Indigenous Upland Plantings

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Density (On Center)
Trees (minimum three species)				
Cabbage palm	*Sabal palmetto*	5 ft.	3 gal	15 ft.
Dahoon holly	*Ilex cassine*	3 ft.	1 gal.	15 ft.
Laurel oak	*Quercus laurifolia*	5 ft.	3 gal.	15 ft.
Live oak	*Quercus virginiana*	5 ft.	3 gal.	15 ft.
Slash pine	*Pinus elliottii* var. *densa*	5 ft.	3 gal.	15 ft.

Table 3. (Continued)

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Density (On Center)
Shrubs (minimum two species)				
Cocoplum	*Chrysobalanus icaco*	3 ft.	1 gal.	10 ft.
Gallberry	*Ilex glabra*	3 ft.	1 gal.	10 ft.
Myrsine	*Myrsine guianensis*	3 ft.	1 gal.	10 ft.
Rusty lyonia	*Lyonia ferruginea*	3 ft.	1 gal.	10 ft.
Saltbush	*Baccharis halimifolia*	3 ft.	1 gal.	10 ft.
Saw palmetto	*Serenoa repens*	3 ft.	1 gal.	10 ft.
Ground Cover (minimum four species)				
Chalky bluestem	*Andropogon virginicus* var. *glaucus*	12 in.	2 in.	5 ft.
Gulfdune paspalum	*Paspalum monostachyum*	12 in.	2 in.	3 ft.
Little blue maidencane	*Amphicarpum muhlenbergianum*	12 in.	2 in.	3 ft.
Muhly grass	*Muhlenbergia capillaris*	12 in.	2 in.	5 ft.
Sand cordgrass	*Spartina bakeri*	12 in.	2 in.	5 ft.
Wiregrass	*Aristida stricta*	12 in.	2 in.	3 ft.

In addition to restoring the wetland and upland areas containing 75 percent coverage by exotic vegetation, a 0.82± acre temporary road, needed to construct the Halfway Creek golf cart path and gain access to the eastern portion of the site, will be restored with native vegetation plantings once construction is completed. The approximate location of the temporary road is located within the area depicted as cart path on Appendix C; however, specific details of this area are included in the engineering plans prepared by Waldrop Engineering, P.A., provided under separate cover.

Florida Department of Transportation No. 1 Coarse aggregate, or approved equivalent, will be used to create the temporary access road. After construction is completed, and prior to the Golf Course receiving the final Certificate of Compliance from Lee County, the No. 1 Coarse aggregate will be removed and replaced with in-situ like soil material to ensure survivability of indigenous vegetation plantings. Once the soil has been restored and ground surface leveled to match existing natural grade, plantings will be installed in accordance with the standards outlined in LDC Section 14-384. Replacement trees and shrubs must be nursery grown in a container. Trees must be no less than six feet in height and shrubs must be planted on no less than three-foot centers. Thus, 357 trees and 3,969 shrubs will be installed within the temporary road area based on a 0.82± acre planting area.

Tree plantings will consist of a minimum of three of the species included in Table 4 and shrub planting will consist of a minimum of two of the species included in Table 4. The species selected for planting will depend on market availability at the time the plantings are to occur.

Table 4. Temporary Road Restoration Planting List

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
Trees (minimum three species)[1]				
Bald cypress	*Taxodium distichum*	6 ft.	3 gal.	10 ft.
Dahoon holly	*Ilex cassine*	6 ft.	3 gal.	10 ft.
Laurel oak	*Quercus laurifolia*	6 ft.	3 gal.	10 ft.
Pond apple	*Annona glabra*	6 ft.	3 gal.	10 ft.
Red maple	*Acer rubrum*	6 ft.	3 gal.	10 ft.
Slash pine	*Pinus elliottii*	6 ft.	3 gal.	10 ft.
Cabbage palm	*Sabal palmetto*	6 ft.	3 gal.	10 ft.
Swamp bay	*Persea palustris*	6 ft.	3 gal.	10 ft.
Swamp dogwood	*Cornus foemina*	6 ft.	3 gal.	10 ft.
Shrubs (minimum two species)[2]				
Buttonbush	*Cephalanthus occidentalis*	3 ft.	1 gal.	3 ft.
Gallberry	*Ilex glabra*	3 ft.	1 gal.	3 ft.
Myrsine	*Myrsine guianensis*	3 ft.	1 gal.	3 ft.
Wax myrtle	*Myrica cubana*	3 ft.	1 gal.	3 ft.

[1]Tree plantings total 357. A minimum of 25 percent of the tree plantings (89 trees) must be at least ten feet in height. In addition, 50 percent of the ten-foot trees (45 trees) must be slash pine.
[2]Shrub plantings total 3,969. Three-gallon shrubs may be substituted for one-gallon shrubs for a total of 1,323 shrub plantings.

6.0 SUCCESS CRITERIA

6.1 Indigenous Wetland and Upland Preserve and Enhancement Areas

The following are the success criteria for the indigenous preserve areas:

1. Initial eradication of exotic and nuisance vegetation will be completed.
2. The preserve area will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

6.2 Indigenous Wetland and Upland Restoration Areas

The following are the success criteria for the indigenous wetland and upland restoration areas:

1. Initial eradication of exotic and nuisance vegetation will be completed.
2. Planting will be completed in the indigenous restoration areas.
3. A minimum 80 percent survival of tree and ground cover plantings after five years.

4. The preserve areas will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

7.0 MONITORING REPORTS

Monitoring will be conducted annually for the conservation areas. Annual reports documenting the achievement of the enhancement and restoration activities will be submitted to the DCD. Annual monitoring reports will be provided for five years after the Certificate of Compliance has been issued by the DCD.

The monitoring reports will include documented exotic and nuisance species; mortality of vegetation; estimated causes of mortality; growth of the vegetation; hydrologic conditions of the wetland preserve areas including monitoring well hydrographs, wildlife observed, photographs, and factors that demonstrate the functional health of the conservation areas. A brief description of anticipated maintenance work to be conducted over the next year will also be included. In addition, monitoring reports will provide recommendations and/or corrective measures to address deficiencies observed, including impacts to wetland hydrology. Periodic inspections will be conducted by DCD staff to ensure the accuracy of the monitoring reports.

8.0 LONG-TERM MANAGEMENT

As stated in Section 1.0, the conservation area was previously placed under conservation easement granted to the SFWMD and the FWCC. The conservation easement will prevent the encroachment of future development, as well as activities that are incompatible with the goal of sustaining the preserved and restored conservation areas in good ecological health. Responsibility for long-term management of the conservation areas will shift to the long-term management entity following the completion of enhancement and restoration activities on-site. Long-term management of exotic and nuisance vegetation, debris removal, and methods and frequency of trimming and pruning will adhere to the requirement outlined in Section 4.0 of this plan.

9.0 PROTECTED SPECIES MANAGEMENT PLAN

Passarella & Associates, Inc. conducted a Lee County protected species survey on the Project site for six days between August 26 and September 9, 2021. The survey was conducted to meet the requirement of LDC Chapter 10, Article III, Division 8 (Protection of Habitat) Standards. Four protected species were documented during the August and September survey. The listed species and their sign (i.e., burrows) observed on the property include one American alligator, 3 little blue herons (*Egretta caerulea*), 2 snowy egrets (*Egretta thula*), 3 gopher tortoises, and 424 gopher tortoise burrows. Additionally, one bald eagle nest tree was identified in the property. The location of the bald eagle nest tree is depicted on Appendix C. Management activities for the bald eagle nest tree are included in Section 9.4 below.

9.1 American Alligator Management Plan

One American alligator was observed on the Project site during the protected species survey. Additionally, there is potential for American alligators to utilize the adjacent lakes associated with the golf course. The following plan outlines the protection guidelines that will be implemented for the American alligator during clearing operations for the Project. The American alligator is listed as threatened (due to similarity of appearance to the American crocodile (*Crocodylus acutus*)) by the U.S. Fish and Wildlife Service (USFWS) and the FWCC.

9.1.1 Biology

The American alligator is a reptile with an elongated, armored, lizard-like body with a muscular flat tail. Adult alligators are dark with a pale underside while juveniles have bright yellow stripes and blotches. The average size for adults is 8.2 feet for females and 11.2 feet for males. The body weight can reach up to one-half ton. American alligators inhabit all counties in the State of Florida and are most common in the major river drainage basins and large lakes in the central and southern portions of the state. They also can be found in marshes, swamps, ponds, drainage canals, phosphate-mine settling ponds, and ditches. Alligators are tolerant of poor water quality and occasionally inhabit brackish marshes along the coast. A few even venture into saltwater. Individuals are wide-ranging and some males may utilize an area of two square miles or more. Individuals of both sexes are most likely to become more active and extend their ranges during the April to May courtship and breeding season. Prey may include frogs, snakes, birds, and small mammals, although alligators are opportunistic feeders and may prey on what is readily available. Larger individuals often prefer carrion to fresh meat.

9.1.2 Management Plan

The proposed Project is not anticipated to impact the American alligator. Alligators commonly move from water body to water body in response to factors such as season, disturbances, food supply, etc. The American alligator is listed as a federally threatened species (by similarity of appearance to the American crocodile). Only representatives of the FWCC are authorized to handle nuisance alligators. If an alligator is present within the limits of construction at the time of clearing, work within the immediate vicinity of the alligator will be halted and the animal will be allowed to move out and into safer territory. Once the alligator has moved, work can be restarted. If an active alligator nest is found, it will be temporarily protected with an adequate buffer zone until the hatchlings leave the nest.

American alligator habitat will be provided on the property through wetland preservation and enhancement. This includes the removal of exotics and installation of native plantings in approximately 77.98± acres of existing wetlands on the property. These wetlands consist of mixed wetland hardwoods and marsh habitat

types. Invasive exotic removal and native plantings will result in wetland preserves that are more suitable to alligators and their prey species. The preserve areas will be maintained per Sections 4.0 and 8.0 of this plan.

Signs will be posted between the Project and the adjacent preserve areas, as well as around the adjacent lakes, to instruct construction workers, golfers, and maintenance staff not to feed or harass the American alligator. The sign will indicate that the offense is punishable by law (Appendix E).

Informational pamphlets providing background information on identification, habits, and protection of the American alligator will be made available to construction, management, and maintenance staff (Appendix F). The pamphlet states if there is a problem with a persistent nuisance alligator, they will need to contact the FWCC, as they are the only agency empowered to handle nuisance alligators.

9.2 Gopher Tortoise Management Plan

Three gopher tortoises and 424 gopher tortoise burrows were located on the Project site during the protected species survey. This includes 170 burrows located within Eco-Park and 254 burrows located within the Project's development footprint. The following plan outlines the management activities that will be implemented for the gopher tortoise prior to implementation of site clearing. The gopher tortoise is listed as threatened by the FWCC.

9.2.1 Biology

The gopher tortoise is a large, terrestrial turtle averaging 23 to 28 centimeters (9 to 11 inches) in shell length. Maximum length is around 38 centimeters (15 inches). The gopher tortoise is characterized by stumpy, elephantine hind feet and flattened; shovel-like forelimbs adapted for digging. The tan, brown, or gray carapace (top portion of the shell) is domed and oblong. The plastron (bottom portion of the shell) is somewhat concave in males. Growth annuli may be conspicuous, particularly in juveniles. Hatchlings are approximately 4.4 centimeters (1.7 inches) in length and are yellowish-orange in color.

The gopher tortoise occurs in the southeastern coastal plain of the United States from East Louisiana to Southeast South Carolina and throughout Florida. In Florida, gopher tortoises occur in portions of all 67 counties. Gopher tortoises inhabit a wide variety of upland vegetative communities. Three environmental conditions are especially important for gopher tortoises: well-drained, sandy soil in which to burrow; adequate low-growing herbaceous ground cover for food; and relatively open sunlit areas for nesting. The gopher tortoise is primarily associated with longleaf pine scrub and oak woodlands (sandhills), but it is also found in sand pine scrub, coastal strands, live oak hammocks, dry prairies, pine flatwoods, and mixed hardwood-pine communities. Disturbed habitats, such as roadsides, fencerows, clearings, and old fields often support relatively high tortoise densities.

Gopher tortoises excavate burrows averaging 4.5 meters (14.8 feet) in length and 2 meters (6.6 feet) in depth and wide enough to allow them to turn around at any point. These burrows provide protection from temperature extremes, desiccation, and predators; and serve as refuges for a variety of other animals. The placement and depth of burrows vary with the soil type, geographic location, and groundwater levels. An individual tortoise may use more than one burrow and may excavate new burrows at any time during its life.

Gopher tortoise densities and movements are affected by the amount of herbaceous ground cover present. Generally, feeding activity is confined to within 50 meters (164 feet) of the burrow. Principal foods include grasses, legumes, and grass-like plants of the sedge and aster families. Legumes appear to be particularly important in the diet of juveniles. Fruits such as blackberries, pawpaws, gopher apples, and saw palmetto berries are also consumed.

9.2.2 Management Plan

The FWCC issued Gopher Tortoise ITP No. LEE-9 for the Pelican Landing Development, which includes the Project site, on August 29, 1995. The ITP allows for the on-site relocation of gopher tortoises to the Eco-Park preserve located within the western portion of the conservation area. However, due to the existing tortoise burrow density within Eco-Park, the opportunity for on-site relocation is limited. Therefore, the applicant will obtain a permit from the FWCC to relocate gopher tortoises located within the development footprint to an off-site, protected recipient site prior to site clearing activities. The recipient site will be approved by the FWCC and managed in perpetuity, consistent with FWCC's 2012 Gopher Tortoise Management Plan. Gopher tortoises located in Eco-Park will remain in the preserve.

Appendix G depicts the location of double row silt fence that will be installed between the golf course renovation area and on-site preserves to protect the gopher tortoises that will remain within the on-site preserve areas. The silt fence will be buried a minimum of eight inches beneath the ground surface in accordance with current FWCC standards. The use of wire fencing will not be utilized since it has been known to ensnare snakes and other small animals.

Management of on-site gopher tortoise habitat will be conducted in accordance with Section 4.0 of this plan.

9.3 Florida Sandhill Crane and Wading Bird Management Plan

Although no Florida sandhill crane (*Grus canadensis pratensis*) or wading bird nesting activity were observed on the site during the August and September 2021 protected species survey, three little blue herons and two snowy egrets were observed utilizing the Project site. The following management plan has been prepared for the purpose of addressing the management of potential Florida sandhill crane and wading bird habitat on the site.

9.3.1 Management Plan

Prior to clearing activities, a qualified ecologist will survey the construction impact area and adjacent habitats for the presence of Florida sandhill crane and state-listed wading bird nests. If there is evidence of Florida sandhill crane or state-listed wading bird nesting, the appropriate FWCC-recommended buffer will be provided around the nest site(s) to avoid disturbance by human activities. If Florida sandhill crane or state-listed wading bird nesting is discovered after construction has begun or if maintaining the buffers is not possible, the applicant will contact the FWCC staff to discuss potential permitting requirements.

The Project will enhance, restore, and preserve wetlands within the existing conservation area that provide foraging and roosting habitat for wading birds. In addition, the existing and proposed golf course lakes could potentially be utilized by wading birds for foraging and nesting.

Problematic encounters between future residents and wading birds are not anticipated. Construction, management, and maintenance staff will be informed that the wading birds are a protected species and will be provided with a wading bird informational brochure (Appendix H).

9.4 Burrowing Owl Management Plan

No burrowing owls (*Athene cunicularia*) were observed on-site during the Project's PSS or other fieldwork. However, there is potential for the species to be found in the open golf course lands on the Project site.

The following management plan outlines the protection guidelines that will be implemented for the burrowing owl if they are to be found on-site. The burrowing owl is listed as threatened by the FWCC.

9.4.1 Biology

The burrowing owl lives and breeds in varied habitats throughout the Florida peninsula with the primary natural habitat occurring in dry prairie and, during the dry season, the edges of depressional marshes. Presently, the burrowing owl inhabits several ruderal areas including pastures, golf courses, airports, athletic fields, school campuses, vacant areas in residential or industrial neighborhoods, and road Right-of-Ways (Hipes *et al* 2001). One of the largest sub-populations of burrowing owls is located on the Cape Coral peninsula in Lee County.

Burrowing owls nest and inhabit underground burrows that they excavate or adopt from other burrowing animals, such as gopher tortoises. Culverts, PVC pipes, and spaces underneath sidewalks and roofs also serve as nesting locations for the burrowing owl. Predominately, the burrowing owl is non-migratory and resides within the vicinity of the burrow. They are mostly monogamous and territorial

around their burrows. During the nesting season, burrows are adorned with various materials such as grasses and palm fronds before egg laying. Subsequent to the laying of eggs, the entrance to the burrow is decorated with highly visible, non-natural objects such as tinfoil and plastics.

In Southern Florida, the burrowing owl feeds primarily on the brown anole (*Anolis sagrei*), marine toad (*Bufo marinus*), and Cuban treefrog (*Osteopilus septentrionalis*). To a lesser extent, other amphibians, small rodents, insects, arachnids, and crayfish provide supplemental sustenance. The majority of foraging occurs at dusk, but they also will hunt from perches or burrow entrances during the day. Fence posts serve as a main source for perching (Wood 2001).

9.4.2 Pre-Construction Surveys

Prior to clearing activities, a qualified biologist will survey the construction impact area and adjacent habitats for the presence of owl burrows. Inactive (i.e., contains no eggs or flightless chicks) nest burrows within the proposed impact area will be removed with an FWCC permit and in accordance with State and Federal regulations. Nest burrows can generally be considered inactive from July 10 to February 15, although some nesting occurs as early as October each year. Between February 15 and July 10, burrows attended by one or more burrowing owls are considered active nests unless information is available to suggest otherwise (i.e., proof that young fledged from the nest prior to July 10). Burrows within the impact area that are determined to be active will be temporarily protected from clearing by a 50-foot radius of undisturbed buffer (staked and/or roped-off) until the young fledge, as confirmed by a qualified biologist. These burrows will then be removed, with an FWCC permit and in accordance with state regulations.

9.4.3 Management Plan

Efforts will be made to leave existing burrows undisturbed, where feasible. The owls, burrows, and their eggs are protected from harassment and/or disturbance by state law. Burrowing owls are also protected by the federal Migratory Bird Treaty Act. Golf course maintenance staff and construction personnel will be notified that the Florida burrowing owl is a protected species and instructed to report malicious destruction or harassment of burrowing owls or their nests to 888-404-FWCC (3922).

9.5 Least Tern Management Plan

No least terns (*Sterna antillarum*) were observed on-site during the Project's PSS or other fieldwork. However, there is potential for the species to occur on-site. The least tern is listed as threatened by FWCC.

While existing conditions on-site likely do not support least tern nesting, clearing associated with construction may create conditions favorable for beach-nesting colonies.

If least terns are observed nesting during construction or maintenance activities, FWCC staff will be notified and a buffer will be provided to the nest to avoid disturbance. Research conducted recommends a disturbance buffer of 180 meters (about 197 yards) for least tern nests (FWCC 2013). If maintaining a 180-meter buffer is not possible, FWCC staff will be contacted to discuss methods to reduce disturbance to the nest.

Problematic encounters with least terns are not anticipated. Construction personnel and maintenance staff will be informed that least terns are a protected species.

9.6 Bald Eagle Management Plan

One bald eagle nest (LE-028A) was observed on the Project site during the protected species survey. The bald eagle has been delisted at both the state and federal levels, but is still protected under the Bald and Golden Eagle Protection Act and Lee County Bald Eagle Ordinance No. 08-25. As such, management activities for the bald eagle nest are included below.

9.6.1 Management Plan

Nest LE-028A and its associated 330-foot and 660-foot buffer zones are located within the designated conservation area (Appendix C). Specifications regarding the treatment of exotic vegetation within 660 feet of LE-028A must follow the specific elements outlined in the Bald Eagle Management Plan for Nest LE-28A (Appendix I).

9.7 Florida Black Bear Management Plan

Though no Florida black bear or their sign were documented on the Project site during the protected species survey, it is anticipated that Florida black bears are within the general vicinity of the Project. The following management plan has been prepared for the purpose of addressing the management of potential black bear activities. The Florida black bear is not listed by the FWCC or the USFWS. However, the FWCC and the Lee County LDC have specific management activities for this species.

9.7.1 Biology

The Florida black bear is a subspecies of the American black bear (*Ursus americanus*). The Florida black bear is a solitary animal that inhabits heavily wooded terrain and is most often found in large tracts of swamp forest and undisturbed upland forest. Some of the most important habitat types for the Florida black bear include pine flatwoods, hardwood swamps, cypress swamps, cabbage palm forests, sand pine scrub, and mixed hardwood hammocks. Denning often occurs in remote swamps or thickets with dense vegetation. Adult females breed in alternating years during the months of June and July. In Florida, hibernation may be restricted to females producing cubs. Hibernation most often occurs during the winter months. The diet of Florida black bears is highly variable and includes both

plants and animals including saw palmetto, berries, honeybees (*Apis* sp.), ants (*Formicidae* sp.), armadillo (*Dasypus novemcinctus*), feral hog (*Sus scrofa*), and white-tailed deer (*Odocoileus virginianus*) (Humphrey 1992).

9.7.2 Management Plan

Problematic encounters between humans and black bears are not anticipated. However, to reduce the potential for problematic encounters, construction, management, and maintenance staff will be provided with FWCC's educational brochure titled "A Guide to Living in Bear Country" (Appendix J).

9.8 Big Cypress Fox Squirrel Management Plan

Though no Big Cypress fox squirrels were observed during the protected species survey, there is potential for them to utilize the forested habitats within the Project site. The following management plan has been prepared for the purpose of addressing the conservation of Big Cypress fox squirrel habitat on the Project site. The plan outlines the protection guidelines that will be implemented for the Big Cypress fox squirrel prior to, during, and after construction of the Project. The Big Cypress fox squirrel is listed as threatened by the FWCC. There is no federal listing for the Big Cypress fox squirrel in Florida.

9.8.1 Biology

The Big Cypress fox squirrel lives and breeds in varied habitats in Southwest Florida including cypress swamps, pine flatwoods, tropical hardwood forests, live oak woods, mangrove forests, and suburban habitats including golf courses, city parks, and residential areas in native vegetation (Humphrey 1992). Dense cypress/hardwood swamps are avoided. This may be due to the competition for food and habitat with the gray squirrel (*Sciurus carolinensis*). Little data is available on the preferred forage habitat of the Big Cypress fox squirrel. Big Cypress fox squirrels prefer to feed on the male and female cones of slash pine. Cabbage palm fruits, bromeliad (*Bromeliaceae* sp.) buds, and acorns are also important food items. A smaller percentage of the diet may consist of seasonal fruits, berries, and seeds (Humphrey 1992).

Big Cypress fox squirrels often form platform nests in pines and hardwoods, and moss and stick nests in cypress, tops of cabbage palms, and large clumps of bromeliads. Cabbage palms and bromeliads are especially important because they can provide immediate shelter, which allows the squirrel to travel over large areas without requiring a daily return to a permanent nesting facility (Humphrey 1992).

Big Cypress fox squirrels are solitary animals. Interaction between animals occurs primarily during mating season. Mating chases occur frequently throughout the months of May through August. During the non-mating season, interactions are infrequent and often occur around food sources. Young remain in the nest for

approximately 90 days. Home ranges are 40 hectares (approximately 100 acres) for males and 20 hectares (approximately 50 acres) for females (Humphrey 1992).

9.8.2 Pre-Construction Surveys

A qualified ecologist will be on-site to supervise Big Cypress fox squirrel management and monitoring activities as detailed in this plan. Prior to clearing activities, the preserve areas will be staked in the field and clearly identified with silt fencing or an equivalent barrier. The fencing will be inspected by the preserve manager prior to clearing activities. The operation and storage of construction equipment and the stockpiling of fill and construction material will be prohibited within the fenced preserve areas. The fencing identifying the limits of the preserves will be maintained for the duration of construction activities.

Also, prior to commencement of clearing activities in the development area and removal of exotic trees within the preserve areas, a survey will be conducted by a qualified ecologist to identify potential Big Cypress fox squirrel nests. If potential nests are identified within the clearing limits or within the preserve areas, observations will be conducted to determine if the nests are being utilized by Big Cypress fox squirrels. The FWCC will be notified of nests determined to be utilized by Big Cypress fox squirrels. Active nests will be temporarily protected from clearing by a 125-foot radius undisturbed buffer until juvenile fox squirrels have vacated the nest(s), as confirmed by a qualified ecologist. After completion of nesting and observations documenting that juvenile fox squirrels have vacated the nest(s), a written request to remove the nest tree(s) will be made to the FWCC. After receipt of the written authorization from the FWCC, the nest tree and buffer can be cleared.

9.8.3 Management Plan

Enhancement and restoration of the preserve areas will be conducted as detailed in Section 4.0 of this plan. The preserve areas will provide foraging and nesting habitats for Big Cypress fox squirrels.

Problematic encounters between future residents and Big Cypress fox squirrels are not anticipated. The typical nest location, high within the tree canopy, will ensure against disturbance to fox squirrel nests. Construction, management, and maintenance staff will be informed that the Big Cypress fox squirrel is a protected species.

9.9 Listed and Less Common Plant Species

Every effort will be made to relocate listed and other less common plant species located within the development footprint to open space and landscaped areas. This includes listed orchid and airplant species, Florida coontie (*Zamia integrifolia*), Catesby's lilies (*Lilium catesbaei*), leather fern, or cabbage palm with golden polypody (*Phlebodium aureum*) or

shoestring fern (*Vittaria lineata*). Methods will include the hand and/or mechanical relocation of these species, provided that it is safe and feasible to do so.

10.0 HUMAN-WILDLIFE COEXISTENCE PLAN

The following Human-Wildlife Coexistence Plans are provided for the American alligator, wading birds, and Florida black bear.

10.1 American Alligator

The FWCC's educational brochure entitled "A Guide to Living with Alligators" (Appendix F) will be provided to construction, management, and maintenance staff. The brochure can be found at http://myfwc.com/media/152524/Alligator_Brochure.pdf.

Construction, management, and maintenance personnel will be instructed that in the event there is a problem with a persistent nuisance alligator, they should contact the FWCC's Nuisance Alligator Hotline at 866-FWC-GATOR (866-392-4286). The FWCC is the only agency empowered to handle nuisance alligators.

10.2 Wading Bird

A wading bird informational brochure entitled "Wading Bird Informational Pamphlet" (Appendix H) will be provided to construction, management, and maintenance personnel. The brochure provides wading bird information and methods to prevent human-wading bird interactions. In addition, the brochure informs construction personnel and the management and maintenance staff of the need to avoid disturbance around a nest(s), should a wading bird nest(s) be identified on the property in the future.

10.3 Florida Black Bear

Construction, management, and maintenance personnel will be educated about the presence of black bears in the area. The FWCC's educational brochure entitled "A Guide to Living in Bear Country" (Appendix J) will be provided to construction, management, and maintenance staff. This brochure can be found at https://myfwc.com/media/1891/livinginbearcountrybrochure.pdf.

11.0 PRESERVE SIGNAGE

Signage shall be placed around preserve areas to identify and protect the preserves during construction. The signs shall be a maximum height of four feet and a maximum size of two square feet, and otherwise comply with Section 5.06.00 of the LDC. Maximum sign spacing shall be 300 feet. Signs identifying the preserve as a "nature preserve area" will be installed along the boundary of the preserve. The signage should include language stating, "No dumping allowed." A typical preserve sign is attached as Appendix E.

12.0 REFERENCES

Florida Fish and Wildlife Conservation Commission. 2013. A species action plan for four imperiled species of beach-nesting birds. Tallahassee, Florida.

Florida Natural Areas Inventory. 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.

Hipes, D., D.R. Jackson, K. NeSmith, D. Printiss, and K. Brandt. 2001. Field Guide to the Rare Animals of Florida. Florida Natural Areas Inventory, Tallahassee, Florida.

Humphrey, Stephen R. 1992. Rare and Endangered Biota of Florida; Volume I. Mammals. University Press of Florida, Gainesville, FL. 392 pages.

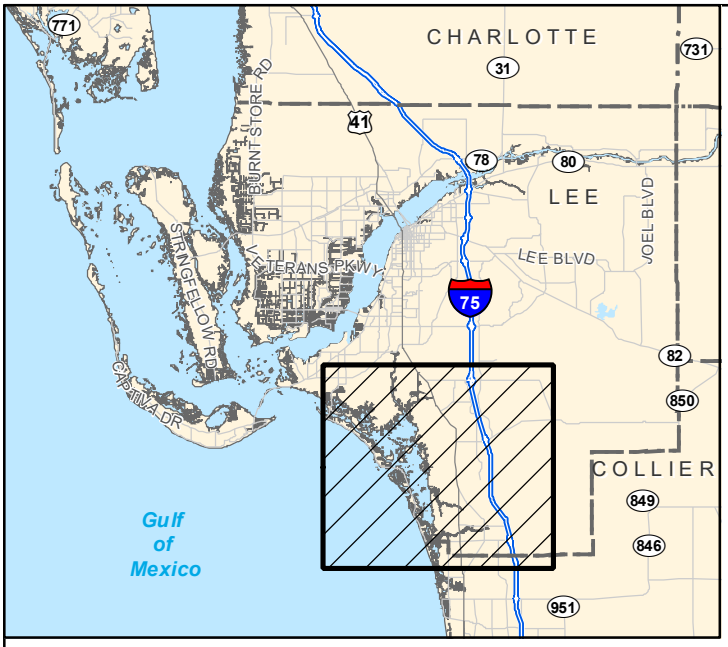
Rodgers, J.A., Jr., H.W. Kale II, H.T. Smith (*eds.*). 1996. Rare and Endangered Biota of Florida, Vol. V. Birds. University of Florida Press, Gainesville, Florida, USA.

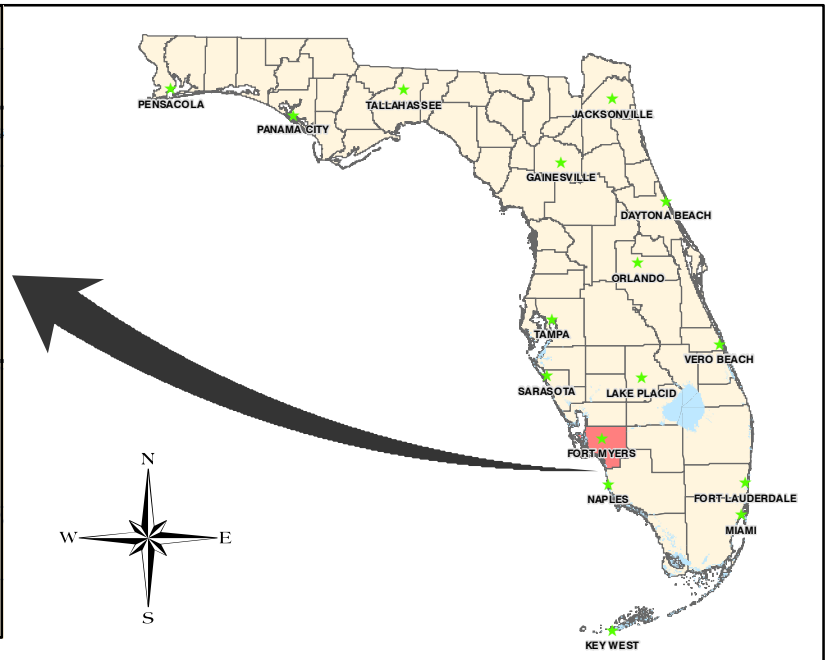
U.S. Fish and Wildlife Service. 1999. South Florida Multi-Species Recovery Plan.

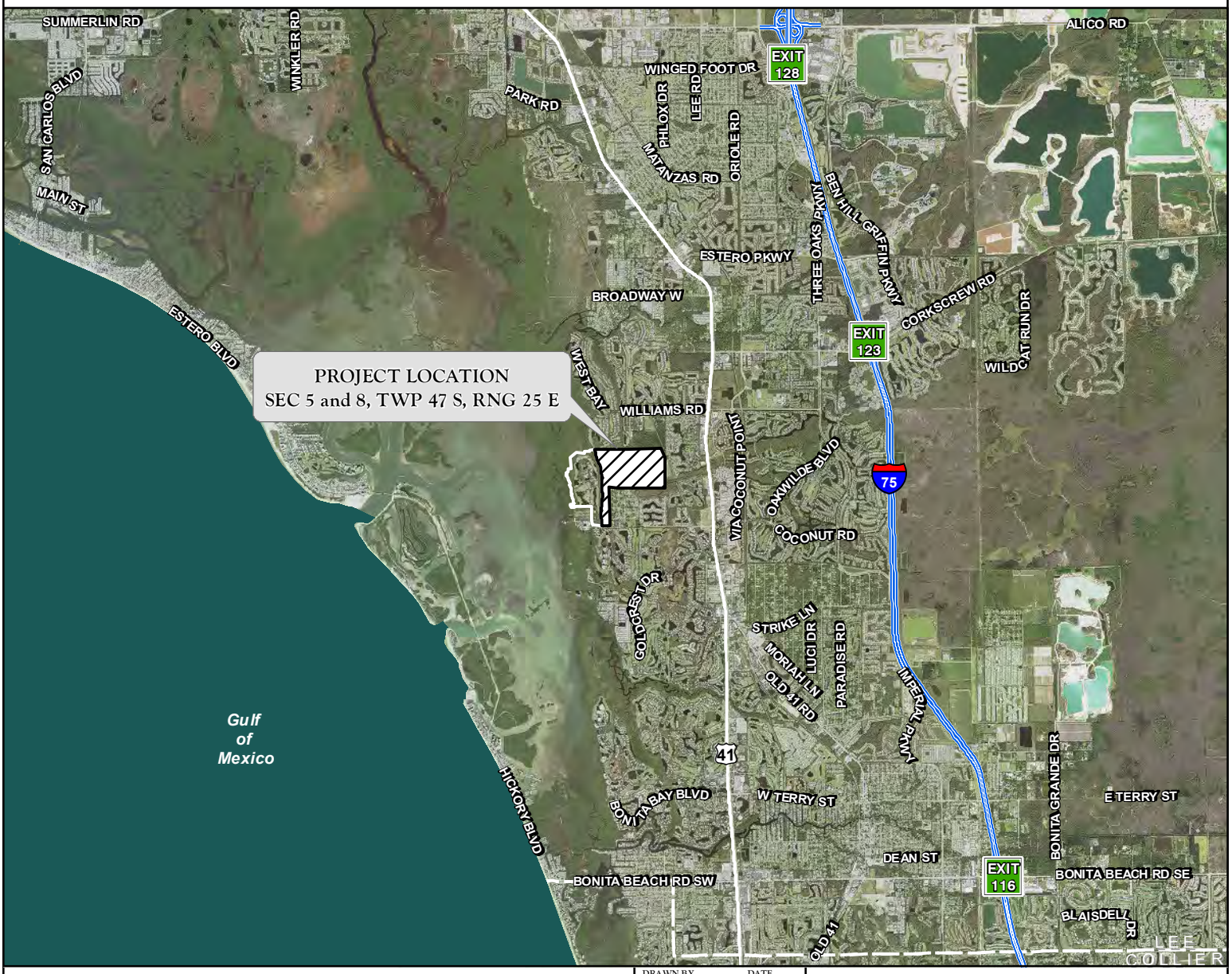
Wood, Don A. 2001. Florida's Fragile Wildlife Conservation and Management. University Press of Florida. Gainesville, FL.

APPENDIX A

PROJECT LOCATION MAP







APPENDIX A. PROJECT LOCATION MAP
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
P.F.	09/22/21
REVIEWED BY	DATE
S.J.	09/22/21
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

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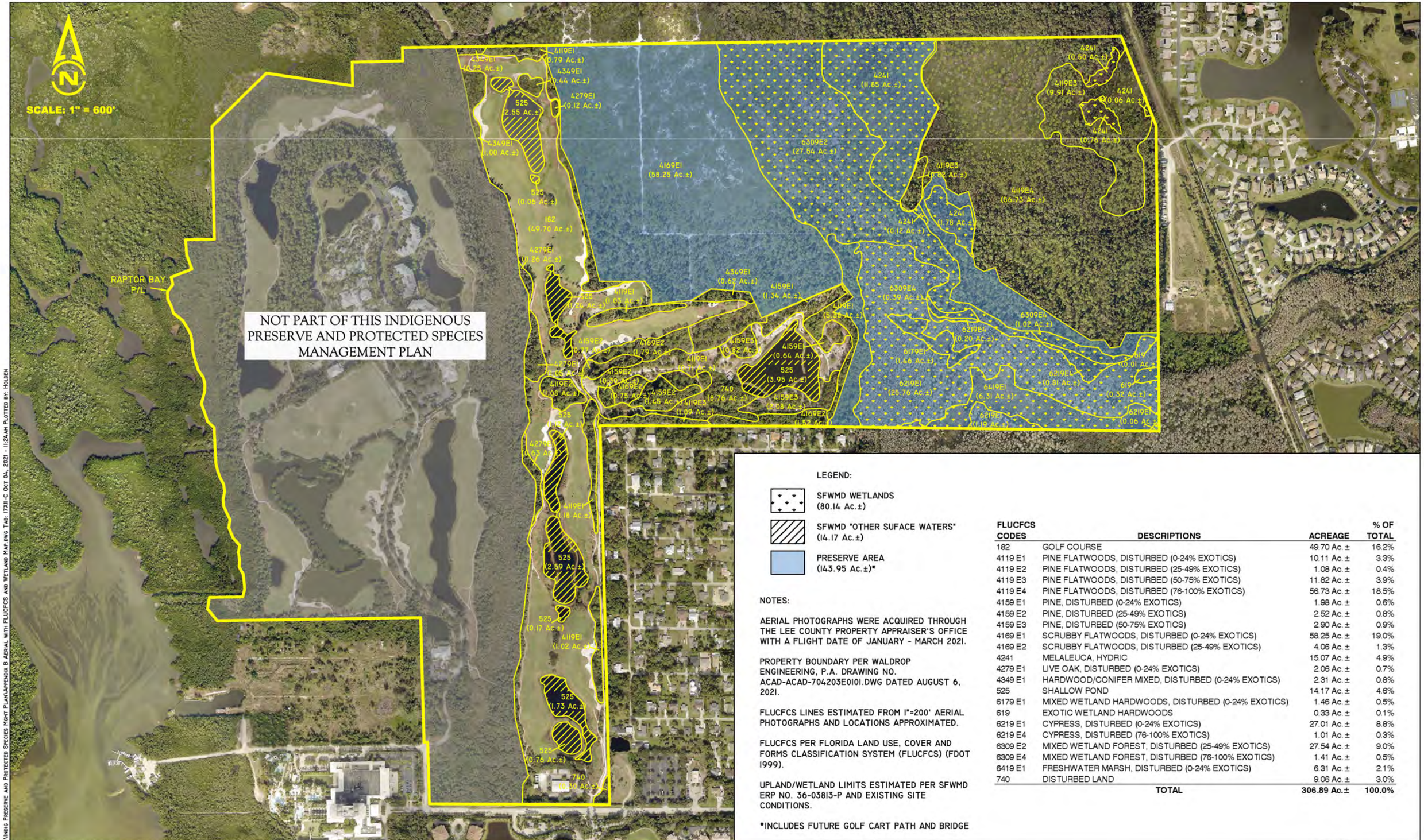
APPENDIX B

AERIAL WITH FLUCFCS AND WETLANDS MAP



LEGEND:

- SFWMD WETLANDS (80.14 Ac.±)
- SFWMD "OTHER SUFACE WATERS" (14.17 Ac.±)
- PRESERVE AREA (143.95 Ac.±)*

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS ESTIMATED PER SFWMD ERP NO. 36-03813-P AND EXISTING SITE CONDITIONS.

*INCLUDES FUTURE GOLF CART PATH AND BRIDGE

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
182	GOLF COURSE	49.70 Ac.±	16.2%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	10.11 Ac.±	3.3%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	1.08 Ac.±	0.4%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	11.82 Ac.±	3.9%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	56.73 Ac.±	18.5%
4159 E1	PINE, DISTURBED (0-24% EXOTICS)	1.98 Ac.±	0.6%
4159 E2	PINE, DISTURBED (25-49% EXOTICS)	2.52 Ac.±	0.8%
4159 E3	PINE, DISTURBED (50-75% EXOTICS)	2.90 Ac.±	0.9%
4169 E1	SCRUBBY FLATWOODS, DISTURBED (0-24% EXOTICS)	58.25 Ac.±	19.0%
4169 E2	SCRUBBY FLATWOODS, DISTURBED (25-49% EXOTICS)	4.06 Ac.±	1.3%
4241	MELALEUCA, HYDRIC	15.07 Ac.±	4.9%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	2.06 Ac.±	0.7%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	2.31 Ac.±	0.8%
525	SHALLOW POND	14.17 Ac.±	4.6%
6179 E1	MIXED WETLAND HARDWOODS, DISTURBED (0-24% EXOTICS)	1.46 Ac.±	0.5%
619	EXOTIC WETLAND HARDWOODS	0.33 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	27.01 Ac.±	8.8%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	1.01 Ac.±	0.3%
6309 E2	MIXED WETLAND FOREST, DISTURBED (25-49% EXOTICS)	27.54 Ac.±	9.0%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	1.41 Ac.±	0.5%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	6.31 Ac.±	2.1%
740	DISTURBED LAND	9.06 Ac.±	3.0%
	TOTAL	306.89 Ac.±	100.0%

J:\2020\20LBR3290\2021\INDIG PRESERVE AND PROTECTED SPECIES MGMT PLAN\APPENDIX B AERIAL WITH FLUCFCS AND WETLAND MAP.DWG TAB: 17X11-C OCT 04, 2021 - 11:24AM PLOTTED BY: HOLDEN

REVISIONS	DATE

DRAWN BY	R.F.	DATE	09/27/21
DESIGNED BY	S.J.	DATE	09/27/21
REVIEWED BY	S.J.	DATE	09/27/21

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

RAPTOR BAY GOLF COURSE RENOVATION

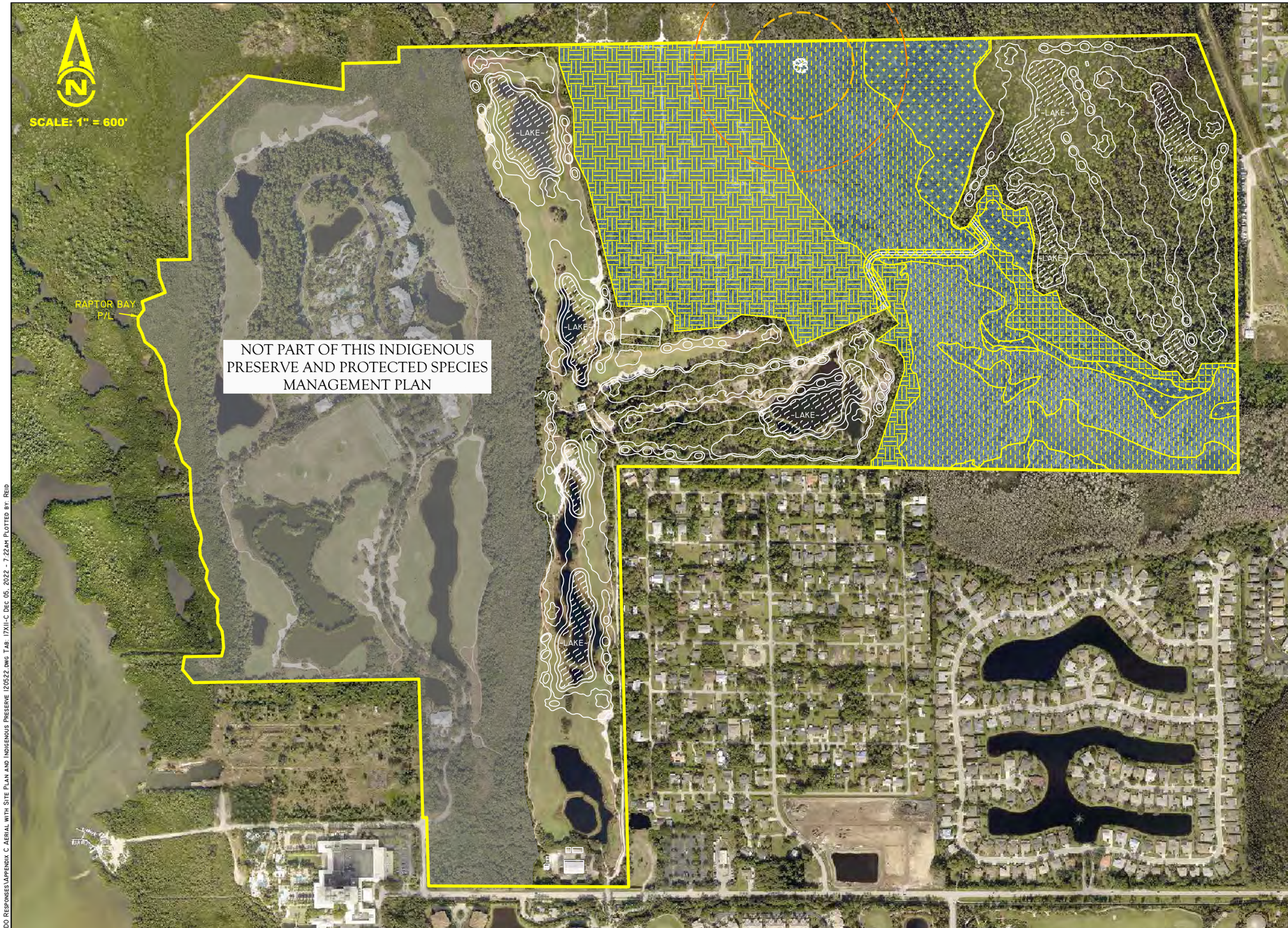
AERIAL WITH FLUCFCS AND WETLANDS MAP

DRAWING No. 20LBR3290

SHEET No. APPENDIX B

APPENDIX C

AERIAL WITH SITE PLAN AND INDIGENOUS PRESERVE



LEGEND:

- PRESERVE AREA (143.95 Ac.±)*
- WETLAND ENHANCEMENT (61.54 Ac.±)
- WETLAND RESTORATION (16.44 Ac.±)**
- UPLAND ENHANCEMENT (57.74 Ac.±)
- UPLAND RESTORATION (6.74 Ac.±)
- CART PATH (1.49 Ac.±)
- EAGLE NEST
- 330' PRIMARY PROTECTION ZONES
- 660' SECONDARY PROTECTION ZONES

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING No. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021 AND DRAWING No. BAYVIEW PROPERTY AND DO BOUNDARY (2021-09-21).DWG DATED SEPTEMBER 21, 2021.

SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING No. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.

*INCLUDES FUTURE GOLF CART PATH AND BRIDGE.

**INCLUDES 1.78 Ac.± OF MELALEUCA THAT IS CURRENTLY UNDER A SEPARATE SFWMD CONSERVATION EASEMENT THAT WILL BE REGRADED AND PLANTED IN ACCORDANCE WITH SFWMD AND U.S. ARMY CORPS OF ENGINEERS PERMIT REQUIREMENTS.

REVISIONS	DATE
Added Note	12/21/21
Added Note	1/11/22
Revised Eagle Zones	12/5/22

		DATE
DRAWN BY	R.F.	09/27/21
DESIGNED BY	S.J.	09/27/21
REVIEWED BY	S.J.	09/27/21

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

RAPTOR BAY GOLF COURSE RENOVATION

AERIAL WITH SITE PLAN AND INDIGENOUS PRESERVE

DRAWING No. 20LBR3290

SHEET No. APPENDIX C

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APPENDIX D

WILSONMILLER'S MARCH 6, 2000 PROPOSED RECONFIGURATION OF PELICAN LANDING DRI ECO-PARK

WilsonMiller

Proposed Reconfiguration of Pelican Landing DRI Eco-Park

Section 5, Township 47 South, Range 25 East
Lee County, Florida

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Planners Engineers Ecologists Surveyors
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1.0. INTRODUCTION AND PROJECT HISTORY

This document serves to revise the initial report dated September 30, 1999 that was submitted to Jim Beever of the Florida Fish and Wildlife Conservation Commission. Changes have been made to the document to update it for the purposes of providing information pertinent to a request to modify Gopher Tortoise Incidental Take Permit #Lee-9 issued to Westinghouse Bayside Communities, Inc. on August 29, 1995.

Changes made to the document compared to the initial version include:

1) *A change to the configuration of the proposed Eco-Park such that the 1.47-acre isolated melaleuca wetland and associated 1.04 acres of adjacent upland buffer, located in the east-central region of the previously-proposed Eco-Park, have been removed from the Eco-Park. This wetland and associated upland buffer will instead be placed under a conservation easement to the South Florida Water Management District (SFWMD) since extensive enhancement activities will occur in this wetland as part of the project's overall wetland mitigation plan (Figures 3, 4, 5).*
2) *Minor changes have been made to the upland acreage of the proposed Eco-Park due to minor modifications to the project design (Tables 1 and 3).*
3) *Updating of the status of coordination with the U.S. Fish and Wildlife Service regarding the project's Bald Eagle Management Plan (Section 1.0).*
4) *Addition of information summarizing the proposed relocation of gopher tortoises inhabiting the deletion parcel to that portion of the existing Eco-Park to remain intact (Section 4.4).*
5) *Addition of information summarizing proposed mitigation for impacts to gopher tortoises inhabiting portions of the Skebe tract that will be developed (Section 4.5, Table 2).*
6) *Refinement of the location of the golf cart path, golf cart bridge, and surface water management conveyance/outfall structures (Figure 5).*
7) *Updating proposed habitat management methods in accordance with those proposed to the SFWMD and Corps as part of the wetland mitigation plan for the overall project (Section 6.0).*

Pelican Landing is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Florida Game and Fresh Water Fish Commission issued a gopher tortoise incidental take permit to Westinghouse Bayside Communities, Inc. on August 29, 1995 (Permit #Lee-9 - Appendix A). This permit encompasses 680.6 acres of gopher tortoise (*Gopherus polyphemus*) habitat within the DRI and authorizes the taking of gopher tortoises (GTs), their eggs, and their burrows. Condition #1 of the permit requires that 78 acres of GT habitat be preserved and managed via a perpetual conservation easement. The conservation easement was executed on September 21, 1995 and recorded in the official records of Lee County on October 18, 1995 (OR Book 2644, Page 1127-1134; see Appendix B). The resulting parcel of land encompassed by this easement is referred to as the Pelican Landing "Eco-Park". Figure 1 provides a general location map for the Pelican Landing Eco-Park. All figures referenced herein are located in Section 9.0 of this report.

The purpose of this document is to provide the Florida Fish and Wildlife Conservation Commission (FWC) with a proposal to revise the boundary of the Eco-Park. As has been discussed in recent meetings with the FWC, the original configuration of the Eco-Park was based on property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc.

has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary could allow for a larger, more balanced and diverse preservation area. The modifications proposed herein are based on the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. This document provides a detailed summary of the proposed changes and the benefits derived therefrom.

Due to the presence of a bald eagle's nest in the Eco-Park (Nest #LE-28A), WilsonMiller is also coordinating with the U.S. Fish and Wildlife Service (USFWS) regarding the proposed boundary configuration. A revised bald eagle management plan incorporating the proposed boundary revision was submitted to the USFWS (Kim Dryden) on September 21, 1999 for review, comment, and approval. The plan has been revised based on USFWS and FFWCC comments and is in the final stages of approval. The plan maintains a Primary Protection Zone (PPZ) of 1,200 feet and a Secondary Protection Zone (SPZ) of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ), in accordance with bald eagle management guidelines. Details of the plan are available by request or by contacting Kim Dryden of the USFWS.

2.0 CHARACTERISTICS OF CURRENT ECO-PARK

Figure 2 provides a map showing the existing configuration of the Eco-Park and its Florida Land Use, Cover and Forms Classification System (FLUCCS; FDOT, 1985) habitats. Figure 2 also provides the acreage of each FLUCCS type within the existing Eco-Park, as well as the location of eagle nest #LE-28A. Habitat boundaries have been modified/updated as-needed based on aerial photography and ground truthing. The following is a description of the habitat types present in the existing Eco-Park.

Xeric Oak (FLUCCS #421): This habitat is the most abundant, comprising approximately 54.1 acres or 69% of the Eco-Park. Xeric oak (scrub) habitat of the site has a sparse of slash pine (*Pinus elliottii*) canopy and a midstory dominated by sand live oak (*Quercus geminata*), other species of scrub oak, and rusty lyonia (*Lyonia ferruginea*). Ground cover is predominately saw palmetto (*Serenoa repens*), with paspalum (*Paspalum* sp.), cordgrass (*Spartina bakerii*), rosemary (*Ceratiola ericoides*), prickly pear cactus (*Opuntia humifusa*), and reindeer lichen (*Cladonia* spp.). Scrub habitat in the southern one-third to one-half of the Eco-Park differs from that in the north by having fewer bare sandy areas, a lesser density of scrub oaks, and a denser ground cover of saw palmetto and grasses. The northern portion of Eco-Park has a more traditional scrub appearance, replete with open sandy areas, abundant scrub oak in the midstory, and a lesser density of saw palmetto and grasses. Appendix C provides representative photographs of xeric scrub habitat in the northern portion of the Eco-Park.

Xeric Oak with High Density Shrub Layer (FLUCCS #4211): This habitat occurs in the northern portion of the Eco-Park. It is similar to the xeric oak scrub habitat, but occurs at a slightly lower elevation and has a greater density of saw palmetto and oaks in the midstory and shrub strata.

Palmetto Prairie (FLUCCS #321): Palmetto prairie habitat occurs in the middle and northern portion of the Eco-Park. Palmetto prairies have very few slash pines in the canopy. The midstory layer consists of scattered paw paw (*Asimina reticulata*), rusty lyonia, and wax myrtle (*Myrica cerifera*). The ground cover is dominated by a thick, dense layer of saw palmetto, with lesser amounts of pineweed (*Hypericum gentianoides*), St. Johns wort (*Hypericum fasciculatum*), big blue stem (*Andropogon virginicus*), yellow-eyed grass (*Xyris platylepis*), paspalum, cordgrass (*Spartina bakerii*), gopher apple (*Licania michauxii*), and partridge pea (*Chamaecrista fasciculata*).

Pine Flatwoods (FLUCCS #411): A small amount of pine flatwoods occurs in the Eco-Park. This habitat has a canopy of slash pine, a sparse to absent midstory, and a ground cover stratum dominated by saw palmetto.

Pine Flatwoods/Palmetto Prairie (FLUCCS #411/321): This habitat is the second-most abundant on-site (19% of site) and is a mix of the pine flatwoods and palmetto prairie habitats. It differs from pine flatwoods and palmetto prairie by having a variable pine canopy density intermediate between these two habitat types. Thus, it has been given a dual designation. The majority of this habitat occurs in the southern portion of the Eco-Park. Plant species are typical of the flatwoods and palmetto prairie vegetative associations described above.

3.0 LOCATION AND HABITAT TYPES OF PROPOSED SWAP PARCELS

3.1 General Information

The proposed reconfiguration of the Eco-Park provides for "swapping" of parcels of the Eco-Park. One parcel is located in the southern portion of the existing Eco-Park and is proposed to be removed from the Eco-Park ("deletion parcel" – Figure 3). Four other parcels are proposed to be added to the Eco-Park. These four parcels will be collectively referred to as the "addition parcel" in the remainder of this report. The largest of the parcels is located to the east of the existing Eco-Park on an adjacent site known as the "Skebe" tract. WCI Communities, Inc. has entered into an agreement with the owner of the Skebe tract to purchase the site pending the USFWS's and the FFWCC's approval of the proposed reconfiguration. Three other smaller parcels are located immediately west of and contiguous to the central and northern region of the existing Eco-Park (Figure 3). Table 1 provides a summary of the acreages of habitat types in the swap parcels, followed by a description of each habitat type.

TABLE 1
Habitat Types and Acreages in Proposed Swap Parcels

FLUCCS Code	FLUCCS Type	Deletion Parcel (ac.)	Addition Parcels (ac.)	Net Gain/Loss (ac.)
	UPLANDS			
321	Palmetto prairie	0.53	0.72	+0.19
411	Pine flatwoods	0.23	23.84*	+23.61
411/321	Pine flatwoods/Palmetto prairie	10.94	0.16	-10.78
421	Xeric oak	10.50	2.24	-8.26
4211	Xeric oak w/ high, dense shrub layer	---	0.31	+0.31
423E1	Pine-cabbage palm-oaks, 10-24% exotics	---	4.66	+4.66
424	Melaleuca	---	1.36	+1.36
743	Spoil area	---	0.12	+0.12
	UPLAND TOTAL	22.20	33.41	+12.34
	WETLANDS			
513	Ditch	---	0.02	+0.02
600	Shrub wetland	---	6.28	+6.28
616	Inland pond	---	0.49	+0.49
621	Cypress	---	45.45	+45.45
	WETLAND TOTAL	---	52.24	+52.24
	GRAND TOTAL	22.20	+ 85.65	+63.45

* Includes 22.56 acres of flatwoods with 10-75% exotic invasion. Exotics will be removed and habitat enhanced.

55.8
33.41
89.21

(78 − 22.20) + 85.65 = 141.45
33.41 uplands
52.24 wetlands.

3.2 Proposed Deletion Parcel

Habitat types present in the proposed deletion parcel in the southern portion of the Eco-Park (Figure 3) include xeric oak (FLUCCS #421), pine flatwoods/palmetto prairie (#411/321), palmetto prairie (#321), and pine flatwoods (#411). A description of these habitats is provided in Section 2.0 and their acreages are provided in Table 1. Appendix D provides representative photographs of xeric oak and pine flatwoods/palmetto prairie habitats of the deletion parcel.

3.3 Proposed Addition Parcels

Ten habitat types occur on parcels proposed to be added to the Eco-Park (Figure 3). These habitats are described below and associated acreages are provided in Table 1. Appendix E provides representative photographs of most of the habitats of the addition parcel.

Palmetto Prairie (FLUCCS #321): Several areas of palmetto prairie habitat are contiguous with and essentially identical to that located in the existing Eco-Park.

Pine Flatwoods (FLUCCS #411): This community is essentially identical to that located in the existing Eco-Park (see Section 2.0), with the exception that flatwoods of the Skebe site tend to have a higher abundance of exotic species (10-75% total cover), primarily melaleuca (*Melaleuca quinquenervia*) and downy rose myrtle (*Rhodomyrtus tomentosus*).

Xeric Oak (FLUCCS #421): Xeric oak habitat on the Skebe tract is similar in vegetative composition and species abundance to that of the proposed deletion parcel. There are also proposed addition areas of higher quality xeric oak that are located to the west of, and are contiguous with, the central and northern region of the existing Eco-Park (Figure 3).

Pine-Cabbage Palm-Oaks (FLUCCS #423): This community is located along the perimeter of Halfway Creek. The canopy consists of large slash pine. The midstory consists of cabbage palm (*Sabal palmetto*), laurel oak (*Quercus laurifolia*), and scattered scrub oaks. Saw palmetto, myrsine (*Myrsine guianensis*), and greenbrier (*Smilax* spp.) are abundant in the understory. Very little herbaceous vegetation is present under the dense saw palmetto stratum. Melaleuca is present in occasional dense patches and overall comprises 10-24% of the cover in this habitat.

Melaleuca (FLUCCS #424): This habitat is a monoculture or pure stand of melaleuca, with occasional slash pine and saw palmetto. Very few other plants grow in the dense shade of this exotic plant community.

Shrub Wetland (FLUCCS #600): This vegetative association is present in the southern portion of the addition area and is dominated by willow (*Salix* sp.) and buttonbush (*Cephalanthus occidentalis*). Very few canopy trees are present in this habitat. This shrub wetland may be permanently flooded.

Inland Pond (FLUCCS #616): This cover type is an open water body present in the southeast corner of the addition area. The area may be remain ponded throughout the year. It is bordered by a narrow shrub fringe.

Cypress (FLUCCS #621): This jurisdictional wetland community is dominated by tall-stature cypress (*Taxodium distichum*) and comprises the majority of Halfway Creek. Cabbage palm, laurel oak, red maple (*Acer rubrum*), pop ash (*Fraxinus caroliniana*), and wax myrtle are also present in the canopy and midstory. Swordfern (*Nephrolepis* spp.) dominates the understory. Melaleuca is present in patches along the wetland-upland interface with occasional Brazilian pepper (*Schinus terebinthifolius*).

Spoil Area (FLUCCS #743): This area consists of what appears to be the grade for an old road that crossed Halfway Creek. There is a gap in the western portion of the spoil berm where a bridge probably once sat. Much of the flow of Halfway Creek flows through this gap during the rainy season.

As noted above, some of the habitats of the addition parcel have exotic species invasion. These habitats will be eradicated of exotic species and maintained/managed in perpetuity as part of the proposed Eco-Park reconfiguration (see habitat management plan in Section 6.0).

4.0 GOPHER TORTOISE (GT) POPULATION OF PROPOSED SWAP PARCELS

4.1 GT Population of Proposed Deletion Parcel

Gopher tortoise burrow surveys were conducted on the deletion parcel by WilsonMiller ecologists for the purpose of evaluating the GT population of the parcel. The locations of identified burrows are provided in Figure 4.

Field work was conducted between July 28, 1999 and August 2, 1999. Pedestrian transects were performed through each of the habitats identified as potential tortoise habitat. The biologist walked the transects recording the number of active, inactive and old burrows and identifying their approximate location on aerial photographs. Upon completion of one transect line, the biologist would begin the next transect at a given distance from the previous line established parallel to the previous line. This process was repeated until the entire deletion parcel had been surveyed. The distance between transects was varied based on visibility limits and ranged from 10 feet in dense vegetation to 20 feet in more open scrub habitat. A minimum of 98% of each habitat was surveyed.

A total of 69 burrows; 37 active, 27 inactive, and 5 old; were identified on the deletion parcel. Based on the 98% habitat coverage, the estimated number of active+inactive burrows on the parcel is 65. Prior studies conducted within the Bonita Bay and adjacent Spring Creek West DRIs indicate that burrow occupancy factors in the project area are 0.21 for xeric oak habitat and 0.31 for pine flatwoods and saw palmetto prairie habitats. Utilization of these occupancy factors yields GT densities of 0.82 for xeric oak habitat of the deletion parcel and 0.65 GTs/acre for pine flatwoods/palmetto prairie habitat of the deletion parcel. It is estimated that a total of 16 GTs are present on the deletion parcel.

4.2 GT Population of Proposed Addition Parcel

Gopher tortoise burrow surveys were conducted on the Skebe addition parcel by ecologists from Boylan Environmental Consultants, Inc. The locations of identified burrows are provided in Figure 4.

Field work was conducted during the period of March through July, 1999. Pedestrian transects were performed through each of the habitats identified as potential tortoise habitat and active, inactive, and old GT burrows were identified. The distance between parallel transects varied based on visibility, which ranged from 20 to 30 feet. A minimum of 90% of each habitat was surveyed.

A total of 15 burrows; 5 active, 5 inactive, and 5 old; were identified on the addition parcel. Based on Boylan Environmental's average habitat coverage of 90%, it is estimated that a total of 11 active+inactive burrows are present on the parcel. When broken down by habitat type, GT densities are 0.15 GTs/acre for pine flatwoods using an occupancy factor of 0.31 and 0.41 GTs/acre for xeric oak habitat using an occupancy factor of 0.21. The relatively low GT densities on the Skebe addition parcel appear to be the result of the greater abundance of exotics compared to the deletion parcel, especially in pine flatwoods habitats. It is anticipated that the quality of the pine flatwoods and xeric oak habitats of the addition parcel can be enhanced via exotic removal and maintenance/management such that the carrying capacity for GTs can be substantially increased over its existing level.

4.3 GT Population of Portion of Existing Eco-Park to Remain Intact

Gopher tortoise burrow surveys were conducted by WilsonMiller ecologists on that portion of the existing Eco-Park to remain intact. The surveys were conducted during the period of September 22nd through 24th, 1999 and the locations of identified burrows are provided in Figure 4. A total of 77 burrows inferred to be active or inactive were identified during the survey. Based on the 98% habitat coverage, the total estimated number of active and inactive burrows is 79. Determination of the activity status of some of the GT burrows was difficult due to the effects of Tropical Storm Harvey which passed through the area one day prior to the survey and resulted in over ten inches of rainfall. The storm flooded burrows in lower lying areas and eliminated indicators of activity status in burrows that had not used following passage of the storm. A total of 18 of the 77 identified burrows were affected in this regard so as to make determination of their exact activity status difficult. However, professional judgment was utilized in evaluating these burrows and resulted in determination of whether these burrows were likely either active or inactive prior to the storm. The results of the survey indicate that the population density of GTs in xeric oak habitat (FLUCCS #421) in the portion of the Eco-Park to remain intact is approximately 0.33 GTs per acre using an occupancy factor of 0.21. No GT burrows were identified in the FLUCCS #4211 habitat of the site that has a high density shrub stratum and that occurs at lower elevations than the higher quality scrub habitat to the west. It is estimated that a total of 16 GTs are present on the portion of the existing Eco-Park to remain intact.

4.4 Proposed Disposition of GTs Currently Inhabiting the Deletion Parcel

GTs currently inhabiting the deletion parcel are proposed to be relocated to areas of the existing Eco-Park to remain intact with FLUCCS types 4211, 411/321, and 411E1. Such relocation is in accordance with the Eco-Park's existing management plan, which allows for relocation of GTs into such areas until densities reach 2.0 GTs/acre. Authorization of the relocation will be formally obtained by submitting a request for modification of the existing incidental take permit for the site (#Lee-9). Based on the estimated 16± GTs in the deletion parcel, the aggregate population density of FLUCCS 4211, 411/321, and 411E1 areas of the recipient parcel located just west of Halfway Creek will increase to 1.11 GTs/acre, well below the permit threshold. GT burrows of the deletion parcel will either be bucket trapped or excavated according to FFWCC guidelines. Prior to the commencement of relocation activities, the western and southern boundaries of the portion of the new Eco-Park located west of Halfway Creek will be fenced to preclude relocated GTs from traveling back to the donor parcel. A burrow survey affording 100% coverage of the donor parcel will be conducted no more than 30 days prior to the relocation effort.

No mitigation is proposed for land being deleted from the existing Eco-Park since suitable upland habitats proposed to be added to the Eco-Park are in excess of those being deleted (33.41 acres added vs. 22.20 deleted).

4.5 Proposed Mitigation for GT Impacts on Skebe Tract

Proposed mitigation for impacts to GTs inhabiting areas of the Skebe tract that will be developed is summarized in Table 2. Based on the calculations in Table 2, the required mitigation acreage for impacts to occupied uplands totals 3.66 acres. Given that there is an 11.21-acre excess of upland habitat being added to the Eco-Park compared to acreage of habitat proposed to be removed, a sufficient amount of mitigation is being provided for proposed impacts to GT habitat of the Skebe tract. In addition, all GTs within impact areas are proposed to be relocated to preserve areas of the Skebe tract. Thus, no direct taking of GTs will occur. Authorization of the relocation will be formally obtained by submitting a request for modification of the existing incidental take permit for Pelican Landing (#Lee-9).

It should be noted that approximately 50% of the "impact" will remain in a predominantly natural state. Such areas are located primarily between golf course holes (see Figure 5) and will undergo selective clearing. Such clearing will result in an increase in herbaceous groundcover and thus an increase in available foraging habitat. As a result, suitable habitat will remain in these areas following development. Thus, the proposed mitigation requirement is conservative in that it compensates for areas where no taking of GTs will occur and where suitable habitat will remain following development. Based on the estimated 8± GTs that will require relocation (*i.e.*, GTs in the direct footprint of the golf course and surface water management features), the aggregate population density of recipient habitats in proposed upland preserves located on the Skebe tract will increase to approximately 0.31 GTs/acre, a density that can be easily accommodated, especially considering that enhancement and management of such habitats will occur.

TABLE 2
Proposed Mitigation for Impacts to GT Habitat on the Skebe Parcel

FLUCCS	Impact Acres	# Active+ Inactive Burrows	Number of #GTs*	GT Density (/acre)	Proposed Mitigation Ratio	Proposed Mitigation Acreage
411	11.54	29	9	0.78	15.0%	1.73
411E1	35.39	14	4	0.12	4.6%	1.63
411E2	5.74	2	1	0.11	4.1%	0.23
411E3	8.57	0	0	0.00	0.0%	0.00
415	0.26	2	1	2.38	25.0%	0.07
424	0.24	0	0	0.00	0.0%	0.00
	61.50	47	15	0.24		3.66

* Utilizes burrow occupancy rate of 31%.

5.0 PROPOSED ECO-PARK CONFIGURATION AND ADJACENT DEVELOPMENT CONDITIONS

The proposed changes to the Eco-Park boundary will increase the size of the Eco-Park by 81% (63-acre net increase) and will create a preserve with a diverse array of upland and wetland habitat types.

Figure 5 shows the proposed reconfiguration of the Pelican Landing Eco-Park along with development conditions proposed in adjacent areas. Table 3 provides a tabulation of the habitat types and acreages contained within the revised Eco-Park boundary.

As has been discussed in recent correspondence with the FWC, the original configuration of the Eco-Park was based on property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Revisions have been made to the Eco-Park boundary (on paper only herein) due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. The reconfiguration incorporates an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes a large portion of Halfway Creek, a high quality riverine system that will serve to provide a perpetual buffer to the east of eagle nest LE-28A.

It should be noted that the Eco-Park boundary reconfiguration proposed herein is dependent on acquisition of the Skebe tract. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC and successful acquisition of the Skebe tract, a conservation easement to be approved by the FFWCC will be recorded for the new Eco-Park boundary. Following recordation of the conservation easement, the existing easement will be dissolved.

The revised Eco-Park will serve as a barrier between the proposed golf course on the Skebe tract and those in the deletion parcel to the west. Thus, the new conservation easement will need to include provisions for a paved golf cart path and buried irrigation line through upland portions of the Eco-Park and a golf cart bridge crossing of Halfway Creek. Cart paths in upland areas will be located along existing trails where possible and will avoid existing trees to the maximum extent possible. Pending approval and permitting by the South Florida Water Management District (SFWMD) and the U.S. Army Corps of Engineers (Corps), the cart bridge will be located at the old crossing at Halfway Creek (*i.e.*, aligned along the FLUCCS #743 spoil island). A tentative location of the cart path is provided in Figure 5. Provisions will also be needed for a buried outfall pipe extending from the isolated wetland on the Skebe site to Halfway Creek (Figure 5). This pipe has been located to correspond with the golf cart path to the extent possible to minimize habitat impacts.

TABLE 3
Habitat Types and Acreages in Revised Eco-Park Boundary

FLUCCS Code	FLUCCS Type	Acres	% of Total
321	Palmetto prairie	1.55	1.1
411*	Pine flatwoods*	23.99*	17.0
411/321	Pine flatwoods/Palmetto prairie	4.04	2.9
421	Xeric oak	45.80	32.4
4211	Xeric oak, high density shrub layer	7.62	5.4
423*	Pine-cabbage palm-oaks*	4.66	3.3
424**	Melaleuca**	1.36**	1.0
513	Ditch	0.02	0.0
600	Shrub wetland	6.28	4.4
616	Inland pond	0.49	0.3
621	Cypress	45.45	32.1
743***	Spoil area***	0.12***	0.1
	TOTAL	141.38	100.0

* Includes areas with exotic invasion to be enhanced/restored.
** To be cleared of melaleuca and allowed to revegetate naturally. May be planted with appropriate native species to speed recovery.

6.0 HABITAT MANAGEMENT PLAN

Habitat management of upland portions of the Eco-Park will be identical to the previously approved management plan (*i.e.*, will be in accordance with Condition #3 of Gopher Tortoise Incidental Take Permit #Lee-9; Appendix A).

Habitat management of wetland portions of the Eco-Park will consist of the following:

- Wetland habitats will be initially managed by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Exotic eradication and maintenance will be accomplished via hand removal; no mechanized clearing or use of heavy equipment will occur within wetland conservation areas. Hand removal exotic clearing methods will include the use of implements such as chainsaws, axes, and machetes to cut down exotic vegetation. Vehicles such as trucks and trailers, and chippers to process the debris, will also be used.
- Plants that are visible for 50 feet from the conservation area perimeter will be cut down and removed from the mitigation area. Stumps of cut plants will be chemically treated within 15 minutes of cutting. Debris generated during this phase of removal will be temporarily stockpiled in adjacent upland areas for later burning, chipping/spreading, or transport off-site for disposal. Where chipping is utilized, any large mounds of chipped materials would either be removed or spread out so as to not inhibit development of desirable groundcover.
- Interior plants (>50' from conservation area perimeter) will primarily be eradicated by chemical treatment of standing trees in order to minimize disruption and impacts to existing native wetland vegetation. Smaller individuals will be eradicated through complete removal, cut and treat, or foliar herbicidal treatment. Only EPA-approved herbicides will be utilized and a visual tracer dye will be added if not already contained in the specific herbicide mixture. All herbicides will be applied in accordance with label specifications. Such applications will be conducted by or under the direction of an appropriately licensed applicator. Felled material that is not removed from the interior of conservation areas will be handled in general accordance with the SFWMD publication *Draft Guidelines for Melaleuca Removal* dated 9/14/98.
- Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods. Ongoing maintenance will consist solely of hand-removal; no heavy equipment will be operated within conservation areas.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (*e.g.*, installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

7.0 SUMMARY

Based on our evaluation, the proposed reconfiguration of the Pelican Landing Eco-Park provides several advantages over the existing configuration. These advantages include:

- The proposed reconfiguration will increase the size of the Eco-Park by 63 acres (81%).
- The proposed plan incorporates an ecosystem approach by including a variety of upland and wetland habitat types, as opposed to only several upland habitat types in the existing Eco-Park. The proposed reconfiguration includes a large portion of Halfway Creek, an Outsanding Florida Water and high quality riverine system.
- Existing wetland and upland habitats will be enhanced via the removal of exotic vegetation and subsequently managed/maintained in perpetuity.

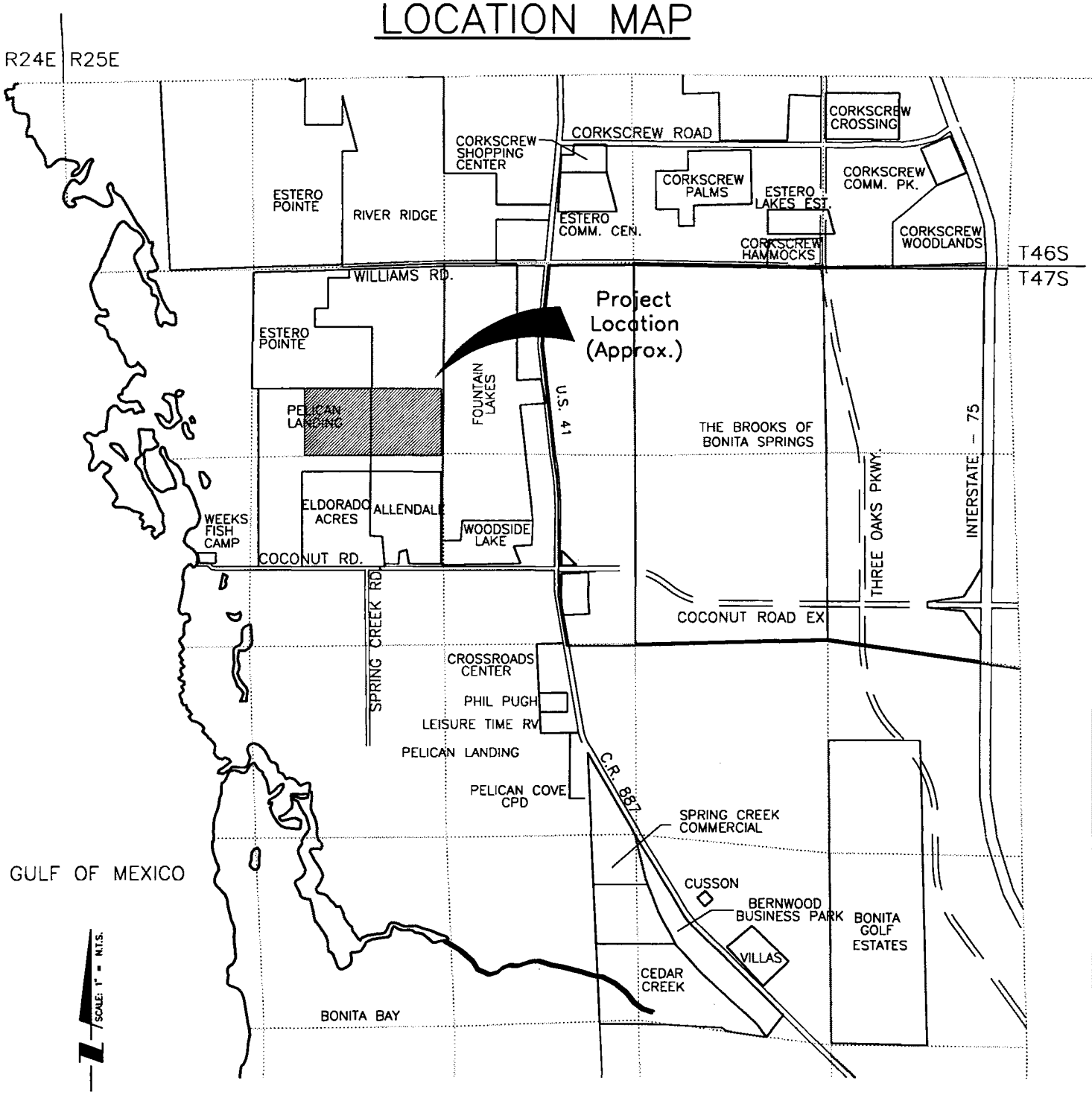
- The USFWS is in the final stages of providing approval of the project's bald eagle management plan. This plan, in conjunction with the proposed changes to the Eco-Park, will substantially increase the controlled acreage of the buffer/protection zone for bald eagle nest #LE-28A. In addition, residential areas previously proposed within the secondary protection zone of the eagle nest will be replaced with golf course and natural areas, land uses more compatible with both eagle nesting and adjacent preservation lands.

8.0 REFERENCES

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

9.0 FIGURES

LOCATION MAP



PROJECT: *PELICAN LANDING DRI ECO-PARK*

APPLICANT: *WCI COMMUNITIES, INC.*

WilsonMiller, Inc. - FL Lic# LC-C000000

WilsonMiller

Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants

WilsonMiller, Inc.

Naples • Fort Myers • Sarasota • Bradenton • Tampa

3200 Bailey Lane, Suite 200 • Naples, Florida 34105-8507 • Phone 941-649-4040 • Fax 941-643-5716 • Web-Site www.wilsonmiller.com

FLA. REG. #	
COUNTY: LEE	DATE: MAR. 2000
SEC: 4,5,8,9 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-014	FILE NO: C-0250-50
DRWN BY/EMP NO. K.L.P./865	SHEET NO: 1 OF 5

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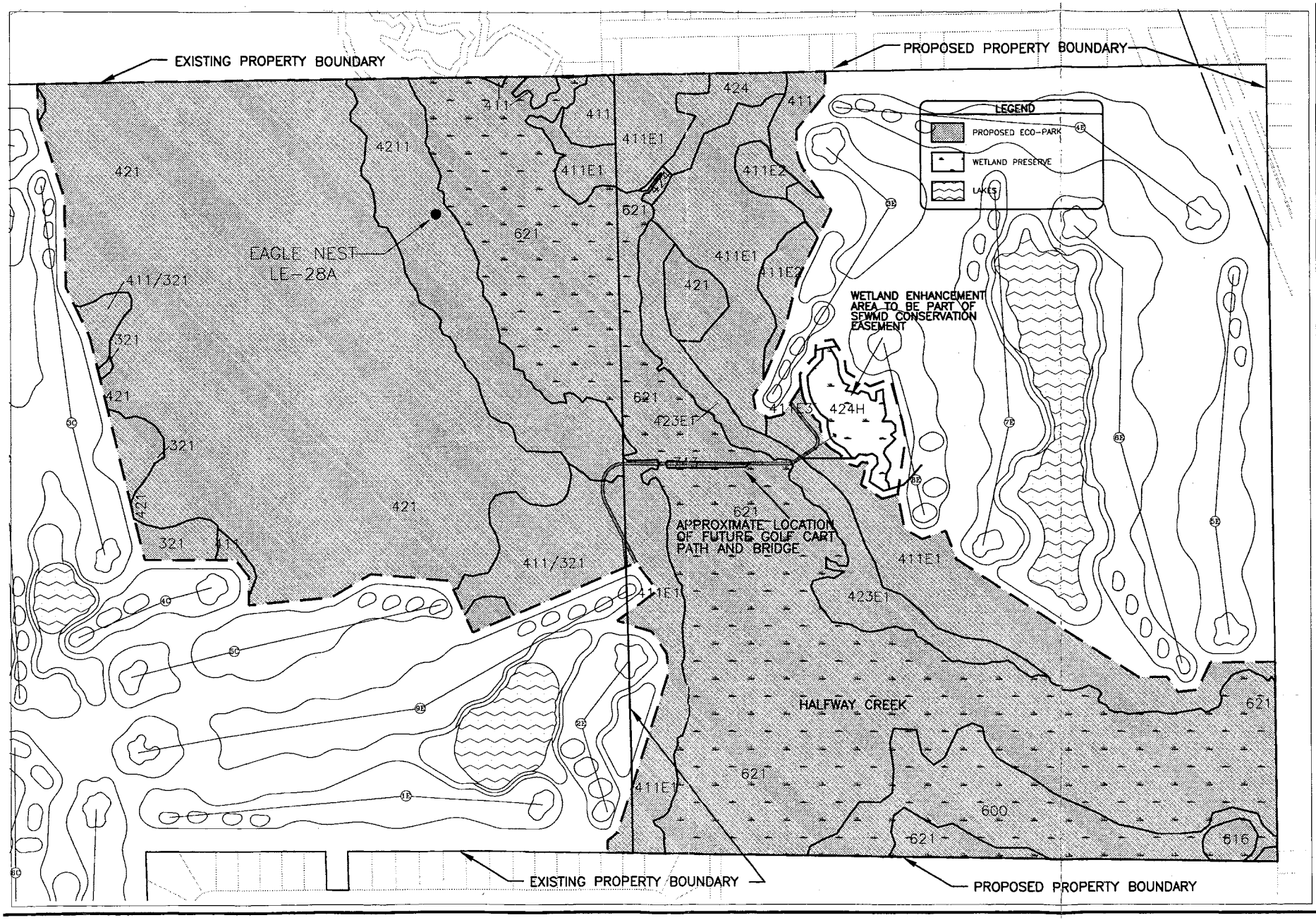

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FIGURE 5
PROPOSED CONFIGURATION OF ECO-PARK WITH ADJACENT DEVELOPMENT CONDITIONS

WilsonMiller, Inc. - FL LB# LC-C000090

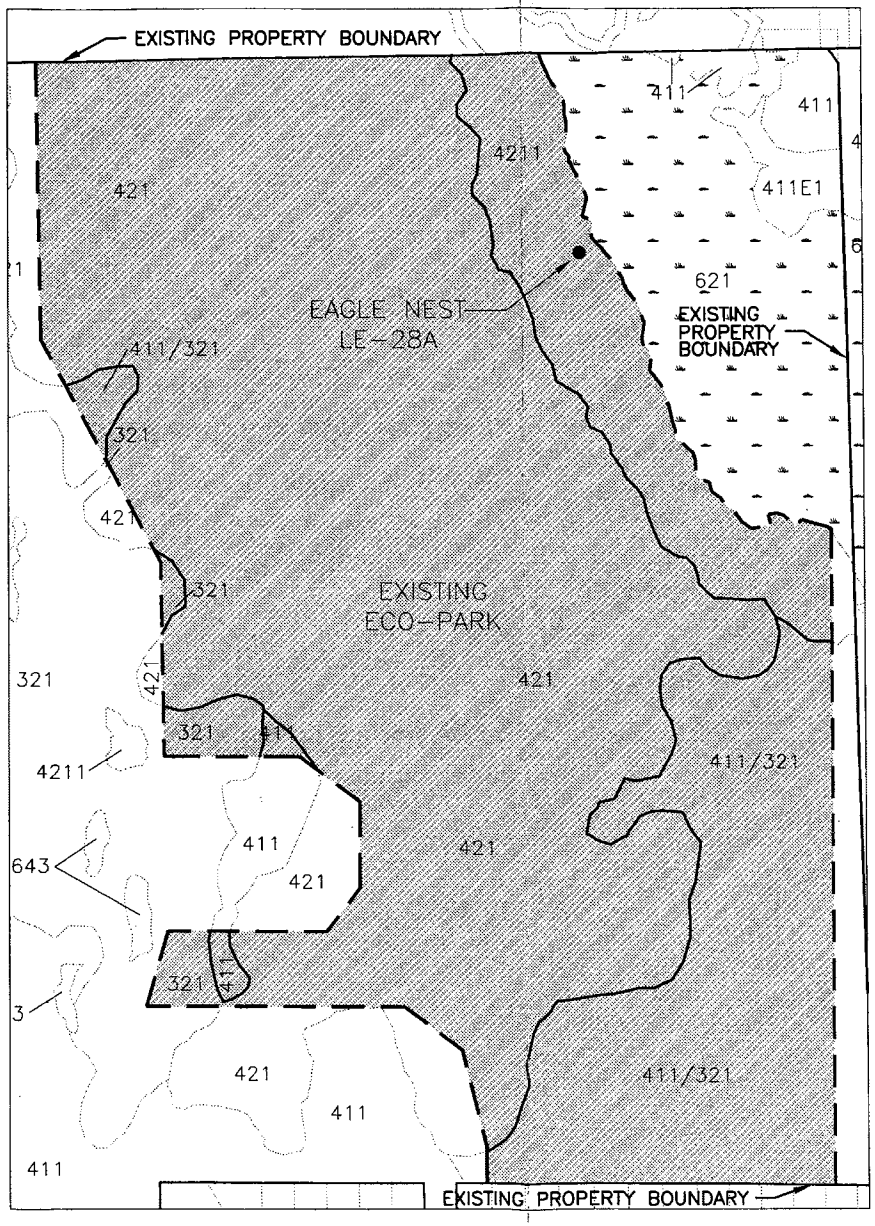
SEC 5 TWP 47S RGE 25E	
Designed by:	
Drawn by:	M.W.L./1260
Checked by:	
Approved by:	
Date:	MAR. 2000
Scale:	1" = 300'
PIN: F0250-024-014 FSGTS	
File #:	C-0250-49
Sheet	5 of 5

LEGEND

- Existing Eco-Park
- Existing Wetlands
- Eco-Park Boundary
- FLUCCS Boundary

SCALE: 1" = 300'

FLUCCS CODES	FLUCCS DESCRIPTION	ACREAGE
321	Palmetto Prairie	1.36
411	Pine Flatwoods	0.38
411/321	Pine Flatwoods/Palmetto Prairie	14.82
421	Xeric Oak	54.07
4211	Xeric Oak with High Density Shrub	7.31
	Total	77.94



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Landscape Architects • Transportation Consultants
WilsonMiller, Inc.
Naples • Fort Myers • Sarasota • Bradenton • Tampa
3200 Bailey Lane, Suite 200 • Naples, Florida 34105-5527
Phone 941-649-4040 • Fax 941-643-5776 • Web-Site www.wilsonmiller.com

FIGURE 2
EXISTING ECO-PARK
AND ASSOCIATED FLUCCS HABITATS

WilsonMiller, Inc. - FL Lic#LC-0000290

SEC 5 TWP 47S RGE 25E	
Designed by:	K.L.P./865
Drawn by:	
Checked by:	
Approved by:	
Date:	MAR. 2000
Scale:	1" = 300'
PIN: FD250-024-014-FSGTS	
File # :	C-0250-49
Sheet 2 of 5	

