DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

North River Village

Large Scale Plan Amendment
CPA2006-12

Lee County
Compiled Re-Submittal

August 2008

RECEIVED
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COMMUNITY DEVELOPMENT

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DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

August 14, 2008

Mr. Matt Noble
Principal Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

RECEIVED
AUG 25 2008
COMMUNITY DEVELOPMENT

Re: North River Village, CPA2006-12

Dear Mr. Noble:

The applicant is in receipt of the April 24, 2008 staff sufficiency comments in response to the March 6th and 17th resubmittals. The applicant has reviewed the comments, and would provide the following data and analysis in response to the comments. For your convenience, staff comments/questions are included in plain text with our responses in bold text.

In response to staff's request of providing a compiled submittal of all previous documents, updated and minimizing repetition, the applicant has structured this response as a compiled submittal. The previous submittals that are included within this package consists of information provided to staff on September 29, 2006; September 26, 2007; October 31, 2007; December 17, 2007; March 6, 2007; and March 17, 2007. The applicant appreciates the time and effort staff expended to provide the applicant with the April 24, 2008 sufficiency questions/comments.

1. Lee County Natural Resources Question Regarding FEMA Floodway

Lee County Natural Resources Division have reviewed the request and is seeking additional information. I have previously given a copy of these comments to a Bonita Bay representative. These comments provide that "On January 10, 2008, FEMA released preliminary Flood Insurance Study (FIS for Lee County that shows significantly large portion of this site lies within the floodway (Flood Insurance Rate Map No 12071C0301F). We were told that FEMA will issue a Letter of Final Determination (LFD) of the preliminary FIS by February 28, 2008." The comments then provide that the "Applicant need to resolve the floodway encroachment issue during the rezoning process and/or prior to Development Order application. The development order may not be approved if the building foundations cannot be constructed prior to the

effective date of the FIS (FIRM) amendment. Also, the floodway from the preliminary FIS needs to be shown on the site plan."

Applicant's Response

Prior to adoption of the new FEMA maps the applicant applied for a correction to the maps using hydraulic and hydrological analyses that support the lines being used for the South Florida Water Management District permit application. However FEMA was unable to process the request prior to the publication and scheduled adoption of the new FEMA maps. The applicant is preparing an updated application and analyses to file for a LOMR. The applicant intends to comply with the FEMA floodway area that is in place at the time of zoning approval. In addition to complying with FEMA and the SFWMD criteria the applicant is proposing to exceed these requirements by incorporating Low Impact Development techniques. These techniques provide additional water storage and water quality treatment opportunities. Please see Tab 12, which contains the water management analysis from the original submittal with additional water management narratives, for a more detailed discussion on both FEMA and Low Impact Development techniques.

2. Planning Comment regarding Conservation and Coastal Management

Planning staff is concerned that the request is counter to the intent of the Lee Plan as expressed in the Conservation and Coastal Management element Goal 105, Objective 105.1, and Policy 105.1.4. Goal 105 seeks to protect human life and developed property from natural disasters. Objective 105.1, in part, provides that allowable densities for undeveloped areas within coastal high hazard areas will be considered for reduction. Policy 105.1.4 is reproduced below:

POLICY 105.1.4: Through the Lee Plan amendment process, future land use designations of undeveloped areas within coastal high hazard areas will be considered for reduced density categories in order to limit the future population exposed to coastal flooding.

The applicant is seeking to essentially double the density on a site that has substantial lands within the Coastal High Hazard Area. Planning staff finds that this is inconsistent with the intent of this Policy. Planning staff notes that this issue has previously been raised by Public Safety and Emergency Management staff. The September 10th 2007 resubmittal provides that "The applicant is in the process of working with the Lee County Division of Public Safety Emergency Management to come up with a mitigation package that off sets concerns of development within the Coastal High Hazard Area." The March 6th, 2008

resubmittal includes a proposed policy, Policy 1.10.9 that speaks to this issue. Has this proposed policy been coordinated with Hendry County? How is Lee County assured that a shelter facility will be available for residents of this project? How can Lee County be assured that this shelter facility is a requirement above and beyond any shelter that is required by Hendry County for Bonita Bay development located in Hendry County?

Applicant's Response

Lee County and the federal government already have several policies in place to ensure the health, safety and welfare of the public. Any development in Lee County is required to be developed in accordance with all FEMA, South Florida Water Management District, and Lee County elevations for the first habitable floor. These regulations are designed and adopted to protect the public health, safety and welfare. The individual home sites will be elevated to a level that is consistent with all pertinent regulations. In addition, under current Lee County regulations, the development is also required to pay a mitigation fee per LDC Section 2-484. This fee was designed to off set the impacts of development in areas that are located in a Category 3 Storm Surge Zone or lower.

Policy 109.2.2 of the Lee County Comprehensive Plan further states that:

> ***"By 1995, the county will implement a program designed to meet the level of service in Policy 109.2.1 by 2010. Components of this program may include: 1. Funding of the All-Hazards MSTU; 2. An impact fee or fee in lieu for new residential developments, with appropriate credits for the construction of on-site shelters outside of category 1 areas; 3. Mandatory on-site shelters for new residential developments (including mobile home and recreational vehicle parks) over a specified size threshold and outside Category 1 areas of the Hurricane Vulnerability Zone; and 4. Any available state funds."***

In accordance with Policy 109.2.2 the County has created additional mechanisms for funding of improvements to off set the impacts on hurricane evacuation times from development. In 1991 Lee County adopted the All-Hazards MSTU. The specific purpose of the MSTU, as stated in the "where as" clauses of the ordinance, was to implement this policy in the Lee Plan (under a different number at the time). The proposed development will generate additional revenues for the County for the All-Hazards MSTU. Currently the All-Hazards MSTU is funded at a millage rate of 0.0693. The increase in density will clearly provide an incremental increase in the net amount of money that Lee County will receive annually for this fund. The total valuation of all units on the property will increase with the increase in density. This increase in annual funding, combined with the increase in

mitigation fees that the County will receive Per LDC Section 2-484 by definition is designed to address development in the Category 1-3 areas. Based on total unit count the existing mitigation fee per Section 2-484 will generate an estimated $185,000. In addition to that money the attached Fiscal Impact Analysis shows that the All Hazards Tax will generate over $1.5 million dollars in revenues for hazard mitigation.

The applicant is sensitive to the staff's concerns and has been intent on providing a proposal that will go above and beyond simply mitigating for the impacts of the proposed development. The applicant has had meetings with Lee County EMS, Lee County Planning staff, Regional Planning Council staff, and the Hendry County Emergency Management Services Director to explore ideas on what this development can do to provide a regional evacuation benefit over and above Lee County's requirements.

The Regional Planning Council staff found that the intersection of SR 29 and SR 80 was a choke point for evacuation during the 2004-2005 hurricane events. These events also highlighted the short fall of hurricane shelters in the region. The applicant sees this as an opportunity to provide an additional public benefit by providing a hurricane shelter. Through the Planned Development zoning process the details of the hurricane shelter or any other preferred option will be determined. The commitment to go above and beyond is based on obtaining approval for 2,500 residential units and 150,000 square feet of commercial development.

A building of sufficient size would be hardened to accommodate, at a minimum, the North River Village residents based on Lee County's needs calculation (below). As part of the condition, the Developer must provide documentation to demonstrate to residents of Lee County, and this development in particular, will be able to use the shelter. The condition also would include minimum size requirements based on the impacts of this development and construction standards that, at minimum, meet the approval of Lee County. To provide flexibility the shelter may be located in Lee, Charlotte or Hendry Counties. Please see Section I TAB 2 for the revised text amendment adding language to address these issues.

One of the locations under consideration is a property owned by the applicant located in the City of Labelle. The property was recently approved as a Development of Regional Impact. The South Labelle Village DRI is not required to provide a hurricane shelter because it is not within a storm surge zone that would require mitigation. To show that a hurricane shelter is not required for the South Labelle Village DRI we have attached a copy of the adopted DRI Development Order in Section II TAB 1.

Below is a calculation of the minimum amount of space needed based on the County's methodology contained in LDC Section 2-484. Our understanding is that the mitigation will need to provide for the minimum space requirements based on these calculations. The building to be used for sheltering purposes can be a commercial building, a school, a YMCA or other suitable structure that is improved and equipped so it can be used as a regional shelter. The regional shelter will provide sufficient space to meet the required mitigation identified below.

Additional Residential Density: 1,500 units X 2.31 people per unit = 3,465 people

3,465 people X .21 rate of seeking shelter = 728 shelter spaces needed

728 shelter spaces X 20 square feet per space = 14,560 square feet of shelter area.

As a point of comparison, a typical elementary school is approximately 125,000 square feet of floor area under air. While most of this will not be used during a storm event, hardening an elementary school will provide for significantly more usable space than 14,560.

In addition to the typical mitigation requirements and the regional benefit provided by creating a regional shelter, the applicant is also making key road improvements based on this plan amendment that will assist in evacuation in a hurricane event. These include two intersection improvements, at State Road 80 and Buckingham Road and State Road 80 and State Road 31, as well as the four laning of State Road 31 from the project entrance south to State Road 78.

Mitigating for impacts in the Coastal High Hazard area is clearly an option that is provided for in the Florida Statutes and an option that corresponds to sound planning principles. In 2005 the Florida Legislature created a state task force to examine this very issue and come up with recommendations on how to address density within the Coastal High Hazard Area. The goal of the task force, called the Coastal High Hazard Study Committee, following a hurricane season with 4 storms that made landfall in Florida, was to find creative ways to find planning solutions for hurricane evacuation and construction of shelters. The end product of the Task Force was to pass legislation that provided for mitigation options where developers proposed to increase density within the Coastal High Hazard Area.

North River Village and Verandah land use Re-designations

In addition to the mitigation that aims to provide a net benefit to hurricane evacuation beyond that needed for the increase in density, the applicant is proposing a simultaneous *decrease* on the future land use map for their project Verandah, which is also partially located in the Coastal High Hazard area (see the response to Question E.1. and Section I TAB 15). The effect of decreasing their entitlement on the future land use map would mean that the map would represent a net *decrease* in units within the coastal high hazard area. The table below shows the total amount of each property that is located within the coastal high hazard area, the gross change in density for those areas and the net decrease on the future land use map of units within the coastal high hazard area.

Density Tradeoff Within the Coastal High Hazard Area			
	Density Change	Acres	Units
North River Village	Plus 1.5 du/acre*	614	921
Verandah	Minus 4 du/acre	253	-1012
Total Increase/Decrease			-91

*The net effect of the change

In conclusion, the applicant will be paying the All Hazards Tax, paying the shelter mitigation fee, providing an off-site regional shelter that acts as a benefit to the County over and above mitigating for project impacts, and providing road improvements that improve two hurricane evacuation corridors. The mitigation that is being paid aims to provide a net benefit to the county despite the increase in density at the North River Village property, even though the overall effect on the future land use map will be a net *decrease* with the change to the future land use category on the Verandah property.

Comment

The Natural Resources Division comments also provide that "Old aerial photos indicate there exists a potential historical flow-ways connecting Otter Creek and the cow ponds at the northeast corner of the site. Therefore, additional filed (sic, should be field) investigation (including hydrological reconnaissance and/or survey) is recommended to determine whether or not a subsequent restoration plan for historical lows (and wildlife corridor) is necessary."

Response

The applicant has field surveyed the property to ascertain whether or not there is a potential historic flowway connecting Otter Creek and the cow

ponds at the northeast corner of the site. It has been determined that there are challenges to creating a flowway, such as existing drainage patterns, spoil, and elevations. However, please see the description from Andy Tilton, PE, at Johnson Engineering, Section I TAB 12, which explains how providing for some drainage flow in this area could be accomplished.

Comment

The Division of Environmental Sciences have provided review comments dated March 7, 2008. I have previously provided a copy of these comments to a Bonita Bay Representative. The comments were provided prior to their review of the March 6, 2008 resubmittal, so I will not cover issues raised in their comments that were addressed by the March 6 resubmittal. These comments provide that "The Preliminary Gopher Tortoise Management Plan (PGTMP) has a conversion factor of 0.4 tortoises for every burrow. According to Florida Fish and Wildlife Conservation Commission (FWC) guidelines the conversion factor to use is 0.614. This is a difference of 64 tortoises (0.4 X 300 = 120; 0.614 X 300 = 184). Please revise to reflect the FWC guidelines of 0.614 per burrow."

Response from Passarella and Associates

The Florida Fish and Wildlife Conservation Commission (FWCC) has historically used a conversion factor of 0.614 for determining gopher tortoise populations based on active and inactive gopher tortoise burrows. However, the FWCC has accepted different conversion factors based on specific geographic locations and data from other relocation efforts. As such, the FWCC has previously accepted a gopher tortoise conversion factor of 0.4 for Southwest Florida. However, the new FWCC Gopher Tortoise Permitting Guidelines (Guidelines) published in April 2008 reference a standardized conversion factor of 0.5 for the entire State of Florida for reporting gopher tortoise populations. Therefore, the project will utilize the new standardized conversion factor of 0.5 for determining the gopher tortoise population on-site.

A Lee County Protected Species Survey was conducted on the site and 298 gopher tortoise burrows were identified. Using the new standardized conversion factor of 0.5, approximately 149 gopher tortoises exist on-site (298 x 0.5 = 149). Per the Guidelines, the maximum density for a gopher tortoise preserve area is 4 gopher tortoises per acre; therefore, approximately 37 acres of preserve is needed to accommodate all the gopher tortoises on-site (149/4 = 37.25). The proposed gopher tortoise relocation area in the central portion of site provides approximately 42 acres of preserve which can accommodate the entire gopher tortoise population on-site, if needed. In addition, the berm where numerous gopher tortoise

burrows are located in the southeast corner of the site will be preserved if determined to be suitable habitat by the FFWCC.

The calculations referenced above are consistent with the current FFWCC guidelines. However, the developer must comply with the guidelines that are in effect at the time of FFWCC review concerning the protection and management of gopher tortoises.

Lee County staff has requested a small rectangular polygon of pine flatwoods habitat be preserved in the northeastern portion of the project due to the fact it contains a small population of gopher tortoises. However, preserving this small area would isolate the existing gopher tortoises in this portion of the property from the overall population onsite. The September 2007 FWCC Gopher Tortoise Management Plan (Plan) identifies several conservation goals concerning habitat preservation including large preserve areas of greater than or equal to 40 acres; increase habitat connectivity; preserve uplands with adjoining or integrated wetland communities to provide habitat for burrow commensals; and restocking gopher tortoise to restore depleted populations. The preservation of the small pine flatwood area in the northeast portion of the project site would not be consistent with these objectives. The gopher tortoise preserve as currently proposed is consistent with these objectives.

Comment

The review memo also contains the following:

Please address the following language and policies for River Village Land Use Category

Applicant stated in the PGTMP that the 20 acre scrub oak habitat located in the central portion of the property will be set aside as a Gopher tortoise preserve. Using FWC guidelines, high quality habitat has a maximum density of 4 tortoises per acre; with approximately 184 tortoises located onsite, the applicant must provide at least 46 acres of high quality habitat as gopher tortoise preserve. Please provide a policy that establishes at least a 46 acre gopher tortoise preserve per FWC guidelines and requires dedication of a conservation easement to Lee County prior to zoning approval.

Response from Passarella and Associates

Any dedication of a conservation easement to Lee County will occur at or about the time the local development order is issued for the conservation area subject to the development order. The property owner should not be

required to create conservation easements prior to the BOCC taking action on the zoning because that is when the development parameters will be established. As discussed above, the proposed gopher tortoise relocation area contains approximately 42 acres which can accommodate the entire gopher tortoise population, if needed. In addition, the 5± acre berm where numerous gopher tortoise burrows are located in the southeast corner of the site (proposed secondary gopher tortoise preserve) will be preserved if the FFWCC finds the area to be suitable habitat for gopher tortoises. The applicant must comply with the FFWCC guidance. Policy 1.10.23 was added to the River Village Land Use Category to address the protection of gopher tortoise and their habitat.

Comment

According to FWC, applicants providing onsite Gopher Tortoise Preserves must propose long term management measures. Does the applicant propose long term management measures to ensure the viability of the gopher tortoise habitat? Please include policy language to ensure the onsite preservation of gopher tortoise habitat. Be advised that the indigenous preserve referenced below may be suitable to achieve the necessary gopher tortoise preserve requirement.

Response from Passarella and Associates

Long term management of the gopher tortoise preserve will be addressed through implementation of a gopher tortoise habitat management plan. Policy 1.10.23 was added to the River Village Land Use Category to address the protection of gopher tortoises and their habitat.

Conservation Map

The proposed Future Land Use Map, Section I TAB 3, was revised to reflect the surveyed property boundary and to include additional preserve areas as within the Conservation land use category. Due to the surveying of the boundary, specifically adjacent to the mean high water line (MHWL), a significant amount of wetland and "other surface water" conservation lands are no longer shown on the map since these areas are below the MHWL and as such are located on state owned lands. Additional wetland conservation lands were removed due to the State Road (SR) 31 proposed Right-of-Way (ROW). However, additional wetland conservation lands were provided throughout the project site.

Through extensive conversations with staff, the applicant has reevaluated the property and is prepared to commit to significantly increase the areas of

land proposed for the Conservation land use category. The total wetland conservation land acreage has increased to approximately 187± acres. A considerable amount of uplands were also added to the conservation lands throughout the property, specifically adjacent to wetland preserves and in areas specifically identified by staff. The total upland conservation land acreage now totals 125± acres which is a 60± acre increase from the previous submittal. The revised boundary also shows that there are approximately 10 acres or "other surface waters" that are part of the property acreage, but will be added to Conservation.

In addition to the agreed upon Conservation areas, the applicant is proposing to create an exhibit and policy language in the plan amendment that would guide the preservation of additional areas. The new exhibit combines the Conservation areas with areas that area proposed as 50 foot and 100 foot buffers to surrounding properties, recreated flowways, and "special treatment areas" where specific requirements are proposed for heritage tree preservation or relocation. The Special Treatment Areas are intended for development and water management facilities. The goal of these areas is to incorporate indigenous vegetation and trees into the development areas. The attached exhibit shows that in addition to the 322 acres of Conservation lands there will be an additional 23 acres of no build areas and 67 acres of uplands that will have special treatment. The proposed Lee Plan Amendment would therefore require significantly more preservation than other Lee County developments, both through these designations and the policy commitment of an increased preservation requirement.

Comment

Policy 1.10.4 Each River Village community will be required to provide an overall 50% on site open space as defined and calculated in Chapter 10-416 of the Lee County Land Development Code. Individual pods, tracts, and parcels will be designed and developed with a minimum of 10% open space to facilitate the clustering of uses. Developments with indigenous native vegetative communities must provide 30% of total project acreage as indigenous native vegetative communities.

Please revise policy to incorporate the preservation of 30% of total project acreage as indigenous native vegetative communities.

Response

Based on the above suggested change and conversations with staff, the applicant revised the text amendment to include language that requires the

developer to provide an increase in the indigenous preservation requirement. The applicant has changed the policy to now state that in addition to the overall increase in the Open Space requirement (from 40% to 50%) the applicant will also further increase the indigenous requirement from 50% of the Open Space acreage (per LDC Section 10-415) to 60% of the open space requirement. The revised policy now states, "Large developments, with existing indigenous native vegetation communities must provide 60 percent of their open space percentage requirement through the onsite preservation of existing native vegetation communities."

Comment

Policy 1.10.14 ES staff does not support the applicants proposed language and recommends the policy be revised to state: Use of drip irrigation for landscaping and the clustering of non-drought tolerant plants separate from drought tolerant plants to limit irrigation areas.

Response

We have added the following 2 requirements to further promote water conservation through this text amendment.

· Required common area landscaping will be clustered to separate non-drought tolerant plants from drought tolerant plants to limit areas requiring full permanent irrigation.

· Drip irrigation will be used on all common area trees and palms in order to more efficiently use irrigation water.

Comment

Policy 1.10.20.10 Please remove "where possible" text language from the following proposed policy.

Buffer zones for wetlands and natural waterways will be used to avoid where possible potential adverse effects upon ground and surface water quality, including any Outstanding Florida Waters, Wild and Scenic Rivers, Florida Aquatic Preserves, or Florida Class 1 or 2 waters that occur within, abutting, or downstream of site.

Response

The applicant has removed this language. Please see the attached revised text amendment, Section I tab 2. The "where possible" language was intended to address the applicant's concern that road and infrastructure crossings would be precluded by this policy. Therefore we have also added language stating that, "Access through wetlands and natural waterways is permitted to provide for infrastructure, road crossings, decks and docks."

Comment

Comments relating to specific sections of the application are provided below:

Section I

Applicant: The applicant listed in the application is North River, LLC while the majority of the property to be included in the plan amendment is under the ownership of North River Communities, LLC. The affidavit in the application is signed by Katherine Green, Vice President of Resource Conservation Properties, Inc., managing member of North River Communities, Inc. Staff is unable to confirm through a search with the Florida Division of Corporations that Katherine Green is listed under the North River, LLC., although Katherine Green is listed under Resource Conservation Properties, Inc. In addition, staff has not been able to confirm that North River Communities, Inc. is a registered entity with the Florida Division of Corporations. Please provide documentation verifying consent.

Response

The ownership of the property is addressed in an attached warranty deed from Resource Conservation Properties, Inc. to North River Communities, LLC. Please see Section I TAB 6, which includes the deed and other ownership documentation. Resource Conservation Properties is the Managing Member of North River Communities, LLC and Katherine Green is an authorized signatory of Resource Conservation Properties.

Comment

Section III

A. 2. The list of STRAP numbers provided as part of the application does not include several parcels within the project boundaries, such as 17-43-26-01-00001.0000 and 17-43-26-01-00002.0000 (as well as others). Please review the

list of STRAP numbers provided and update the list to include all parcels within the project boundaries.

Response

Please see Section I TAB 1 for the revised list of STRAP numbers.

Comment

Section IV

A.5. The legals included can not be verified. The description uses vague calls.

For example: following the mean high water line of an oxbow in the Caloosahatchee River, a line described in another document for a conservation easement.

A legal should be included that uses one of Lee County GIS's "verified section corners" or provides a state plane coordinate for the Point of Commencement as well as the State Plane Coordinates for the Point of Beginning and an opposite corner.

There are, apparently, 8 parcels included in this request. They should all have common starting points or each have a State Plane Coordinate for its point of beginning to ensure that they are correctly designated on the Future Land Use Map.

Before the adoption hearing, a legal for each Future Land Use category should be provided using the same criteria.

Response

Please see Section I TAB 5, the revised boundary survey for the entire property. A legal description for each land use category will be provided to the county prior to adoption.

Comment

A.9. This item requires, a letter from the owner of the property authorizing the applicant to represent the owner if applicant is not the owner. STRAP number 19-43-26-00-00006.0010 does not list the applicant as the owner of the parcel through the property appraiser's website. Please provide proof of ownership or provide consent from the current property owner.

Response

Please see the attached proof of ownership, Section I TAB 6.

Comment

B2. The applicant has not submitted the required data and analysis regarding the availability of potable water service. There is insufficient data and analysis regarding the level of service for potable water required by, or available to, the subject property. The data should include current and projected future potable water plant capacity. Please determine the availability of water supply to support the desired level of development within the franchise area using the current water use allocation (Consumptive Use Permit) based on the annual average daily withdrawal rate. Include the current demand and the projected demand under the existing designation, and the projected demand under the proposed designation. Include the availability of treatment facilities and transmission lines for reclaimed water for irrigation. Include any other water conservation measures that will be applied to the site (see Lee Plan Goal 54). Planning staff notes that the above comments reflect revised requirements due to changes in Florida Statutes.

The applicant has not submitted data and analysis regarding the availability of sanitary sewer service. The applicant has not submitted a letter of availability of service from the sanitary sewer services provider. There is insufficient data and analysis regarding the level of service for sanitary sewer required by, or available to, the subject property. The data should include current and projected future sanitary sewer plant capacity. Staff is requesting a general update concerning the provision of this service.

Response

The data and analysis regarding the availability of potable water service is provided hereto as Section I TAB 11. The development will be subject to Lee Plan Goal 54, and the Developer will encourage the residents to participate in the educational programs to be provided by Lee County pursuant to Objective 54.1. and Policy 54.1.1. The existing River Village policies include policies that implement policy 54.1.2. regarding the use of native and drought tolerant landscaping. The development will be subject to any conservation rate structure adopted for private utilities pursuant to Policy 54.1.5. The development will be subject to Policy 54.1.6. which requires the county to update development regulations.

Also included in this submittal is a letter of availability and Capacity Analysis from North Fort Myers Utility, Section I TAB 11, and recent correspondence from Lee County Utilities on the projected capacity of potable water , Section 1 TAB 11. According to the service providers, the water use permit for Lee County Utilities and the analysis provided to us by North Fort Myers Utilities, there is sufficient planned capacity to accommodate the proposed development at the requested density/intensity.

Comment

B3. Please provide the required letter from the emergency medical service (EMS) provider.

Response

Please see Section 1 TAB 10 for the required letter from the EMS provider.

Comment

E1. The applicant has not supplied data and analysis to show how the proposed amendment will affect Table 1(b) of the Lee Plan. The amendment should also propose revisions to Table 1(b) or no development will be achievable. These revisions may not increase the overall population accommodation for the County as a whole.

Response

In the first sufficiency response a proposed amendment to Table 1b was proposed as part of the text amendment. Please see the attached revised text amendment, Section I TAB 2 (page 15) which now includes all sections of the text of the Lee Plan that are proposed for amendment.

On March 17, 2008, the applicant provided an analysis conducted by Fishkind and Associates on population accommodation. The analysis indicated that there is currently an under allocation of population in the Alva planning community and that the proposed amendment is consistent with accepted state-wide planning practices with regard to accommodating density. Please also refer to the past responses on this issue.

The applicant has also included an analysis that identifies available unused population at Verandah, Section I TAB 7. The applicant will agree to amend the FLUM to Outlying Suburban, so long as the population can be used at North River Village. Under the current land use category, the future land use

map shows a maximum of 6 dwelling units per acre. While the MPD is currently permitted for a total of 1,700 residential dwelling units, the property could request to increase the number of units, consistent with the Suburban land use category. This has been done before when in 2005 Bonita Bay Group increased the density of the MPD from 1,500 units to 1,700 units. Changing the land use category at Verandah would remove that right to the full density allowed in this land use category. A proposed revised future land use map depicting this idea is being included in Section I TAB 7.

Comment

Staff also requests that all of the proposed changes to the Lee Plan be pulled together into one section in the application. The March 6th 2008 submittal included proposed modifications to the footnotes to "Table 1A" and Policy 36.1.1 in a summary discussion section of the submittal but then the section with all of the other proposed changes did not include these proposed modifications. Planning staff also notes that additional comments related to Transportation may be forth coming as the Lee County Department of Transportation has not finalized their review of the March 6th materials.

Response

The applicant has compiled the text amendment to include all sections of the Lee Plan that are requested for amendment in one document. Please see the attached revised text amendment, Section 1 TAB 2. Tab 3 contains all of the proposed map amendments.

Additional Changes to Text Amendment

In addition to the above information, the applicant has made the following revisions to the proposed text amendment:

1. Policy 1.10.2. The applicant deleted the last sentence, which stated, "Further, any development extending from County Road 78 to State Road 80 east of I-75 that is over 200 acres in area and requests an increase in density, must be zoned and developed in compliance with the River Village land use category."

The original intent of the River Village land use category was to provide a category that could be used in other locations. The level of environmental, planning, drainage, and landscaping performance standards mandated in this land use category are appropriate in other locations where comprehensive plan amendments are sought to increase density in proximity to the river. This language was originally added because of a concern that this amendment would

create a precedent for future plan amendments to increase density, but the future amendments would not come with the same level of protection.

However, this policy has caused significant confusion within the Alva community. Residents have publicly represented that this policy effectively extends the requested amendment over the entire area from CR 78 to SR 80 from I-75 to the County line. This was not the intent. To address the concern and confusion created by this text, the language is being removed.

2. Policy 1.10.9 - In addition to the Lee and Hendry Counties, we have added the option of locating a regional hurricane evacuation shelter to an area of southeastern Charlotte County that would accommodate the increase in units. The provision of a regional shelter may be done in partnership with another local government or private landowner, as long as sufficient space is available for the hurricane shelter needs of the North River village. We have also added additional language in response to our discussions with staff to better define the timing of determining the mitigation options and add assurance that the mitigation option would be available for residents of Lee County.

3. Policy 1.10.13 - We have added a policy to guide the permitted height(s) and the location of height above 35 feet on the property. This is necessary because the land development code does not have any specific language regarding this land use category and default language could apply. It is best to clarify the height for the River Village. The height will be limited to 35 feet for residential structures abutting existing off site single family residences. In order to create more compact development and preserve native areas, the height is limited to 85 feet in other areas. The greater heights will be located around the marina waterfront areas.

4. We have deleted Policy 1.10.8. Our understanding is that with the drop in the market values of homes, this issue is not as pressing. By allowing the increase in density, the applicant will be able to provide a variety of housing opportunities on site.

5. We have added Policy 1.10.25 to specifically state the total number of units allowed on this property. At this point in time, creating an entirely generalized land use category is no longer needed.

6. We have made a series of non-substantive changes to the text policies to make them clearer.

Additional Items in the Compiled Submittal:

- As part of this submittal we have also included a packet of information that describes the environmental programs that are being committed to as part of this application Section II, Tab 3.

- It is also our understanding that staff continues to be concerned with the idea of changing property from a "rural" designation to an "urban" designation. While the applicant understands this concern, it is also important to understand that this property has better access to urban infrastructure than many properties within "urban" land use designations in the Lee Plan. The property is also already designated for 1 dwelling unit per acre, a distinctly suburban density, not a rural density, similar to River Hall and Verandah. Two dwelling units per acre is also a suburban density similar to The Brooks and Bonita Bay. The idea that going from 1 to 2 dwelling units per acre changes the development pattern of the property from a rural style to an urban style is simply not accurate. Finally, similar to Downtown Alva, it is common to have nodes or centers of higher density within rural areas to create a sense of place and a community destination point. Our neighbors in North Olga have expressed an interest in and support for locating that destination point on this property, a property at the intersection of two state roads with an existing industrial marina. Please see Section I, Tab 7 for previously submitted narrative on this issue. Creating a destination and sense of place is an aspect of this proposed development that the applicant feels strongly about.

- The applicant has retained Fishkind and Associates to conduct a fiscal and economic impact analysis for the project. Similar to past projects by the applicant, the North River Village project is projected to have a significantly net positive economic impact on Lee County, both with direct fiscal benefits to the county and with secondary economic impacts and job creation opportunities. The direct fiscal impact of this project is projected to be a net benefit of over $28 million over the next 20 years. In addition, and certainly equally as important given today's economy is the general benefit to the local economy and the creation of employment. The North River Village development is projected to create approximately 2,900 direct jobs and 551 indirect jobs on average over the next 20 years. Total sales and earnings that will be produced from this development is projected to be nearly $240 million and $94 million respectively. We have included the Fiscal and Economic Impact study in the submittal as Section II, Tab 2.

- We have included a series of character sketches/vignettes of different aspects of the project. The sketches depict the applicant's vision for the

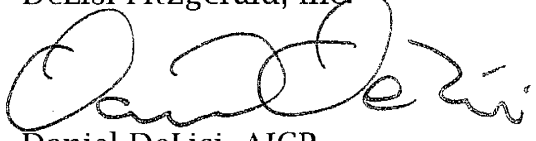
development, including the rural edge protection area, the marina village and other elements that both create a sense of place and enhance the character of the North Olga community. See Section II Tab 4.

Transportation

On June 4th 2008 Lee County sent an e-mail to the applicant stating their concurrence with the transportation mitigation (Section I, Tab 17). The proposed mitigation provides funding of road improvements on SR 31 and the intersections of SR 31 and SR 80 and SR 80 and Buckingham roads. A Developer Contribution Agreement is being formulated to reflect this agreement. The intent is to adopt the DCA at or about the same time as the adoption of the comp plan amendment. The intent is to cap the number of units that are able to be constructed based on the current density until the road improvements are made.

If you should require any additional information, please contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.



Daniel DeLisi, AICP
Principal
DD/av
Project No.: 21023

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

North River Village
Large Scale Plan Amendment
CPA2006-12

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4 Character Sketches/ Vignettes

SECTION III: Previously Submitted Response Letters

LEE COUNTY
SOUTHWEST FLORIDA

Lee County Board of County Commissioners
Department of Community Development
Division of Planning
Post Office Box 398
Fort Myers, FL 33902-0398
Telephone: (239) 479-8585
FAX: (239) 479-8519

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT

(To be completed at time of intake)

DATE REC'D _____ REC'D BY: _____

APPLICATION FEE _____ TIDEMARK NO: _____

THE FOLLOWING VERIFIED:
Zoning ☐ Commissioner District ☐

Designation on FLUM ☐

(To be completed by Planning Staff)

Plan Amendment Cycle: ☐ Normal ☐ Small Scale ☐ DRI ☐ Emergency

Request No: _____

APPLICANT PLEASE NOTE:
Answer all questions completely and accurately. Please print or type responses. If additional space is needed, number and attach additional sheets. The total number of sheets in your application is: _____

Submit **6** copies of the complete application and amendment support documentation, including maps, to the Lee County Division of Planning. Additional copies may be required for Local Planning Agency, Board of County Commissioners hearings and the Department of Community Affairs' packages.

I, the undersigned owner or authorized representative, hereby submit this application and the attached amendment support documentation. The information and documents provided are complete and accurate to the best of my knowledge.

9-25-06 Katherine C
DATE SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE

I. APPLICANT/AGENT/OWNER INFORMATION

North River, LLC Attn: Dennis Church
APPLICANT

9990 Coconut Road, Suite 200
ADDRESS

Bonita Springs	FL	34135
CITY	STATE	ZIP

239-495-1000	
TELEPHONE NUMBER	FAX NUMBER

Daniel DeLisi, AICP DeLisi Fitzgerald, Inc
AGENT*

1500 Royal Palm Square Blvd. Suite 101
ADDRESS

Fort Myers	FL	33919
CITY	STATE	ZIP

239-418-0691	239-418-0692
TELEPHONE NUMBER	FAX NUMBER

See attached List
OWNER(s) OF RECORD

ADDRESS

CITY	STATE	ZIP

TELEPHONE NUMBER	FAX NUMBER

Name, address and qualification of additional planners, architects, engineers, environmental consultants, and other professionals providing information contained in this application.

* This will be the person contacted for all business relative to the application.

II. REQUESTED CHANGE (Please see Item 1 for Fee Schedule)

A. TYPE: (Check appropriate type)

[x] Text Amendment

[x] Future Land Use Map Series Amendment (Maps 1 thru 20)
List Number(s) of Map(s) to be amended

B. SUMMARY OF REQUEST (Brief explanation):

Change the Future Land Use Designation of the subject property from Rural to "River Village" and Conservation. Propose a corresponding text amendment, to guide the growth in the River Village land use category. A Simultaneous amendment is being proposed to change the Future Land Use Category for Verandah from Suburban to Sub-Outlying Suburban. Amendments are being proposed to the Capital Improvements Element to provide funding for the road network, to the Utility Service Area maps and to the 2030 Population Allocation Table (1a).

III. PROPERTY SIZE AND LOCATION OF AFFECTED PROPERTY (for amendments affecting development potential of property)

A. Property Location:

1. Site Address: See Attached List
2. STRAP(s): See Attached List

B. Property Information

Total Acreage of Property: 1,232.5 acres

Total Acreage included in Request: 1,232.5 acres

Area of each Existing Future Land Use Category: 1,232.5 acres

Total Uplands: 988.9 +/- acres

Total Wetlands: 232 +/- acres +/- and 11.6 acres of natural waterways

Current Zoning: AG-2

Current Future Land Use Designation: Rural, Wetlands

Existing Land Use: Agricultural and industrial marina

C. State if the subject property is located in one of the following areas and if so how does the proposed change effect the area:

Lehigh Acres Commercial Overlay: N/A

Airport Noise Zone 2 or 3: N/A

Acquisition Area: N/A

Joint Planning Agreement Area (adjoining other jurisdictional lands): N/A

Community Redevelopment Area: N/A

D. Proposed change for the Subject Property:
Designate the subject property in the River Village land use category.

E. Potential development of the subject property:

1. Calculation of maximum allowable development under existing FLUM:

Residential Units/Density	1,000
Commercial intensity	30,000 square feet
Industrial intensity	Existing Maina

2. Calculation of maximum allowable development under proposed FLUM:

Residential Units/Density	2,500
Commercial intensity	150,000
Industrial intensity	

IV. AMENDMENT SUPPORT DOCUMENTATION

At a minimum, the application shall include the following support data and analysis. These items are based on comprehensive plan amendment submittal requirements of the State of Florida, Department of Community Affairs, and policies contained in the Lee County Comprehensive Plan. Support documentation provided by the applicant will be used by staff as a basis for evaluating this request. To assist in the preparation of amendment packets, the applicant is encouraged to provide all data and analysis electronically. (Please contact the Division of Planning for currently accepted formats)

A. General Information and Maps
NOTE: For each map submitted, the applicant will be required to provide a reduced map (8.5" x 11") for inclusion in public hearing packets.

The following pertains to all proposed amendments that will affect the development potential of properties (unless otherwise specified).

1. Provide any proposed text changes.

2. Provide a Future Land Use Map showing the boundaries of the subject property, surrounding street network, surrounding designated future land uses, and natural resources.

3. Map and describe existing land *uses* (not designations) of the subject property and surrounding properties. Description should discuss consistency of current uses with the proposed changes.

4. Map and describe existing zoning of the subject property and surrounding properties.

5. The legal description(s) for the property subject to the requested change.

6. A copy of the deed(s) for the property subject to the requested change.

7. An aerial map showing the subject property and surrounding properties.

8. If applicant is not the owner, a letter from the owner of the property authorizing the applicant to represent the owner.

B. Public Facilities Impacts
NOTE: The applicant must calculate public facilities impacts based on a maximum development scenario (see Part II.H.).

1. Traffic Circulation Analysis
The analysis is intended to determine the effect of the land use change on the Financially Feasible Transportation Plan/Map 3A (20-year horizon) and on the Capital Improvements Element (5-year horizon). Toward that end, an applicant must submit the following information:

Long Range – 20-year Horizon:

a. Working with Planning Division staff, identify the traffic analysis zone (TAZ) or zones that the subject property is in and the socio-economic data forecasts for that zone or zones;
b. Determine whether the requested change requires a modification to the socio-economic data forecasts for the host zone or zones. The land uses for the proposed change should be expressed in the same format as the socio-economic forecasts (number of units by type/number of employees by type/etc.);

c. If no modification of the forecasts is required, then no further analysis for the long range horizon is necessary. If modification is required, make the change and provide to Planning Division staff, for forwarding to DOT staff. DOT staff will rerun the FSUTMS model on the current adopted Financially Feasible Plan network and determine whether network modifications are necessary, based on a review of projected roadway conditions within a 3-mile radius of the site;
d. If no modifications to the network are required, then no further analysis for the long range horizon is necessary. If modifications are necessary, DOT staff will determine the scope and cost of those modifications and the effect on the financial feasibility of the plan;
e. An inability to accommodate the necessary modifications within the financially feasible limits of the plan will be a basis for denial of the requested land use change;
f. If the proposal is based on a specific development plan, then the site plan should indicate how facilities from the current adopted Financially Feasible Plan and/or the Official Trafficways Map will be accommodated.

Short Range – 5-year CIP horizon:

a. Besides the 20-year analysis, for those plan amendment proposals that include a specific and immediated development plan, identify the existing roadways serving the site and within a 3-mile radius (indicate laneage, functional classification, current LOS, and LOS standard);
b. Identify the major road improvements within the 3-mile study area funded through the construction phase in adopted CIP's (County or Cities) and the State's adopted Five-Year Work Program;

Projected 2020 LOS under proposed designation (calculate anticipated number of trips and distribution on roadway network, and identify resulting changes to the projected LOS);

c. For the five-year horizon, identify the projected roadway conditions (volumes and levels of service) on the roads within the 3-mile study area with the programmed improvements in place, with and without the proposed development project. A methodology meeting with DOT staff prior to submittal is required to reach agreement on the projection methodology;
d. Identify the additional improvements needed on the network beyond those programmed in the five-year horizon due to the development proposal.

2. Provide an existing and future conditions analysis for:
   a. Sanitary Sewer
   b. Potable Water
   c. Surface Water/Drainage Basins
   d. Parks, Recreation, and Open Space.