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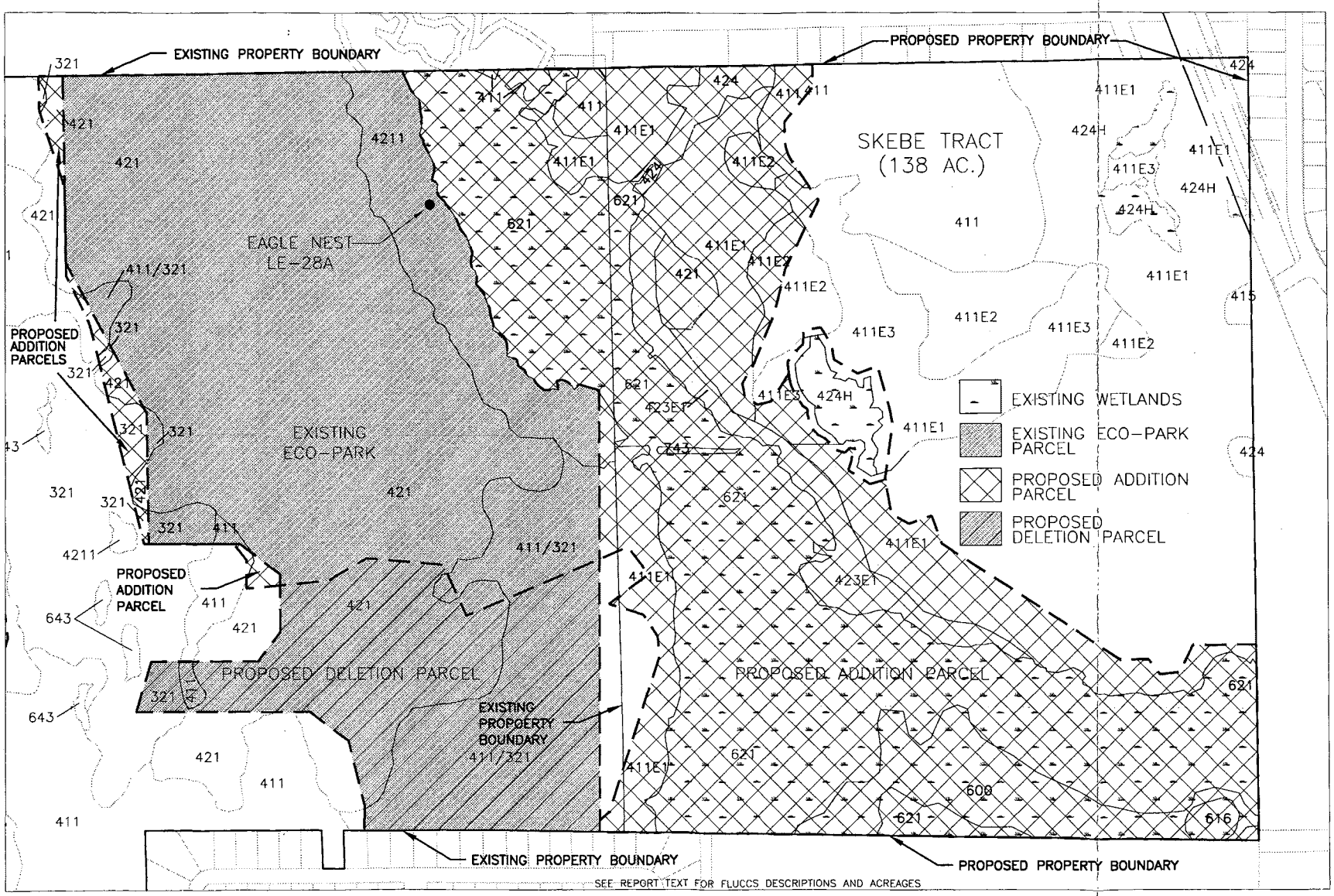

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Phone 941-649-4040 • FAX 941-643-5716 • Web Site www.wilsonmiller.com

FIGURE 3

LOCATION OF PROPOSED SWAP PARCELS

WilsonMiller, Inc. - FL LBA1C-C000046

SEC 5 TWP 47S RGE 25E	
Designed by:	K.L.P./B65
Drawn by:	
Checked by:	
Approved by:	
Date:	MAR. 2000
Scale:	1" = 300'
PIN: F0250-024-014-FSGTS	
File # :	C-0250-49
Sheet 3 of 5	

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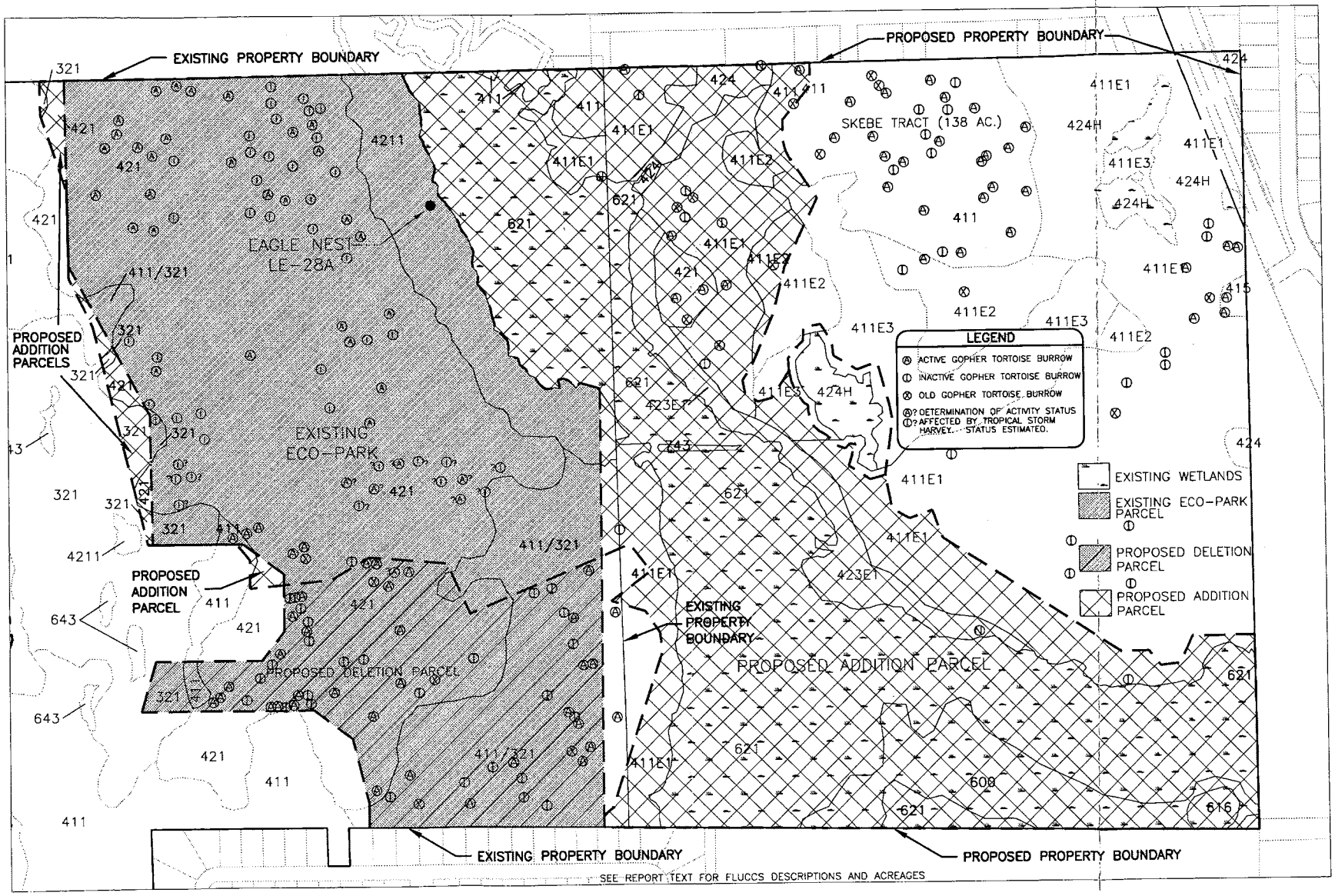

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2200 Bailey Lane, Suite 200 • Naples, Florida 34105-5507
Phone 941-649-4040 • Fax 941-643-5716 • Web-Site www.wilsonmiller.com

FIGURE 4

LOCATION OF GOPHER TORTOISE BURROWS ON PROPOSED SWAP PARCELS

WilsonMiller, Inc. - FL Lic# LC-C000010

SEC 5 TWP 47S RGE 25E	
Designed by:	K.L.P./BMS
Drawn by:	
Checked by:	
Approved by:	
Date:	MAR. 2000
Scale:	1" = 300'
PIN: F0250-024-014-FSGTS	
File #:	C-0250-49
Sheet	4 of 5

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APPENDIX A

Gopher Tortoise Incidental Take Permit #Lee-9

PERMIT FOR TAKING OF GOPHER TORTOISES AND

THEIR BURROWS

Chapter 39-27.002(4) F.A.C.

STATE OF FLORIDA GAME AND FRESH WATER FISH COMMISSION

Issuance Date:	August 29, 1995
Permittee:	Westinghouse Bayside Communities, Inc.
Permittee Address:	24820 Burnt Pine Drive Bonita Springs, FL 33923 ATTN: Mr. Terrence S. Dolan
Consultant:	Mr. Tim Durham Wilson, Miller, Barton & Peek 3200 Bailey Lane at Airport Road, Suite 200 Naples, Florida 33942
Permit Number:	LEE-9

Location of Affected Site: The 1,119-acre Pelican Landing Development of Regional Impact, including 680.6 acres of gopher tortoise habitat, located west of U.S. 41 between the Estero River and Spring Creek, in Sections 5, 7, 8, 9, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, in southwest Lee County. See Attachment 1, location map and Attachment 2, Map H Master Development Plan).

Permitted Action: The permittee or its agents are authorized to take gopher tortoises, their eggs and their burrows within its development boundaries where such taking is incidental to development activities. The criteria of Rule 39-27.002(4), F.A.C., have been satisfied and the taking, as conditioned below, will not be detrimental to the survival potential of the species.

Provisions/Conditions:

1. The permittee shall protect 78 acres of gopher tortoise habitat located within the western 1/2 of Section 5, Township 47 South, Range 25 East in Lee County (see Attachment 3 identifying the tract as the Eco-Park) by placing the referenced parcel under a perpetual conservation easement, approved by and granted to the Florida Game and Fresh Water Fish Commission (GFC). The permittee shall record the approved and signed conservation easement in the Lee County plat records and send an original of the recorded easement to the GFC at the Office of Environmental Services, 620 South Meridian Street, Tallahassee, FL 32399-1600. Of the 78 acres of gopher tortoise habitat, only 77.8 acres are specifically required for this permit; the remaining 0.2 acres may be used, as appropriate, to satisfy requirements of gopher tortoise incidental take permits subsequently issued by the GFC to the permittee.

2. The permit will not go into effect until the date that the permittee is in possession of a notice from the GFC acknowledging receipt of an original approved and recorded conservation easement for the area described in Condition 1 above. However, as described in the permit Notice of Rights Statement, issuance of this permit may be appealed by a concerned party within 21 days of the permittee's receipt of this notice. If a Petition for Administrative Hearing is timely filed within this prescribed time period, the permittee shall cease all work authorized by this permit until the petition is resolved.

3. The permittee shall have the obligation to manage and maintain the conservation easement lands as habitat for the gopher tortoise in perpetuity as described in pages 5-9 of the "Gopher Tortoise Population Study and Habitat Management Plan for Pelican Landing DRI Including the Elks Club and the Wysok Parcel", dated December 1993 and modified December 1994 and May 1995 (Attachment 4).

4. The permittee shall clearly mark the boundaries of the conservation easement area and permanently maintain the boundary markers so that the area perimeters are clearly discernable to GFC personnel who inspect the site in the future. A wooden rail and post, or post and strong cable fence and associated signage restricting access will be installed between the proposed residential tract to the west of the 78-acre Eco-Park and the Eco-Park boundaries.

5. This permit does not relieve the permittee from any other "taking" requirements by the U.S. Fish and Wildlife Service (USFWS) or the GFC as to other listed species. Specifically, this permit does not authorize any destruction of eagles, scrub jays, or scrub jay and eagle nests or habitat. Consultation with the USFWS should be sought and completed if these species are present. The permittee should clearly note the conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities (see page 6 of Attachment 4).

6. The permittee or its approved agents are authorized to move tortoises, at their discretion, within the Pelican Landing property boundaries, with restrictions for relocation into the Eco-Park as noted on page 8 of Attachment 4, to minimize taking. This permit does not authorize the permittee or its agents to possess or move tortoises off the contiguous ownership of the permittee nor to move tortoises into areas previously authorized as a relocation site by a GFC permit. A separate relocation permit from the GFC shall be required for those activities.

7. This permit does not authorize any taking of gopher tortoises beyond that which is a direct result of development activities or the on-site movement of animals addressed in condition #6. Any other form of taking or relocation will require a separate permit from the Executive Director.

8. This permit must be available for inspection at all times while engaged in the permitted activities.

9. This permit is transferrable to subsequent owners of the property.

Notice of Rights Statement: In accordance with Rules 28-5.111 and 28-6.008, F.A.C., and Section 120.60, F.S., any party may request a hearing on this matter pursuant to Section 120.57, F.S., by filing a completed Elections of Rights form (copy attached) by certified mail, return receipt requested, with the undersigned within twenty-one (21) days of receipt of this notice. If timely requested and a hearing is granted, the hearing will be conducted under the procedures established by Section 120.57, F.S. A party will be given the opportunity to be represented by counsel or other qualified representative, to take testimony, to call and cross-examine witnesses, and to have subpoenas issued on your behalf.

Allan L. Egbert, Ph.D.
Executive Director

By: Brian Barnett

ENV 3-2/5
pelldep
Attachments:

1. Project location map
2. Project boundary map
3. Eco-Park location and boundary map
4. Gopher tortoise management plan excerpt, pages 5-9
5. Elections of Rights form

STATE OF FLORIDA
GAME AND FRESH WATER FISH COMMISSION

ELECTION OF RIGHTS

I have read the Explanation of Rights form and understand my options. (You may select one of the options below and return with this form to the Florida Game and Fresh Water Fish Commission (Commission) no later than twenty one (21) days from the receipt of the Notice of Agency Action).

1. ( ) I do not dispute the allegations of fact in the Notice of Agency Action but do wish to be accorded an informal hearing or proceeding, pursuant to Section 120.57(2), Florida Statutes, at which time I will be permitted to submit oral or written evidence in mitigation of the complaint to the agency head or his representative.

2. ( ) I do dispute the allegations of fact contained in the Notice of Agency Action, submit an attached statement of all disputed allegations of fact, and request a formal hearing, pursuant to Section 120.57(1), Florida Statutes, before a hearing officer appointed by the Division of Administrative Hearings.

3. ( ). I do not dispute the allegations of fact in the Notice of Agency Action and waive my right to object or to be heard.

I have read and understand the Election of Rights form and understand that I have the right to be represented by counsel at either an informal or formal

hearing. I also understand that I must attach a petition or written statement of the disputed issues of fact to this request if I have requested a formal hearing.

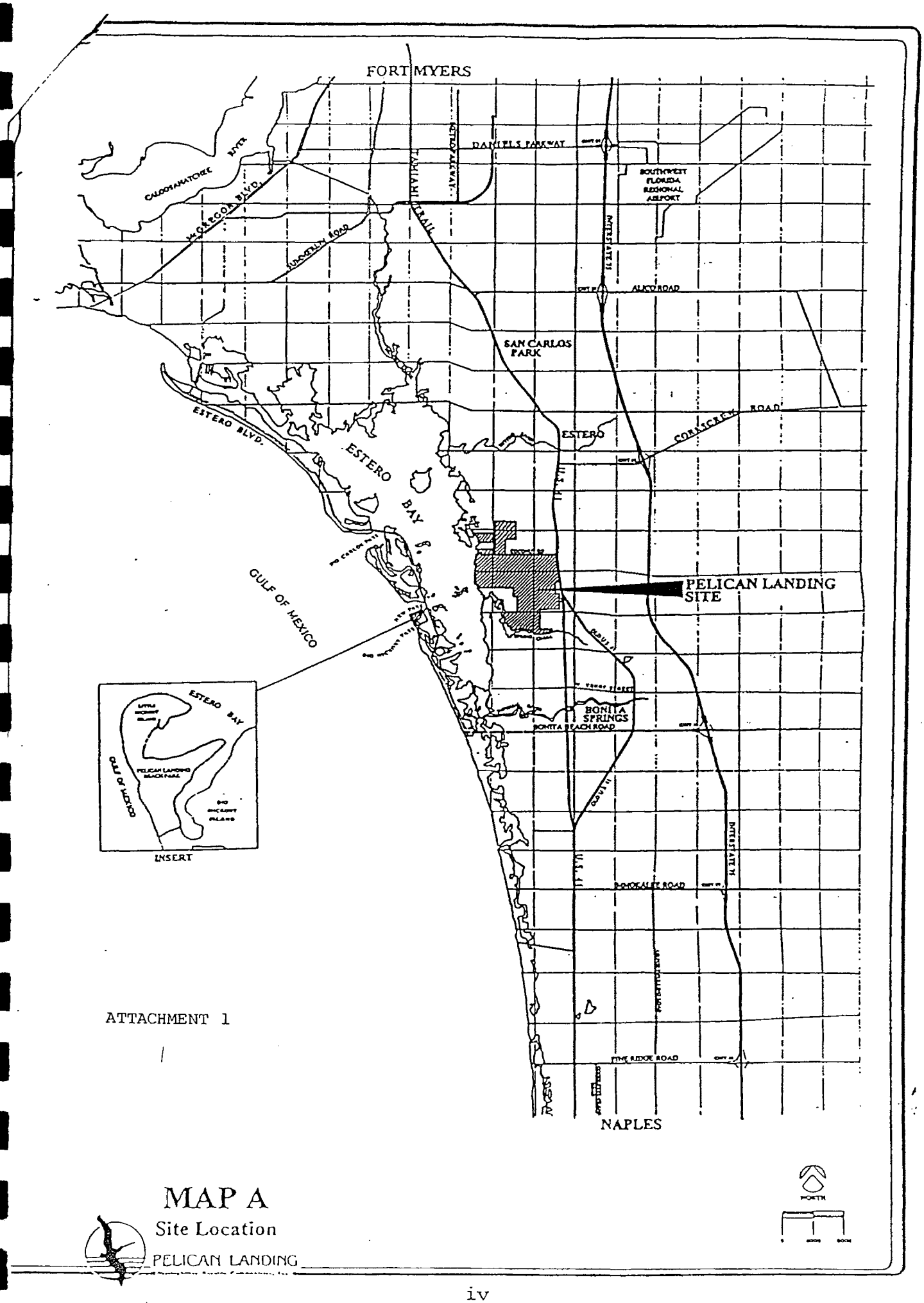
Please sign and state your current address and telephone number:

Date	Signature
Attorney's name and address	Address

Please mail form to:

Office of the General Counsel
Florida Game and Fresh Water
Fish Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

OES

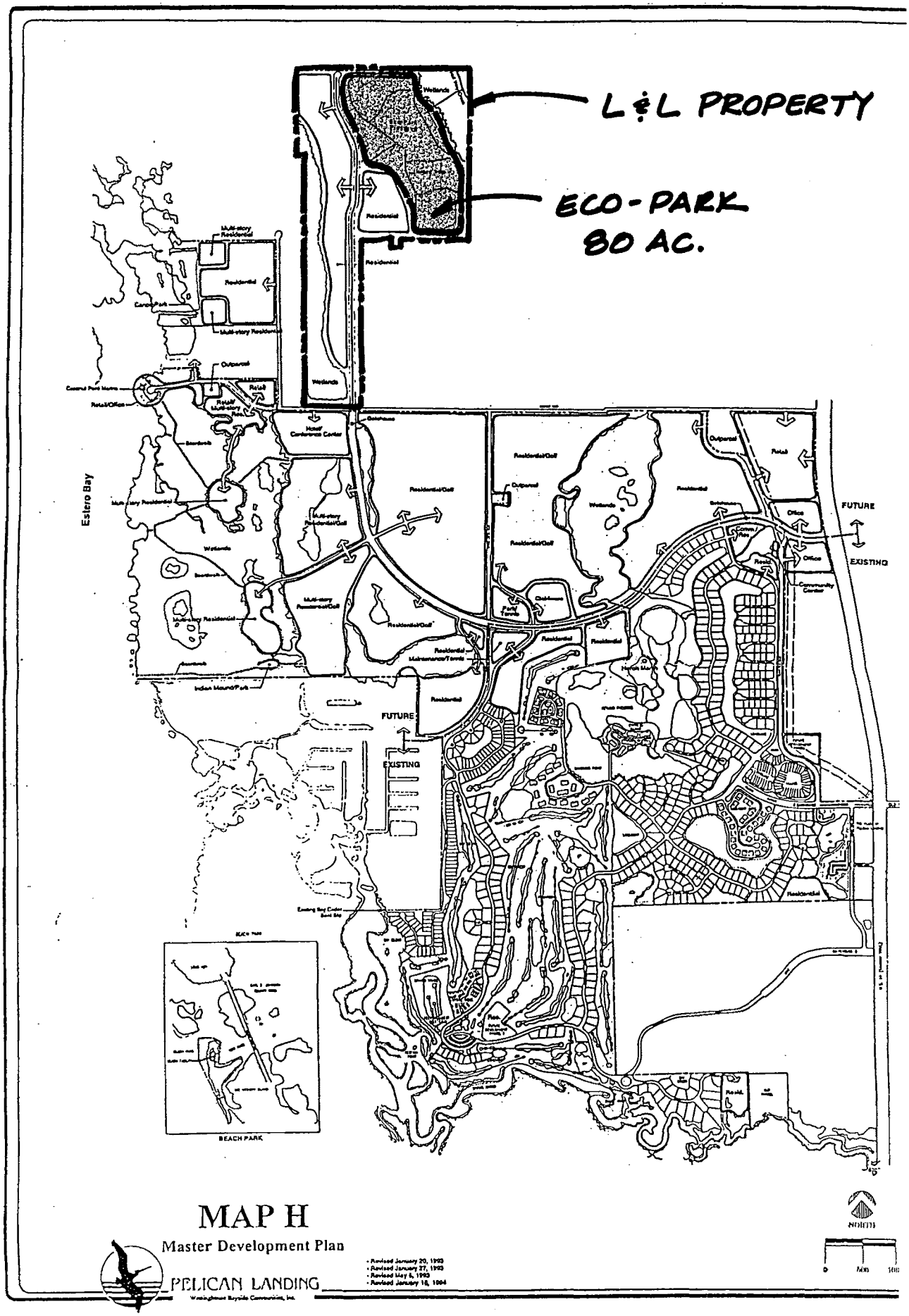


ATTACHMENT 1

MAP A

Site Location

PELICAN LANDING



MAP H

Master Development Plan

PELICAN LANDING

Westinghouse Bayside Community, Inc.

- Revised January 20, 1993
- Revised January 27, 1993
- Revised May 5, 1993
- Revised January 18, 1994

ATTACHMENT 2

WILSON • MILLER • BARTON & PEEK, INC.

GOPHER TORTOISE POPULATION STUDY AND HABITAT MANAGEMENT PLAN

FOR
PELICAN LANDING DRI
INCLUDING THE ELKS CLUB AND THE WYSOK PARCEL

PREPARED FOR:

WCI COMMUNITIES, INC.
24820 BURNT PINE DRIVE
BONITA SPRINGS, FLORIDA 33923

PREPARED BY:

WILSON, MILLER, BARTON & PEEK, INC.
3200 BAILEY LANE
SUITE 200
NAPLES, FLORIDA 33942

DECEMBER 1993
MODIFIED DECEMBER 1994
MODIFIED MAY 1995
MODIFIED AUGUST 1995

WMBP W.O. 16802
WMBP PROJECT NO. 0208

8/14/95-02080040:GTL
1-0208-10-00-VPER

POPULATION STUDY

Introduction

Staff biologists of Wilson, Miller, Barton & Peek, Inc. (WMBP) and Heald and Associates, Inc. (H&A) have completed a study to identify all suitable gopher tortoise (Gopherus polyphemus) habitat and to determine the estimated gopher tortoise population within the undeveloped portions of Pelican Landing DRI. The property includes approximately 1119 acres in Sections 5, 7, 8, 9, 16, 17, 18, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida. The overall study consisted of several phases:

Mapping and classifying the existing vegetative communities.
Meandered pedestrian transects to locate the existing tortoise burrows.
Calculation of the probable tortoise population on-site.
Calculation of the protection area necessary to off-set impacts to tortoise habitat.

This report describes methodologies, identifies the specific study area and documents our results from this study.

Existing Habitat/Land Use

Based on aerial photography and extensive ground truthing, the existing vegetative communities and land uses have been mapped and classified using the Florida Land Use, Cover, and Forms Classification System (FLUCCS) — see attached WMBP Drawing No. ENV-141 and ENV-152A. Following is a list of the different habitat and land use types identified with a brief description of each.

FLUCCS:	Description:
162	Sand or Gravel Pit - Pits used primarily as farm ponds with the soil exported to nursery operations.
184	Marina and Fish Camp - Commercial fish house with docks and fish gear storage is located at the western end of Coconut Road.
261	Fallow Crop Land - Harvested agricultural land not currently in crop production.
321	Palmetto Prairie - Areas in which saw palmetto is the most dominant vegetation.
411	Pine Flatwood - Dominated by slash pine. Common understory species include wax myrtle, gallberry and a wide variety of herbs and brush.
411/321	Pine Flatwood, Palmetto Prairie - Dominated by slash pine. Predominant understory species is saw palmetto. Wax myrtle, gallberry and a wide variety of herbs and brush are sub-dominants.
411/422	Pine Flatwood, Brazilian Pepper - Dominated by slash pine with a midstory of Brazilian pepper.

411/424/621 Pine, Melaleuca, Cypress Mix - Consists of an even mix of slash pine and cypress with invasion of melaleuca.

411/433/422 Pine Flatwood, Slash Pine, Saw Palmetto, Cabbage Palm, Laurel Oak, Brazilian Pepper - Pine flatwood assemblage containing various mesic hardwood species as subdominants.

4111 Pine Flatwood, Slash Pine, Saw Palmetto, Scattered Scrub Oak - Dominated by slash pine. Understory species include primarily saw palmetto with a midstory of scrub oak.

4201 Mesic Oak Stands with Dense High Saw Palmetto - Large live oaks.

421 Xeric Oak - The highest elevations on-site. Dominated by scrub oaks, saw palmetto, stagger bush, and rosemary.

4211 Xeric Oak with High Dense Shrubs - Similar to FLUCCS Unit 421 except the dense scrub oaks likely reflect a fire history.

422 Brazilian Pepper - Commonly found on disturbed sites. Often established along borrow-pits and old disturbed fields.

423/411 Live Oak, Slash Pine, Brazilian Pepper, Downy Rose Myrtle - Dominated by slash pine. Live oak and Brazilian pepper dominate the midstory with downy rose myrtle as a subdominant.

424 Melaleuca - Exotic tree species in almost pure strands on disturbed sites.

424/321 Melaleuca, Saw Palmetto - Melaleuca canopy over a saw palmetto understory. Probably reflects hydrologic manipulation by nearby agricultural operations.

433 Western Everglades Hardwoods - Wetland-upland transitional community dominated by broad leaf trees such as live oak and laurel oak with wild coffee and other West Indian hardwood hammock species and sub-dominants.

433/411/422 Cabbage Palm Association Cabbage Palm, Laurel Oak, Live Oak, Brazilian Pepper - Wetland-upland transitional community dominated by cabbage palms and broad leaf trees such as live oak and laurel oak with wild coffee and other West Indian hardwood hammock species and sub-dominants. Midstory is dominated by Brazilian pepper.

433/422 Cabbage Palm Hammock, Cabbage Palm, Occasional Pine, Cypress Fern Understory - Remnant agricultural field colonized by cabbage palms with scattered pine and cypress. Ferns form the ground cover.

510 Streams and Waterways - Rivers, creeks, canals and other linear water bodies.

542 Bays Closed - Embayments not opening directly into the Gulf of Mexico or the Atlantic Ocean.

612 Mangrove Swamp - Coastal hardwood community composed of red, white and/or black mangrove.

612/642 Mangrove, Saltmarsh Mix - Vegetated, non-forested wetlands in which the dominant herbaceous species does not achieve 66 percent cover. Cordgrass, Needlerush, and saltwort are some of the species composing this FLUCCS unit. Stunted mangroves exist throughout.

616 Inland Ponds and Sloughs - Communities are associated with depressions and drainage areas that are not associated with streams or lakes.

617 Mixed Wetland Hardwoods - Wetland hardwoods communities which are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill defined mixture of species.

621 Cypress Swamp - Bald cypress which is either pure of predominant. Associated species include laurel oak, red bay, red maple, and pop ash on drier portions of the site.

621/630 Cypress Swamp with Mixed Hardwoods - Predominantly cypress canopy with slash pines and hardwoods mixed as subdominants.

630 Wetland Forest Mixed - Mixed wetlands forest in which neither hardwoods or conifers achieve 66 percent dominance of canopy composition.

6411 Sawgrass Marsh - Vegetated, non-forested wetlands in which the dominant herbaceous species is sawgrass.

6411/422 Sawgrass, Brazilian Pepper - Disturbed, vegetated, non-forested wetlands in which the dominant herbaceous species is sawgrass. Brazilian pepper has invaded much of this FLUCCS category.

642 Salt Marsh - Vegetated, non-forested wetlands in which the dominant herbaceous species does not achieve 66 percent cover. Cordgrass, Needlerush, and saltwort are commonly occurring species.

643 Wet Prairie - Predominantly grassy vegetation on wet soils. Usually distinguished from marshes by having less water and shorter herbage. Sawgrass, Maidencane, cordgrass, and yellow-eyed grass are common species.

720 Saltern (Bare Sand) - Tidal sand flat area characterized by high soil chlorides.

740 Disturbed Land - Areas which have been changed due primarily to human activities other than mining.

832 Electrical Power Transmission Line - This line runs south and east from Coconut Road to U.S. 41.

Table 1 lists each of the habitat types along with the approximate acreage of each. The table further identifies the percentage of the total project acreage each type encompasses and the corresponding percentage of the potential tortoise habitat on-site.

A total of 31 different vegetative communities/associations were identified on this property. Only eight (8) were considered to be suitable habitat for gopher tortoises. These included: palmetto prairies, melaleuca over palmetto, disturbed land, and variations of pine flatwood and xeric oak. Approximately 680.0 acres of the 1119 acres of undeveloped property on-site fall within these eight (8) habitat types. Fallow cropland was also surveyed for gopher tortoises with none found, therefore, fallow cropland is not considered for this evaluation.

The biologists conducting this survey are experienced observers with extensive backgrounds in this type of work. The gopher tortoise survey was conducted using sensitive methodologies to achieve thorough coverage of the project site. All methodologies meet or exceed the recommended standards for the Florida Game and Freshwater Fish Commission (FGFWFC).

Survey Methodologies

Once the vegetative communities were identified and mapped, an extensive field survey was conducted in the eight (8) communities identified as suitable for gopher tortoises throughout the undeveloped portions of Pelican Landing.

Temporary pedestrian transects were meandered through each of the habitats identified as possible tortoise habitat. Using existing roads, trails, wetland margins, and other features as landmarks, each habitat type was methodically surveyed to locate tortoise burrows. Biologists walked these meandering transects recording the number of active, inactive and abandoned burrows and identifying their approximate location on aerial photographs. Tortoise burrow locations are not indicated here since tortoises have likely relocated within the local region since the time of the surveys. Distance between transects varied from 10-15' in dense vegetation to 20-30' in open scrub habitat. Table 2a gives the percentage of each suitable habitat surveyed.

Tortoise Population

Tortoise survey field work was conducted between December 1989 and October 1993. A total of 116 burrows were located on the project site as a result of these surveys. Based on an estimate of 26% habitat coverages, the projected burrow count is 448. Refer to Table 3 for the total number of active and inactive burrows in each suitable habitat type.

Based on a projected burrow count of 448 and a burrow occupancy conversion factor 0.614, the probable gopher tortoise population on-site is 275 tortoises. The analysis uses FGFWFC's burrow occupancy multiplier of 0.614 for the purposes of simplicity. It is our experience on similar projects in the region that the realized multiplier is much lower. Thus, related calculations should be interpreted as very conservative in favor of the tortoise population. Tables 2a and 2b provide data on tortoise densities per FLUCCS category.

HABITAT PROTECTION/CONSERVATION AREA

Based upon FGFWFC habitat protection guidelines for DRI projects, Tables 2a and 2b were generated to illustrate the calculation of Habitat Protection Area acreage. The habitat protection factor shown uses 15% for areas with densities between 0.4 and 0.8 tortoises per acre and 25% for areas with densities equal to or greater than 0.8. Below 0.4 densities, the factor of 15% was prorated. The resulting acreage sum of approximately 78 acres represents the acreage required to be addressed for habitat protection under FGFWFC guidelines. An incidental take permit for the entire 680 acres of gopher tortoise habitat is being applied for as part of this study and management plan submittal.

A 78 acre xeric scrub/pine flatwood upland area will be designated as an upland Habitat Protection Area, or *Pelican Landing Eco-Park*, commensurate with gopher tortoise take permit approval. This area will be set aside for gopher tortoise usage and will be actively managed to assure appropriate vegetative density and composition for gopher tortoise usage in perpetuity. The location for the *Eco-Park* was strategically chosen since it contains a majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. Additionally, the *Eco-Park* is connected to the Chapel Ridge Property, a native scrub ridge habitat to the north, thereby retaining the function of the existing community. WMB&P Drawing ENV-141, attached, indicates the approximate location and extent of proposed the *Eco-Park*.

PROTECTION AREA MANAGEMENT PLAN

The proposed protection area encompasses approximately 78 acres in the northeast corner of the property, 65 acres of which are high quality xeric oak habitat and 13 acres are pine flatwood. The xeric scrub habitat borders a cypress/hardwood wetland system to the northeast, the margins of which should serve as foraging habitat for the tortoises in dry season.

The realized upland Habitat Protection Area may vary due to field adjustments, but will encompass at least 78 acres. The extent of habitat protection acreage will be determined by survey, prior to construction-related impacts, and will be placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission and managed as outlined below. In conjunction with the survey, a wooden rail and post, or post and strong cable fence and associated signage restricting access will be installed between the proposed residential tract to the west and the Eco-Park.

Monitoring and maintenance of the tortoise habitat area is acknowledged to be an important component of assuring the long term viability of the existing gopher tortoise population. The legal entity responsible for the maintenance of habitat protection areas will be WCI Communities, Inc., or its assignee.

The following components comprise the tortoise protection area maintenance and monitoring plan:

1. Construction related intrusions into the proposed gopher tortoise protection area will be prohibited during clearing and construction operations. Contractors will be provided a copy of WMB&P Drawing ENV-141 and instructed regarding habitat protection. Areas proposed for habitat protection will be flagged, staked, barricaded or otherwise delineated in the field prior to construction.

2. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FGFWFC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FGFWFC. Educational signage will be placed along the trails.

3. Human access will be restricted, by appropriate signage in the vicinity of any eagle nest during nesting season. During the nesting season, pedestrian trails or other human use, will be restricted to a minimum of 500' from an active eagle's nest. The trail will be barricaded off by a cable across the path.

4. Mulch along the interface between the designated Habitat Protection Area and developed areas will not extend further than one foot into protection areas.

5. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed by hand from protection areas in perpetuity.

6. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise mobility). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level. No maintenance activities will be conducted within 1300 feet of an active eagle's

nest during the nesting season. The distance restriction from the active nest may be reduced upon the approval of the USFWS.

A specific indication of preferred maintenance practices per habitat type is as follows.

A. Xeric Scrub

i. Hand-trim to a height of 6-9 feet at 5 year intervals or as deemed necessary.
ii. Excessive layers of shrubby growth will be removed by hand at 3 year intervals if necessary.
iii. Prescribed burns may be conducted at 8 year intervals if judged feasible and necessary. Appropriate steps will be taken to protect the eagle nest and perch trees, such as the removal of fuel from the vicinity of the nest and perch trees.
iv. No mowing or raking will be performed in xeric scrub areas.
v. No burning will take place during the eagle nesting season, per distances e established by the FGFWFC or the USFWS.

B. Pine Flatwood

i. Bush hogging and/or mowing at 3 year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.

ii. Prescribed burn may be conducted at 3 year intervals if feasible and necessary.

Maintenance activities will be performed upon recording of the Habitat Protection Area conservation easement and every other year thereafter.

A locally based nuisance-wildlife expert will be engaged as necessary to round-up, trap, shoot, or otherwise remove feral hogs from the Protection Area.

If deemed necessary by FGFWFC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.

Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.

A report on maintenance/management activities undertaken will be prepared and submitted to FGFWFC every two years with copies supplied to Lee County and SWFRPC. The FGFWFC will review and suggest modifications, if necessary, to improve management of the site.

Brochures containing information on gopher tortoise habitat, behavior and protection measures will be developed and provided to residents adjacent to the *Eco-Park* or golf course fringes.

GOPHER TORTOISE MANAGEMENT DURING CONSTRUCTION

The proposed development of the Pelican Landing DRI involves golf course construction and single family homesites in or near those areas which are currently suitable for gopher tortoises. The nature and character of the single family homesite and golf course will be essentially identical to the existing developed portions of Pelican Landing to the south. As such, large amounts of native vegetation will be retained through detailed project layout and deed restrictions.

Tortoises proposed to be impacted as a result of this incidental take permit will be relocated to the proposed Pelican Landing Eco-Park, protection area, until tortoise densities within the 4211, 411/321 FLUCCS categories within the Eco-Park reach 2 per acre. No tortoises will be relocated into the 421 FLUCCS category within the Eco-Park. As construction progresses and if the tortoise density within those FLUCCS categories approaches 2 per acre, temporary holding areas may be constructed outside the Eco-Park to accommodate temporarily displaced tortoises. If necessary, tortoises inside these pens will be provided with supplemental food. Tortoises will not be kept in pens longer than 365 days. The location of holding areas will be outside the Eco-Park area in appropriate habitat south of Coconut Road. Containment fencing will be deployed around the containment area as necessary to contain tortoises. Containment fencing will be wire fence extending at least 2 feet above ground, angled inward, staked tightly to discourage scaling by tortoises and buried a minimum of 1 foot below ground.

Prior to construction-related clearing operations, a qualified biologist with gopher tortoise relocation experience will supervise removal of gopher tortoises from the clearing envelope outside the Eco Park and from within a surrounding distance of 200 feet. Removal will be accomplished by excavation and/or bucket trapping. All tortoises removed will be examined for evidence of respiratory disease, and any exhibiting symptoms will be isolated pending instructions from FGFWFC staff.

All non-diseased tortoises will be placed in either the Habitat Protection Area or in the containment areas as described previously. Care will be taken not to overburden the receiving habitat. Previously relocated tortoises will then be distributed around the golf course fringes (rough) when construction is complete.

SUPPLEMENTAL DISCUSSION - PRESCRIBED BURNING

Fire plays a major role in native communities such as xeric oak and pineland habitats. In the absence of fire, the xeric oak scrub vegetation continually increases in height and cover, eventually eliminating all open spaces, causing a decrease in wildlife species dependent on scrub. Burning stimulates an increase in the quantity and quality of many herbaceous plants that are important wildlife foods and creates openings in the canopy that will allow sunlight to penetrate to the ground.

The natural succession in pinelands is toward hardwood species. Fire is the dominant controlling agent of succession and has historically kept pinelands in a sub-climax successional stage which is relatively stable. Controlled burns are conducted in pineland and rangeland by forest and land managers to prevent the buildup of ground fuel, which reduces the chance of catastrophic wildfires, and to release the nutrients bound in the organic material. Fire controls the hardwoods, allowing for regeneration of the pineland communities. Fire also controls saw palmetto, opening the canopy and allowing an increase in herbaceous

species. Saw palmetto, particularly, can cover scrub and brushland habitats to the exclusion of other species if not controlled.

Historically, summer fires initiated by lightening strikes during thunderstorms were more common than winter fires. It should be noted, however, that summer fires tend to kill many more deciduous shrubs and small trees than winter fires. For this reason, winter burning is perhaps more consistent with habitat management objectives.

Prescribed burning, if deemed feasible, will be effected prior to start of construction on any specific development phase. Any burning will be conducted by an experienced control-burn contractor, as described on page 7 under management of pine flatwoods and xeric scrub habitat. The burn plan will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry.

Table 1 - Existing Vegetation Communities

Habitat - FLUCCS	Acres	Percentage of Total Suitable Tortoise Habitat	Percentage Total Proje Site Acreag
Fallow Crop Land - 261	36.03	0	3.2
Palmetto Prairies - 321	142.17	21	12.7
Pine Flatwood - 411	219.56	32	19.6
Pine Flatwood/Palmetto Prairies - 411/321	126.55	19	11.3
Pine Flatwood/Brazilian Pepper - 411/422	10.89	0	1.0
Pine Flatwood/Western Everglades Hardwoods/Brazilian Pepper - 411/433/422	5.96	0	0.8
Pine Flatwood, Slash Pine, Saw Palmetto, Scattered Scrub Oak - 4111	7.08	1	0.6
Mesic Oak Stands with Dense High Saw Palmetto - 4201	2.01	0	0.2
Xeric Oak - 421	127.40	19	11.4
Xeric Oak with High Dense Shrubs - 4211	46.4	7	4.1
Brazilian Pepper - 422	7.66	0	0.7
Oak-Pine-Hickory/Pine Flatwood - 423/411	1.39	0	0.1
Melaleuca - 424	23.12	0	2.1
Melaleuca/Palmetto Prairies - 424/321	6.12	1	0.5
Western Everglades Hardwood - 433	24.27	0	2.2
Western Everglades Hardwood/Pine Flatwood/Brazilian Pepper - 433/411/422	7.02	0	0.6
Western Everglades Hardwood/Brazilian Pepper - 433/422	6.88	0	0.6
Mangrove Swamps - 612	164.04	0	14.7
Mangrove Swamps/Saltwater Marshes - 612/642	3.66	0	0.3
Inland Ponds and Sloughs - 616	2.94	0	0.3
Mixed Wetland Hardwoods - 617	25.3	0	2.3

(Table 1 cont.)

Habitat - FLUCCS	Acres	Percentage of Total Suitable Tortoise Habitat	Percentage Total Proje Site Acreag
Cypress - 621	10.21	0	0.9
Cypress/Wetland Forest Mixed - 621/630	40.25	0	3.6
Wetland Forest Mixed - 630	1.85	0	0.1
Sawgrass - 6411	9.93	0	0.9
Sawgrass/Brazilian Pepper - 6411/422	6.67	0	0.6
Saltwater Marshes - 642	7.25	0	0.6
Wet Prairies - 643	37.16	0	3.3
Disturbed Lands - 740	9.34	1	0.8
TOTAL ACRES	1119.1		

NOTE: Acreages are according to undeveloped portions of Pelican Landing (December 1993).

TABLE 2a - Gopher Tortoise Populations Based on Field Surveys

Habitat FLUCCS	Acres in Project	Acreage Surveyed	Percentage Habitat Surveyed	Observed Population*	Tortoise Density Per Acre	Projected Tortoise Population**
421(N)	62	18.1	29	9.8	0.54	33
421(S)	65	32.0	49	30.7	0.96	62
4211	46	9.1	20	4.9	0.54	25
321	142	33.9	24	9.2	0.27	38
411/321	127	26.1	21	17.8	0.68	86
411	219.6	58.2	27	7.5	0.13	28
4111	7	0.4	6	0.0	0.0	0
424/321	6	1.7	28	0.0	0.0	0
740(U)	6	2.3	38	1.2	0.53	3
TOTALS	680.6	181.8				275

(N) Denotes habitat north of Coconut Road.
(S) Denotes habitat south of Coconut Road.
(U) Denotes upland disturbed areas. These consist primarily of man-made berms.

* = Active + inactive burrows observed x 0.614
** = Observed population ÷ percent habitat surveyed

TABLE 2b - Habitat Protection/Preservation Areas

Habitat FLUCCS	Acres in Project	Tortoise Density Per Acre	Habitat Projection Factor	Potential Habitat Protection Acreage	Acres of Habitat Preserved	Percentage of Habitat Preserved
421(N)	62	0.54	15%	9.3	58	94
421(S)	65	0.96	25%	16.3	0	0
4211	46	0.54	15%	6.9	7	15
321	142	0.27	10%	14.2	0	0
411/321	127	0.68	15%	19.1	13	6
411	219.6	.13	5%	11.0	0	0
4111	7	0.0	0%	0.0	0	0
424/321	6	0.0	0%	0.0	0	0
740(U)	6	0.53	15%	1.0	0	0
TOTALS	680			77.8	78	

(N) Denotes habitat north of Coconut Road.
(S) Denotes habitat south of Coconut Road.
(U) Denotes upland disturbed areas. These consist primarily of man-made berms.