   Analysis should include (but is not limited to) the following:
   - Franchise Area, Basin, or District in which the property is located;

- Current LOS, and LOS standard of facilities serving the site;
- Projected 2020 LOS under existing designation;
- Projected 2020 LOS under proposed designation;
- Improvements/expansions currently programmed in 5 year CIP, 6-10 year CIP, and long range improvements; and
- Anticipated revisions to the Community Facilities and Services Element and/or Capital Improvements Element (state if these revisions are included in this amendment).

3. Provide a letter from the appropriate agency determining the adequacy/provision of existing/proposed support facilities, including:
   a. Fire protection with adequate response times;
   b. Emergency medical service (EMS) provisions;
   c. Law enforcement;
   c. Solid Waste;
   d. Mass Transit; and
   e. Schools.

In reference to above, the applicant should supply the responding agency with the information from Section's II and III for their evaluation. This application should include the applicant's correspondence to the responding agency.

C. Environmental Impacts

Provide an overall analysis of the character of the subject property and surrounding properties, and assess the site's suitability for the proposed use upon the following:

1. A map of the Plant Communities as defined by the Florida Land Use Cover and Classification system (FLUCCS).

2. A map and description of the soils found on the property (identify the source of the information).

3. A topographic map with property boundaries and 100-year flood prone areas indicated (as identified by FEMA).

4. A map delineating wetlands, aquifer recharge areas, and rare & unique uplands.

5. A table of plant communities by FLUCCS with the potential to contain species (plant and animal) listed by federal, state or local agencies as endangered, threatened or species of special concern. The table must include the listed species by FLUCCS and the species status (same as FLUCCS map).

D. Impacts on Historic Resources

List all historic resources (including structure, districts, and/or archeologically sensitive areas) and provide an analysis of the proposed change's impact on these resources. The following should be included with the analysis:

1. A map of any historic districts and/or sites, listed on the Florida Master Site File, which are located on the subject property or adjacent properties.

2. A map showing the subject property location on the archeological sensitivity map for Lee County.

E. Internal Consistency with the Lee Plan

1. Discuss how the proposal affects established Lee County population projections, Table 1(b) (Planning Community Year 2020 Allocations), and the total population capacity of the Lee Plan Future Land Use Map.

2. List all goals and objectives of the Lee Plan that are affected by the proposed amendment. This analysis should include an evaluation of all relevant policies under each goal and objective.

3. Describe how the proposal affects adjacent local governments and their comprehensive plans.

4. List State Policy Plan and Regional Policy Plan goals and policies which are relevant to this plan amendment.

F. Additional Requirements for Specific Future Land Use Amendments

1. Requests involving Industrial and/or categories targeted by the Lee Plan as employment centers (to or from)

   a. State whether the site is accessible to arterial roadways, rail lines, and cargo airport terminals,
   b. Provide data and analysis required by Policy 2.4.4,
   c. The affect of the proposed change on county's industrial employment goal specifically policy 7.1.4.

2. Requests moving lands from a Non-Urban Area to a Future Urban Area

   a. Demonstrate why the proposed change does not constitute Urban Sprawl. Indicators of sprawl may include, but are not limited to: low-intensity, low-density, or single-use development; 'leap-frog' type development; radial, strip, isolated or ribbon pattern type development; a failure to protect or conserve natural resources or agricultural land; limited accessibility; the loss of large amounts of functional open space; and the installation of costly and duplicative infrastructure when opportunities for infill and redevelopment exist.

3. Requests involving lands in critical areas for future water supply must be evaluated based on policy 2.4.2.

4. Requests moving lands from Density Reduction/Groundwater Resource must fully address Policy 2.4.3 of the Lee Plan Future Land Use Element.

G. Justify the proposed amendment based upon sound planning principles. Be sure to support all conclusions made in this justification with adequate data and analysis.

Item 1: Fee Schedule

Map Amendment Flat Fee	$2,000.00 each
Map Amendment > 20 Acres	$2,000.00 and $20.00 per 10 acres
Small Scale Amendment (10 acres or less)	$1,500.00 each
Text Amendment Flat Fee	$2,500.00 each

AFFIDAVIT

I, Katherine C. Green, certify that I am the owner or authorized representative of the property described herein, and that all answers to the questions in this application and any sketches, data, or other supplementary matter attached to and made a part of this application, are honest and true to the best of my knowledge and belief. I also authorize the staff of Lee County Community Development to enter upon the property during normal working hours for the purpose of investigating and evaluating the request made through this application.

Katherine C. 9-25-06

Signature of owner or owner-authorized agent — Date

Katherine C. Green, Vice President of Resource Conservation Properties, Inc.,
Managing Member of North River Communities, Inc.
Typed or printed name

STATE OF FLORIDA)
COUNTY OF LEE)

The foregoing instrument was certified and subscribed before me this 25th day of Sept., 2006, by Katherine C. Green, Vice President, who is personally known to me.

(SEAL)

JOANNE JANES
Notary Public - State of Florida
My Commission Expires Feb 10, 2010
Commission # DD 506598
Bonded by National Notary Assn.

Joanne Janes

Signature of notary public

Joanne Janes

Printed name of notary public

DeLisi Fitzgerald, Inc.
Planning - Engineering - Project Management

1500 Royal Palm Square Blvd., Suite 101
Fort Myers, FL 33919
239-418-0691 • 239-418-0692 fax

Authorized Agents

Planning:	Daniel DeLisi, AICP DeLisi Fitzgerald 1500 Royal Palm Square Blvd., Suite 101 Fort Myers, FL 33919 Phone: (239) 418-0691 E-mail: dandelisi@delisi.biz
Legal:	Neale Montgomery 1833 Hendry Street P.O. Drawer 1507 Ft. Myers, FL 33902-1507 Phone: (239) 336-6235 E-mail: nealemontgomery@paveselaw.com
Transportation:	Ron Talone David Plummer and Assoc. 1531 Hendry Street Fort Myers, FL 33901 Phone: (239) 332-2617 E-mail: ronald.talone@dplummer.com
Environmental:	Ken Passarella Passarella and Associates 9110 College Pointe Court Fort Myers, FL 33919 Phone: (239) 274-0067 E-mail: Kenp@passarella.net
Utilities:	Drew Fitzgerald, P.E DeLisi Fitzgerald, Inc. 1500 Royal Palm Square Blvd., Suite 101 Ft. Myers, FL 33919 Phone: (239) 418-0691 E-mail: drewf@dnreng.com
Water Management:	Andy Tilton Johnson Engineering 2158 Johnson Street Ft. Myers, Fl 33901 Phone: (239) 334-0046 E-mail: atilton@johnsoneng.com

NORTH RIVER VILLAGE
LIST OF STRAP NUMBERS

16-43-26-00-00001.0040
17-43-26-00-00001.0000
17-43-26-00-00006.0000
17-43-26-01-00001.0000
17-43-26-01-00002.0000
17-43-26-01-00003.0000
17-43-26-01-00008.0000
17-43-26-01-00009.0000
18-43-26-00-00001.0000
18-43-26-00-00001.0010
18-43-26-00-00002.0000
18-43-26-00-00002.0010
18-43-26-00-00002.0020
19-43-26-00-00002.1020
19-43-26-00-00005.0030
19-43-26-00-00005.0040
19-43-26-00-00006.0010
19-43-26-00-00006.0030
19-43-26-00-00006.0040
19-43-26-00-00006.0050
19-43-26-00-00006.0060
19-43-26-00-00006.0070
20-43-26-00-00001.0000
20-43-26-00-00001.0040
20-43-26-00-00001.0070
20-43-26-00-00001.0080
20-43-26-00-00001.0090

DeLisi Fitzgerald, Inc.
Planning - Engineering - Project Management

1500 Royal Palm Square Blvd., Suite 101
Fort Myers, FL 33919
239-418-0691 · 239-418-0692 fax

River Village Land Use Category

Policy 1.1.10: The River Village Land Use Category is intended to provide for mixed use communities that are designed to incorporate waterfront access energy efficiency, green development, water quality improvements, public access and compact development along the Caloosahatchee River and provides public benefits to the existing area. The River Village Land Use Category will be implemented by Lee Plan policies that require innovative development designed to protect environmentally sensitive areas, provide for the delivery of public facilities and services, enhance the existing community character, and allow for the efficient use of land. These priorities will be achieved by promoting compact mixed use development as an alternative to low density single use development, and by requiring infrastructure and environmental design standards to be implemented in a financially feasible manner. The intent of the River Village land use category is to promote a balanced mixture of uses, to work to increase the internal capture of trips, by incorporating pedestrian, bicycle and transit opportunities, and by creating pedestrian friendly streetscapes. The minimum density in the River Village land use category is 1.5 units per gross acre and the maximum density is two (2) units per gross acre. The Floor Area Ratio for commercial uses will be a maximum of 1.0 over the entire designated commercial development area(s). River Village developments will be limited to a maximum of 150,000 square feet of overall commercial development.

Policy 1.4.8: The Inner Islands are located along the Caloosahatchee River, have reasonable access to available utility infrastructure, and are in close proximity to urban development. The intent of the Inner Islands land use category is to provide for a mix of uses that add to the character of the Caloosahatchee River. The primary focus is on resort uses and public access developed as part of an Inner Island development where the primary uses consist of lodging facilities, bed and breakfasts, restaurants, spas, boutique retailers, recreation and similar uses that would be associated with a resort environment. Although residential uses are allowed in the Inner Island land use category primary home ownership is discouraged. The maximum residential density is one dwelling unit per acre (1 du/acre). The maximum Floor Area Ratio for non residential uses is 1.0.

Objective 1.10: The River Village Land Use Category will provide for innovative waterfront development which is designed to protect environmentally sensitive areas, promote water conservation and energy efficient methods of development, provide for the efficient delivery of public facilities and services, enhance the existing riverfront community character, and allow for the efficient use of land. The River Village land use category will incorporate smart growth principles to direct the form and design of communities to achieve environmental, planning and community character objectives. These objectives will be achieved by promoting compact mixed use development as an

alternative to low density single use development, and will require that infrastructure and environmental design standards are implemented in a financially feasible manner.

Policy 1.10.1: Development in a River Village must incorporate a mix of uses, such as residential, commercial, water related uses and recreational uses. The residential development in the River Village must be clustered to avoid areas of environmental sensitivity and must promote both connectivity between uses and walkability throughout the development. The commercial uses will be designed with direct internal connectivity as well as public access. Commercial uses will be designed to a "Human-Scale", as defined in the Lee Plan.

Policy 1.10.2: All development utilizing the River Village Future Land Use Category will be rezoned to Planned Development.

Sense of Place/Design

Policy 1.10.3: In order to create a sense of place within the residential and nonresidential areas the following design elements must be incorporated where feasible and detailed on the Planned Development master concept plan and subsequent local development order plans. The land plan must include design elements including, but not limited to: a hierarchy of connectivity, special nodes, landmarks, transitional edges and a distinct variety of architectural styles.

Each River Village must provide for one or more Village Center areas for the benefit of the public and River Village. The Village Center will be designed to create a sense of community through internal and external connections with adjacent residential development, integrating commercial development with residential development and constructing the Village Center so that it is at a human scale and pedestrian oriented.

Village Center Areas should be designed to incorporate as many of the following features as possible.

1. Village Centers will be a minimum of 5 acres.

2. Village Centers are encouraged to be located as part of the overall River Village and therefore Village Centers will not be required to meet site location standards.

3. Mixed uses will be encouraged within individual buildings (e.g. residential above commercial space).

4. Development plans will include focal points such as signature buildings, civic spaces, natural amenities, and other prominent features through placement or street layout.

5. Nonresidential establishments will incorporate development design techniques to integrate the establishment into the surrounding community. Such design techniques will include:

a. Creation of a series of smaller, well defined customer entrances to break up long facades and provide pedestrian scale and variety, that may be achieved through the use of liner buildings.
b. Unified sign package.
c. Landscaping and use of pocket parks and courtyards adequate to soften large building masses.

6. Parking lots will be designed with pedestrian connections to business entrances and public space to create a park-once environment.

7. Crime Prevention Through Environmental Design (CPTED) guidelines will be incorporated to the maximum extent possible.

8. Development density and intensity will be designed to integrate with surrounding land uses.

9. Link pedestrian routes and bikeways with the street system or other public spaces, avoiding routes through parking lots and other locations separated from the overall system.

10. The designs will include a pedestrian circulation system to connect the nonresidential uses with residential uses and areas.

11. Streets and roads will incorporate design features including landscaping and sidewalks which define and contribute to a pedestrian street character. Building design, placement, and entrances will be at a pedestrian scale and oriented towards streets and other public space such as parks or squares.

12. Reduction of paved parking areas will be evaluated wherever practicable through measures such as provision of shared parking and parking structures to serve multiple uses and alternative paving materials. Large expanses of pavement will be discouraged. Reduced ratios of required parking for non-residential uses will be provided in the land development regulations.

13. Internal traffic circulation design will include:
    a. Traffic calming techniques to maintain a multi-modal transportation system including pedestrian, bicycles and automobile traffic.
    b. Maximum use of common access drives.

14. Buffering: River Village developments will be well integrated both internally and externally. Buffering of uses internal to a River Village are not required.

Policy 1.10.4: Each River Village Community will be required to provide an overall 50% on site Open Space as defined and calculated in Chapter 10of the Lee County Land Development Code. Individual pods, tracts, and parcels may be designed and developed with a minimum of 10% open space to facilitate the clustering of uses. Large developments, with existing indigenous native vegetation communities must provide 60 % of their open space percentage requirement through the onsite preservation of existing native vegetation communities.

Community Outreach

Policy 1.10.5: Community Outreach requirements for properties utilizing the River Village Land Use Category must include, at a minimum, the following:

1. Prior to any required public hearings for a Comprehensive Plan Amendment, the applicant shall engage in a series of meetings with the surrounding community, County planning, zoning and natural resources staff and the public at large.
2. Prior to submitting a zoning application for a property utilizing the River Village land use category the applicant must conduct a minimum of two separate meetings. One meeting with the surrounding community in a location within the Planning Community, and one with County staff. Throughout the zoning review process the applicant shall conduct a series of meeting with the public to keep them informed on changes and opportunities to participate in the public hearing process. Meeting notices and sign in sheets shall be submitted formally to the County to keep with the zoning application records.

General Public Benefits

Policy 1.10.6: Each River Village development that is adjacent to natural and navigable bodies of water must provide public access to the natural water body. Public access must be provided through a canoe/kayak launch with parking facilities that connect to the Lee County Blue Way system. Additional public access may include any combination of 1) provision of passive recreational facilities, 2) development or redevelopment of a marina facility, 3) access to commercial or 4) civic uses open to the public, including a boat launch, docking facilities, or a promenade along the waterfront.

Policy 1.10.7: Connection to existing public blue ways and pedestrian trails will be provided.

Policy 1.10.9: Where River Villages are wholly or partially located within the Tropical or Category 1 Storm Surge zones, additional mitigation for hurricane evacuation must be provided, over and above the mitigation fees required in LDC Section 2-485. Additional hurricane mitigation may include the provision of a regional shelter in a category 4-5 zone in eastern Lee County, Charlotte County or Western Hendry County that can be shown to relieve a regional evacuation choke point for Lee County evacuees and/or monetary contributions toward road capacity improvements that improve hurricane evacuation. If a regional shelter in an adjacent county is used for mitigation, documentation that Lee County residents can use the facility. Documentation that the facility will be constructed to meet Lee County standards must be provided to the Director of Public Safety. The mitigation commitment and timing of the mitigation shall be established through the planned development process, however mitigation must be provided no later than the issuance of the building permit that increases the development density beyond one unit per acre for the total community.

Compatibility and Integration with the Surrounding Community

Policy 1.10.10: To promote preservation of the surrounding community character and drive by experience along existing County maintained arterial roads, a minimum 100 foot edge protection area must be incorporated into the development. Where new development is adjacent to properties under separate ownership a 50 feet edge protection area must be provided. The rural edge protection area must contain one or more elements that are representative of rural character including but not limited to groves, livestock grazing, pervious recreational areas or open space, preserves, equestrian facilities, lake or other elements of rural character. Berms and walls that are intended to provide a visual barrier will not be permitted along County maintained arterial roads and are discouraged along the remaining perimeter, unless specifically requested by a majority of the adjoining property owners. The use of perimeter fencing including but not limited to horse fences and picket fences will be encouraged. This policy does not preclude any berms required to meet the requirements of the South Florida Water Management District.

Policy 1.10.11: Where external local residential streets run along an edge of a River Village, edge development must be designed to maintain the existing residential character of the residential street. Similar type homes or landscape area must be developed and oriented toward the local residential street rather than creating a community backing up to the street.

Policy 1.10.12: Where feasible, River Village developments will provide local public road connections that add new links to the transportation network. Connections to adjacent offsite residential neighborhoods will not be precluded by the River Village's design.

Policy 1.10.13: River Villages must be designed so that buildings with height of over 35 feet may not be located abutting to existing external single family uses. The maximum height in the River Village land use category is 85 feet but no more than 7 habitable floors over parking. Multi-story buildings shall be oriented to the waterfront or internal to the development.

Water Conservation and Management

Policy 1.10.14: To ensure that development occurs in a manner that is consistent with Lee County's goals for the protection of natural aquatic systems and the enhancement of water quality within the Caloosahatchee River basin, new development or redevelopment within the River Village land use category will be required to provide or connect to central water and sewer facilities.

Policy 1.10.15: Water conservation measures will be implemented utilizing the following mechanisms:

1. Accepting reuse water, if available, and

2. Using 70% drought tolerant landscape material and 70% native plants for required landscaping in common areas.

3. Limit the amount of irrigated turf to 50% for all residential lots.

4. Required common area landscaping will be clustered to separate non-drought tolerant plants from drought tolerant plants to limit areas requiring full permanent irrigation.

5. Drip irrigation will be used on all common area trees and palms in order to more efficiently use irrigation water.

Policy 1.10.16: Low impact development techniques will be incorporated into the required surface and storm water management facilities. These facilities will be designed to provide open space or a planted visual amenity that resembles natural areas.

Water Quality

Policy 1.10.17: Enhanced Best Management Practices for surface water management will include one or more of the following: treatment trains, created flow ways, reduced impervious area, and other Low Impact Development design techniques.

Policy 1.10.18: Development within the North River Village will provide a minimum of 50' buffer along natural waterways. Buffer areas may contain passive recreational uses, including boardwalks, and river oriented recreational uses such as a canoe/kayak launch with an ancillary building, and necessary community infrastructure crossing points. This policy is not intended to apply to the construction of marina facilities on the Caloosahatchee River or the expansion of any marina facility that is identified on the Lee County Water Dependant Overlay Map Series. Residential dwelling units must not be constructed within 50 feet of the MHWL of natural water bodies, except for docks, observation decks and boardwalks.

Policy 1.10.19: During the Planned Development process developers will pursue opportunities to partner with governmental agencies to create water quality improvement systems for degraded water bodies directly connected to the property. Specifically, applicants will work with Lee County and the South Florida Water Management District to identify ways to improve the water quality of the Caloosahatchee River.

Policy 1.10.20: Golf courses must be designed, constructed, managed and certified in accordance with the Audubon International Signature Silver Program or equivalent. In addition all golf courses must be managed and designed in accordance with the following criteria:

1. Fertilizers with a low leaching potential (slow release) must be used, must not be applied after active growth of the turfgrass has ceased, and must be kept to the lowest reasonable levels.

2. To reduce sources of pollutants, especially nutrients, pesticides and herbicides associated with the golf course, the golf course manager must implement a chemicals management plan which includes an integrated pest management (IPM) program and a nutrient management program such that nutrient management program such that nutrients, pesticides and herbicides are used only when absolutely necessary. The program must address prevention, diagnosis, and limited treatment with pesticides and herbicides when necessary rather than blanket treatment with broad spectrum pesticides as insurance against all pest species. The application of pesticides and herbicides will involve only the purposeful and minimal application of pesticides and herbicides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides and herbicides is prohibited. The IPM program must minimize the use of pesticides and herbicides and must include the use of the US Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) Soil Pesticide Interaction Rating guide to select pesticides and herbicides for use that have a minimum potential for leaching or loss from runoff. The nutrient management program must be based upon the USDA-NRCS Nutrient Management Standard and must include the use of soil tests to determine needed applications of nutrients. Only EPA-approved chemicals may be used. No turf managed areas (including fairways, tees, and greens) are permitted within 35 feet of wetlands or preserve areas. This chemicals management plan must be submitted to and approved by Lee County Natural Resources Staff prior to the development order approval.