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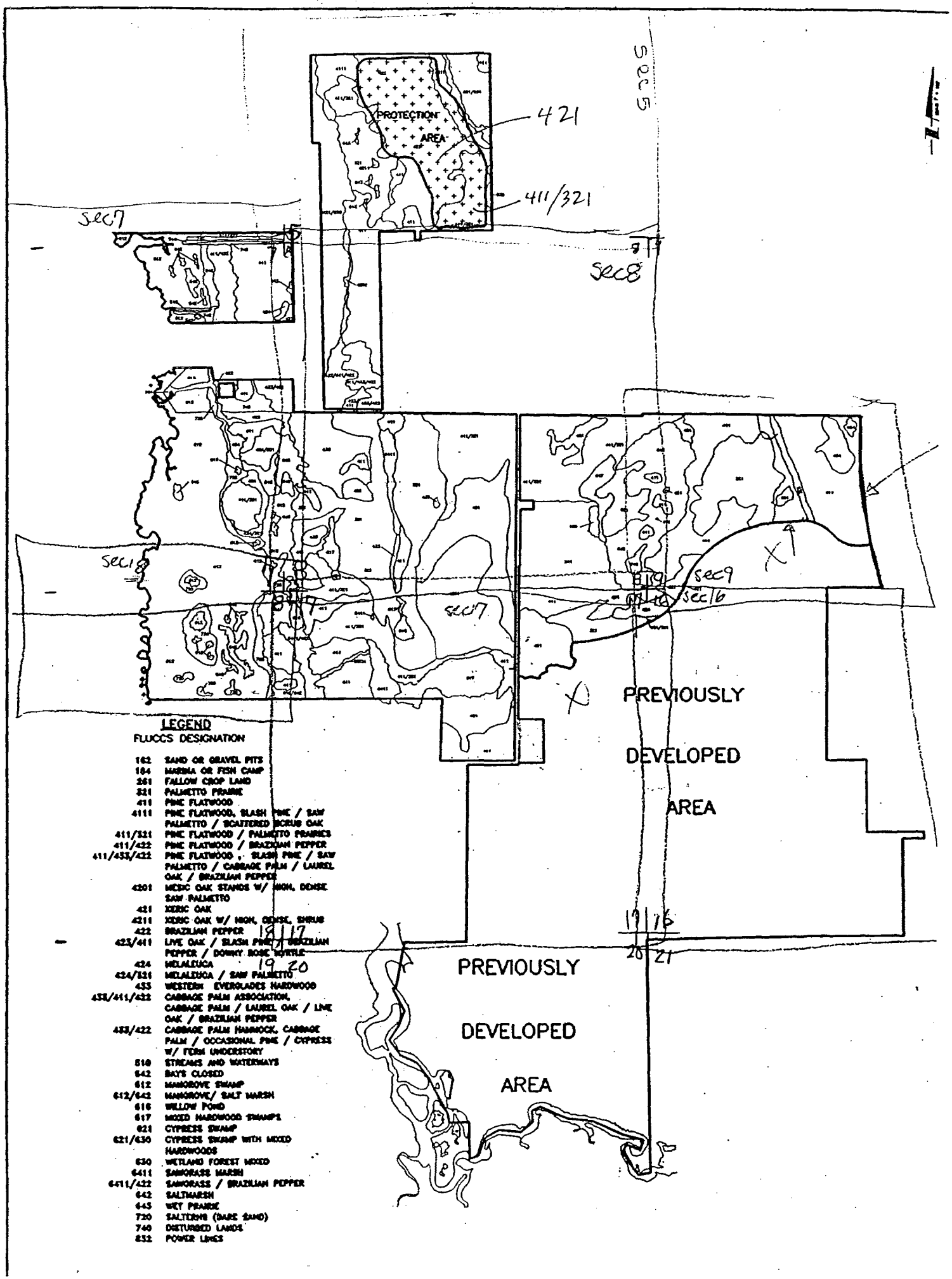
Table 3 - Existing On-Site Tortoise Population - Adjusted Multiplier = 0.614*

FLUCCS Category	Acres**	Projected Burrows (A + I)	Estimate for Tortoise Population
Xeric Oak - 421(N)	62.0	55	33
Xeric Oak - 421 (S)	65.0	102	62
Xeric Oak w/ Dense Shrubs - 4211	46.0	40	25
Palmetto Prairie - 321	142.0	63	38
Pine Flatwood - 411/321	127.0	138	86
Mesic Pine Flatwood - 411	219.6	45	28
Pine Flatwood w/ Scrub Oak - 4111	7.0	0	0
Melaleuca over Palmetto - 424/321	6.0	0	0
Disturbed Land - 740(U)	6.0	5	3
TOTAL	680.6	448	275

* Detailed studies of tortoise populations in the region have shown that burrow occupancy multipliers are typically much lower than 0.614.

** Based on current undeveloped acreages, December 1993.


PROTECTION AREA
421
411/321
Sec5
Sec7
Sec8
Sec18
Sec17
Sec9
Sec16
PREVIOUSLY DEVELOPED AREA
PREVIOUSLY DEVELOPED AREA
LEGEND
FLUCCS DESIGNATION
162 SAND OR GRAVEL PITS
184 MARINA OR FISH CAMP
261 FALLOW CROP LAND
321 PALMETTO PRAIRIE
411 PINE FLATWOOD
4111 PINE FLATWOOD, SLASH PINE / SAW PALMETTO / SCATTERED SCRUB OAK
411/321 PINE FLATWOOD / PALMETTO PRAIRIES
411/422 PINE FLATWOOD / BRAZILIAN PEPPER
411/433/422 PINE FLATWOOD , SLASH PINE / SAW PALMETTO / CABBAGE PALM / LAUREL OAK / BRAZILIAN PEPPER
4201 MESIC OAK STANDS W/ HIGH, DENSE SAW PALMETTO
421 XERIC OAK
4211 XERIC OAK W/ HIGH, DENSE, SHRUB
422 BRAZILIAN PEPPER
423/411 LIVE OAK / SLASH PINE / BRAZILIAN PEPPER / DOWNY ROSE MYRTLE
424 MELALEUCA
424/321 MELALEUCA / SAW PALMETTO
433 WESTERN EVERGLADES HARDWOOD
433/411/422 CABBAGE PALM ASSOCIATION, CABBAGE PALM / LAUREL OAK / LIVE OAK / BRAZILIAN PEPPER
433/422 CABBAGE PALM HAMMOCK, CABBAGE PALM / OCCASIONAL PINE / CYPRESS W/ FERN UNDERSTORY
510 STREAMS AND WATERWAYS
642 BAYS CLOSED
612 MANGROVE SWAMP
612/642 MANGROVE/ SALT MARSH
616 WILLOW POND
617 MIXED HARDWOOD SWAMPS
621 CYPRESS SWAMP
621/630 CYPRESS SWAMP WITH MIXED HARDWOODS
630 WETLAND FOREST MIXED
6411 SAWGRASS MARSH
6411/422 SAWGRASS / BRAZILIAN PEPPER
642 SALTMARSH
643 WET PRAIRIE
720 SALTERNS (BARE SAND)
740 DISTURBED LANDS
832 POWER LINES

Proposed Reconfiguration of
Pelican Landing DRI Eco-Park

APPENDIX B

Existing Conservation Easement for Pelican Landing DRI Eco-Park

TERRY D.

WCI COMMUNITIES
LIMITED PARTNERSHIP

801 Laurel Oak Drive, Suite 500
Naples, Florida 33963-2797
(941) 598-9000, Fax: (941) 597-940

October 27, 1995

Mr. Brian S. Barnett, Assistant Director
Office of Environmental Services
Florida Game and Fresh Water Fish Commission
620 South Meridian Street
Tallahassee, FL 32399-1600

RE: Final Conservation Easement, Mitigation for Gopher Tortoise Incidental Take Permit LEE-9 (Pelican Landing)

Dear Mr. Barnett

In accordance with your letter of September 26, 1995 to Vivien Hastings, enclosed please find the original recorded Grant of Conservation Easement regarding the above-referenced matter. Please feel free to contact us should you have questions or if we can be of further assistance.

Sincerely yours,

COPY

Robin Martin, CLA
Legal Assistant

RM:i\misc
cc: Vivien Hastings (w/enc.) ✓
Susan Watts (w/enc.)
Terrey Dolan (w/enc.)

This instrument prepared by
and please return to:

Vivien N. Hastings
901 Laurel Oak Drive
Suite 500
Naples, Florida 33963

3854202

GRANT OF CONSERVATION EASEMENT

THIS GRANT OF CONSERVATION EASEMENT is made this 31st day of October, 1995, by WCI COMMUNITIES LIMITED PARTNERSHIP, a Delaware limited partnership, successor to WCN Communities, Inc. (f/k/a Westinghouse Communities of Naples, Inc.), whose address is: c/o 24820 Burnt Pine Drive, Bonita Springs, Florida 33923 ("Grantor"), in favor of the FLORIDA GAME AND FRESH WATER FISH COMMISSION, a Commission created by Section 9, Article IV of the Constitution of the State of Florida, whose address is: Farris Bryant Building, 620 South Meridian Street, Tallahassee, Florida 32399-1600 ("Grantee").

R E C I T A L S :

A. The Grantor is the Owner of certain lands situated in Lee County, hereinafter referred to as the "Property", more specifically described in Exhibit "A" (legal descriptions and sketches) attached hereto and incorporated herein by this reference; and

B. This Conservation Easement is being granted by Grantor to Grantee pursuant to the terms of the Pelican Landing Master DRI Gopher Tortoise Incidental Take Permit-Lee - 9, issued to Grantor by GRANTEE on August 29, 1995, which permit includes the Gopher Tortoise Population Study and Habitat Management Plan for Pelican Landing DRI, including the Elks Club and the Wysock Parcel (the "Plan"). (such permit and the Plan as they may be amended or modified from time to time are hereinafter collectively called "Permit"); and

C. The purpose of this Conservation Easement is to protect and conserve wildlife by establishing a Gopher Tortoise Preserve upon the Property by way of this Conservation Easement and to manage the Property in conformance with the terms of the Permit; and

D. The Grantee has approved the establishment of the Conservation Easement pursuant to the Permit and the Development Order approving a Development of Regional Impact known as Pelican Landing DRI, State DRI No. 1-9293-121, the Notice of Adoption which is recorded in Official Record Book 2545, Page 1080, of the Public Records of Lee County, Florida.

NOW, THEREFORE, consistent with the facts set forth above, and as consideration of the consent by Grantee to the issuance of the Permit, Grantor hereby grants, creates and establishes a non-exclusive, perpetual Conservation Easement upon the Property described in Exhibit "A", which shall be subject to the terms and conditions set forth below and which shall run with the land and be binding upon the Grantor, Grantee, their successors and assigns, (including, without limitation, any subsequent purchases of the Property or any portion thereof), and shall remain in full force and effect forever.

1. The scope, nature and character of the Conservation Easement is to provide protection for Gopher Tortoises and shall be used as a conservation area pursuant to Section 704.06, Florida Statutes, and consistent with the Permit and the Plan, a copy of which Permit, including the Plan, is attached hereto as Exhibit "B" and incorporated herein by reference. To carry out this purpose, the following rights are conveyed to Grantee by this Conservation Easement:

(a) To enter upon the Property at reasonable times to observe and inspect the Property and to enforce the rights herein granted upon prior notice to Grantor, its heirs, successors and assigns, in a manner that will not unreasonably interfere with the use and quiet enjoyment of the Property (and/or adjacent lands owned by Grantor) by Grantor, its heirs, successors and assigns at the time of such entry; and

(b) To enforce, by any proceeding in law or equity, any and all terms of this Conservation Easement, including the right to enjoin any activity on or use the Property that is inconsistent with the purpose of this Conservation Easement and to enforce the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

2. Grantor reserves to itself, its heirs, successors and assigns, all rights as Owner of the Property, including the right to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement as set forth in Section 704.06, Florida Statutes and the right to implement all the terms and provisions of the Permit, including the right to install, construct and maintain nature trails upon the Property in accordance with the Permit. The following are prohibited activities unless otherwise specifically provided in the Permit or consented to in writing by Grantee:

(a) Construction or placing of buildings, roads, billboards or other advertising except as required for the construction and maintenance of nature trails, as provided in the Permit;

(b) Dumping or placing of soil or other substance or material as landfill or dumping or placing of trash, waste, or unsightly or offensive materials; except as required for the construction and maintenance of nature trails as provided in the Permit.

(c) Removal or destruction of native trees, shrubs, or other vegetation (except for trimming or removal of dead or diseased trees or removal of exotic nuisance vegetation as may be approved by the appropriate state, federal and/or local regulatory agencies), except as authorized by the Permit;

(d) Excavation, dredging, or removal of loam, peat, gravel, soil, rock or other material substance in such a manner as to affect the surface;

(e) Surface use except for purposes that permit the land or water area to remain predominately in its natural condition;

(f) Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation or fish and wildlife habitat preservation;

(g) Acts or uses detrimental to such retention of land or water areas.

3. No right access by the general public to any portion of the Property is conveyed by this Conservation Easement.

4. Grantor agrees for itself and its successors and assigns, to maintain and repair the Property and agrees to bear all costs related to the operation, upkeep and maintenance of the Property. Notwithstanding the foregoing, Grantor shall have the right, at any time, to assign to the Bayside Improvement Community Development District, a community development district established pursuant to Chapter 190, Florida Statutes, whose address is 10300 N.W. 11th Manor, Coral Springs, Florida 33071 (the "Bayside District"), any or all of its maintenance, upkeep and repair obligations and duties under this Conservation Easement, such assignment and acceptance to be evidenced by an instrument recorded in the Public Records of Lee County, Florida. Upon recording of this instrument, the Bayside District shall automatically assume full responsibility for all of such assigned duties and obligations described herein and Grantor shall have no further obligations with respect thereto. Grantee shall have no maintenance, upkeep or repair responsibilities with respect to this Conservation Easement.

5. Grantor, its successors and assigns, agree to pay any and all real property taxes and assessments levied by competent authority on the Property.

6. Grantee will use care while present on the Property and shall in no way interfere with the right of ingress or egress of Grantor, its successors and assigns, or any other party requiring access to any of the Property over which said Conservation Easement is granted.

7. In the event it becomes necessary for Grantor or Grantee to enforce, judicially or otherwise, the terms and restrictions of this Conservation Easement, including without limitation, costs of suit, attorney's fees, and any cost of restoration necessitated by the

violation of the terms of this Conservation Easement, then the prevailing party shall be entitled to reimbursement of all such costs.

8. Any forbearance on the behalf of Grantor or Grantee to exercise their rights hereunder in the event any breach hereof shall not be deemed or construed to be a waiver of such party's rights hereunder in the event of a subsequent breach.

9. Grantee, or its assigns, agrees (i) that they will hold this Conservation Easement exclusively for conservation purposes, and (ii) that they will not assign their rights and obligations under this Conservation Easement except to another organization which is qualified to hold such interest under applicable state law and who agrees to hold this Conservation Easement exclusively for conservation purposes and subject to strict compliance with the terms hereof, and (iii) that no such assignment will be made without the Grantor's written consent.

10. Grantor agrees that the terms, conditions, restrictions and purposes of this grant will be inserted by it in any subsequent deed or legal instrument by which Grantor divests itself of any interest in the Property.

11. If any provision of the Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement, and the applications of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

12. All notices, consents, approvals, or other communication hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest, at the addresses above set forth or such new addresses as either party may in writing deliver to the other.

13. This Conservation Easement may be amended, altered, released, or revoked only by written agreement between Grantor, the Grantee, their successors or assigns, which shall be filed in the Public Records of Lee County, Florida.

TO HAVE AND TO HOLD unto Grantee, its successors-in-interest and assigns, forever. The covenants, terms, conditions, restrictions and purposes imposed with this easement shall not only be binding upon Grantor but also its agents, personal representatives, heirs, assigns and all other successors to it in interest, and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF, Grantor has set its hand on the day and year first above written.

Signed, Sealed and Delivered in our presence as witnesses:

Robin Martin
Print: Robin martin

Peter Doran
Print: PETER DORAN, II

WCI COMMUNITIES LIMITED PARTNERSHIP, a Delaware limited partnership (f/k/a WCN Communities, Inc.)

By: _____
Jerry H. Schmoyer
Senior Vice President

STATE OF FLORIDA
COUNTY OF Lee

The foregoing instrument was acknowledged before me this 21st day of September, 1995, by Jerry H. Schmoyer, as Senior Vice President of WCI Communities Limited Partnership, a Delaware limited partnership (f/k/a WCN Communities, Inc.). He is personally known to me and did not take an oath.

Robin Martin
Notary Public
Print: Robin Martin
Commission No.: _____
My Commission Expires: _____

NOTARY PUBLIC STATE OF FLORIDA
OFFICIAL NOTARY SEAL
ROBIN MARTIN
COMMISSION NUMBER
CC476912
MY COMMISSION EXP.
JULY 31,1999

GRANTEE ACCEPTANCE

The FLORIDA GAME AND FRESH WATER FISH COMMISSION hereby approves the foregoing Grant of Conservation Easement and agreed to all of the terms and provisions thereof.

FLORIDA GAME AND FRESH WATER FISH COMMISSION

Witness:

Bonnie S. Holcomb
Print: Bonnie S. Holcomb

Barbara Levins
Print: Barbara Levins

By: William C. Sumner
Its: ASSISTANT EXECUTIVE DIRECTOR

_____, ~~Secretary~~

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

STATE OF FLORIDA
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 22nd day of September, 1995, by William C. Sumner ~~and~~ _____, as Asst. Executive Director ~~and Secretary~~, ~~respectively~~, of Florida Game and Fresh Water Fish Commission. They are personally known to me and did not take an oath.

Jimmie C. Bevis
Notary Public
Print: JIMMIE C. BEVIS
Commission No.: CC 338592
My Commission Expires: DECEMBER 23, 1998

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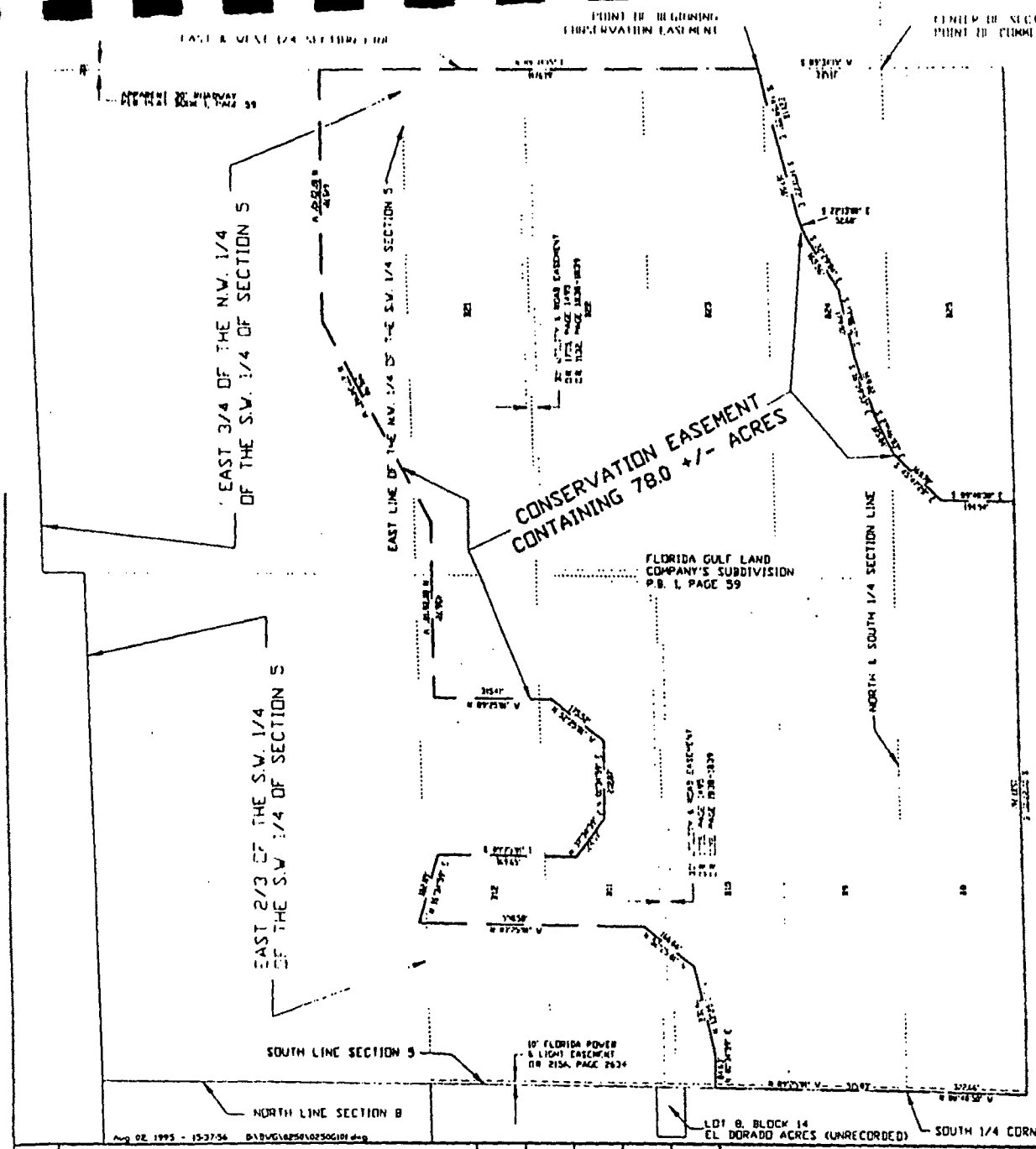


LEGAL DESCRIPTION

DESCRIPTION
PART OF SECTION 5, TOWNSHIP 47 SOUTH, RANGE 25 EAST,
LEE COUNTY, FLORIDA
(Eco-Park Conservation Easement)

All of lots 88, 89, 827 and part of lots 810, 811, 812, 821, 823, 824 and 825 of Florida Gulf Land Company's Subdivision according to the plat thereof as recorded in Plat Book 1, Page 59, Public Records of Lee County, Florida and also being a part of the South one-half (S-1/2) of Section 5, Township 47 South, Range 25 East, Lee County, Florida being more particularly described as follows:

COMMENCING at the center of said Section 5;
thence along the east-west quarter section line of said section 5 S89°34'15"W 33511 feet to the POINT OF BEGINNING of the Easement herein described;
thence leaving said east-west quarter section line S14°59'55"E 72118 feet;
thence S14°11'23"E 16756 feet;
thence S37°13'00"E 5260 feet;
thence S30°29'04"E 16556 feet;
thence S13°08'10"E 17533 feet;
thence S06°19'53"E 16982 feet;
thence S27°46'03"E 10504 feet;
thence S45°47'29"E 16978 feet;
thence S89°40'30"E 19494 feet to an intersection with the east line of said lot 825;
thence S00°27'01"E along the east line of said Lots 825 and 88 (537.7) feet to the southeast corner of said lot 88 and a point on the south line of said Section 5;
thence along said south line of Section 5 and along the south line of said Lot 88 N88°48'50"W 3[illegible]46 feet to the southwest corner of said lot 88 and the south quarter corner of said Section 5;
thence continue along said south line of Section 5 and along the south line of said Lots 89 and 810 N89°23'01"W 31583 feet;
thence leaving said south line of Section 5 N00°34'59"E 8463 feet;
thence N13°25'01"W 23196 feet;
thence N32°25'01"W 16466 feet;
thence N89°25'01"W 59050 feet;
thence N16°34'59"E 18295 feet;
thence S89°25'01"E 36943 feet;
thence N27°34'59"E 17809 feet;
thence N00°34'59"E 20207 feet;
thence N32°25'01"W 17558 feet;
thence N89°25'01"W 31541 feet;
thence N00°26'18"W 4567[illegible] feet;
thence N27°34'42"W 59198 feet;
thence N00°25'45"W 64570 feet to a point on said east-west quarter line of said Section 5;
thence along said east-west quarter line of Section 5 and along the north line of said Lots 821, 822 and 823 N89°34'15"E 117619 feet to the POINT OF BEGINNING of the Easement herein described.

Parcel contains 7800 acres, more or less
Subject to easements, restrictions, reservations and rights-of-way of record
Bearings shown hereon are assumed and based on the east west 1/4 section line of Section 5, being N89°34'15"E

Prepared by

WILSON, MILLER, BARTON & PEEK, INC

Elizabeth F. Gaines, Professional Surveyor & Mapper — Date
Florida Registration No. 4576

GENERAL NOTES:
1. DIMENSIONS ARE IN FEET AND DECIMALS THEREOF
2. BEARINGS SHOWN HEREON ARE ASSUMED AND BASED ON THE EAST WEST 1/4 SECTION LINE OF SECTION 5, BEING N 89°34'15"E
3. OR DENOTES OFFICIAL RECORD BOOK
P.B. DENOTES PLAT BOOK

SCALE 1" = 200'
GRAPHIC SCALE

*** 8 1/2 x 11 NOT TO SCALE ***
*** NOT A SURVEY ***

REV NO	REVISION	DATE	DRAWN BY	CHK. NO.	CHECKED BY	EMP. NO.

ACTIVITY	INITIALS	EMP. NO.	DATE	ACTIVITY	INITIALS	EMP. NO.	DATE
DESIGNED BY:				CONTRACT ADMIN. BY:			
DRAWN BY:	MLB	264	7/28/95	WMBAP APPROVED BY:			
CHECKED BY:		170		SENT TO:			

WILSON, MILLER, BARTON & PEEK, INC.
CONSULTING • SURVEYORS • PLANNERS • ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS • CONSTRUCTION MANAGERS
4571 Colonial Boulevard
Fort Myers, Florida 33913
(813) 939-1020 Fax (813) 939-7479

PROJECT:
ECO-PARK CONSERVATION

DATE: 7/28/95
HORIZONTAL SCALE: 1"=200'
VERTICAL SCALE:
MO. DAY. YRS.
5-47-25
FILE NOS.
217

CLIENT:
PELICAN LANDING COMMUNITIES, INC.
24820 BURNT PINE DRIVE, BONITA SPRINGS, FL 33923 (941)947-2600

TITLE: SKETCH AND DESCRIPTION
OF LOTS 88, 89, 827 AND PART OF LOTS 810, 811, 812, 821, 823, 824 AND 825 OF FLORIDA GULF LAND COMPANY'S SUBDIVISION, PLAT BOOK 1, PAGE 59 AND PART OF SECTION 5 TOWNSHIP 47 SOUTH RANGE 25 EAST, LEE COUNTY, FLORIDA

FLORIDA GAME AND FRESH WATER FISH COMMISSION

JULIE K. MORRIS
Sarasota

QUINTON L. HEDGEPETH, DDS
Miami

MRS. GILBERT W. HUMPHREY
Micanopy

THOMAS B. KIBI
Lakeland

ALLAN L. EGBERT, Ph.D., Executive Director
WILLIAM C. SUMNER, Assistant Executive Director

OFFICE OF ENVIRONMENTAL SERVIC
BRADLEY J. HARTMAN, Direc
FARRIS BRYANT BUILDI
620 South Meridian Str
Tallahassee, FL 32399-16
(904) 488-66
SUNCOM 278-66
FAX (904) 922-56
TDD (904) 488-95

August 29, 1995

Mr. Terrence S. Dolan
Westinghouse Bayside Communities, Inc.
24820 Burnt Pine Drive
Bonita Springs, FL 33923

Re: Gopher Tortoise Incidental Take
Permit #LEE-9, Lee County

Dear Mr. Dolan:

Enclosed is permit LEE-9 for the incidental taking of gopher tortoises, their eggs and their burrows within the development boundaries specified. The application for this permit was complete as of August 28, 1995.

Please contact Ms. Kim Dryden at (941) 639-3515 if you have any questions regarding this permit.

Sincerely,

Brian Barnett, for
Bradley J. Hartman, Director
Office of Environmental Services

BJH/tgw
ENV 3-2/5
Enclosure
gtpermit.ltr
cc: Lee County Planning Department
Mr. Mike Kemmerer, South Region, GFC
Major Buckhalter, South Region, GFC
Ms. Kim Dryden, OES, GFC
Mr. Tim Durham, Wilson, Miller, Barton & Peek
Mr. Don Wood, Division of Wildlife, GFC

95 OCT 18 PM 1:20

APPENDIX C

Photographs of Xeric Oak Scrub Habitat to be Retained in Existing Eco-Park

Exhibit C-1. Representative nature of xeric oak habitat (FLUCCS #421) to be retained in existing Eco-Park.

Exhibit C-2. Representative nature of xeric oak habitat (FLUCCS #421) to be retained in existing Eco-Park.

Exhibit C-3 Representative nature of xeric oak habitat with dense shrub layer (FLUCCS #4211) to be retained in existing Eco-Park.

APPENDIX D

Photographs of Xeric Oak and Pine Flatwoods/Palmetto Prairie Habitat of the Proposed Deletion Parcel

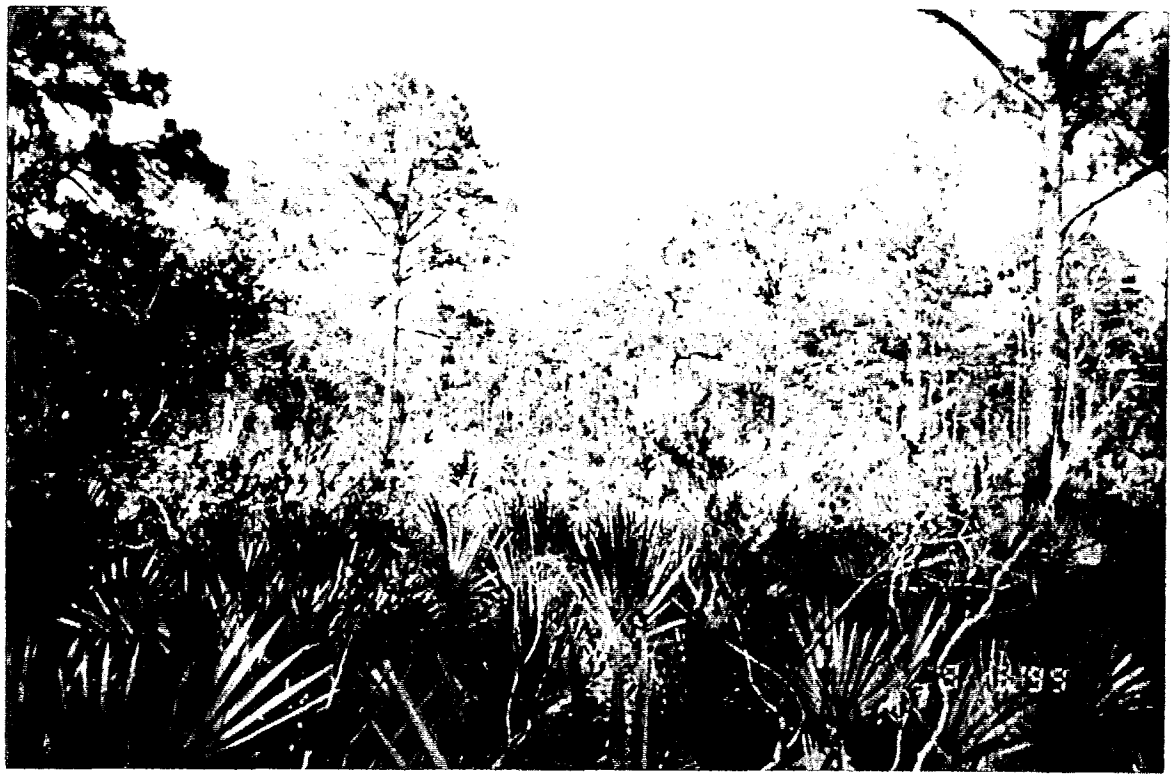


Exhibit D-1. Representative nature of xeric oak habitat (FLUCCS #421) of the parcel proposed to be deleted from the Eco-Park.

Exhibit D-2. Representative nature of xeric oak habitat (FLUCCS #421) of the parcel proposed to be deleted from the Eco-Park.

Exhibit D-3 Representative nature of pine flatwoods/palmetto prairie habitat (FLUCCS #411/321) of the parcel proposed to be deleted from the Eco-Park.

Exhibit D-4. Representative nature of pine flatwoods/palmetto prairie habitat (FLUCCS #411/321) of the parcel proposed to be deleted from the Eco-Park.

APPENDIX E

Photographs of Selected Habitats of the Proposed Addition Parcel

Exhibit E-1. Representative nature of xeric oak (FLUCCS #421) habitat in areas proposed to be added to the Eco-Park (Skebe tract).

Exhibit E-2. Representative nature of pine flatwoods (FLUCCS #411E1) habitat in areas proposed to be added to the Eco-Park (Skebe tract).

Exhibit E-3. Representative nature of pine flatwoods (FLUCCS #411E2) habitat in areas proposed to be added to the Eco-Park (Skebe tract).

Exhibit E-4. Representative nature of cypress habitat (FLUCCS #621) of Halfway Creek in areas proposed to be added to the Eco-Park.

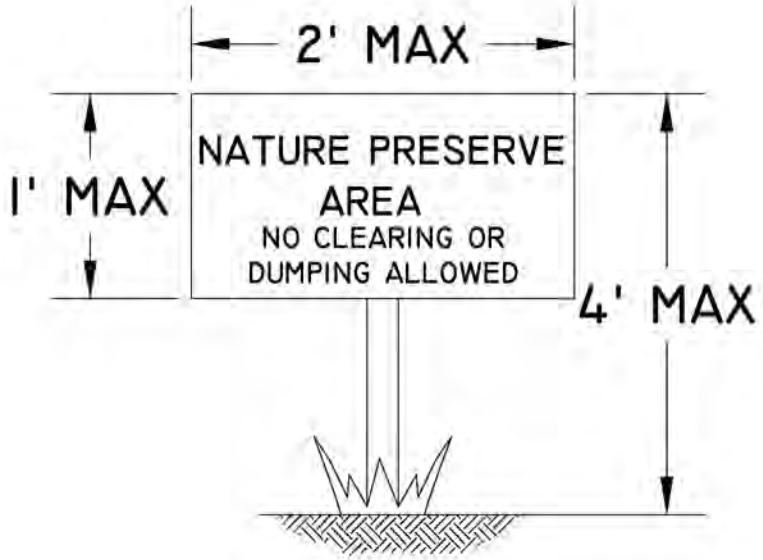
Exhibit E-5. Representative nature of main channel of Halfway Creek in areas proposed to be added to the Eco-Park (Skebe tract).

APPENDIX E

AMERICAN ALLIGATOR MANAGEMENT AND PRESERVE SIGNAGE

TYPICAL AMERICAN ALLIGATOR SIGNAGE

N.T.S.



TYPICAL PRESERVE SIGNAGE

N.T.S.

J:\2020\20-043290\2021\HOA PRESERVE AND PROTECTED SPECIES MGMT PLAN\APPENDIX E ALLIGATOR AND PRESERVE SIGNAGE.DWG TAB: 8X11-M MAR 22, 2022 - 8:06AM PLOTTED BY: PAMET

APPENDIX E. AMERICAN ALLIGATOR MANAGEMENT AND PRESERVE SIGNAGE
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
R.F.	09/27/21
REVIEWED BY	DATE
S.J.	09/27/21
REVISED	DATE

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

APPENDIX F

AMERICAN ALLIGATOR INFORMATIONAL PAMPHLET

- Never feed alligators – it's dangerous and illegal. When fed, alligators can overcome their natural wariness and learn to associate people with food. When this happens, some of these alligators have to be removed and killed.

- Dispose of fish scraps in garbage cans at boat ramps and fish camps. Do not throw them into the water. Although you are not intentionally feeding alligators when you do this, the result can be the same.

- Seek immediate medical attention if you are bitten by an alligator. Alligator bites can result in serious infections.

- Observe and photograph alligators only from a distance. Remember, they're an important part of Florida's natural history as well as an integral component of aquatic ecosystems.

Tim Donovan

Call 866-FWC-GATOR (392-4286) to report nuisance alligators.

Janice Plain

Call 866-FWC-GATOR (392-4286) to report nuisance alligators.

Regional offices
Northwest Region, Panama City
850-265-3676

North Central Region, Lake City
386-758-0525

Northeast Region, Ocala
352-732-1225

Southwest Region, Lakeland
863-648-3200

South Region, West Palm Beach
561-625-5122

REWARD
Report Fish & Wildlife Violations
1-888-404-3922

The FWC prohibits discrimination by race, color, nationality, age, sex or handicap. If you believe you have been discriminated against in any program, activity or facility of this agency, write to: Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600; or to: Office of Human Relations, USFWS, Department of Interior, Washington, D.C. 20240.

printed on recycled paper 50K 07/10

A guide to living with **Alligators**

Jamie Feddersen

Florida Fish and Wildlife Conservation Commission

MyFWC.com

Lizabeth West

Do not swim outside of posted swimming areas or in waters that may be inhabited by alligators.

Living with alligators

In Florida, the growing number of people living and recreating near water has led to a steady rise in the number of alligator-related complaints. The majority of these complaints relate to alligators being where they simply aren't wanted. Because of these complaints, the Florida Fish and Wildlife Conservation Commission's Statewide Nuisance Alligator Program permits the killing of approximately 7,000 nuisance alligators each year. Using this approach, and through increased public awareness, the rate of alligator bites on people has remained constant despite the increased potential for alligator-human interactions as Florida's human population has grown.

Alligators are an important part of Florida's landscape and play a valuable role in the ecology of our state's wetlands. Alligators are predators and help keep other aquatic animal populations in balance. A better understanding of the facts and information presented in this brochure will help ensure that people and alligators can continue to coexist.

Visit MyFWC.com/Gators for more information about alligators and the latest nuisance alligator program statistics.

Alligators and people

Alligators are a fundamental part of Florida's marshes, swamps, rivers and lakes, and they are found in all 67 counties. Florida continues to experience human population growth. Many new residents seek waterfront homes, resulting in increased interactions between people and alligators.

Although many Floridians accept living with alligators nearby, the potential for conflict exists. Because of their predatory nature, alligators may target pets and livestock as prey. Unfortunately, people also are occasionally bitten. Since 1948, Florida has averaged about five unprovoked bites per year. During that period, a little more than 300 unprovoked bites to people have been documented in Florida, with 22 resulting in deaths.

In the past 10 years, the Florida Fish and Wildlife Conservation Commission has received an average of nearly 16,000 alligator-related complaints per year. Most of these complaints deal with alligators occurring in places such as backyard ponds, canals, ditches and streams, but other conflicts occur when alligators wander into garages, swimming pools and golf course ponds. Sometimes, alligators come out of the water to bask in the sun or move between wetlands. In many cases, if left alone, these alligators will eventually move on to areas away from people.

Safety tips

- Generally, alligators less than four feet in length are not large enough to be dangerous unless handled. However, if you encounter any alligator that you believe poses a threat to people, pets or property, call the Nuisance Alligator Hotline at 866-FWC-GATOR (392-4286). Please be aware, nuisance alligators are harvested, not relocated.

Tim Donovan

A young alligator wanders onto a porch in a residential neighborhood.

- Be aware of the possibility of alligators when you are in or near fresh or brackish water. Bites may occur when people do not pay close enough attention to their surroundings when working or recreating near water.
- Do not swim outside of posted swimming areas or in waters that might be inhabited by large alligators.
- Alligators are most active between dusk and dawn. Therefore, avoid swimming at night.
- Dogs and cats are similar in size to the natural prey of alligators. Don't allow pets to swim, exercise or drink in or near waters that may contain alligators. Dogs often attract an alligator's interest, so do not swim with your dog.
- Leave alligators alone. State law prohibits killing, harassing or possessing alligators. Handling even small alligators can result in injury.

(continued)

APPENDIX G

AERIAL WITH SITE PLAN AND GOPHER TORTOISE BURROW LOCATIONS

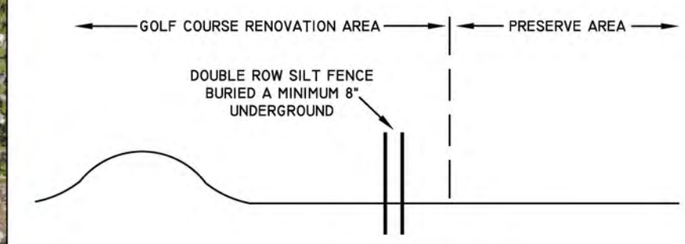
SCALE: 1" = 600'

NOT PART OF THIS INDIGENOUS PRESERVE AND PROTECTED SPECIES MANAGEMENT PLAN

P/L

A A

LAKE



SECTION A-A
N.T.S.

LEGEND:

- APPROXIMATE LOCATION OF GOPHER TORTOISE BURROW
- PRESERVE AREA
- DOUBLE ROW SILT FENCE

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING No. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.

REVISIONS	DATE
Added silt fence	12/21/21

DRAWN BY R.F.	DATE 11/29/21	
DESIGNED BY S.J.	DATE 11/29/21	
REVIEWED BY S.J.	DATE 11/29/21	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

Consulting Ecologists
PASSARELLA & ASSOCIATES INC.

RAPTOR BAY GOLF COURSE RENOVATION

AERIAL WITH SITE PLAN AND GOPHER TORTOISE BURROW LOCATIONS

DRAWING No. 20LBR3290

SHEET No. APPENDIX G

J:\2020\20LBR3290\2021DD RESPONSES\APPENDIX G AERIAL WITH SITE PLAN AND GT LOCATIONS 122121.DWG TAB: 17X11-C MAR 01, 2022 - 1:20PM PLOTTED BY: REID

APPENDIX H

WADING BIRD INFORMATIONAL PAMPHLET

Action to be taken if you observe someone harassing a wading bird:

Promptly notify the FWCC 1-888-404-FWCC

Tips for living with wading birds

- Do not feed wading birds.
- Keep out of vegetated areas surrounding lakes and marshes.
- Keep pets leashed to avoid coming into contact with wading birds.
- Properly dispose of fishing line to avoid bird entanglement.

Prepared By:

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067

WADING BIRD INFORMATIONAL PAMPHLET

RAPTOR BAY GOLF COURSE RENOVATION

Description:

Wading birds are a diverse group of birds which utilize shallow marsh areas as foraging and breeding habitats. They are typically characterized as having long necks, legs and bills, which allows them to feed in shallow water. Wading birds can be found in Florida year round. Examples of wading birds include: great egrets, great blue herons, white ibis', little blue herons and snowy egrets.

Habitat:

Wading birds inhabit all counties in the state of Florida and are most common in the shallow marsh or wetland areas throughout the state. They can also be found in both coastal and inland areas, salt marshes, swamps, ponds, drainage canals, and ditches. Wading birds breed and nest in colonies which consist of various species of other wading birds. Breeding generally occurs just prior to or during the wet season. Stick nests are built in trees or bushes near wetland areas and above the water line.

Wading birds feed in shallow water areas where prey is most concentrated. They feed by spearing prey with their bills or by straining small species out of the water and sediment. Prey may include small fish, invertebrates or other aquatic organisms. Wading birds have also been known to consume snakes, frogs and small rodents.

Protection:

Most wading birds are listed as species of special concern by the State of Florida. Some species such as wood storks are listed as endangered by both the State of Florida and the U.S. Fish and Wildlife Service. It is unlawful for anyone to disturb or take nests or eggs, feed, injure, harm, harass, or kill any wading birds species. Persons who knowingly violate the law may be subject to fines and/or jail time.

If wading birds form a nesting colony on the property in the future, avoid activities within 330 feet of the colony during the nesting season (March 1 to August 1).

APPENDIX I

BALD EAGLE MANAGEMENT PLAN FOR NEST LE-28A

RAPTOR BAY GOLF COURSE RENOVATION
BALD EAGLE MANAGEMENT PLAN
FOR BALD EAGLE NEST LE-28A
LEE COUNTY, FLORIDA

July 2022

Prepared For:

LBRaptor, LLC
2210 Vanderbilt Beach Road, Suite 1300
Naples, Florida 34109
(239) 449-1550

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067

Project No. 20LBR3290

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2.0 Habitat Inventory and Mapping 1

3.0 Bald Eagle Biology and Protection 4

4.0 Description of LE-28A 6

4.1 Location and Landscape Information 6
4.2 Nesting History 6

5.0 Proposed Site Plan and Eagle Protection Zones 7

6.0 Bald Eagle Management Plan 7

7.0 References 7

LIST OF EXHIBITS

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Exhibit 1. Project Location Map.....E1-1

Exhibit 2. Bald Eagle Management Plan for Nest LE-28A (March 2000).....E2-1

Exhibit 3. Aerial with FLUCFCS and Bald Eagle Nest E3-1

Exhibit 4. Aerial with Proposed Site Plan, Bald Eagle Nest, Conservation Area, and Surrounding Land Uses E4-1

1.0 INTRODUCTION

This Bald Eagle Management Plan (BEMP) has been prepared for Bald Eagle (*Haliaeetus leucocephalus*) Nest LE-28A located on the Raptor Bay Golf Course Renovation project (Project). The Project site is located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Exhibit 1). The Project site totals 306.89± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41 and 2.28± miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by a Florida Power & Light (FPL) easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club.