3. The golf course manager must coordinate the application of pesticides and herbicides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides, herbicides and nutrients.

4. The utilization of a golf course manager licensed by the state to use restricted pesticides and herbicides and experienced in the principles of IPM is required. The golf course manager is 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, pesticides and herbicides must be designed to prevent/minimize the pollution of the natural environment.

6. 1) Prior to the issuance of local development order approval, the developer must demonstrate compliance with "Best Management Practices for Golf Course Maintenance Departments," prepared by the Florida Department of Environmental Protection, May 1995, as amended.

   2) The development order must demonstrate separate mixing and loading facilities for pesticides and herbicides, and provide a

separate pesticide storage area, in compliance with materials specified in the above referenced document. The development order must demonstrate separate mixing and loading facilities for fertilizer, and provide a separate fertilizer storage area, in compliance with materials specified in the above referenced document.

3) The development order plans must indicate the construction material for all buildings in compliance with Best Management Practices for Golf Course Maintenance Departments.

4) Equipment to apply pesticides, herbicides and fertilizers must be stored in an area protected from rainfall.

7. The golf course must be planted with a turfgrass cultivated variety that is drought and pest resistant, while requiring relatively low fertilizer use;

8. The irrigation system must operate on an "as needed" basis through the utilization of weather forecasting and ongoing assessment of the moisture content of the soil.

9. All fairways, greens, and tees must be elevated above the 25-year flood level, and all greens must utilize underdrains. The effluent from these underdrains must be pre-treated prior to discharge into the balance of the project's water management system.

10. Stormwater run-off must be pre-treated through an acceptable recreated natural system or dry retention and/or detention and water retention and/or detention system, prior to discharging the run-off into existing lake or wetland (any aquatic) systems.

11. Prior to development order approval for the golf course, the developer must conduct a pre-development groundwater and surface water analysis and submit the analysis to Lee County Division of Natural Resources. This analysis is intended to establish baseline data for groundwater and surface water monitoring for the project area. The analysis must be designed to identify those nutrients and chemicals that are anticipated to be associated with the project. Prior to commencing this baseline study, the developer must submit the methodology for review, comment, and approval by Lee County.

12. An annual monitoring report of ground water and surface water quality is required for the golf course operation. The monitoring program must include: testing to assess whether there are any herbicide, pesticide or fertilizer pollution of the water within the area of the golf course; identifying the locations for the ground water monitoring and testing on a map(s); setting forth the testing and recording requirements. The Developer must submit the test results with the monitoring report to the Lee County Natural Resource Division. The monitoring program will be established and operated at the expense of the Developer, 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 62-302, F.A.C., water quality standards. Developer, or their successor(s), and Staff will review this monitoring requirement every three years to determine if reduction or elimination of the monitoring requirements is justified, and if so, the condition may be proposed for modification through the public hearing process.

13. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time of development order, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course, the application of the material(s) containing the polluting agent must cease until there is a revised management plan. If mitigation is necessary to address the pollution, a mitigation plan approved by Lee County must be implemented by the Developer.

14. Fertigation storage tanks will be located within the golf maintenance facility or if located elsewhere due to functionality, the facility shall require a minimum setback of 100' from residences and preserves. These facilities will be fully screened and will have adequate access to allow trucks to safely maneuver in and out of the storage area.

Policy 1.10.21: Development within a River Village must include green technologies consisting of the following:

1. Energy Efficiency programs such as "Energy Star" and FPL's "HomeSmart" will be promoted in all buildings and residences within the community. An education program on energy efficiency programs will be provided to all residents. In order to facilitate these benefits all Builders within the River Village communities shall be certified through the University of Florida's Build Green and Profit program.

2. Meet the requirements of a Green Community by the Florida Green Building Coalition.

3. All single family residential units will comply with Florida Green Building Coalition standards.

4. Incorporate elements from the Florida Yards and Neighborhoods program during site design. Private homeowners will be encouraged to utilize the recommendations of the Florida *Yards and Neighborhoods* program and the University of Florida IFAS fact sheet ENH-860.

5. Achieve Certification as a Florida Firewise Community.

6. Incorporate elements of the requirements of the National Wildlife Federation Backyard Wildlife Habitat Program.

7. Use only controlled release or slow release organic fertilizers for both common areas and private areas. The developer or their successor shall have the responsibility of providing for sale or easy accessibility allowable fertilizers for private use.

8. Achieve LEED certification for all commonly owned and maintained buildings, excluding a golf course maintenance facility and any other non air-conditioned buildings.

9. Achieve Clean Marina Certification with all marina facilities.

10. Buffer zones for wetlands and natural waterways will be used to avoid potential adverse effects upon ground and surface water quality, including any Outstanding Florida Waters, Wild and Scenic Rivers, Florida Aquatic Preserves or Florida Class I or II Waters that occur within, abutting or downstream of the site. This is not intended to preclude infrastructure and road crossings, decks and docks.

11. Grading and site design of properties adjacent to natural bodies of water shall conform to Federal, State and local regulations which may include but is not limited to the use of berms or retention ditches to intercept surface runoff of water and debris that may contain fertilizer.

Habitat Preservation

Policy 1.10.22: Development within the a River Village property will be designed to incorporate significant indigenous systems such as cabbage palm and oak hammocks and promote the preservation and restoration of wetlands, listed species habitat and rare and unique uplands through the designation of lands as Conservation in accordance with Policy 1.10.23. In order to protect the natural creeks and associated wetland systems within this part of the county, development will preserve high quality wetlands that are adjacent to natural water bodies. Site design will include minimizing impacts to native trees. Where impacts to live oak and laurel oak trees that have a greater than 10 inch caliper dbh are unavoidable, these trees will be relocated to the greatest extent feasible and used within the landscape design of the project.

Policy 1.10.23: In order to protect valuable upland and wetland areas, designation of a River Village area will include simultaneous designation of areas as Conservation on the Future Land Use Map. The intent is to provide certainty for the county and the developer on the location of preserve areas when the property undergoes rezoning to a planned development designation. Areas labeled as Conservation within a River Village will allow for density, to be clustered on the adjacent River Village areas at the same underlying density as the River Village through the planned development process. Conservation lands will be defined as "indigenous", if restored where restoration is needed, and counted toward a River Village's overall open space and indigenous preservation requirements through the planned development process. Buildings and other areas of impervious surface for passive recreational uses such as parking areas, docks, decks and boardwalks, as well as essential services will be allowed in

Conservation areas. Road crossings of Conservation lands will be allowed in accordance with the general alignments shown on the Future Land Use Map.

Special Treatment Areas have been depicted on Map X. The Special Treatment Areas are intended for development and water management facilities. The goal of these areas is to incorporate indigenous vegetation and native trees into the development areas. The indigenous vegetation and tree preservation regulations in the Lee County LDC as well as Policy 1.10.22 shall apply.

Historical flowways will be restored if found to be hydrologically significant and capable of restoration (Consistent with Policy 40.1.3 and 40.1.4)

Policy 1.10.24: In order to protect gopher tortoises and their habitat, development will preserve an area sufficient in size to support the existing gopher tortoise population. This may be done through the designation of Conservation lands in accordance with Policy 1.10.23. This preserve area shall consist of suitable gopher tortoise habitat large enough to support four gopher tortoises per acre. The preserve area will be designated as a gopher tortoise preserve and placed under a conservation easement. A gopher tortoise habitat management plan will be prepared and implemented to ensure the long-term management of the designated preserves.

North River Village

Policy 1.10.25: Development within the North River Village property as described in Map XXX is limited to 2,500 residential units and 150,000 square feet of commercial floor area, not including marina, civic private recreational/community and recreational facilities.

Additional Policies

Footnote to table 1A
The property that is the subject of CPA 2006-0012 must enter into a development agreement prior to developing the 1001st of 2,500 units. The development agreement will address the payment of the funds necessary to program the construction of four lanes on SR 31 from the project entrance to the intersection of State Road 78, as specified in Policy 36.1.1., and any related right-of-way acquisition (including costs of condemnation if necessary). The development agreement must also include payment of the funds necessary to make the intersection improvements listed below at the SR 80/SR 31 intersection and the SR 80/Buckingham Road intersection plus any additional right-of-way needed to construct these intersection improvements.

Add to the existing Policy 36.1.1 ... Also, the comprehensive plan amendment analysis for the Simon Suncoast (Coconut Point) DRI identified the need for improvements at key intersections on US 41 from Koreshan Boulevard to Alico Road to address the added impacts from the project for year 2020, and a mitigation payment has been required as part of the DRI development

order. *The comprehensive plan amendment traffic analysis for the North River Village that includes 2,500 and 150,000 square feet of commercial area, identified the need for four lanes on SR 31 from Bayshore Road (SR 78) to the North River Village entrance. The Developer for North River Village will fund the design and construct four lanes on SR 31 from the North River Village entrance to SR 78 (not creditable toward road impact fees). The owner of the North River property must also fund the construction of the intersection improvements listed below at the SR 80/SR 31 and SR 80/Buckingham Road intersections and any additional right-of-way needed to construct the identified intersection improvements for SR 80. Lee County considers the following intersection improvements to be part of Map 3A and will program the necessary funds to make these improvements at the point they are required to maintain the adopted level of service standards on ~~US 41~~ SR 80:*

1. SR 80/Buckingham Road
2. SR 80/31

TABLE 1(a)
SUMMARY OF RESIDENTIAL DENSITIES[1]

FUTURE LAND USE CATEGORY	STANDARD OR BASE DENSITY RANGE		BONUS DENSITY
	MINIMUM [2] (Dwelling Units per Gross Acre)	MAXIMUM (Dwelling Units per Gross Acre)	MAXIMUM TOTAL DENSITY [3] (Dwelling Units per Gross Acre)
Intensive Development	8	14	22
Central Urban	4	10	15
Urban Community [4,5]	1	6	10
Suburban	1	6	No Bonus
Outlying Suburban [6]	1	3	No Bonus
Rural [11]	No Minimum	1	No Bonus
Outer Islands	No Minimum	1	No Bonus
Rural Community Preserve [7]	No Minimum	1	No Bonus
Open Lands [8]	No Minimum	1 du/5 acres	No Bonus
Density Reduction/Groundwater	No Minimum	1 du/10 acres	No Bonus
Wetlands [9]	No Minimum	1 du/20 acres	No Bonus
New Community	1	6	No Bonus
University Community [10]	1	2.5	No Bonus
River Village [9]	1.5	2	No Bonus
Inner Islands	No Minimum	1	No Bonus

[1] See the glossary in Chapter XII for the full definition of "density."

[2] Adherence to minimum densities is not mandatory but is recommended to promote compact development.

[3] These maximum densities may be permitted by transferring density from non-contiguous land through the provisions of the Housing Density Bonus Ordinance (No. 89-45, as amended or replaced) and the Transfer of Development Rights Ordinance (No. 86-18, as amended or replaced).

[4] Within the Future Urban Areas of Pine Island Center, rezonings that will allow in excess of 3 dwelling units per gross acre must "acquire" the density above 3 dwelling units per gross acre utilizing TDRs that were created from Greater Pine Island Costal Rural or Greater Pine Island Urban Categories. (Amended by Ordinance No. 05-21).

[5] In all cases on Gasparilla Island, the maximum density must not exceed 3 du/acre.

[6] In the Outlying Suburban category: north of the Caloosahatchee River and east of Interstate-75; north of Pondella Road and south of Pine Island Road (SR 78); Lots 6-11, San Carlos Groves Tract, Section 20, Township 46 S, Range 25 E of the San Carlos/Estero area; in the Buckingham area (see Goal 17); and, all lands 187.5 feet south of the north section line of Section 33, Township 43 S, Range 26 E in the Caloosahatch Shores Community Plan area, the maximum density is 2 du/acre. (Amended by Ordinance No. 03-20, 03-21)

[7] Caloosahatch Shores Community Plan area, the maximum density is 2 du/acre. (Amended by Ordinance No. 03-20, 03-21)

[8] The maximum density of 1 unit per 5 acres can only be approved through the planned development process (see Policy 1.4.4), except in the approximately 135 acres of land lying east of US41 and north of Alico Road in the northwest corner of Section 5, Township 46, Range 25. (Amended by Ordinance No. 99-15)

[9] Higher densities may be allowed under the following circumstances:
(a) If the dwelling units are relocated off-site through the provisions of the Transfer of Development Rights Ordinance (No. 86-18, as amended or replaced); or

(b) Dwelling units may be relocated to developable contiguous uplands designated Intensive Development, Central Urban, or Urban Community at the same underlying density as is permitted for those uplands, so long as the uplands density does not exceed the maximum standard density plus one-half of the difference between the maximum total density and the maximum standard density; or

(c) Dwelling units may be relocated from freshwater wetlands to developable contiguous uplands designated Suburban or Outlying Suburban at the same underlying density as is permitted for those uplands, so long as the uplands density does not exceed eight (8) dwelling units per acre for lands designated Suburban and four (4) dwelling units per acre for lands designated Outlying Suburban, unless the Outlying Suburban lands are located in those areas described in Note 6 above, in which case the maximum upland density will be three (3) units per acre. (Amended by Ordinance No. 00-22)

(d) Dwelling units may be relocated from freshwater wetlands to developable contiguous uplands designated River Village at the same underlying density as is permitted for those uplands, so long as the uplands density does not exceed 2.5 dwelling units per acre.

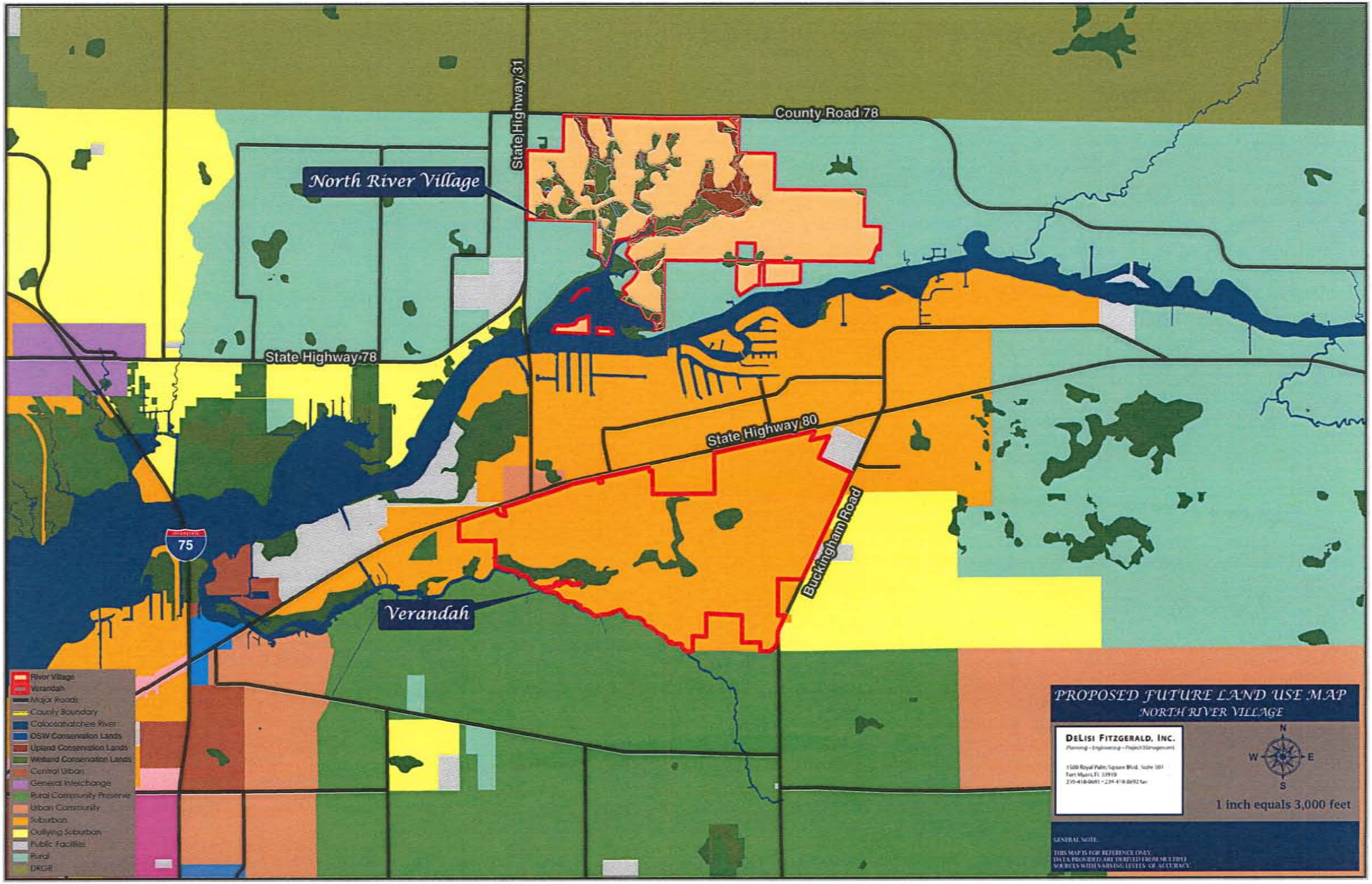
[10] Overall average density for the University Village sub-district must not exceed 2.5 du/acre. Clustered densities within the area may reach 15 du/acre to accommodate university housing.

[11] In the Rural category located in Section 24, Township 43 South, Range 23 East and south of Gator Slough, the maximum density is 1du/2.25 acres. (Added by Ordinance No. 02-02)

TABLE 1(b)

2030 Allocations Table, Alva Planning Community

Residential Use by Future Land Use Category	Acreage		
	Allocation for Year 2030	Existing	Available
Urban Community (UC)	520	462	58
Outlying Suburban (OS)	30	5	25
North River Village	600	0	600
Rural (R)	1,348	1,225	123
Outer Islands (OI)	5	2	3
Open Lands (OL)	250	83	167
Density Reduction/ Groundwater Resources (DRGR)	711	49	662
Wetlands (RPA)	0	0	0
Total Residential	3,464	1,826	1,648


North River Village
Verandah
State Highway 31
County Road 78
State Highway 78
State Highway 80
Buckingham Road
75
River Village
Verandah
Major Roads
County Boundary
Caloosahatchee River
DSW Conservation Lands
Upland Conservation Lands
Wetland Conservation Lands
Central Urban
General Interchange
Rural Community Preserve
Urban Community
Suburban
Outlying Suburban
Public Facilities
Rural
DRGR
PROPOSED FUTURE LAND USE MAP
NORTH RIVER VILLAGE
DeLisi Fitzgerald, Inc.
Planning - Engineering - Project Management
1500 Royal Palm Square Blvd. Suite 101
Fort Myers, FL 33919
239-418-0691 - 239-418-0692 fax
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1 inch equals 3,000 feet
GENERAL NOTE:
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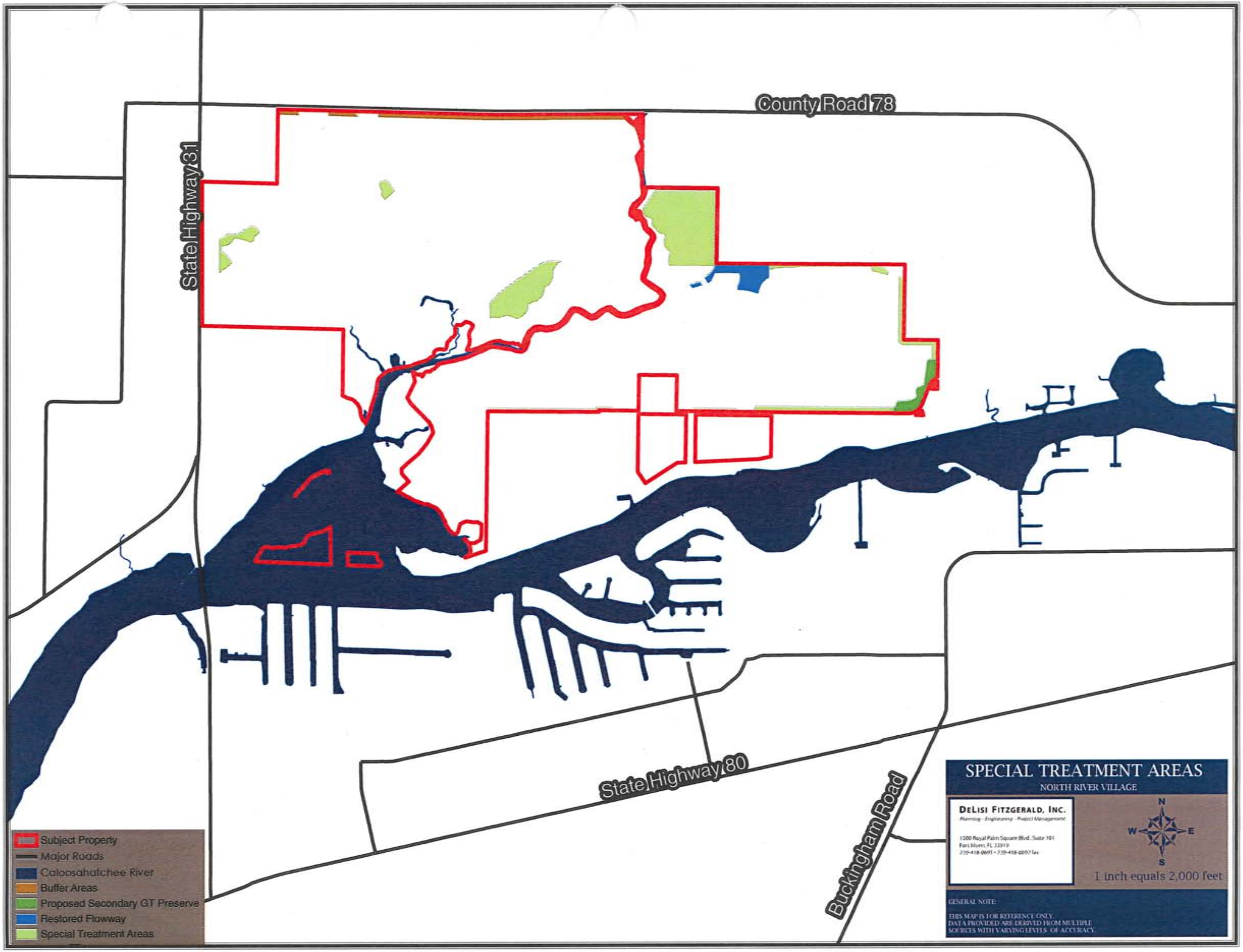
DATA PROVIDED ARE DERIVED FROM MULTIPLE
SOURCES WITH VARYING LEVELS OF ACCURACY.


County Road 78
State Highway 31
State Highway 80
Buckingham Road
Subject Property
Major Roads
Caloosahatchee River
Buffer Areas
Proposed Secondary GT Preserve
Restored Flowway
Special Treatment Areas
SPECIAL TREATMENT AREAS
NORTH RIVER VILLAGE
DeLisi Fitzgerald, Inc.
Planning · Engineering · Project Management
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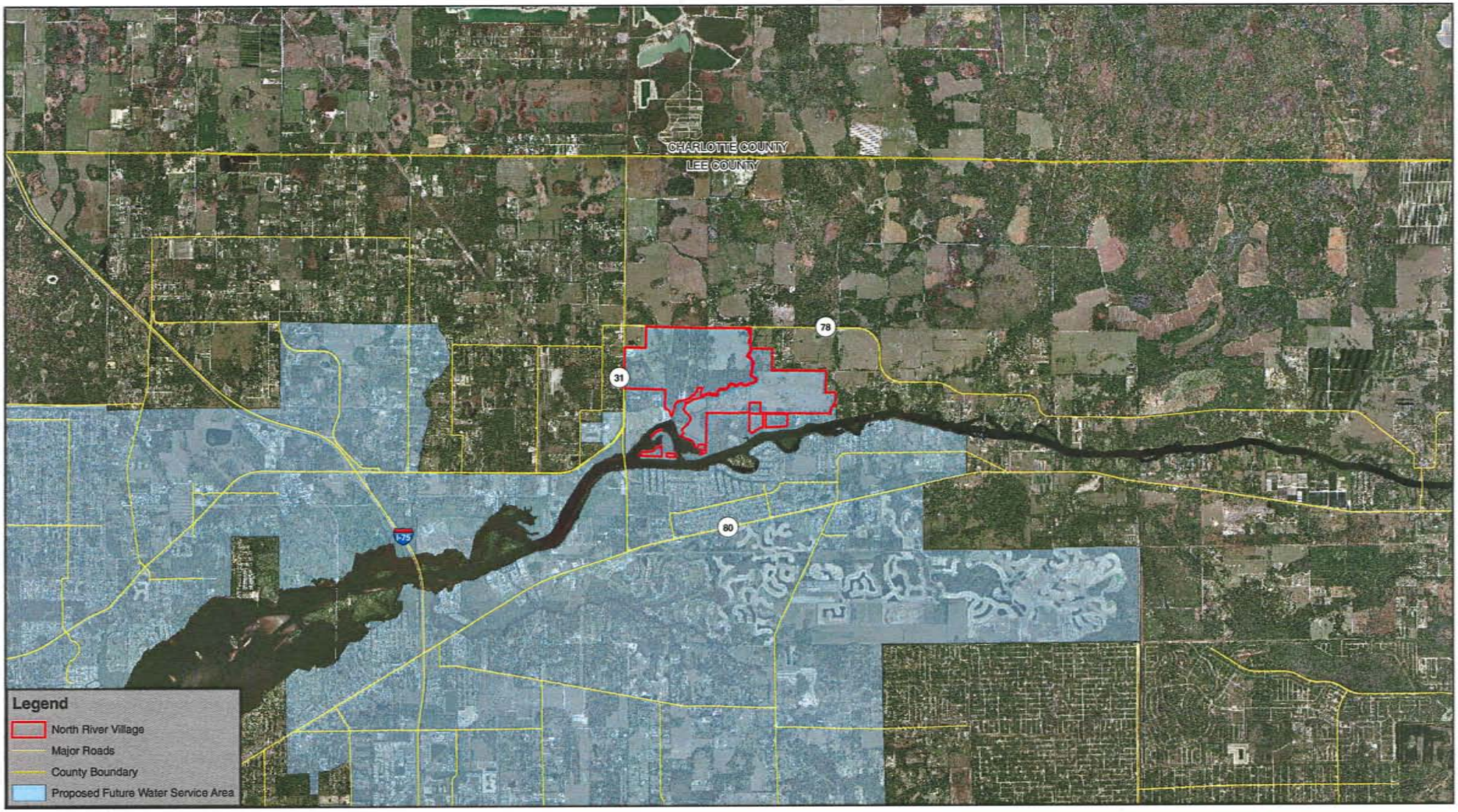

PROPOSED FUTURE WATER SERVICE AREA

NORTH RIVER VILLAGE

GENERAL NOTE:
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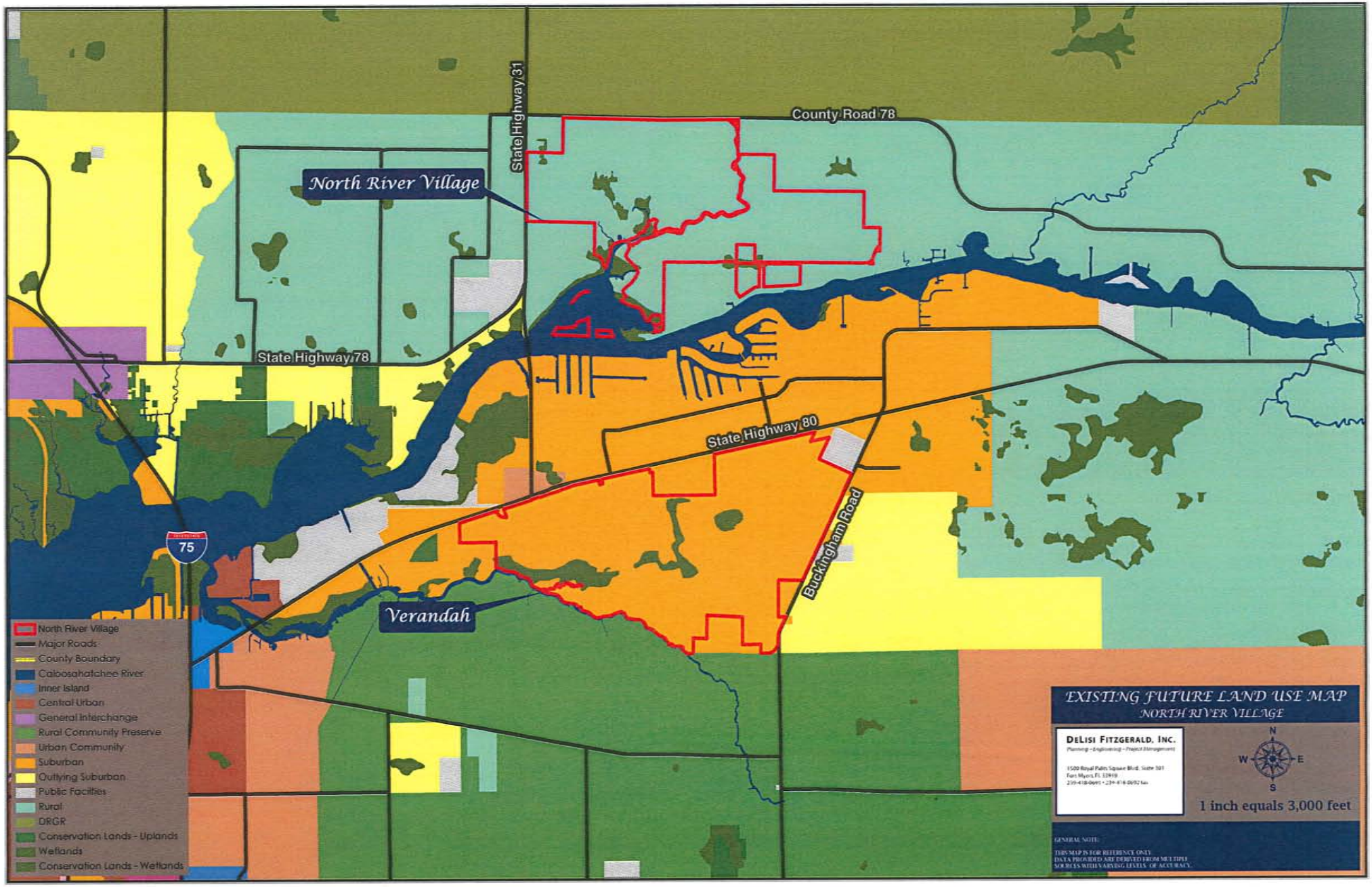
North River Village
State Highway 31
County Road 78
State Highway 78
State Highway 80
Buckingham Road
75
Verandah
North River Village
Major Roads
County Boundary
Caloosahatchee River
Inner Island
Central Urban
General Interchange
Rural Community Preserve
Urban Community
Suburban
Outlying Suburban
Public Facilities
Rural
DRGR
Conservation Lands - Uplands
Wetlands
Conservation Lands - Wetlands
EXISTING FUTURE LAND USE MAP
NORTH RIVER VILLAGE
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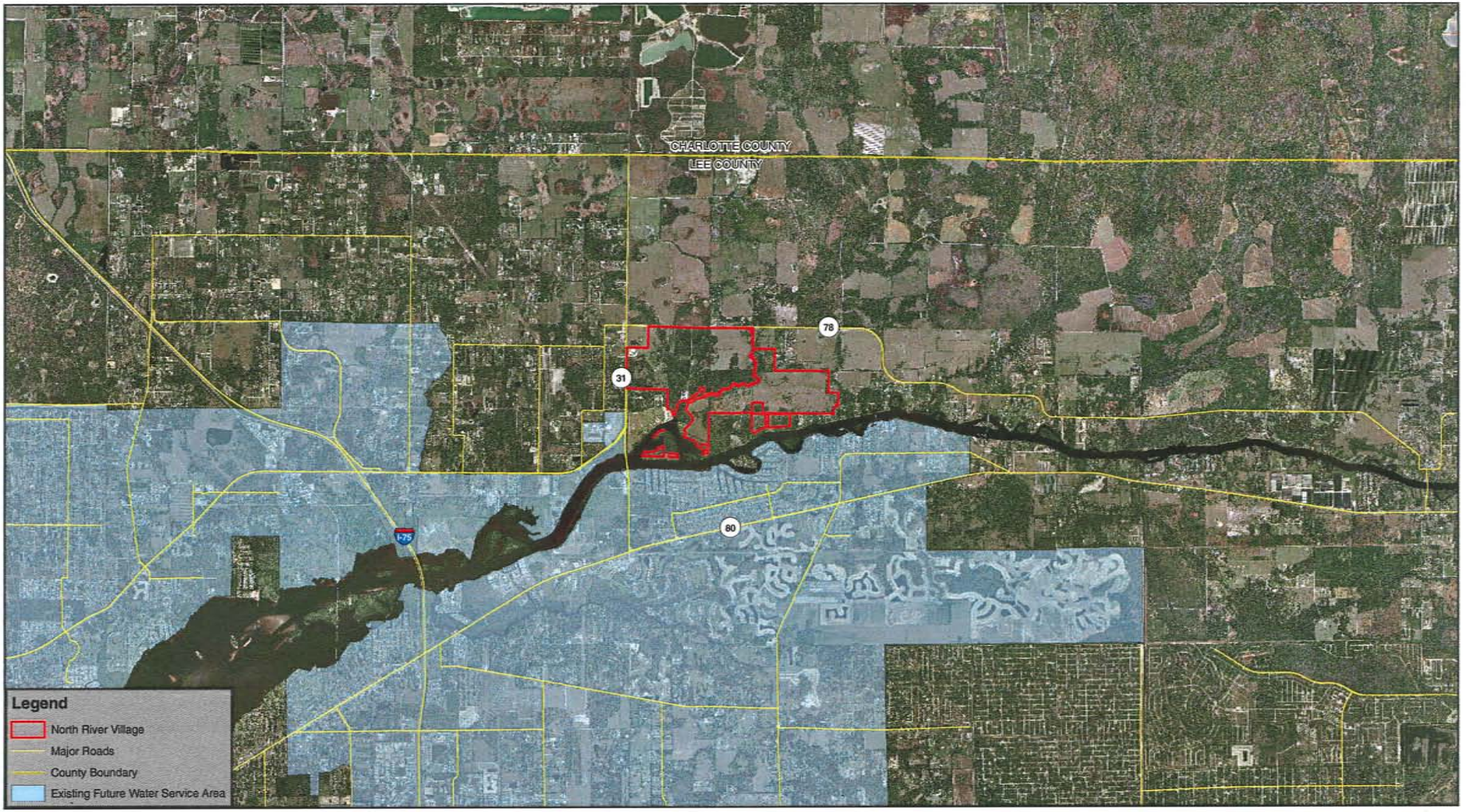

EXISTING FUTURE WATER SERVICE AREA

NORTH RIVER VILLAGE

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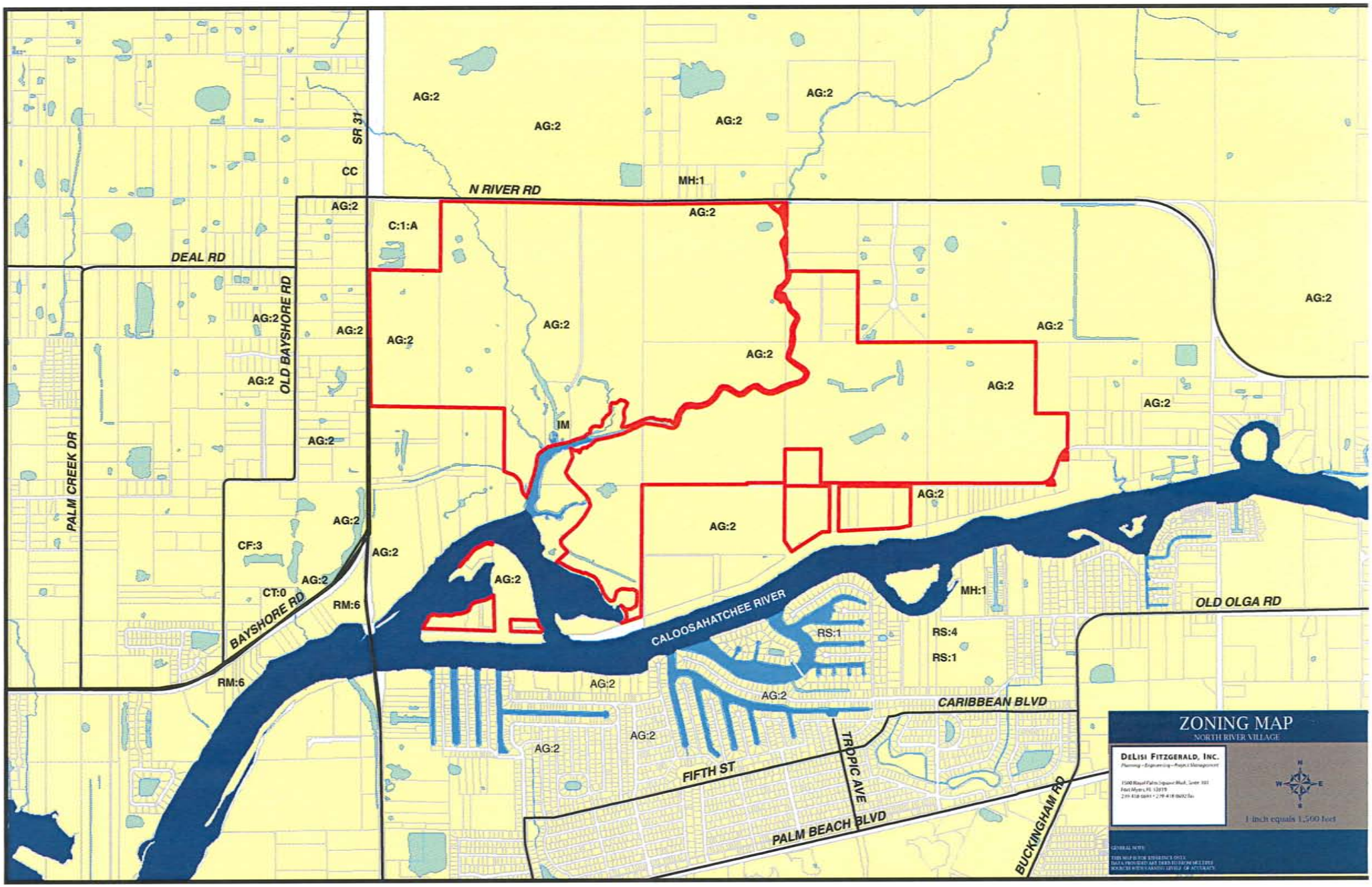
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SR 31
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DEAL RD
OLD BAYSHORE RD
PALM CREEK DR
IM
CF:3
CT:0
BAYSHORE RD
RM:6
CALOOSAHATCHEE RIVER
RS:1
RS:4
OLD OLGA RD
CARIBBEAN BLVD
TROPIC AVE
FIFTH ST
PALM BEACH BLVD
BUCKINGHAM RD
ZONING MAP
NORTH RIVER VILLAGE
DeLisi Fitzgerald, Inc.
1 inch equals 1,500 feet

FLORIDA DEPARTMENT OF STATE
DIVISION OF CORPORATIONS

Detail by Entity Name

Florida Limited Liability Company

NORTH RIVER COMMUNITIES LLC

Filing Information

Document Number	L06000033410
FEI Number	510573092
Date Filed	03/28/2006
State	FL
Status	ACTIVE

Principal Address

9990 COCONUT ROAD, SUITE 201
BONITA SPRINGS FL 34135

Mailing Address

9990 COCONUT ROAD, SUITE 201
BONITA SPRINGS FL 34135

Registered Agent Name & Address

WHITNEY, SCOTT R
9990 COCONUT ROAD
SUITE 200
BONITA SPRINGS FL 34135

Name Changed: 03/12/2008

Address Changed: 03/27/2007

Manager/Member Detail

Name & Address

Title MGRM

RESOURCE CONSERVATION PROPERTIES, INC.
9990 COCONUT ROAD, SUITE 201
BONITA SPRINGS FL 34135

Annual Reports

Report Year Filed Date

2007	03/27/2007
2008	03/12/2008

Document Images

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03/27/2007 -- ANNUAL REPORT	View image in PDF format
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2008 LIMITED LIABILITY COMPANY ANNUAL REPORT

FILED
Mar 12, 2008
Secretary of State

DOCUMENT# L06000033410

Entity Name: NORTH RIVER COMMUNITIES LLC

Current Principal Place of Business:

9990 COCONUT ROAD, SUITE 201
BONITA SPRINGS, FL 34135

New Principal Place of Business:

Current Mailing Address:

9990 COCONUT ROAD, SUITE 201
BONITA SPRINGS, FL 34135

New Mailing Address:

FEI Number: 51-0573092 **FEI Number Applied For ( )** **FEI Number Not Applicable ( )** **Certificate of Status Desired (X)**

Name and Address of Current Registered Agent:

MACKIE, PAMELA S
9990 COCONUT ROAD
SUITE 200
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Name and Address of New Registered Agent:

WHITNEY, SCOTT R
9990 COCONUT ROAD
SUITE 200
BONITA SPRINGS, FL 34135 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE: SCOTT R. WHITNEY 03/12/2008
Electronic Signature of Registered Agent Date

MANAGING MEMBERS/MANAGERS:

Title: MGRM ( ) Delete
Name: RESOURCE CONSERVATIO, N PROPERTIES, I NC.
Address: 9990 COCONUT ROAD, SUITE 201
City-St-Zip: BONITA SPRINGS, FL 34135

ADDITIONS/CHANGES:

Title: ( ) Change ( ) Addition
Name:
Address:
City-St-Zip:

I hereby certify that the information supplied with this filing does not qualify for the exemption stated in Chapter 119, Florida Statutes. I further certify that the information indicated on this report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am a managing member or manager of the limited liability company or the receiver or trustee empowered to execute this report as required by Chapter 608, Florida Statutes.