A BEMP was previously prepared by Wilson Miller, Inc. on March 7, 2000 for Nest LE-28A which depicted the eagle nest tree and two protection zones (Exhibit 2). The two zones consisted of the Primary Protection Zone (PPZ), which ranged from 750 feet to 1,200 feet from the nest tree and the Secondary Protection Zone (SPZ), which ranged from 750 feet to 1,300 feet from the PPZ.

This BEMP has been prepared to update the PPZ and SPZ for Nest LE-28A to 330 and 660 feet, respectively, as currently accepted by Lee County the U.S. Fish and Wildlife Service (USFWS), and the Florida Fish and Wildlife Conservation Commission (FWCC). Additionally, this BEMP is intended to facilitate construction of the Project (i.e., golf course renovation activities) while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles. The golf course renovation activities are currently underway in accordance with Lee County Development Order (DO) No. DOS2021-00137.

Nest LE-28A and its proposed protection zones (i.e., 330 and 660 feet) are contained entirely within the Project's conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. Approval of this BEMP will allow the Project's golf course renovation activities to continue throughout the year, as needed.

2.0 HABITAT INVENTORY AND MAPPING

Vegetation and land cover mapping for the Project was updated by Passarella & Associates, Inc. (PAI) in August 2021 using a Lee County 2021 rectified aerial. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial with FLUCFCS and SFWMD wetlands is included as Exhibit 3. According to the FLUCFCS map, the on-site land uses and vegetation communities consist primarily of golf course, pine flatwoods, pine, scrubby flatwoods, melaleuca, shallow ponds, cypress, mixed wetland forest, and freshwater marsh.

A total of 22 land use types were identified on the Project site and are described below.

Golf Course (FLUCFCS Code 182)
This land use type includes the existing Raptor Bay golf course.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)
The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm (*Sabal palmetto*) and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine grapevine (*Vitis rotundifolia*), cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)
This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)
This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)
The canopy of this habitat type is similar to FLUCFCS Code 4119 E3 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)
The canopy of this habitat type contains slash pine and scattered earleaf acacia and melaleuca. The sub-canopy contains slash pine, melaleuca, earleaf acacia, and carrotwood (*Cupaniopsis anacardioides*). The ground cover contains bracken fern (*Pteridium aquilinum*), deer-tongue (*Carphephorus paniculatus*), muscadine grapevine, and bushy bluestem (*Andropogon glomeratus*).

Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)
This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and earleaf acacia in the canopy and sub-canopy and cogongrass (*Imperata cylindrica*) in the ground cover.

Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)
This habitat type is similar to FLUCFCS Code 4159 E2 but contains 50 to 75 percent Brazilian pepper in the sub-canopy and scattered caesarweed (*Urena lobata*) and spermacoce (*Spermacoce verticillata*) in the ground cover.

Scrubby Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)
The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia*

fruticosa), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4169 E2)
This habitat type is similar to FLUCFCS Code 4169 E1 but contains 25 to 49 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)
The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)
The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)
The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Shallow Pond (FLUCFCS Code 525)
The canopy, sub-canopy, and ground cover of this land use type are mostly open, with the edges containing spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)
The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Exotics Wetland Hardwoods (FLUCFCS Code 619)
The canopy and sub-canopy of this habitat type contain Brazilian pepper, cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)
The canopy of this habitat type includes bald cypress, scattered cabbage palm, and widely scattered melaleuca. The sub-canopy contains bald cypress, wax myrtle, buttonbush, pond apple, and scattered Brazilian pepper. The ground cover contains swamp fern, sawgrass (*Cladium*

jamaicense), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)
This habitat type is similar to FLUCFCS Code 6219 E1 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)
The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
This habitat type is similar to FLUCFCS Code 6309 E2 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)
The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)
The canopy of this habitat type includes Brazilian pepper, cabbage palm, buttonwood (*Conocarpus erectus*), Norfolk Island pine (*Araucaria heterophylla*), and scattered earleaf acacia and slash pine. The sub-canopy contains slash pine, cabbage palm, Brazilian pepper, buttonwood, earleaf acacia, Guinea grass (*Panicum maximum*), Norfolk Island pine, false willow (*Baccharis angustifolia*), castor-bean (*Ricinus communis*), and widely scattered saw palmetto. The ground cover contains areas of open sand with dog fennel (*Eupatorium capillifolium*), rustweed (*Polypremum procumbens*), jointweed (*Polygonella polygama*), caesarweed, rosemary, slash pine, bermudagrass (*Cynodon dactylon*), cogongrass, limpograss (*Hemarthria altissima*), wild bush bean (*Macroptilium lathyroides*), wedelia (*Sphagneticola trilobata*), sweetbroom (*Scoparia dulcis*), beggarticks (*Bidens alba*), ragweed (*Ambrosia artemisiifolia*), bushy bluestem, water pennywort (*Hydrocotyle umbellata*), peppervine (*Nekemias arborea*), saltgrass (*Distichlis spicata*), and scattered saw palmetto.

3.0 BALD EAGLE BIOLOGY AND PROTECTION

The following information on the biology of the bald eagle is excerpted from the South Florida Multi-Species Recovery Plan (U.S. Fish and Wildlife Service (USFWS) 1999).

Bald eagles are considered a water-dependent species typically found near estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats (Robards and King 1966, King *et al*. 1972, Weekes 1974, Whitfield *et al*. 1974, Gerrard *et al*. 1975, Grier 1977, Anthony and Isaacs 1989, Wood *et al*. 1989). Their distribution is influenced by the availability of suitable nest and perch

sites near large and open water bodies, typically with high amounts of water-to-land edge. Bald eagles demonstrate a remarkable ability to tolerate perturbations to their habitat throughout their range.

Their adaptability to a variety of habitat conditions makes any generalizations about habitat requirements and nesting behavior difficult. Though variable, eagles have basic habitat requirements that must be met in order to successfully reproduce and survive during the winter or non-nesting season. Florida bald eagle nests are constructed in dominant or co-dominant living pines (*Pinus* spp.) or bald cypress (*Taxodium distichum*) and are often located in the ecotone between forest and marsh or water (McEwan and Hirth 1979). Approximately ten percent of eagle nests are located in dead pine trees, while two to three percent occur in other species such as Australian pine (*Casuarina equisetifolia*) and live oak (*Quercus virginiana*). The stature of nest trees decreases from north to south (Wood 1987, Wood *et al*. 1989); and in extreme Southwest Florida, eagles nest in black mangroves (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), half of which are snags (Curnutt and Robertson 1994). Nest trees in South Florida are smaller and shorter than reported elsewhere; however, comparatively they are the largest trees available (Wood *et al.* 1989, Hardesty 1991). The small size of nest trees in South Florida relative to other nest sites throughout the eagle's range is due to the naturally smaller stature of slash pine (*Pinus elliotti*), loblolly pine (*P. taeda*), longleaf pine (*P. palustris*), and sand pine (*P. clausa*) in South Florida and to the lack of pines in extreme Southern Florida.

Bald eagles are monogamous, and annual courtship behavior reinforces pair bonds (Palmer 1988). Pair bond formation includes dramatic pursuit flights, high soaring, talon locking, and cartwheeling (Johnsgard 1990). Eagles may also fly around the perimeter of their nesting areas, visually communicating their presence and further establishing their territories. Pair bond behavior, as well as territory establishment and defense, probably occur concurrently throughout much of the eagle's range. Successful pair bond ultimately leads to nest site selection and nest construction for newly formed pairs or established pairs without nests. Pairs that have previously nested may repair established nests or construct an alternate nest concurrent with copulation.

Nesting activities generally begin in early September in South Florida, with egg-laying occurring as early as late October and peaking in the latter part of December. Incubation may be initiated from as early as October through as late as March, depending upon latitude. Clutches usually consist of one or two eggs, but occasionally three or four are laid. Incubation takes approximately 35 days and fledging occurs within 10 to 12 weeks of hatching. Parental care may extend 4 to 6 weeks after fledging, even though young eagles are fully developed and may not remain at the nest after fledging (USFWS 1989).

The Florida Fish and Wildlife Conservation Commission (FWCC) documented 88 active bald eagle nesting territories in Florida during their initial surveys of this species in 1973; by 1987, that number had increased to 391 active territories when the USFWS implemented the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (Guidelines) (USFWS 1987). By 1999, the 1,000-breeding pair recovery goal for Florida had been achieved and had increased to 1,511 breeding pairs by 2012 (Brush *et al.* 2012). Peterson and Robertson (1978) reported that historic numbers of breeding pairs of bald eagles in Florida were likely "in excess of 1,000 breeding pairs."

The bald eagle was a federally and state listed "threatened" species that had been protected since the mid-1970s under the Endangered Species Act of 1973 and Chapter 68A-27.004, Florida Administrative Code. Management and recovery efforts for the species generally have included actions to improve reproductive success and survival by 1) reducing levels of persistent organochlorine pesticides, such as Dichlorodiphenyltrichloroethane (i.e., DDT), occurring in the environment; and 2) habitat protection. Habitat protection measures in Florida primarily have focused on the protection of nesting territories through the implementation of the 1987 Guidelines. Recovery goals for the bald eagle have been achieved as a result of these and related management actions throughout the United States, and the USFWS subsequently published a proposed rule in July 1999 to remove the bald eagle in the lower 48 states from the list of threatened or endangered wildlife. The bald eagle was subsequently delisted by the federal government in August 2007 and by the State of Florida in April 2008. The Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act provide continued federal protection for bald eagles. State Rule 68A-16.002 establishes rules for the continued protection and conservation of eagles in Florida.

4.0 DESCRIPTION OF LE-28A

4.1 Location and Landscape Information

Nest LE-28A is located in a large slash pine tree immediately west of Halfway Creek (Exhibit 3). The nest tree is surrounded by dense scrub oak and forested wetland habitats with varying degrees of exotic infestation. Both the nest tree and protection zones (330 and 660 feet) are located within the proposed conservation area (Exhibit 4). The proposed conservation area contains an abundance of trees that could potentially be utilized for perching and/or nesting by bald eagles.

The site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by an FPL easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club. The location of Nest LE-28A, the eagle nest protection zones, and the surrounding land uses are depicted on Exhibit 4.

4.2 Nesting History

Based on Wilson Miller's 2000 BEMP, Nest LE-28A was first observed in 1987 and served to replace Nest LE-28, which was last used during the 1986-1987 nesting season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992-1993 nesting season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997-1998 nesting season identified Nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

Site observations conducted by PAI in February and March 2022 confirmed that Nest LE-28A was inactive.

5.0 PROPOSED SITE PLAN AND EAGLE PROTECTION ZONES

The Project's site plan consists of the reconfiguration of the existing golf course with associated parking and infrastructure. The site plan is depicted on Exhibit 4.

The USFWS and FWCC recognize 330- and 660-foot protection zones around an active eagle nest (Exhibit 4). Additionally, Lee County's Eagle Ordinance (08-25) states that no construction (structures or site work) may occur within 660 feet of an eagle nest without an approved BEMP. Both the 330- and 660-foot protection zones of Nest LE-28A are within the proposed conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. However, DO No. DOS2021-00137 requires that the Project's conservation areas be maintained free of exotic vegetation. This includes the conservation areas within the 330- and 660-foot eagle protection zones.

6.0 BALD EAGLE MANAGEMENT PLAN

This BEMP serves to revise the existing plan prepared by Wilson Miller in 2000, to reduce the protection zones to the current Lee County, USFWS, and FWCC standards (i.e., 330 and 660 feet). Additionally, this BEMP is intended to facilitate construction of the Project while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles that could occur as a result of the proposed development activities. As a management instrument, the BEMP is only applicable to the Project. It is the responsibility of the property owner to retain and implement this plan for as long as it is required, including educating others (e.g., contractors, future owners, tenants, etc.) about the specific requirements of this BEMP and the state and federal eagle protection laws. Any amendment to this management plan shall require review and approval by the Eagle Technical Advisory Committee or any successor body.

Specific elements of the BEMP are as follows:

1. Exotic vegetation removal within 660 feet of the nest tree shall be completed during the non-nesting season (i.e., May 16 through September 30).
2. The use of chemicals which are known to be toxic to wildlife shall be prohibited at all times in close proximity to the nest tree and within the on-site preserve areas. Chemicals used for the purpose of controlling invasive exotic plants shall be prohibited around the base of the nest tree.

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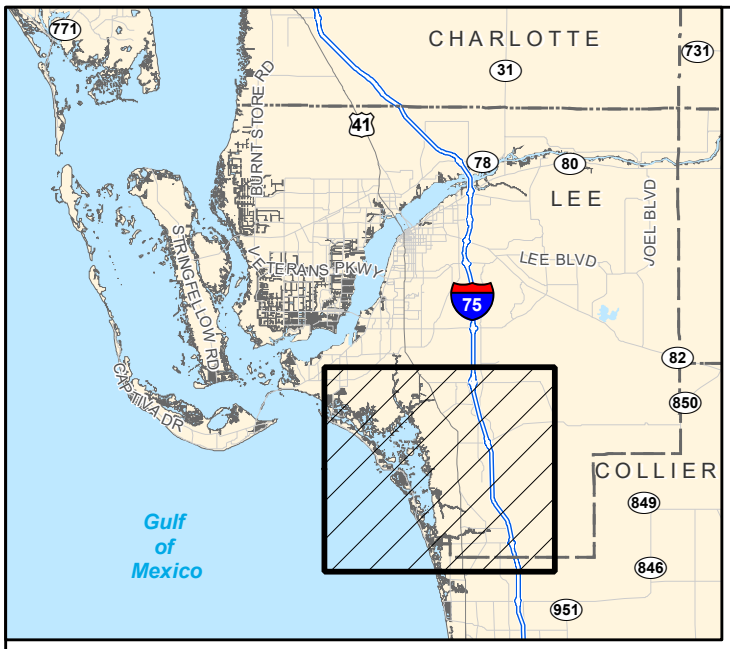
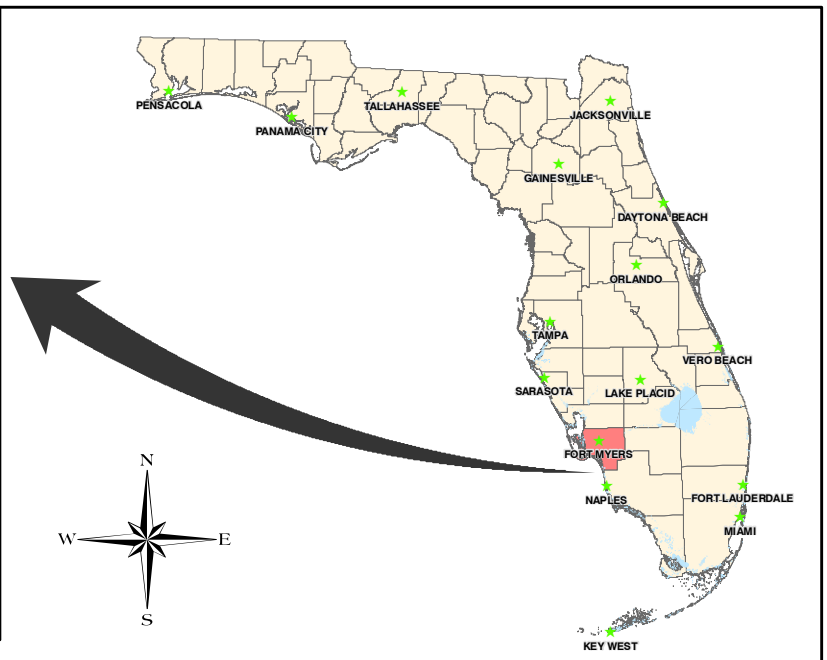
EXHIBIT 1

PROJECT LOCATION MAP





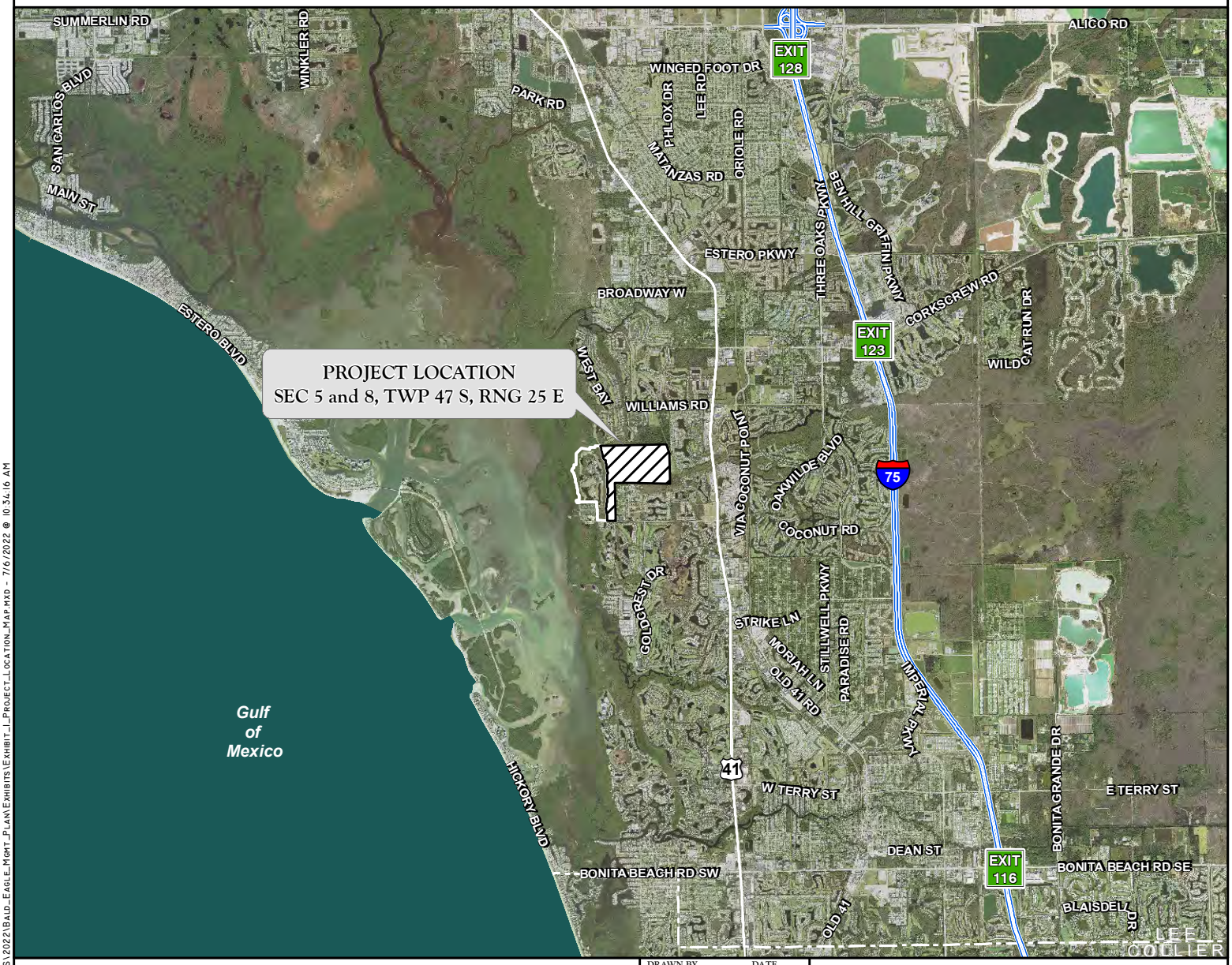


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EXHIBIT 1. PROJECT LOCATION MAP
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
P.F.	09/22/21
REVIEWED BY	DATE
S.J.	09/22/21
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

EXHIBIT 2

BALD EAGLE MANAGEMENT PLAN BY WILSON MILLER, INC.
MARCH 2000

WilsonMiller

BALD EAGLE MANAGEMENT PLAN
FOR NEST LE-28A

Pelican Landing DRI
Section 5, Township 47 South, Range 25 East
Lee County, Florida

Prepared for:

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Submitted to:

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March 7, 2000

BALD EAGLE MANAGEMENT PLAN
FOR NEST LE-28A

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CA #43
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1.0. Introduction and Project History

Pelican Landings is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Pelican Landing DRI contains a 78-acre xeric scrub/pine flatwood upland preservation area known as the "Eco-Park". Figure 1 provides a location map for the Pelican Landing Eco-Park. The Eco-Park was established pursuant to a gopher tortoise incidental take permit issued by the Florida Game and Fresh Water Fish Commission (Permit #Lee-9 issued August 28,1995) to mitigate for impacts to the gopher tortoise and xeric scrub habitat located within the Pelican Landing DRI. It was strategically chosen since at that time it contained the majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. A conservation easement for the 78-acre tract was granted to the Florida Game and Fresh Water Fish Commission and was recorded in the public records of Lee County on October 18, 1995. The incidental take permit contains provisions for perpetual management of the Eco-Park to maintain appropriate vegetative density and composition. Condition #5 of the permit addresses conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities. An active bald eagle's nest is present in the Eco-Park of the Pelican Landing DRI. The eagle nest is recognized by U.S. Fish and Wildlife Service (USFWS) as nest #LE-28A. Conditions of the Development Order for the Pelican Landing DRI require that a management plan be implemented for this nest.

A bald eagle management plan (BEMP) was drafted for nest LE-28A in 1994 (Heald and Associates, Inc. 1994a; Appendix A) and was submitted to the USFWS for review, comment, and approval. The original plan proposed a 1,300-foot setback between the nest and any proposed construction and a 2,500-foot secondary protection zone where construction would be seasonally restricted. Under the 1994 plan, the closest proposed construction was a two-lane road west of the nest that would terminate near the northern property boundary of the project site, and single-story single-family homes on large lots to the west of the road. Via a letter from David Ferrell (USFWS) to Dan Trescott (Southwest Florida Regional Planning Council) dated January 31, 1994, the USFWS made a preliminary determination that 1,300 and 2,500 feet represented adequate primary and secondary protection zones for Nest LE-28A. Prior to making a final determination, the USFWS requested that a study be conducted during the nesting season to determine flight lines and identify any trees frequently used for roosting. The study was conducted by Eric Heald & Associates (Heald, 1994b) during the period of January through May, 1994 and indicated that 84% of all flights recorded inbound or outbound fell within the northern (n=15 of 44), northwestern (n=13), and western (n=9) quadrants.

On August 8, 1995, a meeting was held with Jane Tutton (USFWS) and a revised BEMP was submitted to the USFWS. In consideration of the density of site vegetation and effective visual screening of the eagle's nest, a Primary Protection Zone (PPZ) of 500 feet and a Secondary Protection Zone (SPZ) ranging from 1,200 feet on the southwest to 2,175 feet on the south was proposed. An August 16, 1995 letter from Craig Johnson (USFWS) to Tim Durham (WilsonMiller) indicated the USFWS's concurrence that the revised plan was adequate and appropriate for the nest. A subsequent letter dated October 11, 1995, sent by Craig Johnson (USFWS) to Tim Durham (WilsonMiller) for clarification purposes, superseded the August 16, 1995 letter and indicated that a PPZ of 1,200 feet and an SPZ of 2,500 feet would be required.

The purpose of this document is to provide a revised management plan for eagle nest LE-28A (hereafter referred to as the "Plan") and request technical assistance from the USFWS for review, comment, and approval of the revised Plan. The previous management plan was based on the original configuration of the Eco-Park, the boundary of which was determined by property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. (WCI) has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Proposed revisions have been made to the original Plan due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. WilsonMiller is currently coordinating with the Florida Fish and Wildlife Conservation Commission (FFWCC) to gain approval for the proposed reconfiguration of the Eco-Park boundary as described herein. Thus, we are requesting that the USFWS provide approval of the Plan pending approval of the Eco-Park boundary configuration by the FFWCC. Upon approval by the USFWS, the revised Plan would supersede the 1994 plan in its entirety.

The revised plan is consistent with existing USFWS management guidelines for the bald eagle as well as the original 1994 plan. The proposed plan maintains a PPZ of 1,200 feet and an SPZ of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ) in accordance with bald eagle management guidelines. It should be noted that the revised plan results in a numerous benefits to the eagle compared to the original plan. Details regarding these benefits are provided in Section 4.4 of this report.

2.0 Nest Location/History

Figure 2 shows the location of nest LE-28A with respect to the existing boundary of the Pelican Landing Eco-Park. Nest LE-28A is located on the northwest side of a large slash pine (*Pinus elliottii*) tree immediately west of Halfway Creek. From most angles, the nest is effectively screened from view beyond a distance of 200 to 600 feet by pines, dense scrub oak, and tall fetterbush (*Lyonia* spp.). Heald (1994b) indicated that the primary perch tree for the eagles is located approximately 400 feet west of the nest tree.

Nest LE-28A was first observed in 1987 and served to replace nest LE-28, which was last used during the 1986/1987 breeding season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992/1993 breeding season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997/1998 breeding season identified nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

3.0 Results of Flight Pattern Surveys

At the request of the USFWS, a flight pattern study of eagles nesting in LE-28A was conducted from January to May 1994. A report summarizing the results of this study (Heald, 1994b) is provided in Appendix A. The study concluded that 34%, 30%, and 20% of recorded flights were to or from the northern, northwestern, or western directions, respectively. Based on the flight study, it is presumed that the eagles feed primarily in Estero Bay. Other research conducted KBN Engineering and Applied Sciences, Inc. (1995) indicated that the eagle pair utilizing nest LE-28A were frequently seen perching

on trees next to homes and roads along Kings Road and Williams Road, foraging in sewage treatment ponds of the Fountain Lakes development, feeding on road kills along U.S. 41, and perching in trees in the vicinity of the Coconut Point fish camp. Thus, it appears that the eagles are opportunistic feeders and have become accustomed to human activity.

4.0 Habitat Management/Nest Protection Strategies

4.1 Objectives

The overall objectives of the Plan are as follows:

- To protect the integrity of the bald eagle nest LE-28A.
- To minimize detrimental human-related impacts on the bald eagles utilizing nest LE-28A, particularly during the nesting season (generally from October 1 through May 15 but specific to individual nests depending on the time of commencement of mating and fledging of young).
- To define compatible land uses and development in areas in close proximity to the active nest.

These objectives, and the methods proposed to attain them, are consistent with the guidelines issued by the USFWS Southeast Region as found in *"Habitat Management Guidelines for the Bald Eagle in the Southeast Region"* (USFWS, 1987). These guidelines recommend the establishment of primary and secondary protection/management zones around eagle nest trees. The following methods and management techniques are hereby proposed for each of these zones in order to achieve Plan objectives.

4.2 Primary Protection Zone (PPZ)

The PPZ will extend outward radially from the nest tree a distance ranging from 750' to 1,200'. Figure 3 shows the configuration of the PPZ and the habitat types present. The purpose of the PPZ will be to provide a natural zone in the immediate vicinity of the nest tree that will remain free of development, and where passive activities potentially detrimental to nesting will be restricted.

The following activities will be prohibited within the PPZ:

- Residential, commercial, and industrial development
- Tree cutting, except as absolutely needed to construct the golf cart bridge across Halfway Creek and golf cart paths leading to the bridge.
- Logging, mining, filling, and excavation.
- Use of non-approved chemicals toxic to wildlife.
- Habitat management practices during the active nesting season, including burning.
- Unauthorized human activities potentially detrimental to bald eagle nesting.
- Passive recreational use of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge, during the eagle nesting season, except for uses related strictly to golfing.

The following activities will not be considered detrimental when conducted in the PPZ during the non-nesting season:

- Construction or use of passive recreational facilities, including benches, jogging/hiking trails, or similar uses consistent with the Eco-Park management plan. In accordance with the Eco-Park habitat management plan, passive recreational facilities will be located no closer than 500' from nest LE-28A.
- Construction of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge.

- Habitat management activities, including removal of exotic and nuisance vegetation and prescribed burning. Prior to any prescribed burning, the nest tree and perch trees will be protected by hand raking or clearing to minimize fuel in the vicinity of the tree.

Habitat management in the PPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the PPZ will occur only during the non-nesting season.

4.3 Secondary Protection Zone (SPZ)

The SPZ will extend a distance varying from 750' to 1,300' outward from the PPZ and will serve to provide a buffer for the PPZ. Figure 3 shows the configuration of the PPZ and the habitat types present. Development in the SPZ will be consistent with USFWS guidelines so as to minimize activities potentially detrimental to the PPZ. The majority of development in the SPZ will be golf course to be constructed during the non-nesting season. A relatively small portion (2 acres) of the outer zone of the SPZ in the western region of the site (Figure 3) is proposed for timeshare units that will have a maximum height of 45' above flood elevation. Considering that: a) this height is below the height of the existing tree canopy of this region of the site, b) the timeshare units are at least 2,370' removed from the nest tree, and c) the preserved freshwater slough and other native vegetation to be retained to the east will provide an effective visual screen, it is unlikely that the timeshare units will affect eagle nesting or foraging behavior. At its closest point the golf course is 1,250' from the nest tree, which is well beyond the line of sight distance of the tree and should also not affect eagle behavior.

The following activities will be prohibited within the SPZ unless otherwise approved by the USFWS:

- Development of commercial and industrial sites.
- Development of high density housing and multi-story buildings.
- Road or canal construction that would facilitate access to the nest.
- Use of non-approved chemicals toxic to wildlife.
- Heavy construction during the nesting season, including operation of heavy machinery, land clearing, earthmoving, blasting, excavation, installation of major utilities, and burning.

The following activities will not be considered detrimental when conducted in the SPZ during the nesting season:

- Normal habitat management practices, excluding prescribed burning.
- Passive pedestrian recreational use (*e.g.*, hiking, bird watching, fishing, etc.).
- Construction of pedestrian pathways using non-motorized equipment, and erecting interpretive/educational signage.
- Golfing activity and operation of golf carts in golf course areas.
- Activities normally associated with golf course maintenance operations, except as noted in the above prohibitions.
- Finishing work (*i.e.*, all interior work, hanging windows and doors, stucco-ing exterior walls, and activities of similar nature) on those portions of the two timeshare units located in the SPZ, provided that the vertical construction of the units (*i.e.*, construction of exterior walls and roof) is conducted during the non-nesting season.

Habitat management in the SPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the SPZ can occur at any

time of the year, with the exception that prescribed burning and methods involving excessive noise will be restricted during the active nesting season.

4.4 Other Management/Protection Strategies Benefiting the Eagle

Other management/protection strategies that will be used as measures to protect eagle nest LE-28A, provide a net benefit to eagles utilizing nest LE-28A, and provide a net benefit to eagle conservation in general will include the following:

4.4.1 Increased Size of Pelican Landing DRI Eco-Park: The size of the Pelican Landing Eco-Park, within which nest LE-28A is located, is proposed to be substantially increased by the proposed project. Changes to the Eco-Park from its current configuration incorporate an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes all of that portion of Halfway Creek located in the project area and thereby serves to provide a buffer to the east of nest LE-28A that was not previously under ownership. The proposed changes will increase the size of the Eco-Park by approximately 84% (66-acre± net increase) and insure the continued protection and success of nest LE-28A.

4.4.2 Preservation of Habitat in Secondary Protection Zone: The project has incorporated a significant amount of habitat preservation in the SPZ to insure the continued success of eagles utilizing nest LE-28A. Of the land located in the SPZ, 102 of 159 acres (64%) will remain in a natural state (SPZ areas in Eco-Park) or mostly-natural state (golf course rough and inter-hole areas where selectively removal of vegetation will occur but where majority of canopy will be retained). On a site-wide basis, a total of 56% of the existing habitat will be retained in a natural or semi-natural state, the majority of which will be enhanced via the removal of exotic vegetation. Figure 3 shows the location of areas to be preserved in the project.

4.4.3 Creation of Foraging Habitat: As part of the project, foraging habitat for the eagle, as well as wading birds, will be created both within and outside of the SPZ by excavating surface water management lakes and creating freshwater marshes (Figure 3). Created lakes and marshes within the SPZ occupy 11 acres or 7% of the SPZ, and on a site-wide basis occupy 9% of the land area. Many of the marshes to be created are located adjacent to the lakes and will serve to establish a more natural appearance to, and function of, the lakes. The marshes also serve as pretreatment areas to 'polish' surface water runoff prior to entering the lake. Such pretreatment is not required by existing SFWMD regulations, but is being incorporated into the site design to enhance the quality of the created systems. In most areas, the marshes are separated from golf course areas by upland areas that will remain in a mostly-natural state, providing additional pretreatment of runoff and further mimicking a natural lake system.

4.4.4 Restoration of Freshwater Slough: The north-south trending freshwater slough located in the western region of the project (Figure 3) will be enhanced as part of this project. Approximately one-third of this slough is located in the SPZ. The slough is currently dominated (>75% coverage) by exotic and nuisance species. Exotic/nuisance species will be removed from the slough, thus increasing habitat quality. In many areas of the slough, planting of native wetland species will occur to further enhance the quality of this area. Preservation and enhancement of the slough will also serve to provide a buffer between the eagle nest and development to the west of the slough.

4.4.5 Retaining Canopy, Perch, and Roost Trees: The site design incorporates the retainage of a substantial amount of the existing canopy. Areas that will remain natural or mostly-natural and thus will retain the majority of their existing canopy comprise 64% of the SPZ and 56% of the overall project site. Preservation of the existing canopy of the site will insure the continued presence of suitable perch and roost trees, as well as provide for suitable screening between the eagle nest and land uses

in the SPZ. In golf course and other development areas, potential perch/roost trees that are of specimen value (*e.g.*, largest trees in stand, trees with open crowns and stout lateral limbs) will be field located/flagged and incorporated into the field design whenever possible. The shores of excavated lakes will also be meandered where necessary to preserve individual canopy trees of moderate to high value, as well as to provide a more natural character to the lake system.

4.4.6 Minimization of Number of Buildings in Secondary Protection Zone: The existing BEMP for nest LE-28A provides for single-family residential units and an associated access road in a portion of the SPZ. As part of the revised site plan proposed herein, these residential units have been eliminated and replaced with golf course, a land use more compatible with eagle nest protection. Under the proposed site plan, only two buildings of substantial size (excluding minor buildings such as golf course halfway houses) occur in the SPZ. These units are timeshare buildings that are approximately 2,370' removed from the eagle nest and comprise only 1% of the SPZ. Minimization of buildings in the SPZ will serve to further enhance the success of eagles utilizing nest LE-28A.

4.4.7 Minimization of Building Height Outside of Secondary Protection Zone: In the western region of the project between the SPZ and the western property line, building heights will be limited to a maximum height of 45' above flood elevation. This height is below the height of the existing tree canopy of this area and thus will not affect eagle nesting or foraging behavior. Although such height restrictions are not mandatory based on past USFWS determinations regarding nest LE-28A, they will be instituted as a measure to insure that the degree of access that the eagles' currently have to their primary foraging destination, Estero Bay, is maintained and is not hindered by the project.

4.4.8 Establishment of Educational Programs: Educational programs will be established for local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park). The objectives of such programs will be to :a) inform citizens of local, state, and federal laws protecting eagles and other wildlife, b) identify ways for citizens to protect eagles from disturbance, and c) inform citizens of the habitat management plan for the Pelican Landing Eco-Park.

4.5 Proposed Post-Development Conditions and Eco-Park Configuration

Figure 3 shows the proposed post-development conditions and configuration of the Pelican Landing Eco-Park. It should be noted that the Eco-Park boundary has been modified (on paper only) compared to the 1994 BEMP . The boundary reconfiguration is due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in configuring the Eco-Park. *[All of the preceding moved to Section 4.1.1]*

WilsonMiller is currently coordinating with the FFWCC to gain approval for the proposed reconfiguration of the Eco-Park boundary. Also, the parcel located to the east of the existing Eco-Park ("Skebe" parcel) is currently under contract but has not yet been acquired. Thus, post-development conditions proposed herein are tentative pending approval of the reconfiguration by the FFWCC and the subsequent acquisition of the Skebe parcel. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC, the existing conservation easement for the Eco-Park will be revised to conform to the new boundary.

WCI Communities, Inc. reserves the right to modify the Plan, consistent with USFWS management recommendations and upon concurrence by the USFWS, as the needs of the project change, and as the location or status of the nest changes.

5.0 References

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

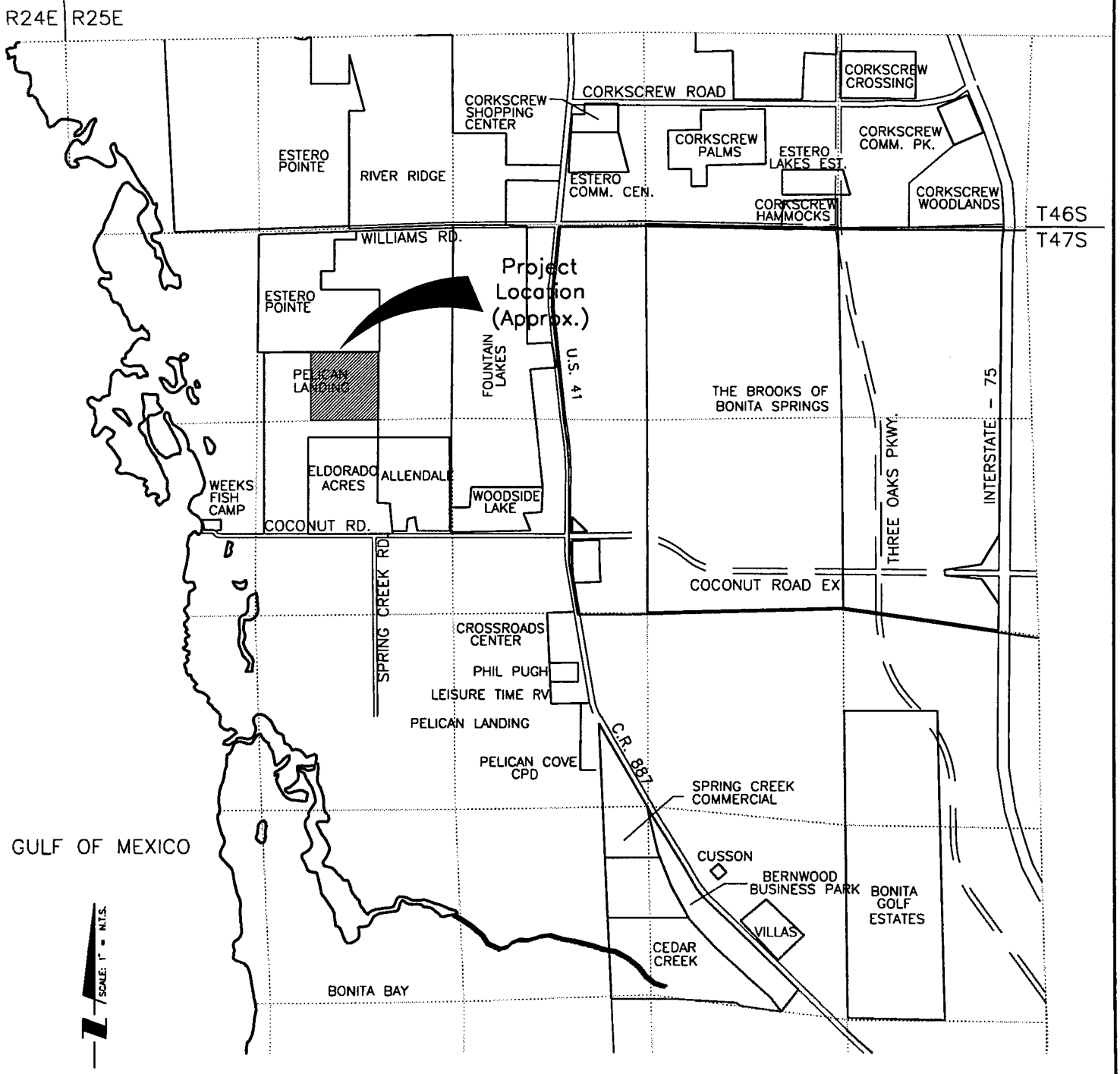
Heald and Associates, Inc., 1994a. Management Plan for the Southern Bald Eagle in the Vicinity of the Pelican Landing DRI, Lee County, Florida. 3 p. + attachments.

Heald and Associates, Inc., 1994b. Observations from January-May 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida. 7 p.

KBN Engineering and Applied Sciences, Inc., 1995. Bald Eagle Management Plan for Nest LE-28A; Estero Pointe Project. 20 p.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeastern Region. U. S. Department of the Interior. 9 pp.

LOCATION MAP



PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller

WilsonMiller, Inc. - FL Lic.# LC-C000070

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FLA. REG. #	
COUNTY: LEE	DATE: Sept. 21, '99
SEC: 4,5,8,9 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-006	FILE NO: C-0250-31
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 1 OF 4

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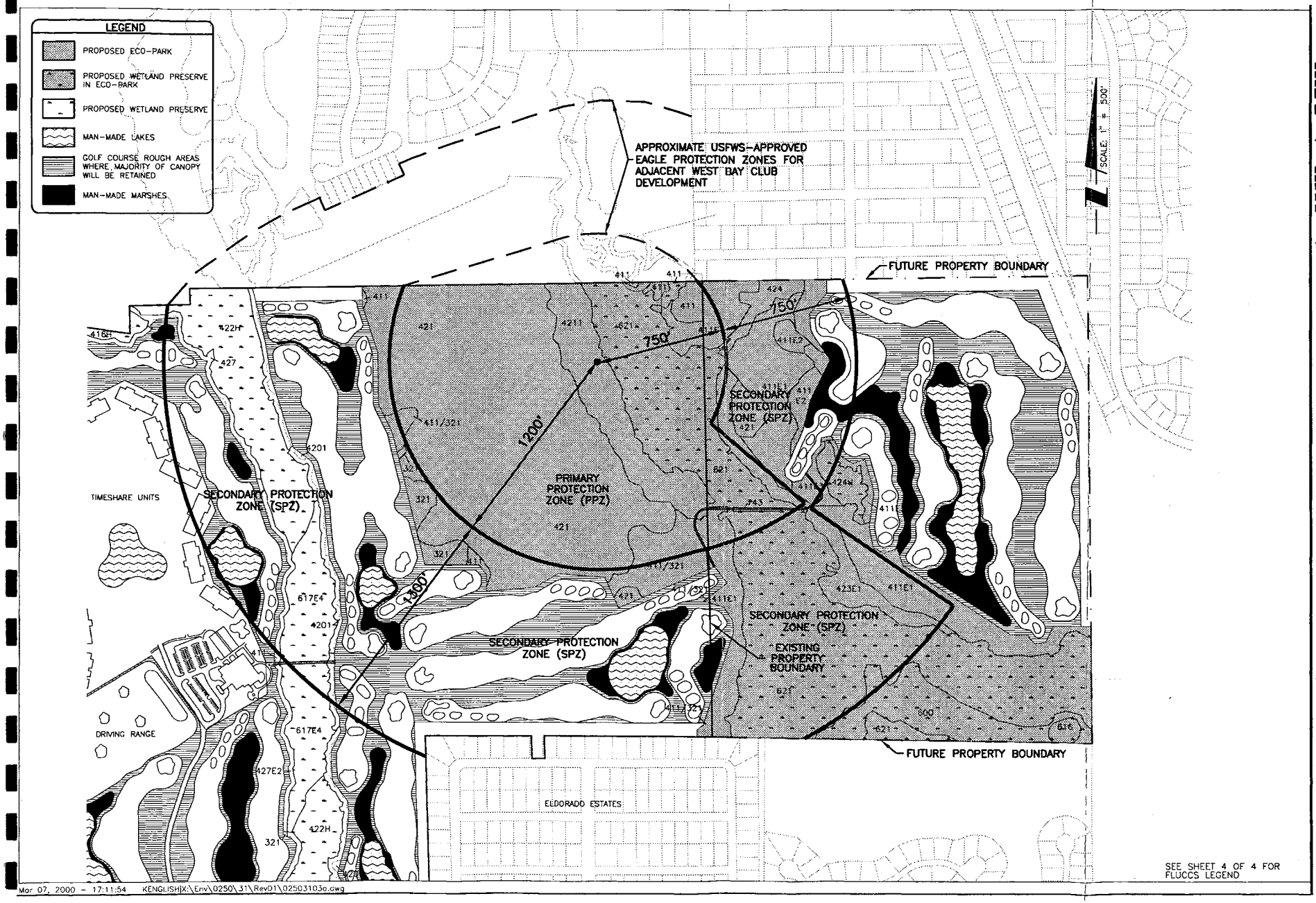
FIGURE 2
Existing Eco-Park
and Associated Habitats

SEC 5 TWP 47S RGE 25E
Designed by:
Drawn by: M.W.L./1260
Checked by:
Approved by:
Date: Sept. 21, '99
Scale: 1" = 500'
PIN: F0250-024-006-FPVOQ
File #: C-0250-31
Sheet 2 of 4



SEE SHEET 4 OF 4 FOR FLUCCS LEGEND

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FIGURE 3
Proposed Configuration of Eco-Park, Eagle Protection Zones, And Adjacent Development

REV. 1, 1/4/00 – UPDATE EAGLE PROTECTION ZONE LAND PLAN, AND ECO-PARK BOUNDARY

WilsonMiller, Inc. - FL Lic.# LC-C000009

SEC 5 TWP 47S RGE 25E	
Designed by:	
Drawn by:	K.L.E./865
Checked by:	
Approved by:	
Date:	Sept. 21, '99
Scale:	1" = 500'
PIN: F0250-024-006-FPVOO	
File #:	C-0250-31

Sheet 3 of 4

Pelican Landing Eco-Park
FLUCCS Legend

FLUCCS	FLUCCS Description
321	Palmetto prairie
411	Pine flatwoods
411E1	Pine flatwoods, 10-24% exotics
411E2	Pine flatwoods, 25-49% exotics
411E3	Pine flatwoods, 50-75% exotics
411/321	Pine flatwoods/Palmetto prairie
415	Scrubby flatwoods
416H	Pine flatwoods/Graminoid understory-hydric
421	Xeric oak
4201	Mesic oak, high density shrub layer
4211	Xeric oak, high density shrub layer
422	Brazilian pepper
422H	Brazilian pepper-hydric
423E1	Pine-cabbage palm-oaks, 10-24% exotics
424	Melaleuca
424H	Melaleuca-hydric
427	Live oak
427E2	Live oak, 25-49% exotics
427E3	Live oak, 50-75% exotics
428E3	Cabbage palm, 50-75% exotics
513	Ditch
524	Lakes less than 10 acres which are dominent features
600	Shrub wetland
616	Inland pond
617E4	Mixed wetland hardwoods
621	Cypress
6412	Cattail
643	Wet prairie
740	Disturbed land
743	Spoil area

PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller, Inc. - FL Lic# LC-C000070

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COUNTY: LEE	DATE: Sept. 21, '99
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PROJECT NO. F0250-024-006	FILE NO: C-0250-006
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 4 OF 4

APPENDIX A

1994 Version of Bald Eagle Management Plan (Heald, 1994a, 1994b)

Heald and Associates, Inc.