SIGNATURE: SCOTT R. WHITNEY SVP 03/12/2008
Electronic Signature of Signing Managing Member, Manager, or Authorized Representative / Date

FLORIDA DEPARTMENT OF STATE
DIVISION OF CORPORATIONS

Detail by Entity Name

Florida Profit Corporation

RESOURCE CONSERVATION PROPERTIES, INC.

Filing Information

Document Number	P96000053291
FEI Number	650694124
Date Filed	06/21/1996
State	FL
Status	ACTIVE
Last Event	NAME CHANGE AMENDMENT
Event Date Filed	09/23/1999
Event Effective Date	NONE

Principal Address

9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Changed 02/27/2003

Mailing Address

9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Changed 02/27/2003

Registered Agent Name & Address

WHITNEY, SCOTT R
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Name Changed: 03/31/2008

Address Changed: 02/27/2003

Officer/Director Detail

Name & Address

Title DSV

WATTS, SUSAN H

9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Title V

GARON, JOSEPH B
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Title DC

LUCAS, DAVID
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Title DP

GREEN, KATHERINE C
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135 US

Title DV

LUCAS, BRIAN
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Title DTV

WHITNEY, SCOTT R
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS FL 34135 US

Annual Reports

Report Year	Filed Date
2006	03/20/2006
2007	03/27/2007
2008	03/31/2008

Document Images

03/31/2008 -- ANNUAL REPORT	View image in PDF format
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03/20/2006 -- ANNUAL REPORT	View image in PDF format
08/25/2005 -- ANNUAL REPORT	View image in PDF format
07/14/2005 -- ANNUAL REPORT	View image in PDF format
03/17/2005 -- ANNUAL REPORT	View image in PDF format
06/24/2004 -- ANNUAL REPORT	View image in PDF format
04/29/2004 -- ANNUAL REPORT	View image in PDF format
07/01/2003 -- ANNUAL REPORT	View image in PDF format
02/27/2003 -- ANNUAL REPORT	View image in PDF format
05/15/2002 -- ANNUAL REPORT	View image in PDF format

2008 FOR PROFIT CORPORATION ANNUAL REPORT

FILED
Mar 31, 2008 8:00 am
Secretary of State
03-31-2008 90037 006 ***158.75

DOCUMENT # P96000053291

1. Entity Name
RESOURCE CONSERVATION PROPERTIES, INC.

Principal Place of Business	Mailing Address
9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135 US	9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135 US

02282008 Chg-P CR2E034 (12/06)

2. Principal Place of Business - No P.O. Box #	3. Mailing Address
Suite, Apt. #, etc.	Suite, Apt. #, etc.
City & State	City & State
Zip / Country	Zip / Country

4. FEI Number 65-0694124 ☐ Applied For ☐ Not Applicable

5. Certificate of Status Desired ☒ $8.75 Additional Fee Required

6. Name and Address of Current Registered Agent

MACKIE, PAMELA S
9990 COCONUT ROAD, SUITE 200
BONITA SPRINGS, FL 34135

7. Name and Address of New Registered Agent

Name Scott R. Whitney
Street Address (P.O. Box Number is Not Acceptable)
9990 Coconut Rd. Ste 200
City Bonita Springs FL Zip Code 34135

8. The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida. I am familiar with, and accept the obligations of, registered agent.

SIGNATURE Scott R. Whitney Senior Vice President DATE 3/26/08
Signature, typed or printed name of registered agent and title if applicable. (NOTE: Registered Agent signature required when reinstating)

FILE NOW!!! FEE IS $150.00
After May 1, 2008 Fee will be $550.00

9. Election Campaign Financing Trust Fund Contribution. ☐ $5.00 May Be Added to Fees

10. OFFICERS AND DIRECTORS			11. ADDITIONS/CHANGES TO OFFICERS AND DIRECTORS IN 11		
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	VP WATTS, SUSAN H 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☐ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	DSV Susan H. Watts (Same address)	☒ Change ☐ Addition
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	DP GREEN, KATHERINE C 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☐ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	V Joseph B. Garon (Same address)	☐ Change ☒ Addition
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	DC LUCAS, DAVID 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☐ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	V Dennis L Church (Same address)	☐ Change ☒ Addition
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	VP HUTCHCRAFT, MITCH 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☒ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP		☐ Change ☐ Addition
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	VP LUCAS, BRIAN 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☐ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	DV Brian Lucas (Same address)	☒ Change ☐ Addition
TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	STV WHITNEY, SCOTT R 9990 COCONUT ROAD, SUITE 200 BONITA SPRINGS, FL 34135	☐ Delete	TITLE / NAME / STREET ADDRESS / CITY-ST-ZIP	DTV Scott R. Whitney (Same address)	☒ Change ☐ Addition

12. I hereby certify that the information supplied with this filing does not qualify for the exemptions contained in Chapter 119, Florida Statutes. I further certify that the information indicated on this report or supplemental report is true and accurate and that my signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears in Block 10 or Block 11 if changed, or on an attachment with an address, with all other like empowered.

SIGNATURE: Scott R. Whitney 3/26/08 (239) 495-1000
SIGNATURE AND TYPED OR PRINTED NAME OF SIGNING OFFICER OR DIRECTOR — Date — Daytime Phone #

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 16-43-26-00-00001.0040
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD
SUITE 200
BONITA SPRINGS FL 34135

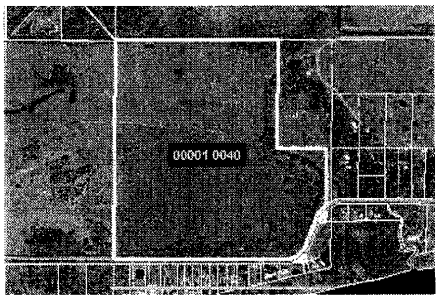
SITE ADDRESS[NEW! NOTES]

ACCESS UNDETERMINED
FL

LEGAL DESCRIPTION

SW 1/4 LESS PARCEL 1.003
LESS INST 2006-281030
LESS R/W OR 2026/2985

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

60 - GRAZING LAND CLASS I

PROPERTY VALUES (TAX ROLL 2008)
[HISTORY CHART]

JUST	3,397,250
ASSESSED	82,210
ASSESSED SOH	82,210
TAXABLE	82,210
BUILDING	0
LAND	82,210
BUILDING FEATURES	0
SOH DIFFERENCE	0
LAND FEATURES	0

EXEMPTIONS

HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	3,315,040

ATTRIBUTES

LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	135.89
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	
HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,875,800	7/14/2006	2006000281034	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 17-43-26-00-00001.0000, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000	V
100	7/14/2006	2006000281029	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000, 20-43-26-00-00001.0040	V
100	10/21/2004	4481/2453	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010	V
100	6/1/1993	2393/1572	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000, 23-43-26-00-00013.0000	V
100	3/1/1988	1979/1806	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 17-43-26-01-00009.0000, 23-43-26-00-00013.0000	V

Parcel Numbering History

Creation Date - 8/1/2006

Prior STRAP	Renumber Reason	Renumber Date
16-43-26-00-00001.0010	Split (From another Parcel)	Tuesday, August 01, 2006

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	R - Residential Category		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, Click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
2	A7-EL8	125124	0250	B	091984

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

This site is best viewed with Microsoft Internet Explorer 5.5+ or Netscape Navigator 6.0+.
Page was last modified Wednesday, July 30, 2008 3:48:21 PM.

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-00-00001.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

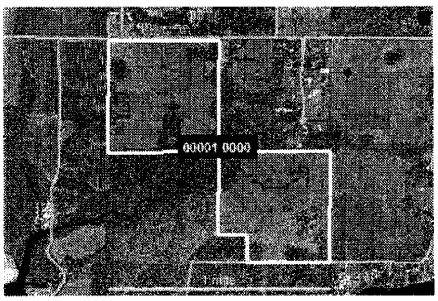
SITE ADDRESS

13230 N RIVER RD
ALVA FL 33920

LEGAL DESCRIPTION

NW 1/4 + SE 1/4 LESS SW 1/4 OF SW 1/4 OF SE 1/4 LESS R/W OR 2026/2985

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

62 - GRAZING LAND CLASS III

PROPERTY VALUES (TAX ROLL 2008)
[HISTORY CHART]

JUST	7,750,000
ASSESSED	53,940
ASSESSED SOH	53,940
TAXABLE	53,940
BUILDING	0
LAND	53,940
BUILDING FEATURES	0
SOH DIFFERENCE	0
LAND FEATURES	0

EXEMPTIONS

HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	7,696,060

ATTRIBUTES

LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	310.00
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	
1ST YEAR BUILDING ON TAX ROLL	0
HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,875,800	7/14/2006	2006000281034	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0040, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000	V
100	7/14/2006	2006000281029	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00003.0000, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000, 20-43-26-00-00001.0040	V
100	10/21/2004	4481/2435	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	6/1/1993	2393/1572	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000, 23-43-26-00-00013.0000	V
100	3/1/1988	1979/1806	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00003.0000, 17-43-26-01-00009.0000, 23-43-26-00-00013.0000	V

SOLID WASTE (GARBAGE) ROLL DATA

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
2	A7-EL8	125124	0250	B	091984

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

This site is best viewed with Microsoft Internet Explorer 5.5+ or Netscape Navigator 6.0+.
Page was last modified Wednesday, July 30, 2008 3:48:21 PM.

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-00-00006.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUINITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

13231 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

SW 1/4 LESS R/W OR 2026/2985

[VIEWER] TAX MAP [PRINT]

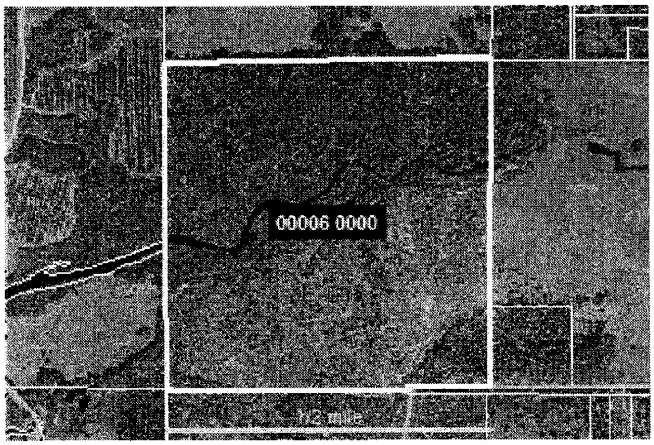


IMAGE OF STRUCTURE

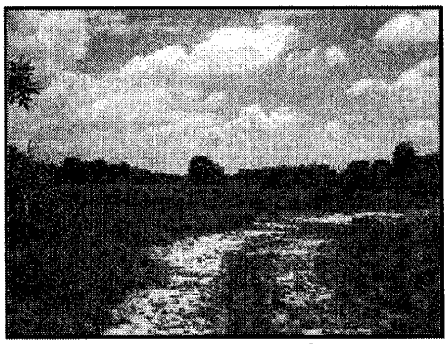


Photo Date: May of 2008
Photo dated after 2008 Roll

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	60 - GRAZING LAND CLASS I

PROPERTY VALUES (TAX ROLL 2008)
[HISTORY CHART]

JUST	4,000,000
ASSESSED	21,630
ASSESSED SOH	21,630
TAXABLE	21,630
BUILDING	0

EXEMPTIONS

HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	3,978,370

ATTRIBUTES

LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	160.00
FRONTAGE	0
DEPTH	0

LAND	21,630	BEDROOMS	
BUILDING FEATURES	0	BATHROOMS	
SOH DIFFERENCE	0	TOTAL BUILDING SQFT	
LAND FEATURES	0	1ST YEAR BUILDING ON TAX ROLL	0
		HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	8/14/2006	2006000334334	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
800,000	11/17/2000	3329/4300	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V
100	8/1/1992	2324/2260	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
200,000	7/1/1973	964/670	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-01-00001.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

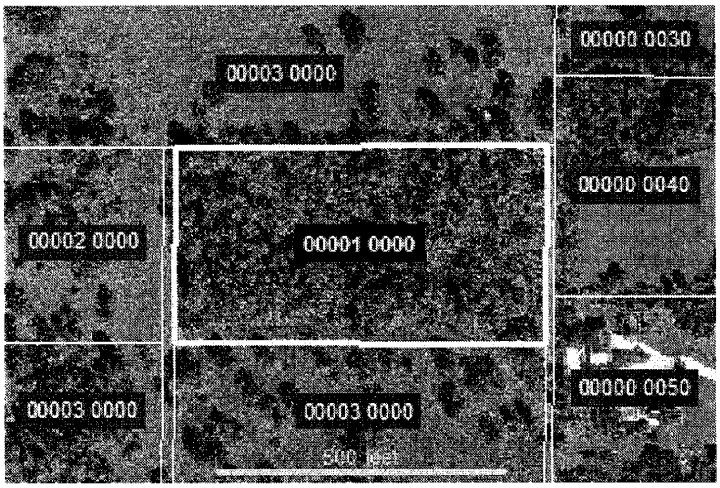
SITE ADDRESS

ACCESS UNDETERMINED
ALVA FL 33920

LEGAL DESCRIPTION

HARTS P JOHN SUBD
PB 3 PG 7
LOT 1

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	121,000
ASSESSED	1,290
ASSESSED SOH	1,290
TAXABLE	1,290
BUILDING	0
LAND	1,290
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	119,710

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	4.84
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
514,500	7/14/2006	2006000281036	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 17-43-26-01-00002.0000	V
100	6/1/1993	2393/1580	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 17-43-26-01-00002.0000	V
13,500	2/1/1975	1079/447	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
2	B	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-01-00002.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

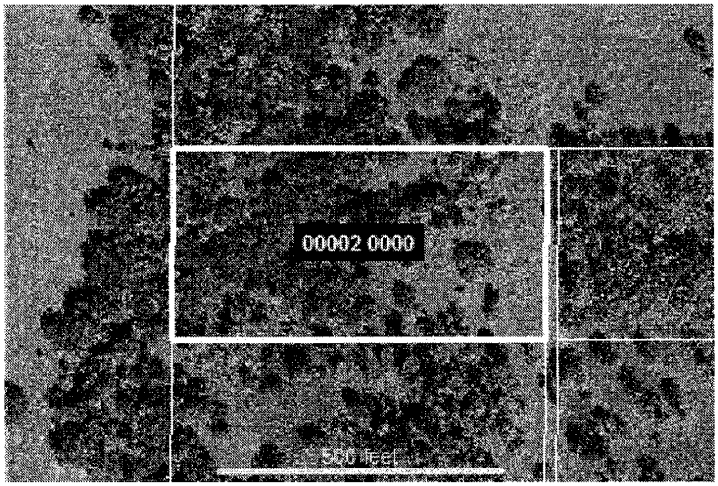
SITE ADDRESS

ACCESS UNDETERMINED
ALVA FL 33920

LEGAL DESCRIPTION

HARTS P JOHN SUBD
PB 3 PG 7
LOT 2

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	122,500
ASSESSED	1,080
ASSESSED SOH	1,080
TAXABLE	1,080
BUILDING	0
LAND	1,080
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	121,420

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	4.90
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
514,500	7/14/2006	2006000281036	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 17-43-26-01-00001.0000	V
100	6/1/1993	2393/1580	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 17-43-26-01-00001.0000	V
3,500	10/1/1970	635/727	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
2	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-01-00003.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD #200
BONITA SPRINGS FL 34135

SITE ADDRESS

ACCESS UNDETERMINED
ALVA FL 33920

LEGAL DESCRIPTION

HARTS P JOHN SUBD
PB 3 PG 7
LOTS 3 THRU 7 INCL

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	611,750
ASSESSED	5,750
ASSESSED SOH	5,750
TAXABLE	5,750
BUILDING	0
LAND	5,750
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	606,000

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	24.47
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING	

LAND FEATURES	0

SQFT	
1ST YEAR BUILDING ON TAX ROLL	0
HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,875,800	7/14/2006	2006000281034	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0040, 17-43-26-00-00001.0000, 17-43-26-01-00009.0000	V
100	7/14/2006	2006000281029	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 17-43-26-01-00009.0000, 20-43-26-00-00001.0040	V
100	10/21/2004	4481/2441	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	6/1/1993	2393/1572	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-01-00009.0000, 23-43-26-00-00013.0000	V
100	3/1/1986	1837/1812	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, Click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	A7-EL8	125124	0250	B	091984

[Show] **Appraisal Details**

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-01-00008.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD #200
BONITA SPRINGS FL 34135

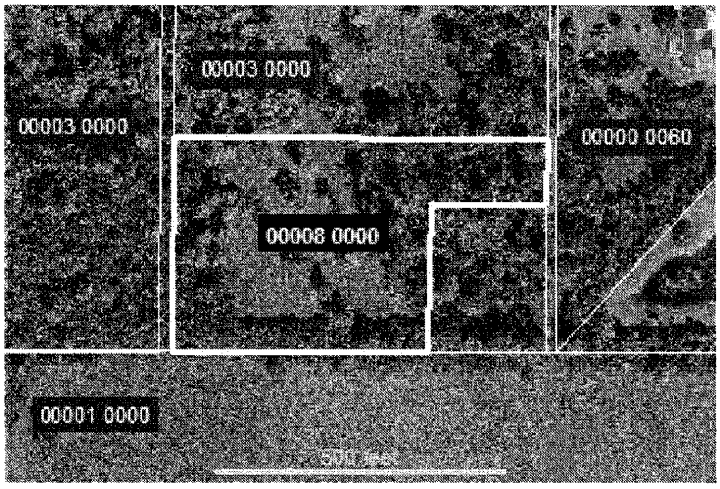
SITE ADDRESS

ACCESS UNDETERMINED
ALVA FL 33920

LEGAL DESCRIPTION

HARTS P JOHN SUBD
PB 3 PG 5
LOT 8

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	93,750
ASSESSED	820
ASSESSED SOH	820
TAXABLE	820
BUILDING	0
LAND	820
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	92,930

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	3.75
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	

LAND FEATURES	0	1ST YEAR BUILDING ON TAX ROLL	0
		HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
206,500	7/14/2006	2006000281038	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
100	5/1/1993	2387/2301	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	5/1/1977	1200/1931	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
2	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 17-43-26-01-00009.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD #200
BONITA SPRINGS FL 34135

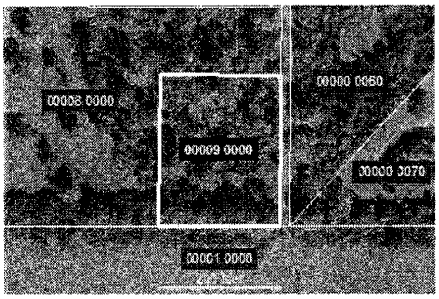
SITE ADDRESS

ACCESS UNDETERMINED
ALVA FL 33920

LEGAL DESCRIPTION

HARTS P JOHN SUBD
PB 3 PG 7
LOTS 9 + 10

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	27,500	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	230	WIDOW	0	TOTAL NUMBER OF LAND UNITS	1.10
ASSESSED SOH	230	WIDOWER	0	FRONTAGE	0
TAXABLE	230	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	230	AGRICUTLURE	27,270	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	0
LAND FEATURES	0			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,875,800	7/14/2006	2006000281034	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0040, 17-43-26-00-00001.0000, 17-43-26-01-00003.0000	V
100	7/14/2006	2006000281029	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 17-43-26-01-00003.0000, 20-43-26-00-00001.0040	V
100	10/21/2004	4481/2459	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	6/1/1993	2393/1572	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-01-00003.0000, 23-43-26-00-00013.0000	V
100	3/1/1988	1979/1806	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 23-43-26-00-00013.0000	V

SOLID WASTE (GARBAGE) ROLL DATA

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click here

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
2	A7-EL8	125124	0250	B	091984

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 18-43-26-00-00001.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 201
BONITA SPRINGS FL 34135

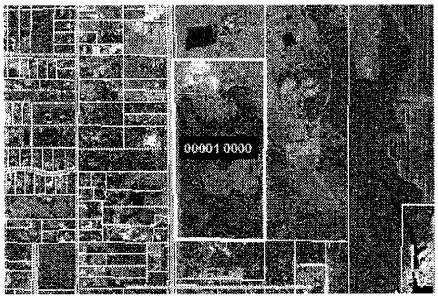
SITE ADDRESS

18500 SR 31
ALVA FL 33920

LEGAL DESCRIPTION

W 1/2 LESS RD R/W
+ 1.0010 THRU 1.006

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

IMAGE OF STRUCTURE

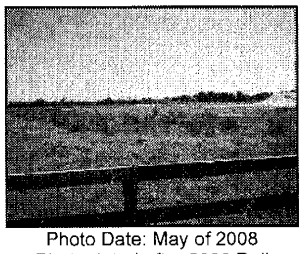


Photo Date: May of 2008
Photo dated after 2008 Roll

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

60 - GRAZING LAND CLASS I

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]

JUST	2,688,350
ASSESSED	279,370
ASSESSED SOH	279,370
TAXABLE	279,370
BUILDING	0
LAND	279,370
BUILDING FEATURES	0
SOH DIFFERENCE	0
LAND FEATURES	0

EXEMPTIONS

HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	2,408,980

ATTRIBUTES

LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	76.81
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	
1ST YEAR BUILDING ON TAX ROLL	0
HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
13,848,400	12/15/2006	2006000467701	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0010	V
100	12/15/2006	2006000467699	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	6/29/2004	4377/3953	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
240,000	12/24/1996	2776/737	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0060	V
240,000	12/20/1996	2775/1435	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0060	V
100	6/1/1995	2608/975	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0050, 18-43-26-00-00001.0060, 18-43-26-00-00001.0080	V
100	1/19/1988	1968/590	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 5 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0060, 19-43-26-00-00001.0000, 19-43-26-00-00001.0020, 19-43-26-00-00001.0030, 19-43-26-00-00001.0040	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT

004 - Service Area 4	-	0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ)				
	RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	AE-EL8	125124	225		

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 18-43-26-00-00001.0010
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

12250 N RIVER RD
ALVA FL 33920

LEGAL DESCRIPTION

PAR IN E 1/2 OF W 1/2 N OF RIVER AS DESC IN INST#2006-467701

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

IMAGE OF STRUCTURE

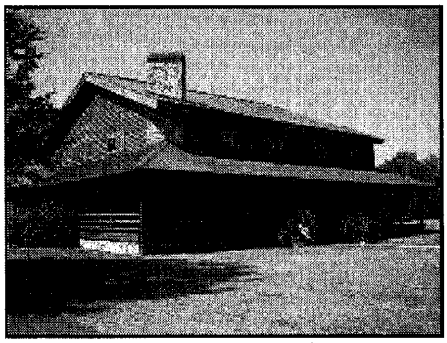

Photo Date: April of 2008
Photo dated after 2008 Roll

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	4,019,680
ASSESSED	1,637,300
ASSESSED SOH	1,637,300
TAXABLE	1,637,300

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	106.76
FRONTAGE	0

BUILDING	1,429,480	WHOLLY	0	DEPTH	0
LAND	207,820	AGRICUTLURE	2,382,380	BEDROOMS	4
BUILDING FEATURES	34,590			BATHROOMS	4
SOH DIFFERENCE	0			TOTAL BUILDING SQFT	22,101
LAND FEATURES	0			1ST YEAR BUILDING ON TAX ROLL	1995
				HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	DESCRIPTION	VACANT / IMPROVED
13,848,400	12/15/2006	2006000467701	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0000	V
720,000	6/1/1994	2510/2120	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00001.0120	V

PARCEL NUMBERING HISTORY

CREATION DATE - 1/1/1994

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
18-43-26-00-00001.0120	Split (From another Parcel)	Wednesday, January 17, 2007
18-43-26-00-00001.0000	Split (From another Parcel)	

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	R - Residential Category		1	228.33

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	AE-EL8	125124	225		

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 18-43-26-00-00002.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

18420 OWL CREEK DR
ALVA FL 33920

LEGAL DESCRIPTION

E 1/2 AS DESC IN OR 2619
PG 3907LESS OR 1087 PG 233
+ OR 2437/2976

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

60 - GRAZING LAND CLASS I

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	2,106,750	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	18,850	WIDOW	0	TOTAL NUMBER OF LAND UNITS	26.75
ASSESSED SOH	18,850	WIDOWER	0	FRONTAGE	0
TAXABLE	18,850	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	18,850	AGRICUTLURE	2,087,900	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	1986
LAND FEATURES	0			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,000,000	10/17/2006	2006000405365	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0020, 19-43-26-00-00002.1010, 19-43-26-00-00002.1020	V
100	8/22/2006	2006000334929	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0020, 19-43-26-00-00002.1010, 19-43-26-00-00002.1020	V
100	3/21/2005	4637/1078	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0020, 19-43-26-00-00002.1020	V
100	6/15/1999	3136/1849	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0030, 19-43-26-00-00002.1020	V
100	6/15/1999	3136/1844	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0030, 19-43-26-00-00002.1020	V
100	3/25/1998	2941/3561	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0030, 19-43-26-00-00002.1020	V
100	6/23/1997	2841/1219	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0030, 19-43-26-00-00002.1020	I
100	7/14/1995	2619/3907	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00002.1020	V

100	1/1/1994	2464/1973	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0020, 18-43-26-00-00002.0030, 19-43-26-00-00002.1010	I
100	4/1/1992	2290/3477	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0030, 19-43-26-00-00002.0000, 19-43-26-00-00002.1000	I

Parcel Numbering History

Creation Date - Unavailable

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00002.1000	Split (From another Parcel)	Friday, April 30, 2004

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	A7-EL8	125124	0250	B	091984

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 18-43-26-00-00002.0010
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tangible Accounts on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

18251 OWL CREEK DR
ALVA FL 33920

LEGAL DESCRIPTION

PARL IN SE 1/4 N OF CRK
AS DESC IN OR 1100 PG 0642

[VIEWER] TAX MAP [PRINT]

IMAGE OF STRUCTURE

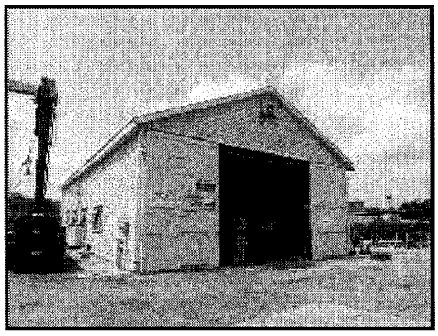

Photo Date: June of 2008
Photo dated after 2008 Roll

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	20 - AIRPORTS, TERMINALS, PIERS

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	1,883,090
ASSESSED	1,883,090
ASSESSED SOH	1,883,090
TAXABLE	1,883,090
BUILDING	916,710
LAND	966,380

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	0

ATTRIBUTES	
LAND UNITS OF MEASURE**	MIXED USE
TOTAL NUMBER OF LAND UNITS	18.78
FRONTAGE	0
DEPTH	0
BEDROOMS	3

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/3/2007	2007000334594	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	I
3,700,000	1/5/2001	3348/2578	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	I
0	8/1/1975	1100/642	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	
217,000	5/1/1975	1087/233			

PARCEL NUMBERING HISTORY

CREATION DATE - 1/1/1975

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
18-43-26-00-00002.0000	N/A	

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	C - Commercial Category	C	12422	369.95

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	AE-EL8	125124	225		

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00002.1020
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

17900 OWL CREEK DR
ALVA FL 33920

LEGAL DESCRIPTION

PAR IN NE 1/4 OF SEC LYING
N OF RIVER AND EAST OF LIN
DESC IN OR 2619 PG 3907

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

TAXING DISTRICT

202 - BAYSHORE FIRE/CO MOSQUITO

DOR CODE

61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	5,404,810	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	20,180	WIDOW	0	TOTAL NUMBER OF LAND UNITS	61.29
ASSESSED SOH	20,180	WIDOWER	0	FRONTAGE	0
TAXABLE	20,180	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	20,180	AGRICUTLURE	5,384,630	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	0
LAND FEATURES	0			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
20,000,000	10/17/2006	2006000405365	02	Qualified (Multiple STRAP # / 06-09I) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0020, 19-43-26-00-00002.1010	V
100	8/22/2006	2006000334929	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0020, 19-43-26-00-00002.1010	V
100	3/21/2005	4637/1078	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0020	V
100	6/15/1999	3136/1849	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0030	V
100	6/15/1999	3136/1844	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0030	V
100	3/25/1998	2941/3561	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0030	V
100	6/23/1997	2841/1219	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000, 18-43-26-00-00002.0030	V
100	7/14/1995	2619/3907	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 18-43-26-00-00002.0000	V

Parcel Numbering History

Creation Date - 1/1/1995

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00002.1000	Split (From another Parcel)	

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	A7-EL8	125124	0250	B	091984

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00005.0030
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

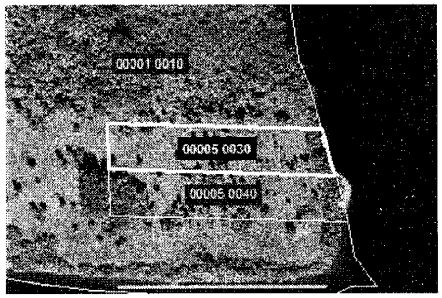
SITE ADDRESS

HAVENS ISLAND
FORT MYERS FL 33905

LEGAL DESCRIPTION

GOVT LT 8
N OF RIVER AS DESC
IN OR 133 PG 336
LESS OR 2841/745

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	34,000	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	34,000	WIDOW	0	TOTAL NUMBER OF LAND UNITS	1.36
ASSESSED SOH	34,000	WIDOWER	0	FRONTAGE	0
TAXABLE	34,000	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	34,000	AGRICUTLURE	0	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	0
LAND FEATURES	0			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	5/27/2008	2008000144044	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/2/1997	2865/624	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040	V
100	7/2/1997	2841/739	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040	V
30,000	9/1/1990	2175/1415	06	Qualified (Fair Market Value / Arms Length / One STRAP #) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0040	V

100	11/1/1982	1657/3902	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 35-43-25-00-00012.0000, 03-44-25-01-00070.0010, 19-43-26-00-00005.0040	V

Parcel Numbering History

Creation Date - Unavailable

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00005.0040	Split (From another Parcel)	Thursday, September 17, 1998
19-43-26-00-00005.0000	N/A	

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, Click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00005.0040
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE200
BONITA SPRINGS FL 34135

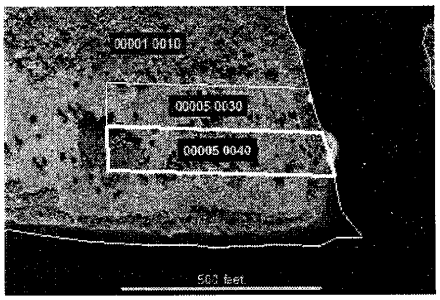
SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

SOUTHERLY PORTION OF
HAVENS ISLAND DESC
OR 2841 PG 745

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	35,750	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	35,750	WIDOW	0	TOTAL NUMBER OF LAND UNITS	1.43
ASSESSED SOH	35,750	WIDOWER	0	FRONTAGE	0
TAXABLE	35,750	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	35,750	AGRICUTLURE	0	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			HISTORIC DISTRICT	NO
LAND FEATURES	0				

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/2/1997	2865/624	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030	V
100	7/2/1997	2841/739	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030	V
30,000	9/1/1990	2175/1415	06	Qualified (Fair Market Value / Arms Length / One STRAP #) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030	V
100	11/1/1982	1657/3902	04	Disqualified (Multiple STRAP # - 01,03,04,07)	V

There are 3 additional parcel(s) with this document (may have been split after the transaction date)...
35-43-25-00-00012.0000, 03-44-25-01-00070.0010, 19-43-26-00-00005.0030

Parcel Numbering History

Creation Date - 9/18/1998

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00005.0030	Split (From another Parcel)	Friday, September 18, 1998

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	R - Residential Category			0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0010
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

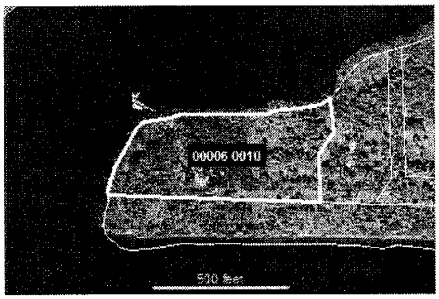
SITE ADDRESS

6 HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

GVT LT 6 + PT OF GVT LT 7
N OF US CHANNEL IN RIVER
LESS PARL 6.2 THRU 6.007

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

IMAGE OF STRUCTURE

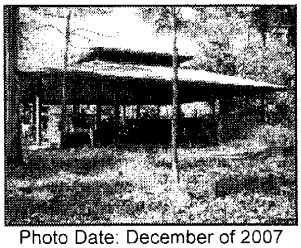


Photo Date: December of 2007

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	175,240	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	175,240	WIDOW	0	TOTAL NUMBER OF LAND UNITS	5.40
ASSESSED SOH	175,240	WIDOWER	0	FRONTAGE	0
TAXABLE	175,240	DISABILITY	0	DEPTH	0
BUILDING	7,140	WHOLLY	0	BEDROOMS	
LAND	168,100	AGRICUTLURE	0	BATHROOMS	
BUILDING FEATURES	7,140			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	1982
LAND FEATURES	33,100			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	I
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	I
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	I
80,000	1/1/1980	1406/2205	02	Qualified (Multiple STRAP # / 06-09I) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	V
0	1/1/1900	298/323		There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	

PARCEL NUMBERING HISTORY

CREATION DATE - UNAVAILABLE

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
00-00-00-00-00000.0000	Split (From another Parcel)	Thursday, July 17, 1997

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ)				
	RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	AE-EL8	125124	225		

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0030
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

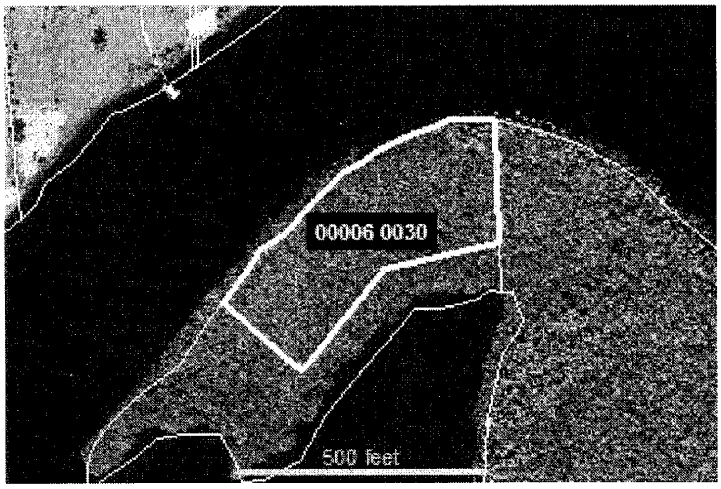
SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

PARL IN GVT LT 6 SEC 19
TWP 43 RGE 26 DESC IN
OR 1478 PG 2163

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	34,880
ASSESSED	34,880
ASSESSED SOH	34,880
TAXABLE	34,880
BUILDING	0
LAND	34,880
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	0

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	2.79
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	

LAND FEATURES	0	**1ST YEAR BUILDING ON TAX ROLL**	0
		HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100,000	1/4/2000	3206/1474	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0050	V
22,000	11/1/1980	1478/2163	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V

PARCEL NUMBERING HISTORY

CREATION DATE - 1/1/1981

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
19-43-26-00-00006.0010	Split (From another Parcel)	

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show] **Appraisal Details**

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0040
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

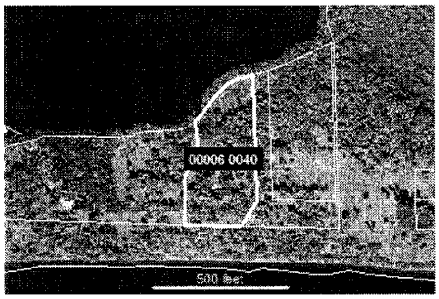
SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

PARL IN GOVT LOT 6
DESC IN OR 1741 PG 0729

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

IMAGE OF STRUCTURE

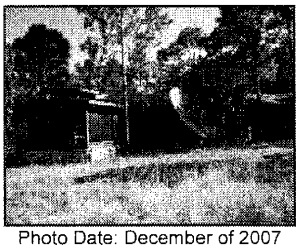


Photo Date: December of 2007

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

01 - SINGLE FAMILY RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	166,240	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	166,240	WIDOW	0	TOTAL NUMBER OF LAND UNITS	2.20
ASSESSED SOH	166,240	WIDOWER	0	FRONTAGE	0
TAXABLE	166,240	DISABILITY	0	DEPTH	0
BUILDING	111,240	WHOLLY	0	BEDROOMS	3
LAND	55,000	AGRICUTLURE	0	BATHROOMS	1
BUILDING FEATURES	1,330			TOTAL BUILDING SQFT	3,762
SOH DIFFERENCE	0			1ST YEAR BUILDING ON TAX ROLL	0
LAND FEATURES	0			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	I
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	3/31/1997	2807/3797	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
26,500	7/1/1984	1741/729	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V

PARCEL NUMBERING HISTORY

CREATION DATE - 1/1/1985

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
19-43-26-00-00006.0010	Split (From another Parcel)	

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	R - Residential Category		1	228.33

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click HERE

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0050
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

PAR IN GOVT LT 6
DESC IN OR 1937 PG 3675

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
076 - FORT MYERS SHORES FIRE & LIGHT	00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	86,250
ASSESSED	86,250
ASSESSED SOH	86,250
TAXABLE	86,250
BUILDING	0
LAND	86,250
BUILDING FEATURES	0
SOH DIFFERENCE	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	0

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	3.45
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	

LAND FEATURES	0	1ST YEAR BUILDING ON TAX ROLL	0
		HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100,000	1/4/2000	3206/1474	02	Qualified (Multiple STRAP # / 06-09I) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0030	V
0	6/1/1986	1937/3675	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V

PARCEL NUMBERING HISTORY

CREATION DATE - 1/1/1988

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
19-43-26-00-00006.0010	Split (From another Parcel)	

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click here

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show] **Appraisal Details**

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0060
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

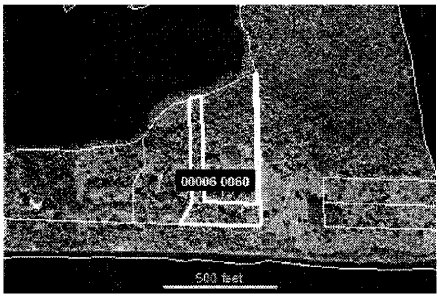
SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

PT OF GOVT LOT 6 AS DESC
IN OR 2841 PG 736

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	35,000	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	35,000	WIDOW	0	TOTAL NUMBER OF LAND UNITS	1.40
ASSESSED SOH	35,000	WIDOWER	0	FRONTAGE	0
TAXABLE	35,000	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	35,000	AGRICUTLURE	0	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			HISTORIC DISTRICT	NO
LAND FEATURES	0				

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0070	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0070, 30-43-26-00-00001.0000	V
100	7/2/1997	2841/736	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
80,000	1/1/1980	1406/2205	02	Qualified (Multiple STRAP # / 06-09I) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0010, 19-43-26-00-00006.0070	V
0	1/1/1900	298/323		There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0010, 19-43-26-00-00006.0070	

Parcel Numbering History

Creation Date - 7/17/1997

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00006.0010	Split (From another Parcel)	Thursday, July 17, 1997

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-			0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click here

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 19-43-26-00-00006.0070
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