7550 S.W. 136 Street
Miami, Florida 33156
305-253-5343

Management Plan for the Southern Bald Eagle in the Vicinity of The Pelican Landing DRI, Lee County, Florida

(Revised to Reflect Renewed Nesting Activity)

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

Nest-building by bald eagles is known to have occurred at 5 locations (trees) within or in the vicinity of the Pelican Landing DRI project boundaries over the past decade. Some confusion has existed in connection with the locations and official designations of these (see sections of ADA, ADA Sufficiency Response, and pertinent correspondence appended to Draft Management Plan, June 1993).

The nest trees (sites, territories) are listed by Florida Game and Fish Commission (FGFC) as follows, and their current status is described:

LE 08

The nest no longer exists, having disintegrated over the past several years. The nest tree, a cypress, remains, and a pair of eagles was sighted at the tree during a December 3, 1992 overflight by FGFC.

LE 08A

This nest is no longer in existence (FGFC, Dec., 1993). It was occupied by great-horned owls during the 1991-1992 and 1992-1993 breeding seasons. It is addressed in a Lee County Rezoning Resolution (#Z-88-034) for San Marino Pines (March 18, 1988) in which a 900' buffer zone was established in a semi-circle to the west of the nest tree.

LE 28

Only a few twigs remain. It has been unoccupied since the 1986/1987 breeding season.

LE28A

The nest is located in a large pine tree on the western margin of Half-way Creek. It was occupied during the 1990-1991 breeding season, and was reported by Mr. Paul Schultz (FGFC) as occupied in December, 1993. A field representative of United States Fish and Wildlife Services (USFWS) inspected the preserve area and the newly-occupied nest tree (LE-28A) in January, 1994. On January 31, 1994 USFWS signified approval of the Management Plan (see enclosed letter from Mr. Peter Plage to Mr. Dan Trescott), and requested a study to determine flight lines during the current nesting season. This has been conducted (copy appended).

LE-28B

This recently constructed nest was occupied during the 1992-1993 breeding season and contained an unfledged eaglet at the time of FGFC overflight on March 14, 1993. The eaglet was no longer in evidence on overflights conducted by Heald and Associates on May 3

and May 20, 1993. It was not used during the 1993-1994 breeding season (Schultz, FGFC, Pers. Comm.).

Management Strategies

Nest tree ('territory') 28A on the western margin of Half-way Creek lies within approximately 120 contiguous acres of upland and wetland communities to be preserved within the Pelican Landing Development. It is located almost at the northern boundary of the project. A proposed two lane access road to single family homesites lies, at its closest point, approximately 1300' from the tree. The nest tree, and other potential nest, roost, or perch trees in close proximity within the preserve, will remain available for any future nesting activities. The birds presumably feed primarily in the Estero Bay system which they reach either by flying over the proposed single-road alignment of single family residences and the existing fish camp, or by flying over undeveloped uplands and wetlands immediately north and northwest of the nest tree (see appended copy of recorded flight patterns).

USFWS has determined that the primary zone should be established at a radius of ±1300' from the nest tree. Human activities within the preserve will be limited to pedestrian pathways, with interpretive/educational signage. Pathways will not impinge upon a 750' radius around the nest tree, which is well-screened by dense oaks. The nest tree and all other potential nest trees within the preserve will be monitored twice a month from October through April for a period of five years to determine if nesting is occurring. If the nest is occupied, access to all pathways within the ±1300' primary zone will be prohibited until nesting activities are reliably reported to have ceased. Appropriate signs will be installed at the barricaded path entrances. No habitat management activities, such as selective clearing or prescribed burning, will be conducted during the active nesting season and no construction of road or residences will be permitted within a 2500' radius of the nest tree during this period.

Bayside Improvement District will own the preserve area, known as the Pelican Landing Eco-Park, and will be responsible for all management and maintenance, in accordance with the approved Development Order.

Nest tree 28B lies off the property, approximately 1800-2000' west of the northwest boundary of the project. The birds feed primarily in the extensive Estero Bay system to the west of the nest tree. Approximately 80 acres of uplands plus approximately 42 acres of freshwater wetlands within the northwestern portion of the project will be preserved; and are thus available as potential additional feeding sites. Scattered large pines within the upland preserve will also remain available as potential nesting sites. Since applicant does not own the nest tree site or the lands surrounding it, further management practices are not feasible. Monitoring of potential nest trees within the preserve area will be

conducted as described above (28A), and appropriate measures will be taken to comply as far as practical with established guidelines if the birds relocate onto the subject property.

The remaining nest trees or territories (28, 08 and 08A) are located north and east of the project site. The birds, should they resume residence or nesting, will be unaffected by project activities. Extensive wetland areas preserved to the south within the project will remain available as potential feeding areas. Florida Game and Fish Commission and U.S. fish and Wildlife Service will be consulted on appropriate actions if the eagles are reported to relocate to trees closer to the project than at present.

Attachments

Observations From January - May, 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

As an integral part of a Development of Regional Impact (DRI), Westinghouse Bayside communities (WBC) in 1992 designated a contiguous area of ±120 acres, including ±78 acres of xeric oak scrub and pine flatwoods, for preservation. This area, known as the "L&L Tract" and latterly as the "Pelican Landing Eco-Park", lies north of Coconut Road in Southern Lee County and constitutes a portion of the Planned Community of Pelican Landing (Figure 1). The preserved tract includes several large slash pines, one of which contains the nest of a southern bald eagle. The nest tree, designated LE-28A by Florida Game and Fish Commission (FGFC) was occupied during the breeding season of 1990-1991 and was not used during the subsequent two seasons.

In accordance with requests by several regulatory agencies during the Application for Development Approval review process, a Management Plan for the southern bald eagle was prepared and submitted for review to U.S. Fish and Wildlife Service (USFWS) in June 1993. While the Management Plan was under review the nest was reported by FGFC in December, 1993 to be occupied by a pair of eagles (Paul Schultz, FGFC; Pers. Comm.). It is assumed, though not confirmed, that the eagle pair currently occupying this nest utilized nest LE 28B during the 192-1993 breeding season. In January 1994, USFWS, while approving the Management Plan as submitted, requested that prevalent flight patterns of the birds occupying nest LE-28A be documented to assist further review. At the request of WBC, Dr. Eric Heald of Heald and Associates (H&A) conducted the field observations reported below.

Methods

The slash pine containing the nest stands immediately adjacent to the western margin of Halfway Creek (Figure 2) and from most angles is effectively screened from view beyond a distance of 200' to 600' by pines, dense scrub oak and tall Lyonia spp. During mid-late January, 1994 several potential observation stations were tried before a satisfactory station (see Figure 2) was chosen. With the exception of two flights recorded on January 19, 1994 all observations were conducted from this station. Observations were conducted on 25 separate days between January 19 and May 19. Table 1 gives dates, hours of observation, basic climatic conditions and miscellaneous observations.

Activities at or in the immediate vicinity of the nest were observed through binocular field-glasses. Outbound flights were monitored with or without field-glasses until visual contact was lost. The efficacy of tracking varied according to pattern of flight on departure from nest tree, direction of flight, and altitude assumed by the bird during flight. Inbound flights (returns) were sometimes not detected until the bird was within 200' of the nest tree, and are thus considered a less reliable indication of flight patterns.

FIGURE 1
Location of the "L&L Tract".

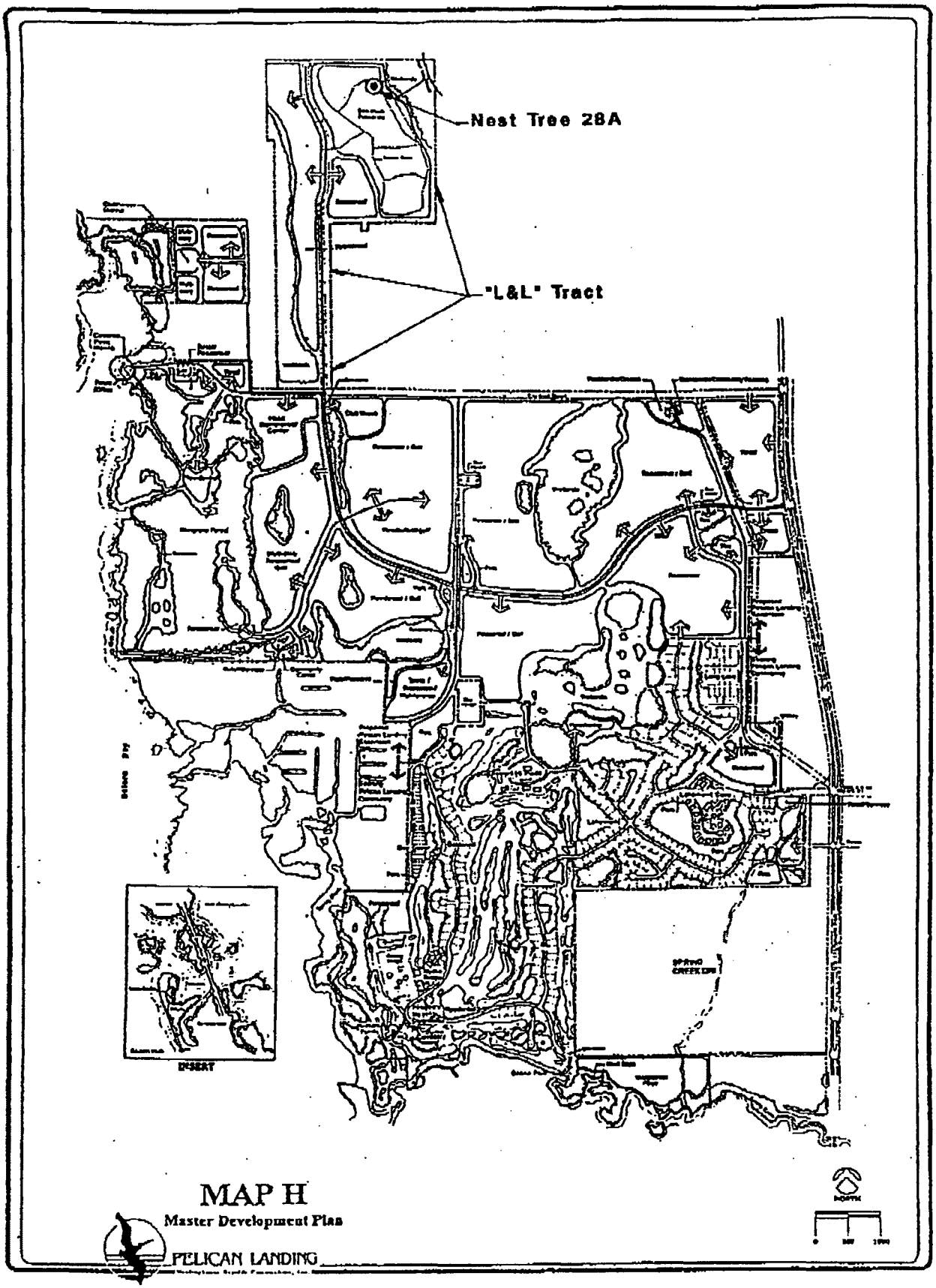
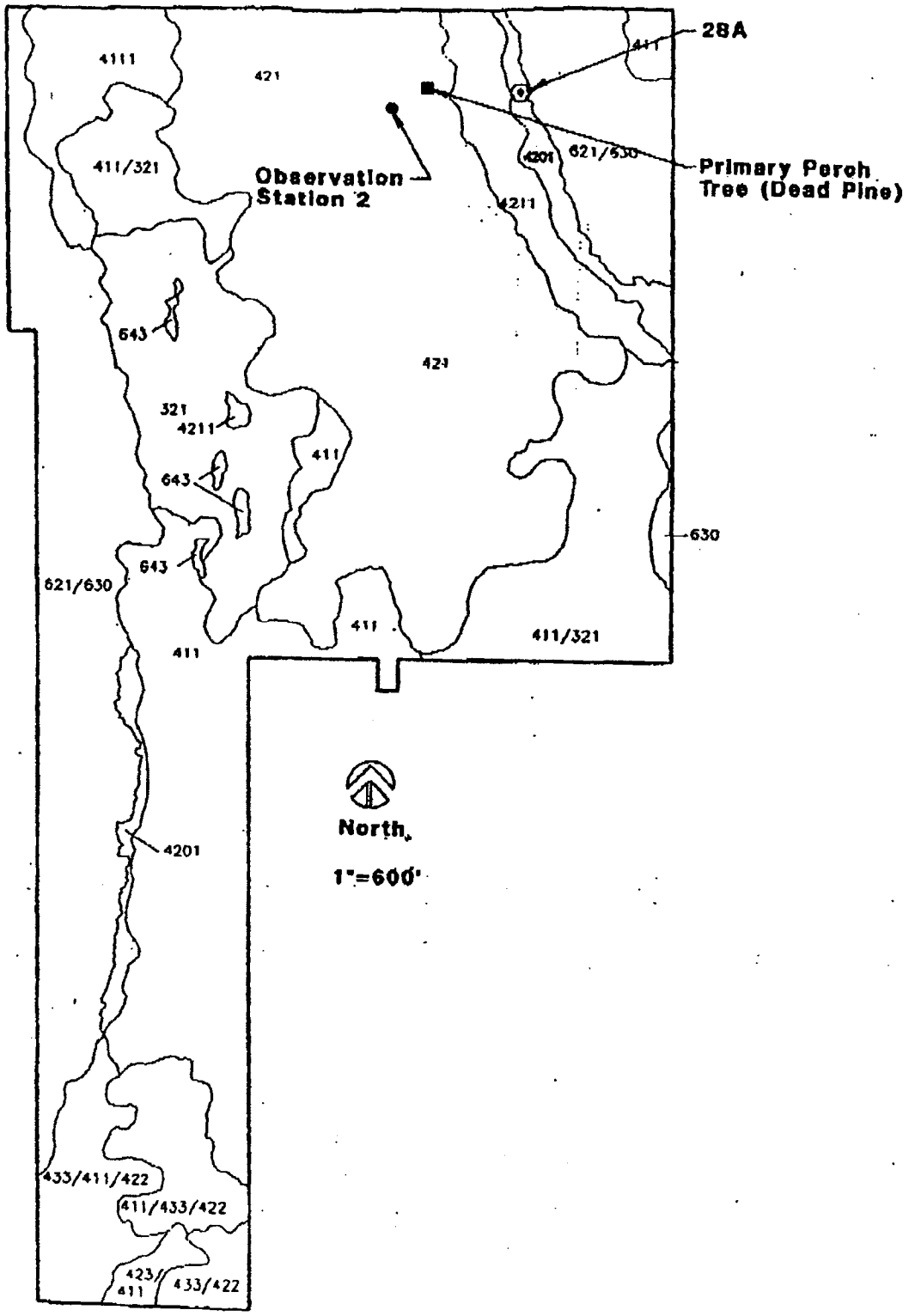


TABLE I. Observations January 19 to May 19 1994

DATE	TIME ARR	TIME DEP	FLIGHTS OUT	FLIGHTS IN**	SKY	APPROX TEMP	WIND DIR	(approx) MPH	COMMENTS
1/19	930	1630	2	–	Clear	70	NE	<5	4 stations occupied
1/31	1420	1730	1	–	Pt. Cloudy	70	ENE	<5	Station on Figure 2
2/01	0800	1140	2	1	Pt. Cloudy	65	E	5	–
2/01	1425	1720	1	1	Cloudy	65	E	<5	–
2/02	1300	1700	–	–	Cloudy	50	NE	<5	Drizzle/rain
2/03	1030	1515	1	1	Clear	50	SE	10	Cold
2/08	1600	1800	1	1	Pt. Cloudy	75	SW	10	–
2/09	0800	1540	1	–	Clear	75	SW	15	–
2/10	0730	1005	–	1	Clear	70	SE	0–10	Gusty Winds
2/16	1410	1615	1	–	Cloudy	65	ENE	10	–
2/17	0800	1000	–	–	Pt. Cloudy	70	E	20	Very windy
2/22	1550	1705	–	–	Pt. Cloudy	75	SE	5	–
2/23	1520	1900	2	1	Clear	80	SW	5–20	Gusty winds; eaglet observed
2/24	0800	1730	2	2	Cloudy	70	NONE	NONE	Eaglet observed
3/08	1100	1330	1	–	Pt. Cloudy	80	NE	5	Eaglet observed
3/09	0700	1100	–	–	Pt. Cloudy	75	ENE	5–10	–
3/12	1600	1745	4	2	Clear	75	E	10–15	Eaglet observed
3/13	1130	1610	4	2	Clear	80	SE	<5	Eaglet exercising wings
3/14	1000	1250	4	2	Cloudy	75	NONE	NONE	Eaglet on edge of nest
3/15	1130	1520	1	2	Clear	80	E	<5	Eaglet–edge of nest; exercising wings
3/28	1300	1435	–	–	Clear	80	NE	15–20	Eaglet on adjacent branch
4/01	1500	1755	1	–	Clear	80	SW	5	Eaglet–edge of nest; exercising wings
4/07	1600	1735	–	–	Clear	75	W	<5	Eaglet in nest
4/13	1215	1430	–	–	Pt. Cloudy	80	WSW	15	Eaglet moving between branches
5/18	1605	1755	–	–	Clear	85	SE	<5	No birds at nest
5/19	0940	1130	–	–	Pt. Cloudy		ESE	<5	No birds at nest

** If sighted further than approximately 500' from nest tree

FIGURE 2
FLUCCS Vegetation Map Showing Location of Nest Tree LE 28A, Observation Station, and Perch Tree.



Observations

Figure 3 and Table II reflect behavior on 44 observed flights between January 19 and May 19. Flight directions in Figure 3 are portrayed within 45° compass quadrants centered upon N, NW, NE, etc. The observed number of flights in either direction within a specific quadrant is indicated along each vector arrow. Inbound flights are only recorded if the bird was sighted and tracked from sufficient distance from the nest tree to be considered a reliable indicator of the direction of approach.

Although no distinction is made in Figure 3 between the flight patterns of male and female birds, the detailed flight patterns of the two sexes differed significantly. The larger bird, presumably the male, frequently flew to an almost dead pine approximately 400' WNW of the nest tree (Figure 2) and there remained for 1-5 minutes before departing westward or northward. The (smaller) female was never observed to do this. Further, all 6 flights recorded in the northeast to south quadrants were made by the female bird.

Flight activity observed form January 19th to May 19th comprised 44 events/flights. A single chick hatched in mid-February, at which point flight activity increased significantly. Although increased in frequency, flights from mid-February onward did not deviate appreciably from previously observed directional patterns.

From mid-March to mid-April, the eaglet was frequently observed exercising wing muscles and hopping between branches, but was never observed in flight. The nest was not visited from mid-April to mid-May, by which time it appeared empty.

As Table II shows, 84% of all flights recorded inbound or outbound fell within the northern, northwestern and western quadrants. The single flight to the southwest was in pursuit of a black vulture or a turkey vulture by the male bird. The female initially gave chase but returned to the nest tree from approximately ¼ mile out.

Conclusions

Almost 85% of all recorded flights were to or from the northwest quadrant. Only 6% lay within quadrants which would lead to existing or proposed Pelican Landing development. The findings thus support the USFWS conclusion that the proposed development would have no appreciable impact on nesting activities at nest tree LE-28A.

FIGURE 3
Recorded Flights to and from Nest Tree. Number of Flights Depicted on each Vector Arrow.

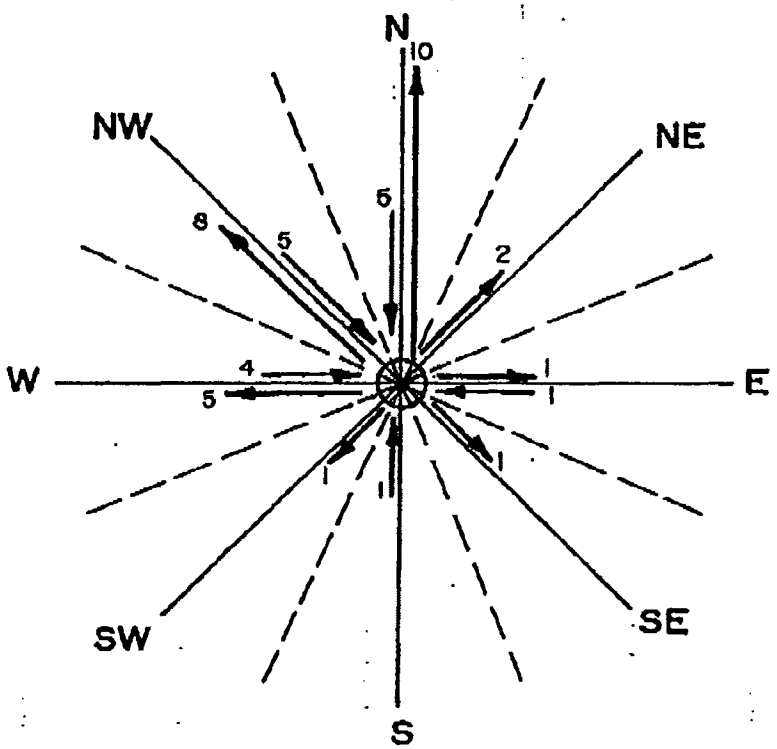


TABLE II. Summation of Observed Flight Directions, Jan. 19–May 19, 1994

DIRECTION	NO. OF FLIGHTS OUT	IN**	TOTAL	% OF TOTAL
N	10	5	15	34.1
NE	2	–	2	4.6
E	1	1	2	4.5
SE	1	–	1	2.3
S	–	1	1	2.3
SW	1	–	1	2.3
W	5	4	9	20.5
NW	8	5	13	29.5

** If sighted further than 500' from nest tree.

APPENDIX B

Pelican Landing DRI Eco-Park Habitat Management Methods

PELICAN LANDING DRI
ECO-PARK HABITAT MANAGEMENT METHODS

Introduction

The (existing) Pelican Landing DRI "Eco-Park" encompasses approximately 78 acres in the northeast corner of the DRI property. The Eco-Park consists of 65 acres of high quality xeric oak/scrub habitat and 13 acres of pine flatwoods and was established primarily as a gopher tortoise (*Gopherus polyphemus*) preserve. A bald eagle's nest (nest #LE-28A) is present near the northeast corner of the Eco-Park. The majority of the Eco-Park lies within protection zones surrounding this nest and special consideration has been given to minimize disturbance to the nest from habitat management practices.

The Eco-Park is bordered by a cypress/hardwood wetland system (Halfway Creek) to the east, native uplands and wetlands to the west, and residential subdivisions to the north and south. The Eco-Park has been placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission (now the Florida Fish and Wildlife Conservation Commission - FFWCC) and is managed as outlined below.

Maintenance of the Eco-Park is acknowledged to be an important component of assuring the long term viability of scrub habitat, the existing gopher tortoise population, and the bald eagle's nest. The legal entity responsible for the maintenance of the Eco-Park will be WCI Communities, Inc., or its assignee.

Management Methods

The following is a summary of the management methods to be employed in the Eco-Park:

1. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise activity). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level, except in the Primary Protection Zone of the bald eagle nest. No maintenance activities will be conducted within the Primary Protection Zone of eagle nest LE-28A during the active nesting season.

   Preferred maintenance practices per habitat type are as follows.

   A. Xeric Scrub

   - Hand-trim to a height of 6-9 feet at 5-year intervals or as deemed necessary.
   - Excessive layers of shrubby growth will be removed by hand at 3-year intervals if necessary.
   - Prescribed burns may be conducted at 8-year intervals if judged feasible and necessary. Any burning will be conducted by an experienced control-burn contractor. Burning will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry. Steps taken to protect the eagle nest or perch trees will include hand raking or clearing to minimize fuel in the vicinity of the tree prior to burning.

- No mowing or raking will be performed in xeric scrub areas.
- No burning will take place during the eagle nesting season in either the Primary or Secondary Protection Zones surrounding the eagle nest.

B. *Pine Flatwoods and Other Upland Habitat Types*

- Bush hogging and/or mowing at 3-year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- Prescribed burning will be conducted as in xeric scrub habitat, but at an approximate 3-year interval if judged feasible and necessary.
- Exotic/nuisance plant species will be removed by hand.

C. *Wetland Habitats*

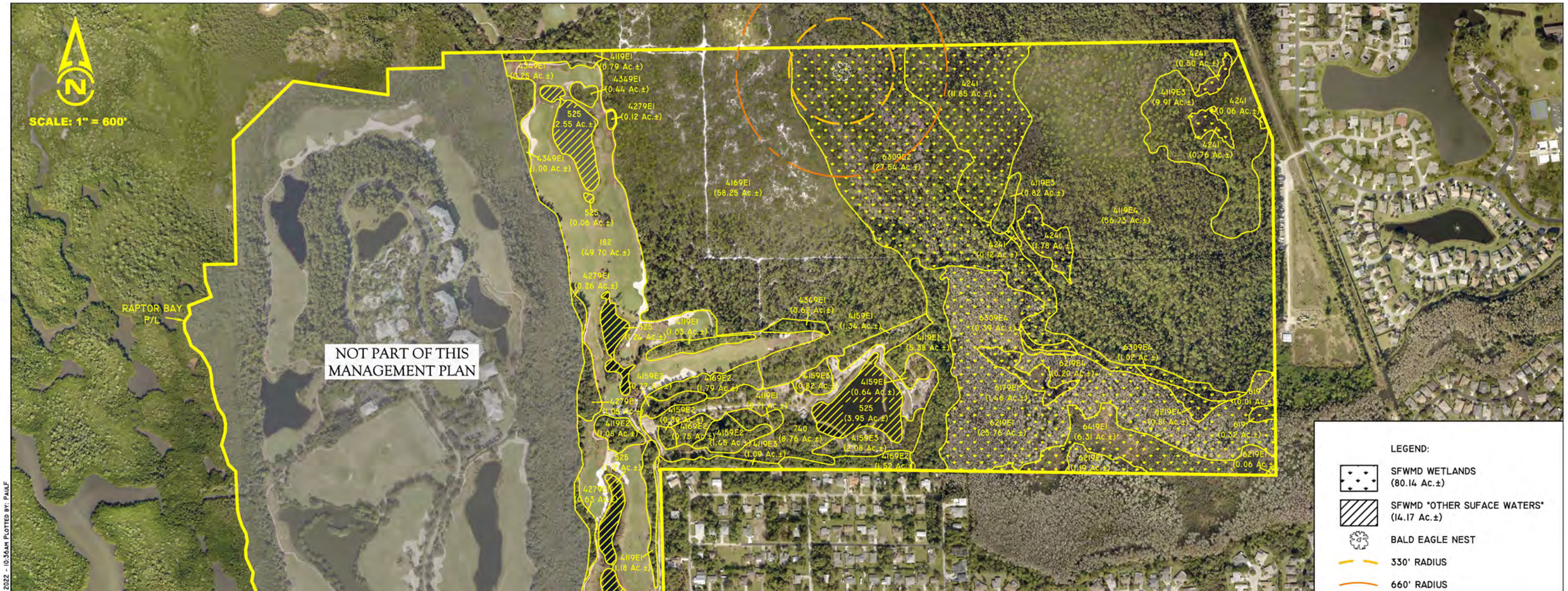
- Wetland habitats will be initially maintained by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Hand removal will be utilized whenever feasible. In certain areas of heavy infestation, mechanical clearing may be necessary. Any mechanical clearing will first be approved by the FFWCC and will be conducted so as to minimize disturbance to eagles during the active nesting season.
- Following initial removal of exotic/nuisance species, wetland habitats will be maintained in perpetuity to suppress re-infestation and maintain exotic/nuisance plant species abundance at low levels. Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (*e.g.*, installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

2. Maintenance activities will be initiated upon recording of the conservation easement for the Eco-Park and every other year thereafter.
3. A locally based nuisance-wildlife expert will be engaged as necessary to remove feral hogs from the Eco-Park.
4. If deemed necessary by FFWCC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.
5. Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.
6. Brochures containing information on gopher tortoise and bald eagle habitat, behavior and protection measures will be developed and made available to local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park).

7. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FFWCC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FFWCC. Educational signage will be placed along the trails.
8. Human access will be restricted by appropriate signage within the primary zone of the eagle nest during the nesting season. During the non-nesting season, pedestrian trails or other human use will be restricted to a minimum of 500' from the nest tree. The trail will be barricaded off by a cable across the path.
9. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed from protection areas in perpetuity.

EXHIBIT 3

AERIAL WITH FLUCFCS AND BALD EAGLE NEST



LEGEND:

- SFWMD WETLANDS (80.14 Ac.±)
- SFWMD "OTHER SUFACE WATERS" (14.17 Ac.±)
- BALD EAGLE NEST
- 330' RADIUS
- 660' RADIUS

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS ESTIMATED PER SFWMD ERP NO. 36-03813-P AND EXISTING SITE CONDITIONS.

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
182	GOLF COURSE	49.70 Ac.±	16.2%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	10.11 Ac.±	3.3%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	1.08 Ac.±	0.4%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	11.82 Ac.±	3.9%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	56.73 Ac.±	18.5%
4159 E1	PINE, DISTURBED (0-24% EXOTICS)	1.98 Ac.±	0.6%
4159 E2	PINE, DISTURBED (25-49% EXOTICS)	2.52 Ac.±	0.8%
4159 E3	PINE, DISTURBED (50-75% EXOTICS)	2.90 Ac.±	0.9%
4169 E1	SCRUBBY FLATWOODS, DISTURBED (0-24% EXOTICS)	58.25 Ac.±	19.0%
4169 E2	SCRUBBY FLATWOODS, DISTURBED (25-49% EXOTICS)	4.06 Ac.±	1.3%
4241	MELALEUCA, HYDRIC	15.07 Ac.±	4.9%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	2.06 Ac.±	0.7%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	2.31 Ac.±	0.8%
525	SHALLOW POND	14.17 Ac.±	4.6%
6179 E1	MIXED WETLAND HARDWOODS, DISTURBED (0-24% EXOTICS)	1.46 Ac.±	0.5%
619	EXOTIC WETLAND HARDWOODS	0.33 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	27.01 Ac.±	8.8%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	1.01 Ac.±	0.3%
6309 E2	MIXED WETLAND FOREST, DISTURBED (25-49% EXOTICS)	27.54 Ac.±	9.0%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	1.41 Ac.±	0.5%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	6.31 Ac.±	2.1%
740	DISTURBED LAND	9.06 Ac.±	3.0%
	TOTAL	306.89 Ac.±	100.0%

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REVISIONS	DATE

DRAWN BY R.F.	DATE 06/29/22	
DESIGNED BY B.T.	DATE 06/29/22	
REVIEWED BY S.J.	DATE 06/29/22	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

RAPTOR BAY GOLF COURSE RENOVATION

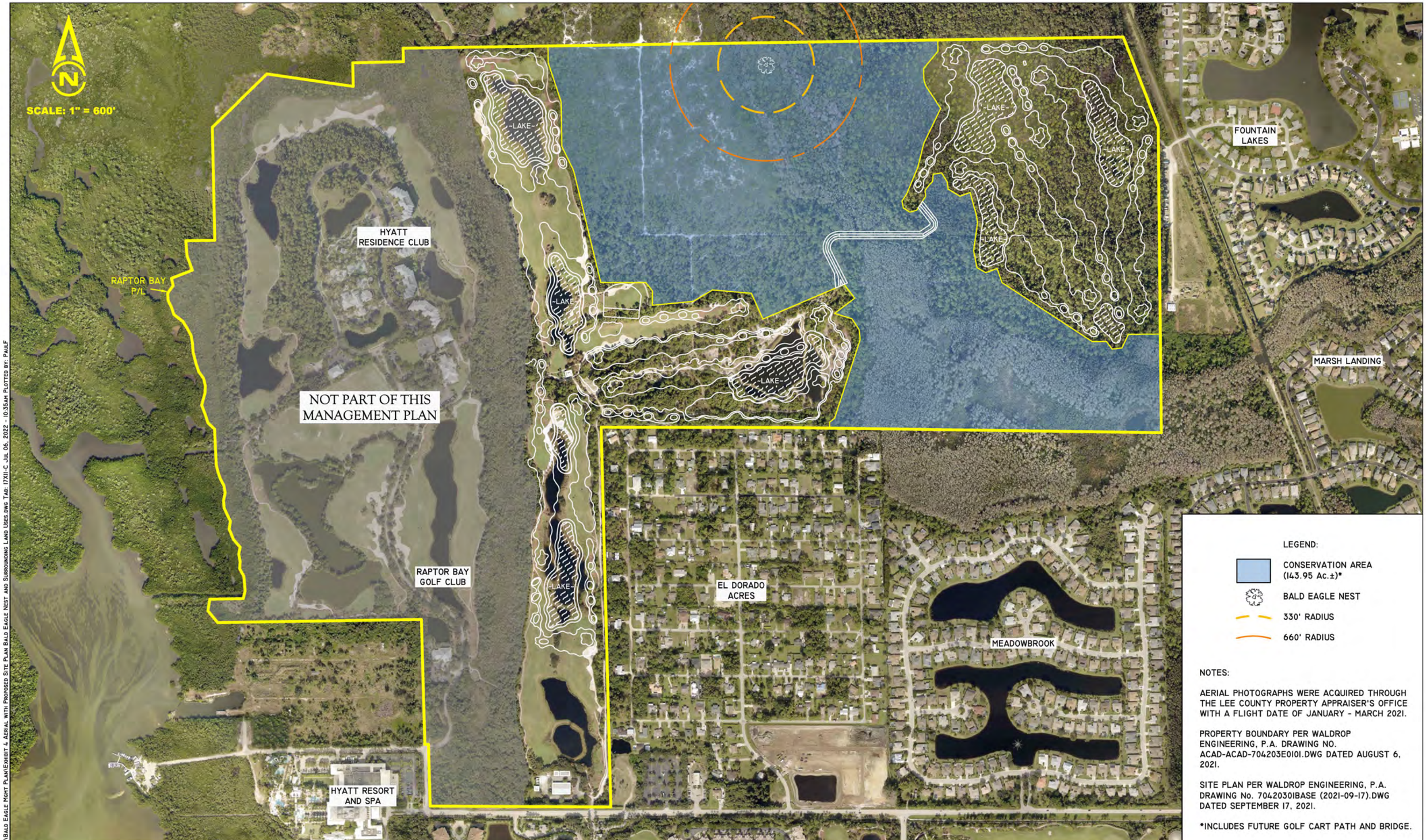
AERIAL WITH FLUCFCS AND BALD EAGLE NEST

DRAWING No. 20LBR3290

SHEET No. EXHIBIT 3

EXHIBIT 4

AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES



NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING No. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.

*INCLUDES FUTURE GOLF CART PATH AND BRIDGE.

J:\2020\20LBR3290\2022\BALD EAGLE MGMT PLAN\EXHIBIT & AERIAL WITH PROPOSED SITE PLAN BALD EAGLE NEST AND SURROUNDING LAND USES.DWG TAB: 17XII-C JUL 06, 2022 - 10:35AM PLOTTED BY: PAULF

REVISIONS	DATE	DRAWN BY	DATE
		R.F.	06/29/22
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RAPTOR BAY GOLF COURSE RENOVATION

AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES

DRAWING No. 20LBR3290

SHEET No. EXHIBIT 4

APPENDIX J

FLORIDA BLACK BEAR INFORMATIONAL PAMPHLET

Milt Fox

Discouraging bears from visiting your home

Properly storing or securing residential garbage and other attractants is a proven method of discouraging bears and preventing bear conflicts around homes, farms and neighborhoods. The following items attract bears and should be protected by an electric fence, wildlife resistant container, or stored in a secure place, such as a garage or sturdy shed:

- Trash and recycling containers
- Bird and squirrel feeders
- Game feeders
- Pet foods and bowls
- Barbeque grills and smokers
- Pets and small livestock
- Livestock feed
- Compost piles
- Beehives
- Fruit and nut-bearing trees and shrubs

Funds from the "Conserve Wildlife" license plate help support efforts to reduce human-bear conflicts. Buy one today at your local tax collector's office or online at BuyAPlate.com.

Secure common bear attractants

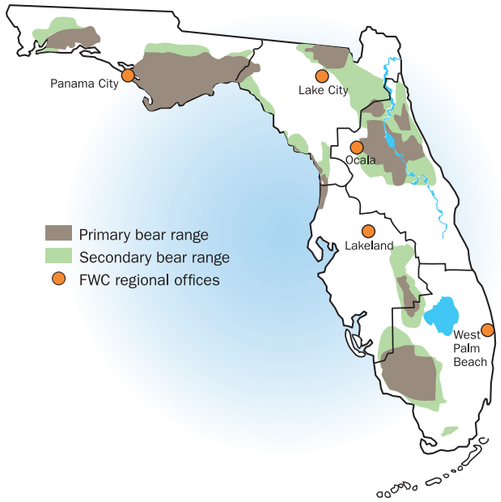
- Use electric fencing to protect gardens, compost piles, apiaries, fruit trees and livestock.
- Store garbage and recyclables in bear-resistant containers or in a secure area until the morning of pick up.
- Feed pets indoors or bring food dishes (even if empty) inside before dark.
- Store pet and livestock feed in bear-resistant containers or inside a secure area.
- Remove bird and wildlife feeders. Ensure the area is free of all seed, corn, or other wild animal feed.
- Keep gardens and fruiting trees and shrubs tidy. Remove rotten fruit and harvest ripe nuts, fruits and vegetables.
- Clean meat smokers and barbeque grills with a degreasing detergent. Properly dispose of food remnants after each use.

Learn more about black bears with the Florida Black Bear Curriculum Guide. The guide is designed to educate teachers and students in 3rd to 8th grade and offers a comprehensive series of lessons on Florida's black bear.

To get tips on how to secure bear attractants, watch videos about bears or how to install electric fencing, and learn more about bear-resistant containers, visit MyFWC.com/Bear.

Rick Sinnott

Bear range in Florida



If you are experiencing bear problems, please contact the nearest FWC regional office.

North Central, Lake City	386-758-0525
Northeast, Ocala	352-732-1225
Northwest, Panama City	850-265-3676
South, West Palm Beach	561-625-5122
Southwest, Lakeland	863-648-3200

If you suspect illegal activity, call FWC's Wildlife Alert Hotline at 1-888-404-3922.

Follow us on:

YouTube flickr

Cover photo by Ashley Hockenberry

Florida Fish and Wildlife Conservation Commission
MyFWC.com

printed on recycled paper

A guide to living in **bear country**

Florida Fish and Wildlife Conservation Commission
MyFWC.com

Ashley Hockenberry

If you live in Florida, you should know

Florida black bear populations have been recovering from historically low numbers in most areas of the state. At the same time, the human population is rapidly expanding in and around bear range. As a result, bears and humans are encountering each other more than ever.

Calls to the Florida Fish and Wildlife Conservation Commission (FWC) about human-bear encounters have increased from 1,000 in 2001 to over 4,000 in 2010. The most common calls refer to bears in yards and getting into garbage.

The mere presence of a black bear does not represent a problem. In fact, living in bear country can provide unique and rewarding experiences for residents.

While feeding bears is illegal in Florida, bears are still often fed by humans, either intentionally or unintentionally. When black bears have access to pet food, garbage, birdseed, livestock feed or other human-provided items, they quickly learn to associate people with food. Bears that have become too comfortable around people are more likely to be killed, either by vehicle collisions, illegal shooting, or as a result of bear management actions.

People ask why problem bears can't simply be relocated to a "wild area where they won't bother anyone." Unfortunately, areas large and remote enough for bears to avoid people are rare in Florida. Also, most relocated bears typically leave the new area, either to return to their original home or to leave an area already occupied by other bears. Some bears will wander through unfamiliar areas and cross busy roads, creating a danger to the bear and to motorists. In addition, bears remaining in the relocation area often exhibit the same, unwanted behavior, thus shifting the problem to a new location. As a result, relocation is not a desirable or effective solution to bear conflicts. Wildlife biologists can provide technical advice to residents who live in bear country to help them take actions to discourage bears from becoming a problem. The FWC is committed to addressing the safety concerns of residents and visitors while ensuring the long-term well-being of black bears.

If a bear comes into your yard

If you encounter a black bear at close range, remain standing upright, back up slowly and speak to the bear in a calm, assertive voice.

- Do not intentionally feed or attract bears. If a bear is eating something on your property, take note of what it is and secure it after the bear has left the area.

Charles Towne

Ashley Hockenberry

- Never approach or surprise a bear. Keep as much distance between you and the bear as possible.
- Make sure you are in a secure area and the bear has a clear escape route to leave the area - then yell, bang pots and pans, or use an air horn to scare the bear away.
- Do not turn your back, play dead or run from a black bear. Back away slowly into a house, car or building.
- Report any bear threatening the safety of humans, pets or livestock, or causing property damage to the FWC (see back panel).
- Warning! It is illegal to injure or kill black bears under Florida state law. If you are found guilty, you could face fines and/or jail time.

Climbing trees is a bear's natural escape route. If the bear climbs a tree, keep people and pets away. The bear will come down the tree and leave when it feels safe, usually after dark.

Did you know?

Black bears are shy animals and generally not aggressive towards people. When a bear stands on its hind legs, it is merely trying to get a better view, rather than acting in a threatening way. Black bears may huff, snap their jaws, swat the ground or "bluff charge" when cornered, threatened or caught stealing food. Stand your ground and then slowly back away. Always respect bears – they are large and powerful wild animals and can act unpredictably. Bears used to getting food from humans may lose their natural fear of people and are more likely to damage property or become a safety threat.

The bear facts

Black bears are the only species of bear in Florida and once roamed the entire state.

- FWC biologists estimate there are 2,500-3,000 black bears in Florida.
- Florida bears are generally black with a brown muzzle and may have a white chest marking called a blaze.
- Adult black bears typically weigh between 150 to 400 pounds; males are usually larger than females.
- Female bears have their first litter at about $3^1/_2$ years of age and generally have one to three cubs every other year.
- In Florida, the breeding season runs from June to August and cubs are born in late January or early February.
- Bears of all ages are excellent climbers and will climb trees when they are frightened or looking for food (e.g., acorns).
- About 80 percent of a black bear's diet comes from plants (e.g., fruits, nuts, berries), 15 percent from insects (e.g., termites, ants, yellow jackets) and 5 percent from meat (e.g., opossums, armadillos, carrion).

It is illegal to intentionally place food or garbage out that attracts bears and causes conflicts. Anything that attracts dogs, cats or raccoons also will attract bears!

ATTACHMENT X

RAPTOR BAY GOLF COURSE RENOVATION
BALD EAGLE MANAGEMENT PLAN
FOR BALD EAGLE NEST LE-28A
LEE COUNTY, FLORIDA

July 2022

Prepared For:

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1.0 INTRODUCTION

This Bald Eagle Management Plan (BEMP) has been prepared for Bald Eagle (*Haliaeetus leucocephalus*) Nest LE-28A located on the Raptor Bay Golf Course Renovation project (Project). The Project site is located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Exhibit 1). The Project site totals 306.89± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41 and 2.28± miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by a Florida Power & Light (FPL) easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club.

A BEMP was previously prepared by Wilson Miller, Inc. on March 7, 2000 for Nest LE-28A which depicted the eagle nest tree and two protection zones (Exhibit 2). The two zones consisted of the Primary Protection Zone (PPZ), which ranged from 750 feet to 1,200 feet from the nest tree and the Secondary Protection Zone (SPZ), which ranged from 750 feet to 1,300 feet from the PPZ.

This BEMP has been prepared to update the PPZ and SPZ for Nest LE-28A to 330 and 660 feet, respectively, as currently accepted by Lee County the U.S. Fish and Wildlife Service (USFWS), and the Florida Fish and Wildlife Conservation Commission (FWCC). Additionally, this BEMP is intended to facilitate construction of the Project (i.e., golf course renovation activities) while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles. The golf course renovation activities are currently underway in accordance with Lee County Development Order (DO) No. DOS2021-00137.

Nest LE-28A and its proposed protection zones (i.e., 330 and 660 feet) are contained entirely within the Project's conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. Approval of this BEMP will allow the Project's golf course renovation activities to continue throughout the year, as needed.

2.0 HABITAT INVENTORY AND MAPPING

Vegetation and land cover mapping for the Project was updated by Passarella & Associates, Inc. (PAI) in August 2021 using a Lee County 2021 rectified aerial. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial with FLUCFCS and SFWMD wetlands is included as Exhibit 3. According to the FLUCFCS map, the on-site land uses and vegetation communities consist primarily of golf course, pine flatwoods, pine, scrubby flatwoods, melaleuca, shallow ponds, cypress, mixed wetland forest, and freshwater marsh.

A total of 22 land use types were identified on the Project site and are described below.

Golf Course (FLUCFCS Code 182)
This land use type includes the existing Raptor Bay golf course.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)
The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm (*Sabal palmetto*) and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine grapevine (*Vitis rotundifolia*), cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)
This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)
This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)
The canopy of this habitat type is similar to FLUCFCS Code 4119 E3 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)
The canopy of this habitat type contains slash pine and scattered earleaf acacia and melaleuca. The sub-canopy contains slash pine, melaleuca, earleaf acacia, and carrotwood (*Cupaniopsis anacardioides*). The ground cover contains bracken fern (*Pteridium aquilinum*), deer-tongue (*Carphephorus paniculatus*), muscadine grapevine, and bushy bluestem (*Andropogon glomeratus*).

Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)
This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and earleaf acacia in the canopy and sub-canopy and cogongrass (*Imperata cylindrica*) in the ground cover.

Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)
This habitat type is similar to FLUCFCS Code 4159 E2 but contains 50 to 75 percent Brazilian pepper in the sub-canopy and scattered caesarweed (*Urena lobata*) and spermacoce (*Spermacoce verticillata*) in the ground cover.

Scrubby Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)
The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia*

fruticosa), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4169 E2)
This habitat type is similar to FLUCFCS Code 4169 E1 but contains 25 to 49 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)
The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)
The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)
The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Shallow Pond (FLUCFCS Code 525)
The canopy, sub-canopy, and ground cover of this land use type are mostly open, with the edges containing spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)
The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Exotics Wetland Hardwoods (FLUCFCS Code 619)
The canopy and sub-canopy of this habitat type contain Brazilian pepper, cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)
The canopy of this habitat type includes bald cypress, scattered cabbage palm, and widely scattered melaleuca. The sub-canopy contains bald cypress, wax myrtle, buttonbush, pond apple, and scattered Brazilian pepper. The ground cover contains swamp fern, sawgrass (*Cladium*

jamaicense), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)
This habitat type is similar to FLUCFCS Code 6219 E1 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)
The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
This habitat type is similar to FLUCFCS Code 6309 E2 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)
The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)
The canopy of this habitat type includes Brazilian pepper, cabbage palm, buttonwood (*Conocarpus erectus*), Norfolk Island pine (*Araucaria heterophylla*), and scattered earleaf acacia and slash pine. The sub-canopy contains slash pine, cabbage palm, Brazilian pepper, buttonwood, earleaf acacia, Guinea grass (*Panicum maximum*), Norfolk Island pine, false willow (*Baccharis angustifolia*), castor-bean (*Ricinus communis*), and widely scattered saw palmetto. The ground cover contains areas of open sand with dog fennel (*Eupatorium capillifolium*), rustweed (*Polypremum procumbens*), jointweed (*Polygonella polygama*), caesarweed, rosemary, slash pine, bermudagrass (*Cynodon dactylon*), cogongrass, limpograss (*Hemarthria altissima*), wild bush bean (*Macroptilium lathyroides*), wedelia (*Sphagneticola trilobata*), sweetbroom (*Scoparia dulcis*), beggarticks (*Bidens alba*), ragweed (*Ambrosia artemisiifolia*), bushy bluestem, water pennywort (*Hydrocotyle umbellata*), peppervine (*Nekemias arborea*), saltgrass (*Distichlis spicata*), and scattered saw palmetto.

3.0 BALD EAGLE BIOLOGY AND PROTECTION

The following information on the biology of the bald eagle is excerpted from the South Florida Multi-Species Recovery Plan (U.S. Fish and Wildlife Service (USFWS) 1999).

Bald eagles are considered a water-dependent species typically found near estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats (Robards and King 1966, King *et al*. 1972, Weekes 1974, Whitfield *et al*. 1974, Gerrard *et al*. 1975, Grier 1977, Anthony and Isaacs 1989, Wood *et al*. 1989). Their distribution is influenced by the availability of suitable nest and perch

sites near large and open water bodies, typically with high amounts of water-to-land edge. Bald eagles demonstrate a remarkable ability to tolerate perturbations to their habitat throughout their range.

Their adaptability to a variety of habitat conditions makes any generalizations about habitat requirements and nesting behavior difficult. Though variable, eagles have basic habitat requirements that must be met in order to successfully reproduce and survive during the winter or non-nesting season. Florida bald eagle nests are constructed in dominant or co-dominant living pines (*Pinus* spp.) or bald cypress (*Taxodium distichum*) and are often located in the ecotone between forest and marsh or water (McEwan and Hirth 1979). Approximately ten percent of eagle nests are located in dead pine trees, while two to three percent occur in other species such as Australian pine (*Casuarina equisetifolia*) and live oak (*Quercus virginiana*). The stature of nest trees decreases from north to south (Wood 1987, Wood *et al*. 1989); and in extreme Southwest Florida, eagles nest in black mangroves (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), half of which are snags (Curnutt and Robertson 1994). Nest trees in South Florida are smaller and shorter than reported elsewhere; however, comparatively they are the largest trees available (Wood *et al.* 1989, Hardesty 1991). The small size of nest trees in South Florida relative to other nest sites throughout the eagle's range is due to the naturally smaller stature of slash pine (*Pinus elliotti*), loblolly pine (*P. taeda*), longleaf pine (*P. palustris*), and sand pine (*P. clausa*) in South Florida and to the lack of pines in extreme Southern Florida.

Bald eagles are monogamous, and annual courtship behavior reinforces pair bonds (Palmer 1988). Pair bond formation includes dramatic pursuit flights, high soaring, talon locking, and cartwheeling (Johnsgard 1990). Eagles may also fly around the perimeter of their nesting areas, visually communicating their presence and further establishing their territories. Pair bond behavior, as well as territory establishment and defense, probably occur concurrently throughout much of the eagle's range. Successful pair bond ultimately leads to nest site selection and nest construction for newly formed pairs or established pairs without nests. Pairs that have previously nested may repair established nests or construct an alternate nest concurrent with copulation.

Nesting activities generally begin in early September in South Florida, with egg-laying occurring as early as late October and peaking in the latter part of December. Incubation may be initiated from as early as October through as late as March, depending upon latitude. Clutches usually consist of one or two eggs, but occasionally three or four are laid. Incubation takes approximately 35 days and fledging occurs within 10 to 12 weeks of hatching. Parental care may extend 4 to 6 weeks after fledging, even though young eagles are fully developed and may not remain at the nest after fledging (USFWS 1989).

The Florida Fish and Wildlife Conservation Commission (FWCC) documented 88 active bald eagle nesting territories in Florida during their initial surveys of this species in 1973; by 1987, that number had increased to 391 active territories when the USFWS implemented the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (Guidelines) (USFWS 1987). By 1999, the 1,000-breeding pair recovery goal for Florida had been achieved and had increased to 1,511 breeding pairs by 2012 (Brush *et al.* 2012). Peterson and Robertson (1978) reported that historic numbers of breeding pairs of bald eagles in Florida were likely "in excess of 1,000 breeding pairs."

The bald eagle was a federally and state listed "threatened" species that had been protected since the mid-1970s under the Endangered Species Act of 1973 and Chapter 68A-27.004, Florida Administrative Code. Management and recovery efforts for the species generally have included actions to improve reproductive success and survival by 1) reducing levels of persistent organochlorine pesticides, such as Dichlorodiphenyltrichloroethane (i.e., DDT), occurring in the environment; and 2) habitat protection. Habitat protection measures in Florida primarily have focused on the protection of nesting territories through the implementation of the 1987 Guidelines. Recovery goals for the bald eagle have been achieved as a result of these and related management actions throughout the United States, and the USFWS subsequently published a proposed rule in July 1999 to remove the bald eagle in the lower 48 states from the list of threatened or endangered wildlife. The bald eagle was subsequently delisted by the federal government in August 2007 and by the State of Florida in April 2008. The Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act provide continued federal protection for bald eagles. State Rule 68A-16.002 establishes rules for the continued protection and conservation of eagles in Florida.

4.0 DESCRIPTION OF LE-28A

4.1 Location and Landscape Information

Nest LE-28A is located in a large slash pine tree immediately west of Halfway Creek (Exhibit 3). The nest tree is surrounded by dense scrub oak and forested wetland habitats with varying degrees of exotic infestation. Both the nest tree and protection zones (330 and 660 feet) are located within the proposed conservation area (Exhibit 4). The proposed conservation area contains an abundance of trees that could potentially be utilized for perching and/or nesting by bald eagles.

The site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by an FPL easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club. The location of Nest LE-28A, the eagle nest protection zones, and the surrounding land uses are depicted on Exhibit 4.

4.2 Nesting History

Based on Wilson Miller's 2000 BEMP, Nest LE-28A was first observed in 1987 and served to replace Nest LE-28, which was last used during the 1986-1987 nesting season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992-1993 nesting season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997-1998 nesting season identified Nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

Site observations conducted by PAI in February and March 2022 confirmed that Nest LE-28A was inactive.

5.0 PROPOSED SITE PLAN AND EAGLE PROTECTION ZONES

The Project's site plan consists of the reconfiguration of the existing golf course with associated parking and infrastructure. The site plan is depicted on Exhibit 4.

The USFWS and FWCC recognize 330- and 660-foot protection zones around an active eagle nest (Exhibit 4). Additionally, Lee County's Eagle Ordinance (08-25) states that no construction (structures or site work) may occur within 660 feet of an eagle nest without an approved BEMP. Both the 330- and 660-foot protection zones of Nest LE-28A are within the proposed conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. However, DO No. DOS2021-00137 requires that the Project's conservation areas be maintained free of exotic vegetation. This includes the conservation areas within the 330- and 660-foot eagle protection zones.

6.0 BALD EAGLE MANAGEMENT PLAN

This BEMP serves to revise the existing plan prepared by Wilson Miller in 2000, to reduce the protection zones to the current Lee County, USFWS, and FWCC standards (i.e., 330 and 660 feet). Additionally, this BEMP is intended to facilitate construction of the Project while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles that could occur as a result of the proposed development activities. As a management instrument, the BEMP is only applicable to the Project. It is the responsibility of the property owner to retain and implement this plan for as long as it is required, including educating others (e.g., contractors, future owners, tenants, etc.) about the specific requirements of this BEMP and the state and federal eagle protection laws. Any amendment to this management plan shall require review and approval by the Eagle Technical Advisory Committee or any successor body.

Specific elements of the BEMP are as follows:

1. Exotic vegetation removal within 660 feet of the nest tree shall be completed during the non-nesting season (i.e., May 16 through September 30).
2. The use of chemicals which are known to be toxic to wildlife shall be prohibited at all times in close proximity to the nest tree and within the on-site preserve areas. Chemicals used for the purpose of controlling invasive exotic plants shall be prohibited around the base of the nest tree.

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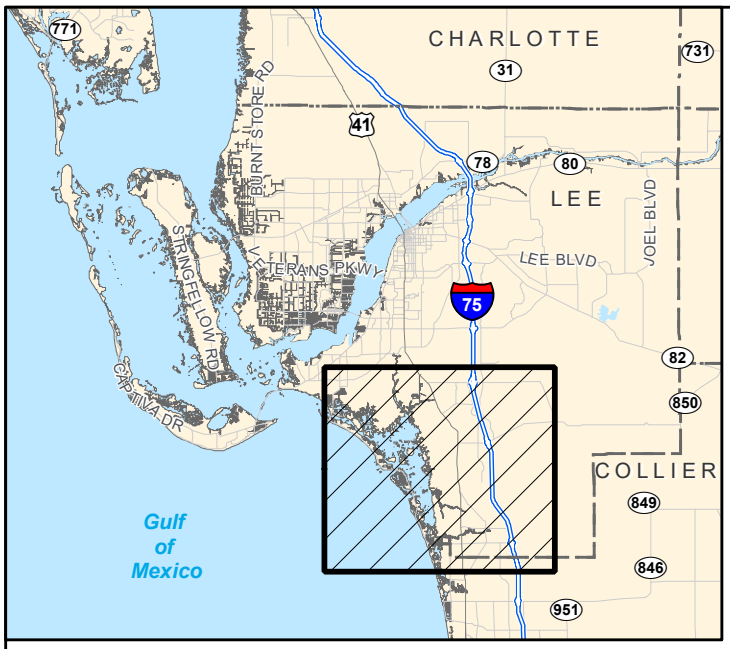
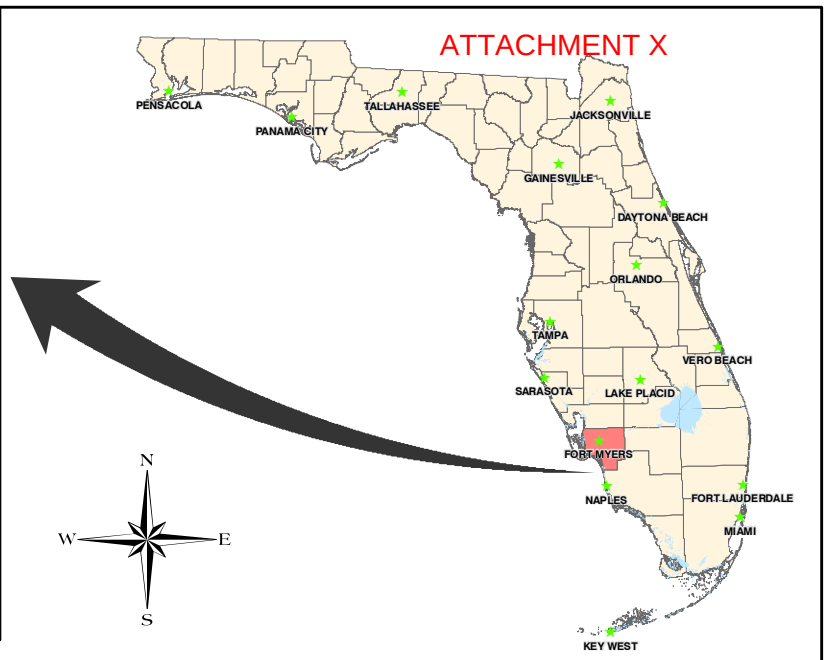
EXHIBIT 1

PROJECT LOCATION MAP





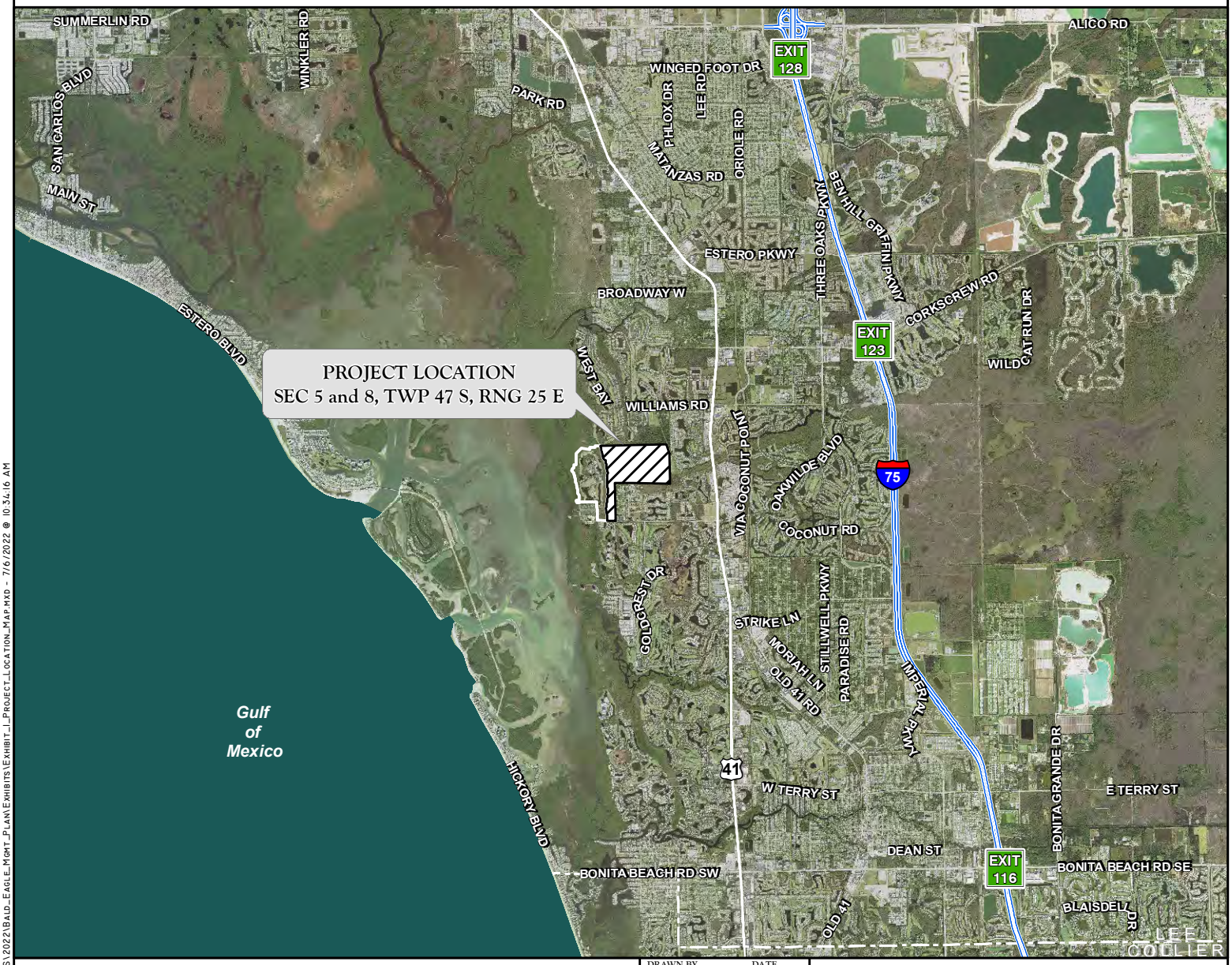


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EXHIBIT 1. PROJECT LOCATION MAP
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
P.F.	09/22/21
REVIEWED BY	DATE
S.J.	09/22/21
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

ATTACHMENT X

EXHIBIT 2

BALD EAGLE MANAGEMENT PLAN BY WILSON MILLER, INC.
MARCH 2000

ATTACHMENT X

WilsonMiller

BALD EAGLE MANAGEMENT PLAN
FOR NEST LE-28A

Pelican Landing DRI
Section 5, Township 47 South, Range 25 East
Lee County, Florida

Prepared for:

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March 7, 2000

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BALD EAGLE MANAGEMENT PLAN
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1.0. Introduction and Project History

Pelican Landings is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Pelican Landing DRI contains a 78-acre xeric scrub/pine flatwood upland preservation area known as the "Eco-Park". Figure 1 provides a location map for the Pelican Landing Eco-Park. The Eco-Park was established pursuant to a gopher tortoise incidental take permit issued by the Florida Game and Fresh Water Fish Commission (Permit #Lee-9 issued August 28,1995) to mitigate for impacts to the gopher tortoise and xeric scrub habitat located within the Pelican Landing DRI. It was strategically chosen since at that time it contained the majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. A conservation easement for the 78-acre tract was granted to the Florida Game and Fresh Water Fish Commission and was recorded in the public records of Lee County on October 18, 1995. The incidental take permit contains provisions for perpetual management of the Eco-Park to maintain appropriate vegetative density and composition. Condition #5 of the permit addresses conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities. An active bald eagle's nest is present in the Eco-Park of the Pelican Landing DRI. The eagle nest is recognized by U.S. Fish and Wildlife Service (USFWS) as nest #LE-28A. Conditions of the Development Order for the Pelican Landing DRI require that a management plan be implemented for this nest.

A bald eagle management plan (BEMP) was drafted for nest LE-28A in 1994 (Heald and Associates, Inc. 1994a; Appendix A) and was submitted to the USFWS for review, comment, and approval. The original plan proposed a 1,300-foot setback between the nest and any proposed construction and a 2,500-foot secondary protection zone where construction would be seasonally restricted. Under the 1994 plan, the closest proposed construction was a two-lane road west of the nest that would terminate near the northern property boundary of the project site, and single-story single-family homes on large lots to the west of the road. Via a letter from David Ferrell (USFWS) to Dan Trescott (Southwest Florida Regional Planning Council) dated January 31, 1994, the USFWS made a preliminary determination that 1,300 and 2,500 feet represented adequate primary and secondary protection zones for Nest LE-28A. Prior to making a final determination, the USFWS requested that a study be conducted during the nesting season to determine flight lines and identify any trees frequently used for roosting. The study was conducted by Eric Heald & Associates (Heald, 1994b) during the period of January through May, 1994 and indicated that 84% of all flights recorded inbound or outbound fell within the northern (n=15 of 44), northwestern (n=13), and western (n=9) quadrants.

On August 8, 1995, a meeting was held with Jane Tutton (USFWS) and a revised BEMP was submitted to the USFWS. In consideration of the density of site vegetation and effective visual screening of the eagle's nest, a Primary Protection Zone (PPZ) of 500 feet and a Secondary Protection Zone (SPZ) ranging from 1,200 feet on the southwest to 2,175 feet on the south was proposed. An August 16, 1995 letter from Craig Johnson (USFWS) to Tim Durham (WilsonMiller) indicated the USFWS's concurrence that the revised plan was adequate and appropriate for the nest. A subsequent letter dated October 11, 1995, sent by Craig Johnson (USFWS) to Tim Durham (WilsonMiller) for clarification purposes, superseded the August 16, 1995 letter and indicated that a PPZ of 1,200 feet and an SPZ of 2,500 feet would be required.

The purpose of this document is to provide a revised management plan for eagle nest LE-28A (hereafter referred to as the "Plan") and request technical assistance from the USFWS for review, comment, and approval of the revised Plan. The previous management plan was based on the original configuration of the Eco-Park, the boundary of which was determined by property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. (WCI) has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Proposed revisions have been made to the original Plan due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. WilsonMiller is currently coordinating with the Florida Fish and Wildlife Conservation Commission (FFWCC) to gain approval for the proposed reconfiguration of the Eco-Park boundary as described herein. Thus, we are requesting that the USFWS provide approval of the Plan pending approval of the Eco-Park boundary configuration by the FFWCC. Upon approval by the USFWS, the revised Plan would supersede the 1994 plan in its entirety.

The revised plan is consistent with existing USFWS management guidelines for the bald eagle as well as the original 1994 plan. The proposed plan maintains a PPZ of 1,200 feet and an SPZ of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ) in accordance with bald eagle management guidelines. It should be noted that the revised plan results in a numerous benefits to the eagle compared to the original plan. Details regarding these benefits are provided in Section 4.4 of this report.

2.0 Nest Location/History

Figure 2 shows the location of nest LE-28A with respect to the existing boundary of the Pelican Landing Eco-Park. Nest LE-28A is located on the northwest side of a large slash pine (*Pinus elliottii*) tree immediately west of Halfway Creek. From most angles, the nest is effectively screened from view beyond a distance of 200 to 600 feet by pines, dense scrub oak, and tall fetterbush (*Lyonia* spp.). Heald (1994b) indicated that the primary perch tree for the eagles is located approximately 400 feet west of the nest tree.

Nest LE-28A was first observed in 1987 and served to replace nest LE-28, which was last used during the 1986/1987 breeding season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992/1993 breeding season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997/1998 breeding season identified nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

3.0 Results of Flight Pattern Surveys

At the request of the USFWS, a flight pattern study of eagles nesting in LE-28A was conducted from January to May 1994. A report summarizing the results of this study (Heald, 1994b) is provided in Appendix A. The study concluded that 34%, 30%, and 20% of recorded flights were to or from the northern, northwestern, or western directions, respectively. Based on the flight study, it is presumed that the eagles feed primarily in Estero Bay. Other research conducted KBN Engineering and Applied Sciences, Inc. (1995) indicated that the eagle pair utilizing nest LE-28A were frequently seen perching

on trees next to homes and roads along Kings Road and Williams Road, foraging in sewage treatment ponds of the Fountain Lakes development, feeding on road kills along U.S. 41, and perching in trees in the vicinity of the Coconut Point fish camp. Thus, it appears that the eagles are opportunistic feeders and have become accustomed to human activity.

4.0 Habitat Management/Nest Protection Strategies

4.1 Objectives

The overall objectives of the Plan are as follows:

- To protect the integrity of the bald eagle nest LE-28A.
- To minimize detrimental human-related impacts on the bald eagles utilizing nest LE-28A, particularly during the nesting season (generally from October 1 through May 15 but specific to individual nests depending on the time of commencement of mating and fledging of young).
- To define compatible land uses and development in areas in close proximity to the active nest.

These objectives, and the methods proposed to attain them, are consistent with the guidelines issued by the USFWS Southeast Region as found in *"Habitat Management Guidelines for the Bald Eagle in the Southeast Region"* (USFWS, 1987). These guidelines recommend the establishment of primary and secondary protection/management zones around eagle nest trees. The following methods and management techniques are hereby proposed for each of these zones in order to achieve Plan objectives.

4.2 Primary Protection Zone (PPZ)

The PPZ will extend outward radially from the nest tree a distance ranging from 750' to 1,200'. Figure 3 shows the configuration of the PPZ and the habitat types present. The purpose of the PPZ will be to provide a natural zone in the immediate vicinity of the nest tree that will remain free of development, and where passive activities potentially detrimental to nesting will be restricted.

The following activities will be prohibited within the PPZ:

- Residential, commercial, and industrial development
- Tree cutting, except as absolutely needed to construct the golf cart bridge across Halfway Creek and golf cart paths leading to the bridge.
- Logging, mining, filling, and excavation.
- Use of non-approved chemicals toxic to wildlife.
- Habitat management practices during the active nesting season, including burning.
- Unauthorized human activities potentially detrimental to bald eagle nesting.
- Passive recreational use of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge, during the eagle nesting season, except for uses related strictly to golfing.

The following activities will not be considered detrimental when conducted in the PPZ during the non-nesting season:

- Construction or use of passive recreational facilities, including benches, jogging/hiking trails, or similar uses consistent with the Eco-Park management plan. In accordance with the Eco-Park habitat management plan, passive recreational facilities will be located no closer than 500' from nest LE-28A.
- Construction of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge.

- Habitat management activities, including removal of exotic and nuisance vegetation and prescribed burning. Prior to any prescribed burning, the nest tree and perch trees will be protected by hand raking or clearing to minimize fuel in the vicinity of the tree.

Habitat management in the PPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the PPZ will occur only during the non-nesting season.

4.3 Secondary Protection Zone (SPZ)

The SPZ will extend a distance varying from 750' to 1,300' outward from the PPZ and will serve to provide a buffer for the PPZ. Figure 3 shows the configuration of the PPZ and the habitat types present. Development in the SPZ will be consistent with USFWS guidelines so as to minimize activities potentially detrimental to the PPZ. The majority of development in the SPZ will be golf course to be constructed during the non-nesting season. A relatively small portion (2 acres) of the outer zone of the SPZ in the western region of the site (Figure 3) is proposed for timeshare units that will have a maximum height of 45' above flood elevation. Considering that: a) this height is below the height of the existing tree canopy of this region of the site, b) the timeshare units are at least 2,370' removed from the nest tree, and c) the preserved freshwater slough and other native vegetation to be retained to the east will provide an effective visual screen, it is unlikely that the timeshare units will affect eagle nesting or foraging behavior. At its closest point the golf course is 1,250' from the nest tree, which is well beyond the line of sight distance of the tree and should also not affect eagle behavior.

The following activities will be prohibited within the SPZ unless otherwise approved by the USFWS:

- Development of commercial and industrial sites.
- Development of high density housing and multi-story buildings.
- Road or canal construction that would facilitate access to the nest.
- Use of non-approved chemicals toxic to wildlife.
- Heavy construction during the nesting season, including operation of heavy machinery, land clearing, earthmoving, blasting, excavation, installation of major utilities, and burning.

The following activities will not be considered detrimental when conducted in the SPZ during the nesting season:

- Normal habitat management practices, excluding prescribed burning.
- Passive pedestrian recreational use (*e.g.*, hiking, bird watching, fishing, etc.).
- Construction of pedestrian pathways using non-motorized equipment, and erecting interpretive/educational signage.
- Golfing activity and operation of golf carts in golf course areas.
- Activities normally associated with golf course maintenance operations, except as noted in the above prohibitions.
- Finishing work (*i.e.*, all interior work, hanging windows and doors, stucco-ing exterior walls, and activities of similar nature) on those portions of the two timeshare units located in the SPZ, provided that the vertical construction of the units (*i.e.*, construction of exterior walls and roof) is conducted during the non-nesting season.

Habitat management in the SPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the SPZ can occur at any

time of the year, with the exception that prescribed burning and methods involving excessive noise will be restricted during the active nesting season.

4.4 Other Management/Protection Strategies Benefiting the Eagle

Other management/protection strategies that will be used as measures to protect eagle nest LE-28A, provide a net benefit to eagles utilizing nest LE-28A, and provide a net benefit to eagle conservation in general will include the following:

4.4.1 Increased Size of Pelican Landing DRI Eco-Park: The size of the Pelican Landing Eco-Park, within which nest LE-28A is located, is proposed to be substantially increased by the proposed project. Changes to the Eco-Park from its current configuration incorporate an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes all of that portion of Halfway Creek located in the project area and thereby serves to provide a buffer to the east of nest LE-28A that was not previously under ownership. The proposed changes will increase the size of the Eco-Park by approximately 84% (66-acre± net increase) and insure the continued protection and success of nest LE-28A.

4.4.2 Preservation of Habitat in Secondary Protection Zone: The project has incorporated a significant amount of habitat preservation in the SPZ to insure the continued success of eagles utilizing nest LE-28A. Of the land located in the SPZ, 102 of 159 acres (64%) will remain in a natural state (SPZ areas in Eco-Park) or mostly-natural state (golf course rough and inter-hole areas where selectively removal of vegetation will occur but where majority of canopy will be retained). On a site-wide basis, a total of 56% of the existing habitat will be retained in a natural or semi-natural state, the majority of which will be enhanced via the removal of exotic vegetation. Figure 3 shows the location of areas to be preserved in the project.

4.4.3 Creation of Foraging Habitat: As part of the project, foraging habitat for the eagle, as well as wading birds, will be created both within and outside of the SPZ by excavating surface water management lakes and creating freshwater marshes (Figure 3). Created lakes and marshes within the SPZ occupy 11 acres or 7% of the SPZ, and on a site-wide basis occupy 9% of the land area. Many of the marshes to be created are located adjacent to the lakes and will serve to establish a more natural appearance to, and function of, the lakes. The marshes also serve as pretreatment areas to 'polish' surface water runoff prior to entering the lake. Such pretreatment is not required by existing SFWMD regulations, but is being incorporated into the site design to enhance the quality of the created systems. In most areas, the marshes are separated from golf course areas by upland areas that will remain in a mostly-natural state, providing additional pretreatment of runoff and further mimicking a natural lake system.

4.4.4 Restoration of Freshwater Slough: The north-south trending freshwater slough located in the western region of the project (Figure 3) will be enhanced as part of this project. Approximately one-third of this slough is located in the SPZ. The slough is currently dominated (>75% coverage) by exotic and nuisance species. Exotic/nuisance species will be removed from the slough, thus increasing habitat quality. In many areas of the slough, planting of native wetland species will occur to further enhance the quality of this area. Preservation and enhancement of the slough will also serve to provide a buffer between the eagle nest and development to the west of the slough.

4.4.5 Retaining Canopy, Perch, and Roost Trees: The site design incorporates the retainage of a substantial amount of the existing canopy. Areas that will remain natural or mostly-natural and thus will retain the majority of their existing canopy comprise 64% of the SPZ and 56% of the overall project site. Preservation of the existing canopy of the site will insure the continued presence of suitable perch and roost trees, as well as provide for suitable screening between the eagle nest and land uses

in the SPZ. In golf course and other development areas, potential perch/roost trees that are of specimen value (*e.g.*, largest trees in stand, trees with open crowns and stout lateral limbs) will be field located/flagged and incorporated into the field design whenever possible. The shores of excavated lakes will also be meandered where necessary to preserve individual canopy trees of moderate to high value, as well as to provide a more natural character to the lake system.

4.4.6 Minimization of Number of Buildings in Secondary Protection Zone: The existing BEMP for nest LE-28A provides for single-family residential units and an associated access road in a portion of the SPZ. As part of the revised site plan proposed herein, these residential units have been eliminated and replaced with golf course, a land use more compatible with eagle nest protection. Under the proposed site plan, only two buildings of substantial size (excluding minor buildings such as golf course halfway houses) occur in the SPZ. These units are timeshare buildings that are approximately 2,370' removed from the eagle nest and comprise only 1% of the SPZ. Minimization of buildings in the SPZ will serve to further enhance the success of eagles utilizing nest LE-28A.

4.4.7 Minimization of Building Height Outside of Secondary Protection Zone: In the western region of the project between the SPZ and the western property line, building heights will be limited to a maximum height of 45' above flood elevation. This height is below the height of the existing tree canopy of this area and thus will not affect eagle nesting or foraging behavior. Although such height restrictions are not mandatory based on past USFWS determinations regarding nest LE-28A, they will be instituted as a measure to insure that the degree of access that the eagles' currently have to their primary foraging destination, Estero Bay, is maintained and is not hindered by the project.

4.4.8 Establishment of Educational Programs: Educational programs will be established for local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park). The objectives of such programs will be to :a) inform citizens of local, state, and federal laws protecting eagles and other wildlife, b) identify ways for citizens to protect eagles from disturbance, and c) inform citizens of the habitat management plan for the Pelican Landing Eco-Park.

4.5 Proposed Post-Development Conditions and Eco-Park Configuration

Figure 3 shows the proposed post-development conditions and configuration of the Pelican Landing Eco-Park. It should be noted that the Eco-Park boundary has been modified (on paper only) compared to the 1994 BEMP . The boundary reconfiguration is due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in configuring the Eco-Park. *[All of the preceding moved to Section 4.1.1]*

WilsonMiller is currently coordinating with the FFWCC to gain approval for the proposed reconfiguration of the Eco-Park boundary. Also, the parcel located to the east of the existing Eco-Park ("Skebe" parcel) is currently under contract but has not yet been acquired. Thus, post-development conditions proposed herein are tentative pending approval of the reconfiguration by the FFWCC and the subsequent acquisition of the Skebe parcel. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC, the existing conservation easement for the Eco-Park will be revised to conform to the new boundary.

WCI Communities, Inc. reserves the right to modify the Plan, consistent with USFWS management recommendations and upon concurrence by the USFWS, as the needs of the project change, and as the location or status of the nest changes.

5.0 References

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

Heald and Associates, Inc., 1994a. Management Plan for the Southern Bald Eagle in the Vicinity of the Pelican Landing DRI, Lee County, Florida. 3 p. + attachments.

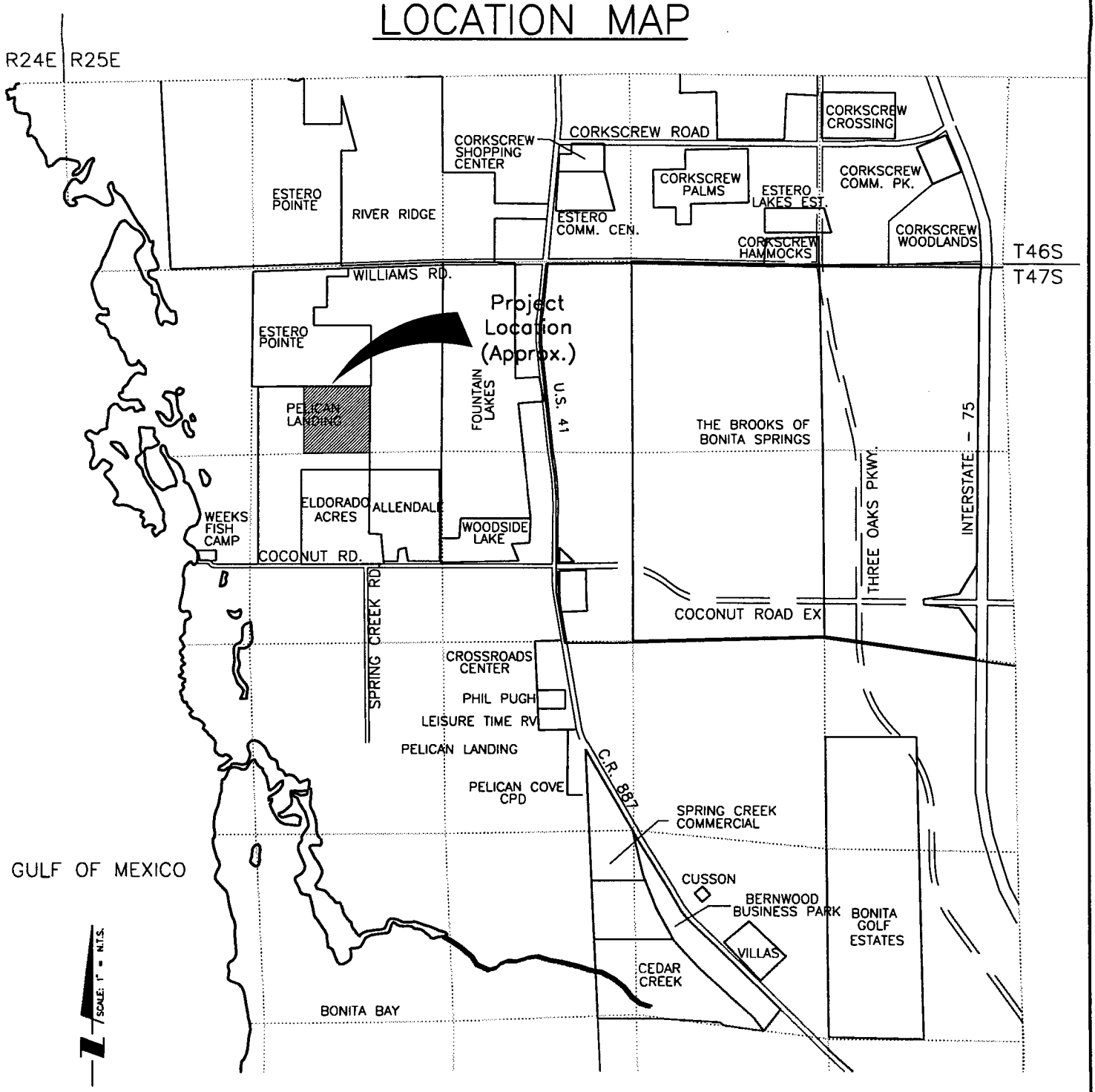
Heald and Associates, Inc., 1994b. Observations from January-May 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida. 7 p.

KBN Engineering and Applied Sciences, Inc., 1995. Bald Eagle Management Plan for Nest LE-28A; Estero Pointe Project. 20 p.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeastern Region. U. S. Department of the Interior. 9 pp.

ATTACHMENT X

LOCATION MAP



PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller

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FLA. REG. #	
COUNTY: LEE	DATE: Sept. 21, '99
SEC: 4,5,8,9 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-006	FILE NO: C-0250-31
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 1 OF 4

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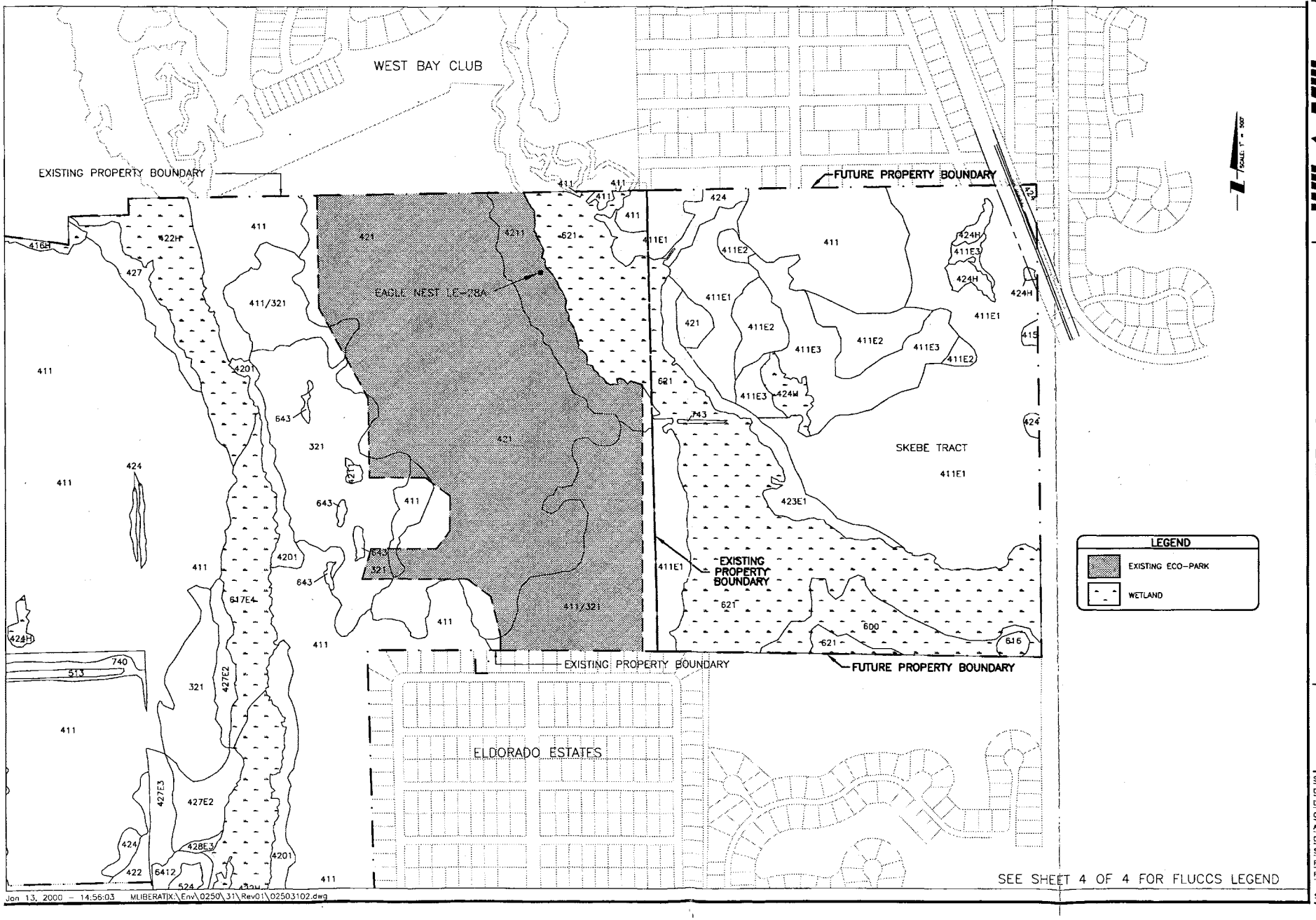

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FIGURE 2
Existing Eco-Park
and Associated Habitats

SEC 5 TWP 47S RGE 25E
Designed by:
Drawn by: /1260
Checked by:
Approved by:
Date: Sept. 21, '99
Scale: 1" = 500'
PIN: F0250-024-006-FPVOQ
File # : 0250-31
Sheet 2 of 4

ATTACHMENT 2

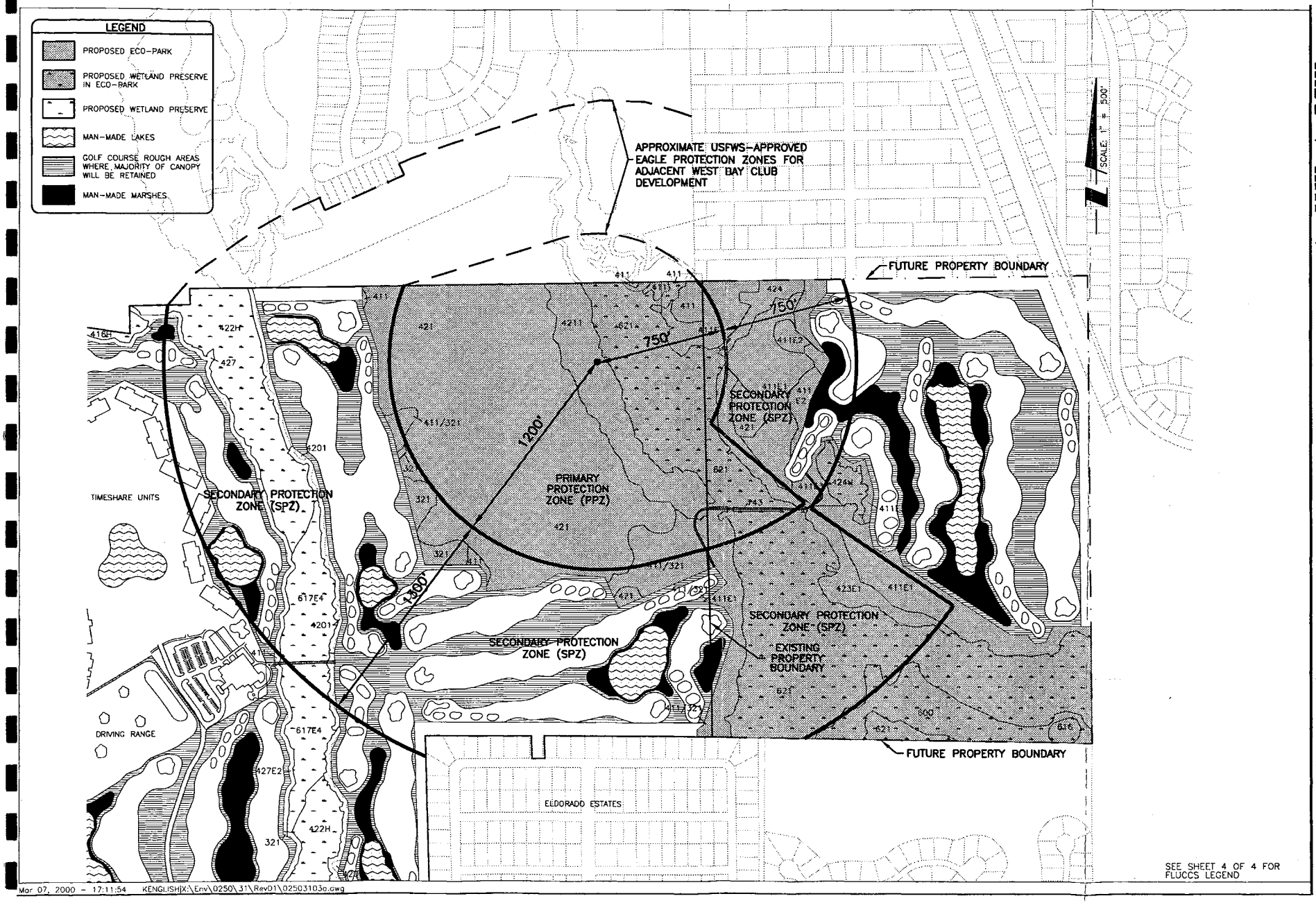

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FIGURE 3

Proposed Configuration of Eco-Park, Eagle Protection Zones, And Adjacent Development

REV. 1, 1/4/00 – UPDATE EAGLE PROTECTION ZONE LAND PLAN, AND ECO-PARK BOUNDARY

WilsonMiller, Inc. - FL Lic.# LC-C000009

SEC 5 TWP 47S RGE 25E

Designed by:

Drawn by: K.L.E./BBS

Checked by:

Approved by:

Date: Sept. 21, '99

Scale: 1" = 500'

PIN: F0250-024-006-FPV00

File #: C-0250-31

Sheet 3 of 4

ATTACHMENT X

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ATTACHMENT X

Pelican Landing Eco-Park
FLUCCS Legend

FLUCCS	FLUCCS Description
321	Palmetto prairie
411	Pine flatwoods
411E1	Pine flatwoods, 10-24% exotics
411E2	Pine flatwoods, 25-49% exotics
411E3	Pine flatwoods, 50-75% exotics
411/321	Pine flatwoods/Palmetto prairie
415	Scrubby flatwoods
416H	Pine flatwoods/Graminoid understory-hydric
421	Xeric oak
4201	Mesic oak, high density shrub layer
4211	Xeric oak, high density shrub layer
422	Brazilian pepper
422H	Brazilian pepper-hydric
423E1	Pine-cabbage palm-oaks, 10-24% exotics
424	Melaleuca
424H	Melaleuca-hydric
427	Live oak
427E2	Live oak, 25-49% exotics
427E3	Live oak, 50-75% exotics
428E3	Cabbage palm, 50-75% exotics
513	Ditch
524	Lakes less than 10 acres which are dominent features
600	Shrub wetland
616	Inland pond
617E4	Mixed wetland hardwoods
621	Cypress
6412	Cattail
643	Wet prairie
740	Disturbed land
743	Spoil area

PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

WilsonMiller, Inc. - FL Lic# LC-C000070

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FLA. REG. #	
COUNTY: LEE	DATE: Sept. 21, '99
SEC: 4,5,8,9 TWP: 47S RGE: 25E	REV NO:
PROJECT NO. F0250-024-006	FILE NO: C-0250-006
DRWN BY/EMP NO. M.W.L./1260	SHEET NO: 4 OF 4

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APPENDIX A

1994 Version of Bald Eagle Management Plan (Heald, 1994a, 1994b)

Heald and Associates, Inc.

7550 S.W. 136 Street
Miami, Florida 33156
305-253-5343

Management Plan for the Southern Bald Eagle in the Vicinity of The Pelican Landing DRI, Lee County, Florida

(Revised to Reflect Renewed Nesting Activity)

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

Nest-building by bald eagles is known to have occurred at 5 locations (trees) within or in the vicinity of the Pelican Landing DRI project boundaries over the past decade. Some confusion has existed in connection with the locations and official designations of these (see sections of ADA, ADA Sufficiency Response, and pertinent correspondence appended to Draft Management Plan, June 1993).

The nest trees (sites, territories) are listed by Florida Game and Fish Commission (FGFC) as follows, and their current status is described:

LE 08

The nest no longer exists, having disintegrated over the past several years. The nest tree, a cypress, remains, and a pair of eagles was sighted at the tree during a December 3, 1992 overflight by FGFC.

LE 08A

This nest is no longer in existence (FGFC, Dec., 1993). It was occupied by great-horned owls during the 1991-1992 and 1992-1993 breeding seasons. It is addressed in a Lee County Rezoning Resolution (#Z-88-034) for San Marino Pines (March 18, 1988) in which a 900' buffer zone was established in a semi-circle to the west of the nest tree.

LE 28

Only a few twigs remain. It has been unoccupied since the 1986/1987 breeding season.

LE28A

The nest is located in a large pine tree on the western margin of Half-way Creek. It was occupied during the 1990-1991 breeding season, and was reported by Mr. Paul Schultz (FGFC) as occupied in December, 1993. A field representative of United States Fish and Wildlife Services (USFWS) inspected the preserve area and the newly-occupied nest tree (LE-28A) in January, 1994. On January 31, 1994 USFWS signified approval of the Management Plan (see enclosed letter from Mr. Peter Plage to Mr. Dan Trescott), and requested a study to determine flight lines during the current nesting season. This has been conducted (copy appended).

LE-28B

This recently constructed nest was occupied during the 1992-1993 breeding season and contained an unfledged eaglet at the time of FGFC overflight on March 14, 1993. The eaglet was no longer in evidence on overflights conducted by Heald and Associates on May 3

and May 20, 1993. It was not used during the 1993-1994 breeding season (Schultz, FGFC, Pers. Comm.).

Management Strategies

Nest tree ('territory') 28A on the western margin of Half-way Creek lies within approximately 120 contiguous acres of upland and wetland communities to be preserved within the Pelican Landing Development. It is located almost at the northern boundary of the project. A proposed two lane access road to single family homesites lies, at its closest point, approximately 1300' from the tree. The nest tree, and other potential nest, roost, or perch trees in close proximity within the preserve, will remain available for any future nesting activities. The birds presumably feed primarily in the Estero Bay system which they reach either by flying over the proposed single-road alignment of single family residences and the existing fish camp, or by flying over undeveloped uplands and wetlands immediately north and northwest of the nest tree (see appended copy of recorded flight patterns).

USFWS has determined that the primary zone should be established at a radius of ±1300' from the nest tree. Human activities within the preserve will be limited to pedestrian pathways, with interpretive/educational signage. Pathways will not impinge upon a 750' radius around the nest tree, which is well-screened by dense oaks. The nest tree and all other potential nest trees within the preserve will be monitored twice a month from October through April for a period of five years to determine if nesting is occurring. If the nest is occupied, access to all pathways within the ±1300' primary zone will be prohibited until nesting activities are reliably reported to have ceased. Appropriate signs will be installed at the barricaded path entrances. No habitat management activities, such as selective clearing or prescribed burning, will be conducted during the active nesting season and no construction of road or residences will be permitted within a 2500' radius of the nest tree during this period.

Bayside Improvement District will own the preserve area, known as the Pelican Landing Eco-Park, and will be responsible for all management and maintenance, in accordance with the approved Development Order.

Nest tree 28B lies off the property, approximately 1800-2000' west of the northwest boundary of the project. The birds feed primarily in the extensive Estero Bay system to the west of the nest tree. Approximately 80 acres of uplands plus approximately 42 acres of freshwater wetlands within the northwestern portion of the project will be preserved; and are thus available as potential additional feeding sites. Scattered large pines within the upland preserve will also remain available as potential nesting sites. Since applicant does not own the nest tree site or the lands surrounding it, further management practices are not feasible. Monitoring of potential nest trees within the preserve area will be

conducted as described above (28A), and appropriate measures will be taken to comply as far as practical with established guidelines if the birds relocate onto the subject property.

The remaining nest trees or territories (28, 08 and 08A) are located north and east of the project site. The birds, should they resume residence or nesting, will be unaffected by project activities. Extensive wetland areas preserved to the south within the project will remain available as potential feeding areas. Florida Game and Fish Commission and U.S. fish and Wildlife Service will be consulted on appropriate actions if the eagles are reported to relocate to trees closer to the project than at present.

Attachments

Observations From January - May, 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida

Prepared for

Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.
Heald and Associates, Inc.

May, 1994

Introduction

As an integral part of a Development of Regional Impact (DRI), Westinghouse Bayside communities (WBC) in 1992 designated a contiguous area of ±120 acres, including ±78 acres of xeric oak scrub and pine flatwoods, for preservation. This area, known as the "L&L Tract" and latterly as the "Pelican Landing Eco-Park", lies north of Coconut Road in Southern Lee County and constitutes a portion of the Planned Community of Pelican Landing (Figure 1). The preserved tract includes several large slash pines, one of which contains the nest of a southern bald eagle. The nest tree, designated LE-28A by Florida Game and Fish Commission (FGFC) was occupied during the breeding season of 1990-1991 and was not used during the subsequent two seasons.

In accordance with requests by several regulatory agencies during the Application for Development Approval review process, a Management Plan for the southern bald eagle was prepared and submitted for review to U.S. Fish and Wildlife Service (USFWS) in June 1993. While the Management Plan was under review the nest was reported by FGFC in December, 1993 to be occupied by a pair of eagles (Paul Schultz, FGFC; Pers. Comm.). It is assumed, though not confirmed, that the eagle pair currently occupying this nest utilized nest LE 28B during the 192-1993 breeding season. In January 1994, USFWS, while approving the Management Plan as submitted, requested that prevalent flight patterns of the birds occupying nest LE-28A be documented to assist further review. At the request of WBC, Dr. Eric Heald of Heald and Associates (H&A) conducted the field observations reported below.

Methods

The slash pine containing the nest stands immediately adjacent to the western margin of Halfway Creek (Figure 2) and from most angles is effectively screened from view beyond a distance of 200' to 600' by pines, dense scrub oak and tall Lyonia spp. During mid-late January, 1994 several potential observation stations were tried before a satisfactory station (see Figure 2) was chosen. With the exception of two flights recorded on January 19, 1994 all observations were conducted from this station. Observations were conducted on 25 separate days between January 19 and May 19. Table 1 gives dates, hours of observation, basic climatic conditions and miscellaneous observations.

Activities at or in the immediate vicinity of the nest were observed through binocular field-glasses. Outbound flights were monitored with or without field-glasses until visual contact was lost. The efficacy of tracking varied according to pattern of flight on departure from nest tree, direction of flight, and altitude assumed by the bird during flight. Inbound flights (returns) were sometimes not detected until the bird was within 200' of the nest tree, and are thus considered a less reliable indication of flight patterns.

FIGURE 1
Location of the "L&L Tract".

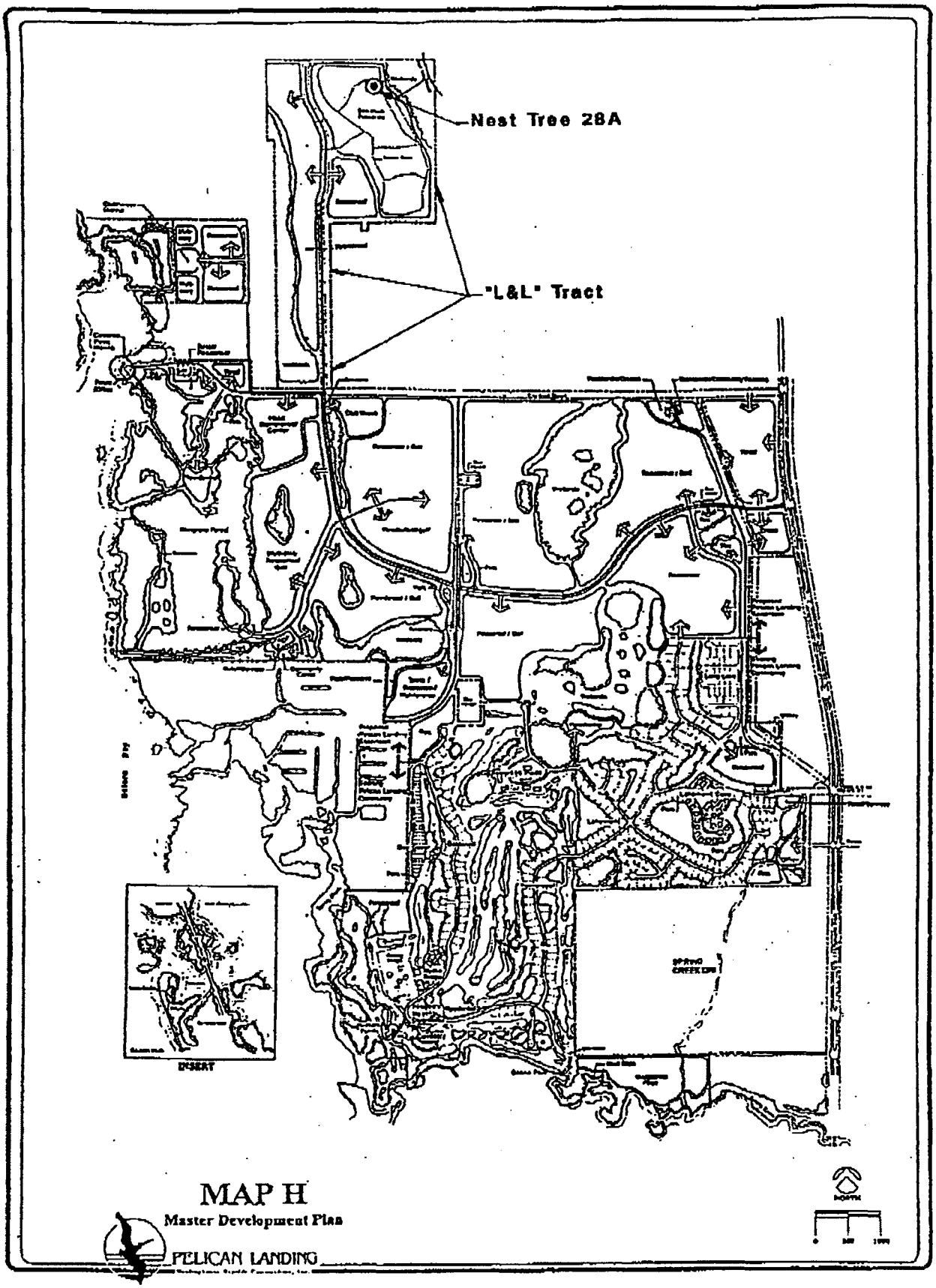
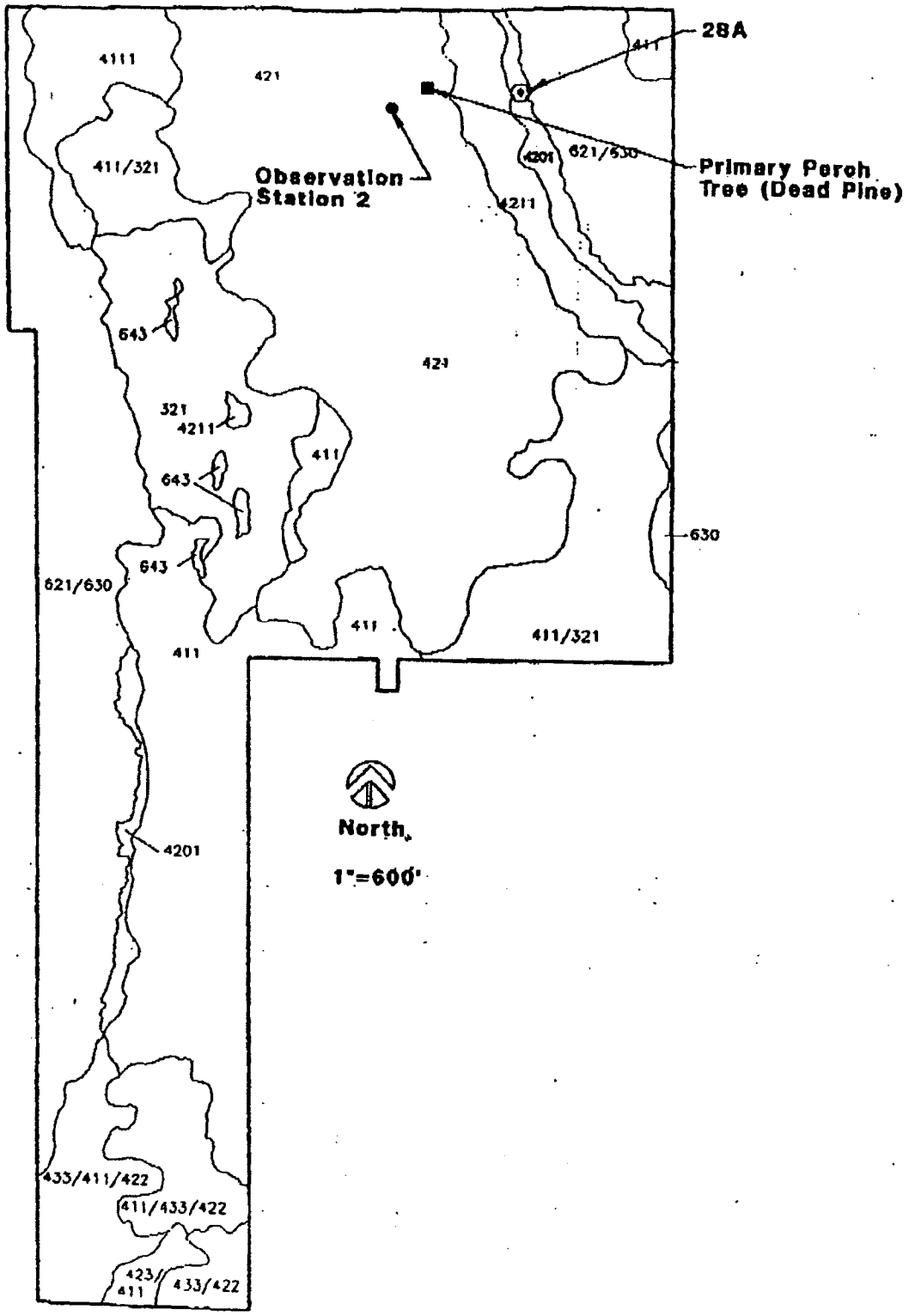


TABLE I. Observations January 19 to May 19 1994

DATE	TIME ARR	TIME DEP	FLIGHTS OUT	FLIGHTS IN**	SKY	APPROX. TEMP	WIND DIR	(approx) MPH	COMMENTS
1/19	930	1630	2	–	Clear	70	NE	<5	4 stations occupied
1/31	1420	1730	1	–	Pt. Cloudy	70	ENE	<5	Station on Figure 2
2/01	0800	1140	2	1	Pt. Cloudy	65	E	5	–
2/01	1425	1720	1	1	Cloudy	65	E	<5	–
2/02	1300	1700	–	–	Cloudy	50	NE	<5	Drizzle/rain
2/03	1030	1515	1	1	Clear	50	SE	10	Cold
2/08	1600	1800	1	1	Pt. Cloudy	75	SW	10	–
2/09	0800	1540	1	–	Clear	75	SW	15	–
2/10	0730	1005	–	1	Clear	70	SE	0–10	Gusty Winds
2/16	1410	1615	1	–	Cloudy	65	ENE	10	–
2/17	0800	1000	–	–	Pt. Cloudy	70	E	20	Very windy
2/22	1550	1705	–	–	Pt. Cloudy	75	SE	5	–
2/23	1520	1900	2	1	Clear	80	SW	5–20	Gusty winds; eaglet observed
2/24	0800	1730	2	2	Cloudy	70	NONE	NONE	Eaglet observed
3/08	1100	1330	1	–	Pt. Cloudy	80	NE	5	Eaglet observed
3/09	0700	1100	–	–	Pt. Cloudy	75	ENE	5–10	–
3/12	1600	1745	4	2	Clear	75	E	10–15	Eaglet observed
3/13	1130	1610	4	2	Clear	80	SE	<5	Eaglet exercising wings
3/14	1000	1250	4	2	Cloudy	75	NONE	NONE	Eaglet on edge of nest
3/15	1130	1520	1	2	Clear	80	E	<5	Eaglet–edge of nest; exercising wings
3/28	1300	1435	–	–	Clear	80	NE	15–20	Eaglet on adjacent branch
4/01	1500	1755	1	–	Clear	80	SW	5	Eaglet–edge of nest; exercising wings
4/07	1600	1735	–	–	Clear	75	W	<5	Eaglet in nest
4/13	1215	1430	–	–	Pt. Cloudy	80	WSW	15	Eaglet moving between branches
5/18	1605	1755	–	–	Clear	85	SE	<5	No birds at nest
5/19	0940	1130	–	–	Pt. Cloudy		ESE	<5	No birds at nest

** If sighted further than approximately 500' from nest tree

FIGURE 2
FLUCCS Vegetation Map Showing Location of Nest Tree LE 28A, Observation Station, and Perch Tree.



Observations

Figure 3 and Table II reflect behavior on 44 observed flights between January 19 and May 19. Flight directions in Figure 3 are portrayed within 45° compass quadrants centered upon N, NW, NE, etc. The observed number of flights in either direction within a specific quadrant is indicated along each vector arrow. Inbound flights are only recorded if the bird was sighted and tracked from sufficient distance from the nest tree to be considered a reliable indicator of the direction of approach.

Although no distinction is made in Figure 3 between the flight patterns of male and female birds, the detailed flight patterns of the two sexes differed significantly. The larger bird, presumably the male, frequently flew to an almost dead pine approximately 400' WNW of the nest tree (Figure 2) and there remained for 1-5 minutes before departing westward or northward. The (smaller) female was never observed to do this. Further, all 6 flights recorded in the northeast to south quadrants were made by the female bird.

Flight activity observed form January 19th to May 19th comprised 44 events/flights. A single chick hatched in mid-February, at which point flight activity increased significantly. Although increased in frequency, flights from mid-February onward did not deviate appreciably from previously observed directional patterns.

From mid-March to mid-April, the eaglet was frequently observed exercising wing muscles and hopping between branches, but was never observed in flight. The nest was not visited from mid-April to mid-May, by which time it appeared empty.

As Table II shows, 84% of all flights recorded inbound or outbound fell within the northern, northwestern and western quadrants. The single flight to the southwest was in pursuit of a black vulture or a turkey vulture by the male bird. The female initially gave chase but returned to the nest tree from approximately ¼ mile out.

Conclusions

Almost 85% of all recorded flights were to or from the northwest quadrant. Only 6% lay within quadrants which would lead to existing or proposed Pelican Landing development. The findings thus support the USFWS conclusion that the proposed development would have no appreciable impact on nesting activities at nest tree LE-28A.

FIGURE 3
Recorded Flights to and from Nest Tree. Number of Flights Depicted on each Vector Arrow.

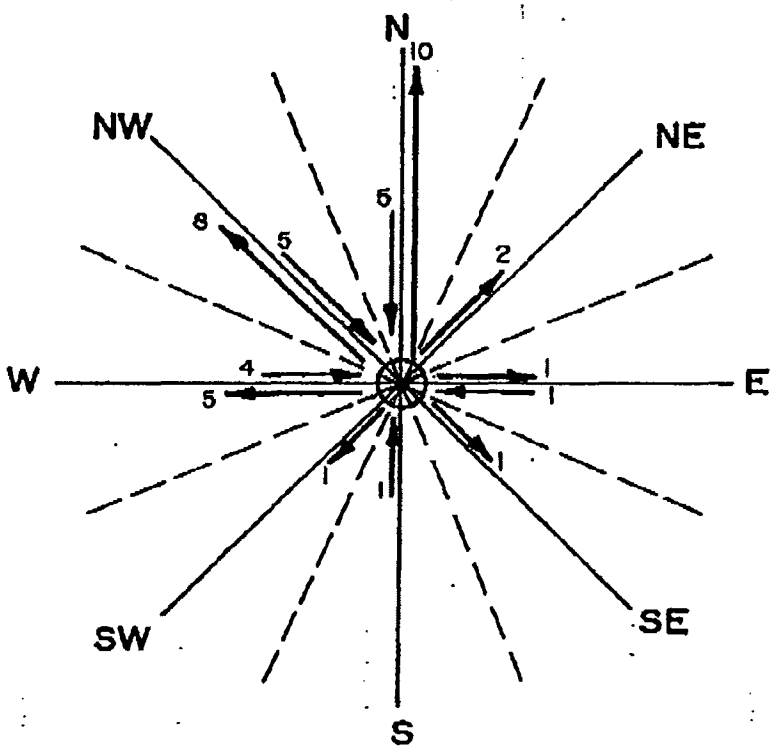


TABLE II. Summation of Observed Flight Directions, Jan. 19–May 19, 1994

DIRECTION	NO. OF FLIGHTS OUT	IN**	TOTAL	% OF TOTAL
N	10	5	15	34.1
NE	2	–	2	4.6
E	1	1	2	4.5
SE	1	–	1	2.3
S	–	1	1	2.3
SW	1	–	1	2.3
W	5	4	9	20.5
NW	8	5	13	29.5

** If sighted further than 500' from nest tree.

ATTACHMENT X

APPENDIX B

Pelican Landing DRI Eco-Park Habitat Management Methods

PELICAN LANDING DRI
ECO-PARK HABITAT MANAGEMENT METHODS

Introduction

The (existing) Pelican Landing DRI "Eco-Park" encompasses approximately 78 acres in the northeast corner of the DRI property. The Eco-Park consists of 65 acres of high quality xeric oak/scrub habitat and 13 acres of pine flatwoods and was established primarily as a gopher tortoise (*Gopherus polyphemus*) preserve. A bald eagle's nest (nest #LE-28A) is present near the northeast corner of the Eco-Park. The majority of the Eco-Park lies within protection zones surrounding this nest and special consideration has been given to minimize disturbance to the nest from habitat management practices.

The Eco-Park is bordered by a cypress/hardwood wetland system (Halfway Creek) to the east, native uplands and wetlands to the west, and residential subdivisions to the north and south. The Eco-Park has been placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission (now the Florida Fish and Wildlife Conservation Commission - FFWCC) and is managed as outlined below.

Maintenance of the Eco-Park is acknowledged to be an important component of assuring the long term viability of scrub habitat, the existing gopher tortoise population, and the bald eagle's nest. The legal entity responsible for the maintenance of the Eco-Park will be WCI Communities, Inc., or its assignee.

Management Methods

The following is a summary of the management methods to be employed in the Eco-Park:

1. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise activity). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level, except in the Primary Protection Zone of the bald eagle nest. No maintenance activities will be conducted within the Primary Protection Zone of eagle nest LE-28A during the active nesting season.

   Preferred maintenance practices per habitat type are as follows.

   A. Xeric Scrub

   - Hand-trim to a height of 6-9 feet at 5-year intervals or as deemed necessary.
   - Excessive layers of shrubby growth will be removed by hand at 3-year intervals if necessary.
   - Prescribed burns may be conducted at 8-year intervals if judged feasible and necessary. Any burning will be conducted by an experienced control-burn contractor. Burning will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry. Steps taken to protect the eagle nest or perch trees will include hand raking or clearing to minimize fuel in the vicinity of the tree prior to burning.

- No mowing or raking will be performed in xeric scrub areas.
- No burning will take place during the eagle nesting season in either the Primary or Secondary Protection Zones surrounding the eagle nest.

B. *Pine Flatwoods and Other Upland Habitat Types*

- Bush hogging and/or mowing at 3-year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- Prescribed burning will be conducted as in xeric scrub habitat, but at an approximate 3-year interval if judged feasible and necessary.
- Exotic/nuisance plant species will be removed by hand.

C. *Wetland Habitats*

- Wetland habitats will be initially maintained by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Hand removal will be utilized whenever feasible. In certain areas of heavy infestation, mechanical clearing may be necessary. Any mechanical clearing will first be approved by the FFWCC and will be conducted so as to minimize disturbance to eagles during the active nesting season.
- Following initial removal of exotic/nuisance species, wetland habitats will be maintained in perpetuity to suppress re-infestation and maintain exotic/nuisance plant species abundance at low levels. Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (*e.g.*, installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

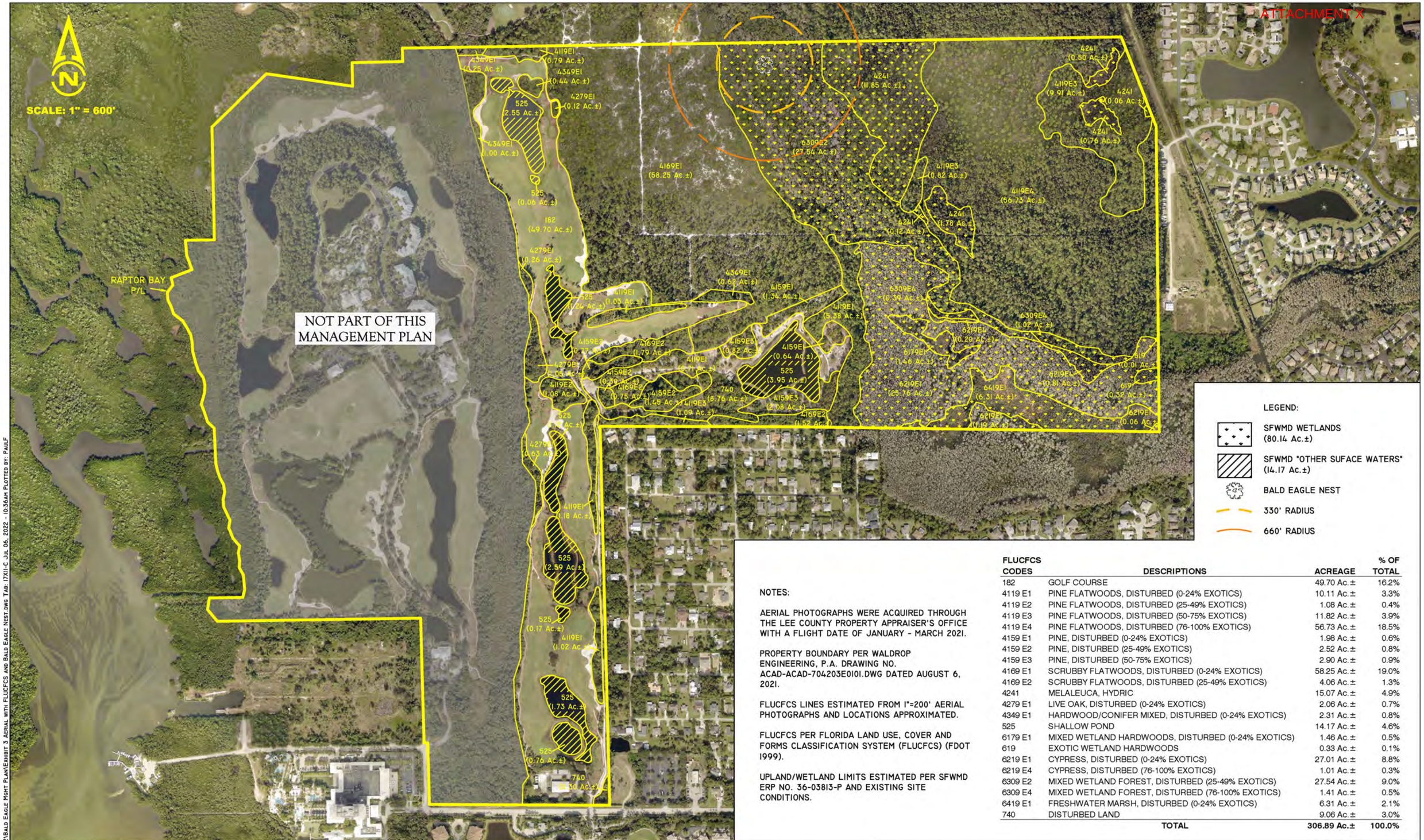
2. Maintenance activities will be initiated upon recording of the conservation easement for the Eco-Park and every other year thereafter.
3. A locally based nuisance-wildlife expert will be engaged as necessary to remove feral hogs from the Eco-Park.
4. If deemed necessary by FFWCC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.
5. Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.
6. Brochures containing information on gopher tortoise and bald eagle habitat, behavior and protection measures will be developed and made available to local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park).

7. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FFWCC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FFWCC. Educational signage will be placed along the trails.
8. Human access will be restricted by appropriate signage within the primary zone of the eagle nest during the nesting season. During the non-nesting season, pedestrian trails or other human use will be restricted to a minimum of 500' from the nest tree. The trail will be barricaded off by a cable across the path.
9. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed from protection areas in perpetuity.

EXHIBIT 3

AERIAL WITH FLUCFCS AND BALD EAGLE NEST

ATTACHMENT X



NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS ESTIMATED PER SFWMD ERP NO. 36-03813-P AND EXISTING SITE CONDITIONS.

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
182	GOLF COURSE	49.70 Ac.±	16.2%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	10.11 Ac.±	3.3%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	1.08 Ac.±	0.4%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	11.82 Ac.±	3.9%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	56.73 Ac.±	18.5%
4159 E1	PINE, DISTURBED (0-24% EXOTICS)	1.98 Ac.±	0.6%
4159 E2	PINE, DISTURBED (25-49% EXOTICS)	2.52 Ac.±	0.8%
4159 E3	PINE, DISTURBED (50-75% EXOTICS)	2.90 Ac.±	0.9%
4169 E1	SCRUBBY FLATWOODS, DISTURBED (0-24% EXOTICS)	58.25 Ac.±	19.0%
4169 E2	SCRUBBY FLATWOODS, DISTURBED (25-49% EXOTICS)	4.06 Ac.±	1.3%
4241	MELALEUCA, HYDRIC	15.07 Ac.±	4.9%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	2.06 Ac.±	0.7%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	2.31 Ac.±	0.8%
525	SHALLOW POND	14.17 Ac.±	4.6%
6179 E1	MIXED WETLAND HARDWOODS, DISTURBED (0-24% EXOTICS)	1.46 Ac.±	0.5%
619	EXOTIC WETLAND HARDWOODS	0.33 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	27.01 Ac.±	8.8%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	1.01 Ac.±	0.3%
6309 E2	MIXED WETLAND FOREST, DISTURBED (25-49% EXOTICS)	27.54 Ac.±	9.0%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	1.41 Ac.±	0.5%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	6.31 Ac.±	2.1%
740	DISTURBED LAND	9.06 Ac.±	3.0%
	TOTAL	306.89 Ac.±	100.0%

J:\2020\20LBR3290\2022\BALD EAGLE MGMT PLAN\EXHIBIT 3 AERIAL WITH FLUCFCS AND BALD EAGLE NEST.DWG TAB: 17X11-C JUL 06, 2022 - 10:36AM PLOTTED BY: PAULF

REVISIONS	DATE

DRAWN BY R.F.	DATE 06/29/22	
DESIGNED BY B.T.	DATE 06/29/22	
REVIEWED BY S.J.	DATE 06/29/22	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC.
Consulting Ecologists

RAPTOR BAY GOLF COURSE RENOVATION

AERIAL WITH FLUCFCS AND BALD EAGLE NEST

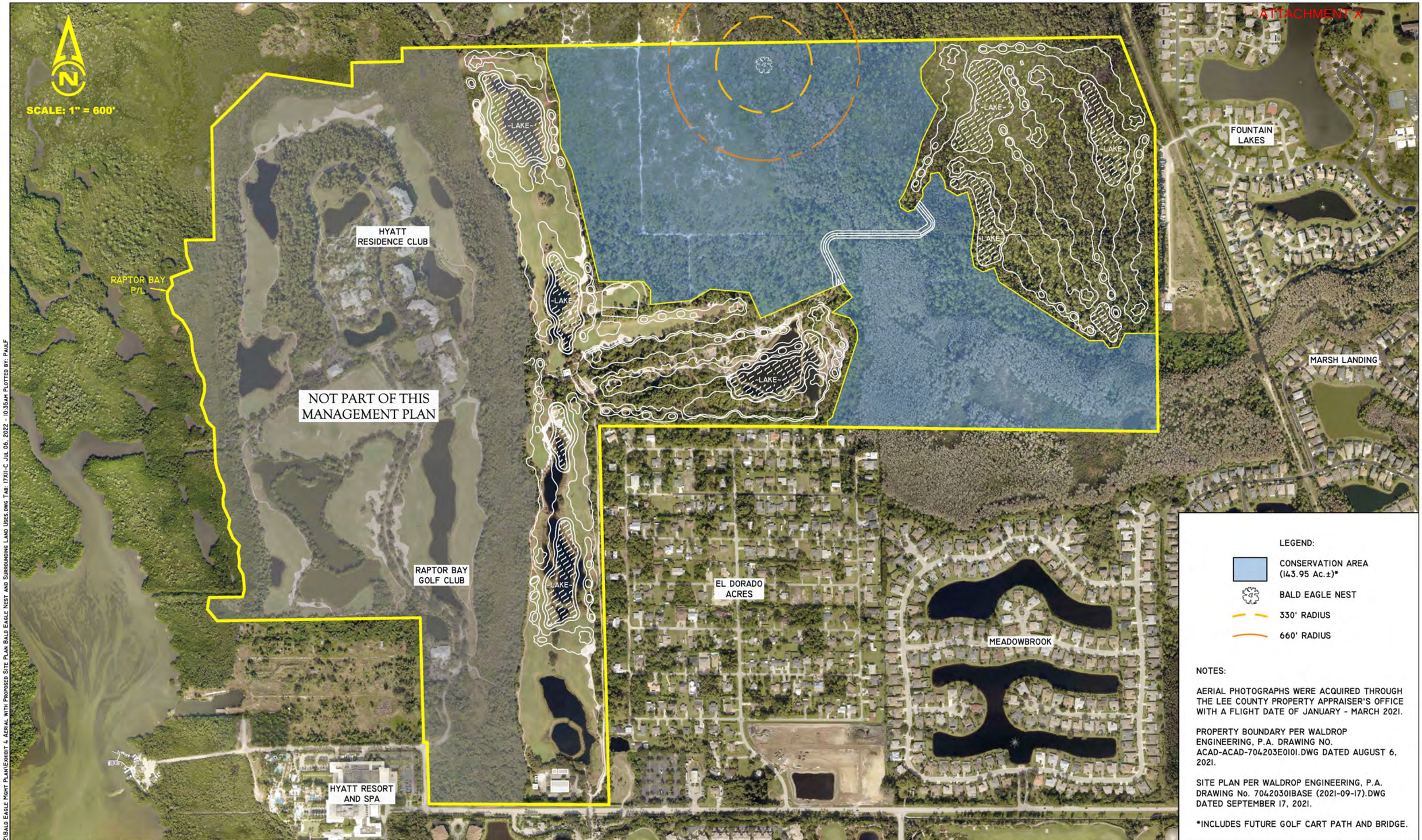
DRAWING No. 20LBR3290

SHEET No. EXHIBIT 3

EXHIBIT 4

AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES

ATTACHMENT X



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AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E0101.DWG DATED AUGUST 6, 2021.

SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING No. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.

*INCLUDES FUTURE GOLF CART PATH AND BRIDGE.

J:\2020\20LBR3290\2022\BALD EAGLE MGMT PLAN\EXHIBIT & AERIAL WITH PROPOSED SITE PLAN BALD EAGLE NEST AND SURROUNDING LAND USES.DWG TAB: 17X11-C JUL 06, 2022 - 10:35AM PLOTTED BY: PAULF

REVISIONS	DATE	DRAWN BY	DATE	13620 Metropolis Avenue Suite 200 Ft. Myers, FL 33912 Phone (239) 274-0067 Fax (239) 274-0069	PASSARELLA & ASSOCIATES INC Consulting Ecologists	RAPTOR BAY GOLF COURSE RENOVATION AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA, AND SURROUNDING LAND USES	DRAWING No.
		R.F.	06/29/22				20LBR3290
		DESIGNED BY	DATE				SHEET No.
		B.T.	06/29/22				EXHIBIT 4
		REVIEWED BY	DATE				
		S.J.	06/29/22				