RESOURCE CONSERVATION
PROPERTIES INC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

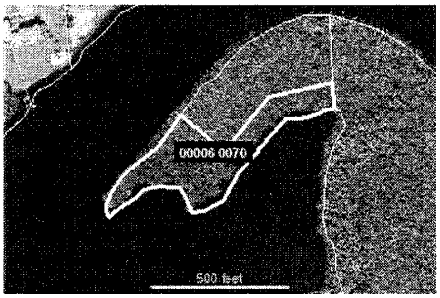
SITE ADDRESS

HAVENS ISLAND
ALVA FL 33920

LEGAL DESCRIPTION

PT OF GOVT LOT 7 N OF US
CHANNEL IN RIVER AS DESC
IN OR 2841/742 LESS 6.003

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT

050 - COUNTY/NO FIRE DISTRICT

DOR CODE

00 - VACANT RESIDENTIAL

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]		EXEMPTIONS		ATTRIBUTES	
JUST	35,000	HOMESTEAD	0	LAND UNITS OF MEASURE	AC
ASSESSED	35,000	WIDOW	0	TOTAL NUMBER OF LAND UNITS	2.80
ASSESSED SOH	35,000	WIDOWER	0	FRONTAGE	0
TAXABLE	35,000	DISABILITY	0	DEPTH	0
BUILDING	0	WHOLLY	0	BEDROOMS	
LAND	35,000	AGRICUTLURE	0	BATHROOMS	
BUILDING FEATURES	0			TOTAL BUILDING SQFT	
SOH DIFFERENCE	0			HISTORIC DISTRICT	NO
LAND FEATURES	0				

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
100	10/10/2007	2007000334595	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 7 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060	V
2,690,000	6/29/2000	3284/1452	02	Qualified (Multiple STRAP # / 06-09I) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0030, 19-43-26-00-00006.0040, 19-43-26-00-00006.0050, 19-43-26-00-00006.0060, 30-43-26-00-00001.0000	V
100	7/9/1999	3145/2200	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 6 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00005.0030, 19-43-26-00-00005.0040, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 30-43-26-00-00001.0000	V
100	7/2/1997	2841/742	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
80,000	1/1/1980	1406/2205	02	Qualified (Multiple STRAP # / 06-09I) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0010, 19-43-26-00-00006.0060	V
0	1/1/1900	298/323		There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 19-43-26-00-00006.0010, 19-43-26-00-00006.0060	

Parcel Numbering History

Creation Date - 7/17/1997

Prior STRAP	Renumber Reason	Renumber Date
19-43-26-00-00006.0010	Split (From another Parcel)	Thursday, July 17, 1997

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-			0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

Elevation Information

This category may change in September 2008. To view the new category, click here

Storm Surge Category	Flood Insurance (FIRM FAQ)				
	Rate Code	Community	Panel	Version	Date
T S	AE-EL8	125124	225		

[Show]

Appraisal Details

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 20-43-26-00-00001.0000
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 201
BONITA SPRINGS FL 34135

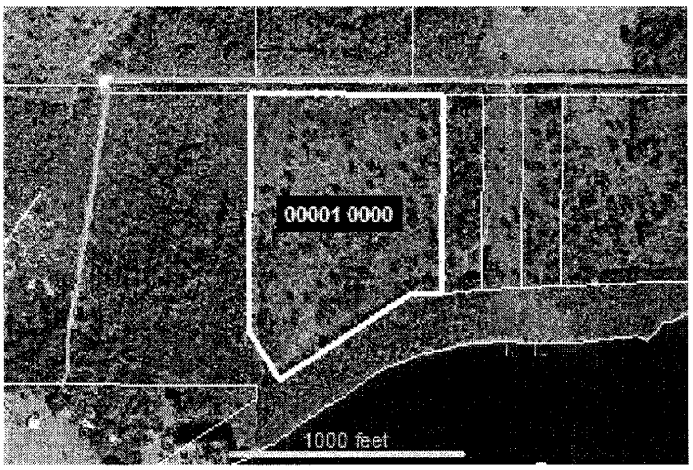
SITE ADDRESS

13638 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

PARL IN NE 1/4 AS DESC IN
OR 1227 PG 1185

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	2,670,310
ASSESSED	4,060
ASSESSED SOH	4,060
TAXABLE	4,060
BUILDING	0
LAND	4,060
BUILDING FEATURES	0
SOH DIFFERENCE	0
LAND FEATURES	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	2,666,250

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	19.78
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	
TOTAL BUILDING SQFT	
1ST YEAR BUILDING ON TAX ROLL	0

HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
3,930,000	7/14/2006	2006000281045	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
40,000	6/1/1977	1227/1184	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V
100	10/1/1970	634/752	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 20-43-26-00-00001.0040
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 201
BONITA SPRINGS FL 34135

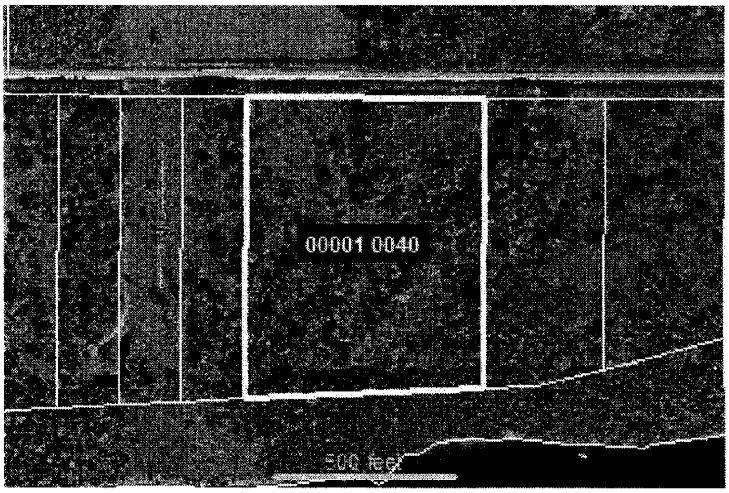
SITE ADDRESS

13808 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

W 1/2 OF NE 1/4 OF NE 1/4
LESS PAR 1.001 + RD R/W

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	1,691,550
ASSESSED	2,570
ASSESSED SOH	2,570
TAXABLE	2,570
BUILDING	0
LAND	2,570
BUILDING	

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	1,688,980

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	12.53
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	

FEATURES	0
SOH DIFFERENCE	0
LAND FEATURES	0

TOTAL BUILDING SQFT	
1ST YEAR BUILDING ON TAX ROLL	0
HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
2,454,000	7/14/2006	2006000281043	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
100	7/14/2006	2006000281029	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 8 additional parcel(s) with this document (may have been split after the transaction date)... 16-43-26-00-00001.0010, 16-43-26-00-00001.0020, 16-43-26-00-00001.0040, 16-43-26-00-00007.0070, 17-43-26-00-00001.0000, 17-43-26-00-00003.0000, 17-43-26-01-00003.0000, 17-43-26-01-00009.0000	V
100	10/21/2004	4481/2456	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	9/1/1970	634/753	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V

PARCEL NUMBERING HISTORY

CREATION DATE - UNAVAILABLE

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
20-43-26-00-00001.0000	N/A	

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ)				
	RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 20-43-26-00-00001.0070
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 200
BONITA SPRINGS FL 34135

SITE ADDRESS

13746 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

PARL LOC IN GOVT LOT 1 AS DESC IN OR 2906 PG 1605

[VIEWER] TAX MAP [PRINT]

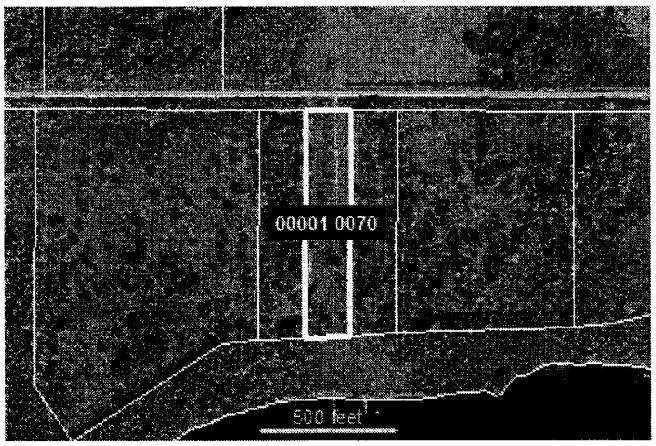

IMAGE OF STRUCTURE

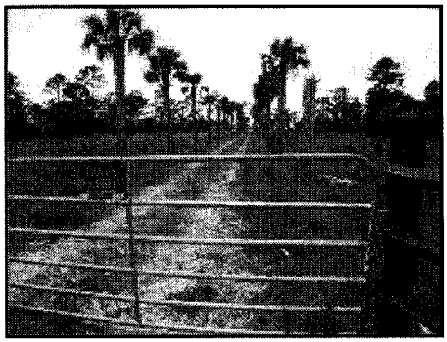

Photo Date: May of 2005

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	685,680
ASSESSED	18,360
ASSESSED SOH	18,360
TAXABLE	18,360

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	3.34
FRONTAGE	0

BUILDING	0	WHOLLY	0	DEPTH	0
LAND	18,360	AGRICUTLURE	667,320	BEDROOMS	
BUILDING FEATURES	0			BATHROOMS	
SOH DIFFERENCE	0			TOTAL BUILDING SQFT	
LAND FEATURES	17,670			HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	DESCRIPTION	VACANT / IMPROVED
100	11/3/2006	2006000424647	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	8/28/2006	2006000347579	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
1,200,000	5/10/2006	2006000192800	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
525,000	9/30/2003	4081/1997	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
170,000	1/27/2000	3215/2220	06	Qualified (Fair Market Value / Arms Length / One STRAP #)	V
100	1/5/1998	2906/1605	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
155,000	1/11/1989	2043/1151	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0060, 20-43-26-00-00001.0080	V
100	1/1/1985	2029/1308	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0060, 20-43-26-00-00001.0080	V

PARCEL NUMBERING HISTORY

CREATION DATE - 1/20/1998

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
20-43-26-00-00001.0060	Split (From another Parcel)	Tuesday, January 20, 1998

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-			0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ)				
	RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 20-43-26-00-00001.0080
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Building Permits on this Parcel | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 201
BONITA SPRINGS FL 34135

SITE ADDRESS

13778 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

PARL LOC IN GOVT
LOT 1 AS DESC IN
OR 2906 PG 1608

[VIEWER] TAX MAP [PRINT]

[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	677,910
ASSESSED	10,590
ASSESSED SOH	10,590
TAXABLE	10,590
BUILDING	0
LAND	10,590
BUILDING FEATURES	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	667,320

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	3.34
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	

SOH Difference	0	**Total Building SqFt**	
Land Features	9,900	**Historic District**	No

Sales/Transactions

Sale Price	Date	OR Number	Transaction Details Type	Transaction Details Description	Vacant / Improved
1,400,000	9/11/2006	2006000353027	08	Disqualified (Doc Stamps Greater than .70/SP Gr. than $100)	V
100	11/30/2005	2006000150105	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
100	1/5/1998	2906/1608	01	Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
155,000	1/11/1989	2043/1151	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0060, 20-43-26-00-00001.0070	V
100	1/1/1985	2029/1308	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 2 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0060, 20-43-26-00-00001.0070	V

Parcel Numbering History

Creation Date - 1/20/1998

Prior STRAP	Renumber Reason	Renumber Date
20-43-26-00-00001.0060	Split (From another Parcel)	Tuesday, January 20, 1998

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit/Area	Tax Amount
004 - Service Area 4	-			0.00

Collection Days

Garbage	Recycling	Horticulture
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ)				
	RATE CODE	COMMUNITY	PANEL	VERSION	DATE
T S	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

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Page was last modified Wednesday, July 30, 2008 3:48:21 PM.

LEE COUNTY PROPERTY APPRAISER

PROPERTY DATA FOR PARCEL 20-43-26-00-00001.0090
TAX YEAR 2008 PRELIMINARY

Parcel data is available for the following tax years:
[2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 (Preliminary)]

[Next Lower Parcel Number | Next Higher Parcel Number | Display Tax Bills on this Parcel | Tax Estimator]

OWNERSHIP, LEGAL, SALES AND DISTRICT DATA ARE FROM THE CURRENT DATABASE. LAND, BUILDING, VALUE AND EXEMPTION DATA ARE FROM THE 2008 PRELIMINARY ROLL.

PROPERTY DETAILS

OWNER OF RECORD

NORTH RIVER COMMUNITIES LLC
9990 COCONUT RD STE 201
BONITA SPRINGS FL 34135

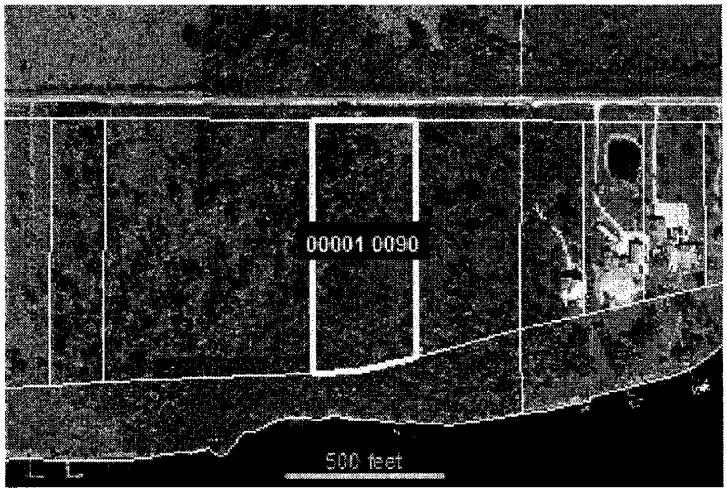
SITE ADDRESS

13860 DUKE HWY
ALVA FL 33920

LEGAL DESCRIPTION

TH E 1/2 OF TH E 1320 FT
OF GOVT LOT 1 LESS THE E 330FT
LYING N OF
C + F S CONTROL DIST

[VIEWER] TAX MAP [PRINT]



[PICTOMETRY]

TAXING DISTRICT	DOR CODE
202 - BAYSHORE FIRE/CO MOSQUITO	61 - GRAZING LAND CLASS II

PROPERTY VALUES (TAX ROLL 2008) [HISTORY CHART]	
JUST	835,500
ASSESSED	1,140
ASSESSED SOH	1,140
TAXABLE	1,140
BUILDING	0
LAND	1,140
BUILDING FEATURES	0

EXEMPTIONS	
HOMESTEAD	0
WIDOW	0
WIDOWER	0
DISABILITY	0
WHOLLY	0
AGRICUTLURE	834,360

ATTRIBUTES	
LAND UNITS OF MEASURE	AC
TOTAL NUMBER OF LAND UNITS	5.57
FRONTAGE	0
DEPTH	0
BEDROOMS	
BATHROOMS	

SOH DIFFERENCE	0	TOTAL BUILDING SQFT	
LAND FEATURES	0	HISTORIC DISTRICT	NO

SALES/TRANSACTIONS

SALE PRICE	DATE	OR NUMBER	TRANSACTION DETAILS TYPE	TRANSACTION DETAILS DESCRIPTION	VACANT / IMPROVED
1,166,000	7/14/2006	2006000281041	02	Qualified (Multiple STRAP # / 06-09I)	V
100	6/1/1993	2393/1568	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0050	V
100	3/1/1971	747/313	04	Disqualified (Multiple STRAP # - 01,03,04,07) There are 1 additional parcel(s) with this document (may have been split after the transaction date)... 20-43-26-00-00001.0050	V

PARCEL NUMBERING HISTORY

CREATION DATE - 8/24/2006

PRIOR STRAP	RENUMBER REASON	RENUMBER DATE
20-43-26-00-00001.0050	Split (From another Parcel)	Thursday, August 24, 2006

SOLID WASTE (GARBAGE) ROLL DATA

SOLID WASTE DISTRICT	ROLL TYPE	CATEGORY	UNIT/AREA	TAX AMOUNT
004 - Service Area 4	-		0	0.00

COLLECTION DAYS

GARBAGE	RECYCLING	HORTICULTURE
Thursday	Wednesday	Wednesday

ELEVATION INFORMATION

THIS CATEGORY MAY CHANGE IN SEPTEMBER 2008. TO VIEW THE NEW CATEGORY, CLICK HERE

STORM SURGE CATEGORY	FLOOD INSURANCE (FIRM FAQ) RATE CODE	COMMUNITY	PANEL	VERSION	DATE
2	A7-EL8	125124	0250	B	091984

[Show]

APPRAISAL DETAILS

TRIM (*proposed* tax) Notices are available for the following tax years:
[2006 | 2007]

[Next Lower Parcel Number | Next Higher Parcel Number]

[New Query | Parcel Queries Page | Lee PA Home]

This site is best viewed with Microsoft Internet Explorer 5.5+ or Netscape Navigator 6.0+.
Page was last modified Wednesday, July 30, 2008 3:48:21 PM.

INSTR # 2008000144044, Doc Type D, Pages 4, Recorded 05/30/2008 at 10:11 AM, Charlie Green, Lee County Clerk of Circuit Court, Rec. Fee $35.50 Deputy Clerk LHINSPETER

Prepared by and return to:
David L. Cook, Esq.
Henderson Franklin Starnes & Holt, P.A.
3451 Bonita Bay Boulevard, Suite 206
Bonita Springs, FL 34134

Prepared without opinion of title.

Documentary Stamp Taxes: $0.00*
Recording Fee: $35.50

Special Warranty Deed

This Special Warranty Deed made this 27th day of May, 2008 between Resource Conservation Properties, Inc, a Florida corporation, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135, Grantor, and North River Communities, LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135, Grantee,

(Whenever used herein the terms "Grantor" and "Grantee" include all the parties to this instrument and their heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporation, trusts and trustees.)

Witnesseth that said Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said Grantee, and Grantee's heirs and assigns forever, the following described land, (the "Land") situate, lying and being in Lee County, Florida, to-wit:

See Exhibits "A" and "B" attached hereto.

Subject to the following encumbrances and restrictions: (i) ad valorem real estates taxes for the year 2008 and subsequent years; (ii) all applicable laws, ordinances, and governmental regulations, including, but not limited to all applicable building, zoning, land use and environmental ordinances and regulations; (iii) matters which would be disclosed by an accurate survey of the land; and (iv) all matters, restrictions, easements, limitations, reservations, covenants of record and outstanding oil, gas and mineral interests, if any, but this reference shall not operate to re-impose same.

* This deed is exempt from Documentary Stamp Tax. The Grantor and Grantee are affiliated entities and there is no monetary consideration for this conveyance. The property described herein is encumbered by a Mortgage in favor of KeyBank, N.A., recorded as Instrument Number 2007000334599, Public Records of Lee County, Florida; however, both the Grantor and Grantee are mortgagors and obligors under that Mortgage and this conveyance does not affect the obligations of either Grantor or Grantee under said Mortgage.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold the same in fee simple forever.

And the Grantor hereby covenants with the Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land; that the Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under Grantor.

In Witness Whereof, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness #1 Printed Name Joanne Janes

Witness #2 Printed Name Melissa Ottenjan

Resource Conservation Properties, Inc., a Florida corporation

By:

Printed Name: Dennis L. Church

Its: Vice President

(Corporate Seal)

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 27th day of May, 2008 by Dennis L. Church as Vice President of Resource Conservation Properties, Inc., on behalf of the corporation. He/She [✓] is personally known to me or [ ] has produced a Florida driver's license as identification.

(SEAL)

Notary Public

Printed Name: Joanne Janes

My Commission Expires: 2/10/10

JOANNE JANES
Notary Public - State of Florida
My Commission Expires Feb 10, 2010
Commission # DD 506598
Bonded by National Notary Assn.

Exhibit "A"

TRACT X RCP-RIVERHAVEN:

Parcel 60 RIVERHAVEN:

PARCEL 3 Parcel 60 RIVERHAVEN:

NORTHERLY PARCEL IN GOVERNMENT LOT 8
SECTION 19, T. 43 S., R. 26 E.
LYING NORTH OF THE CALOOSAHATCHEE RIVER (CANAL C-43)
HAVENS ISLAND, LEE COUNTY, FLORIDA

A tract or parcel of land lying in Government Lot 8, Section 19, Township 43 South, Range 26 East, lying North of the Caloosahatchee River (Canal C-43), Havens Island, Lee County, Florida, which tract or parcel is described as follows:

From the Southwest corner of Section 19 run South 88° 18' 00" East along the South line of said section to the quarter section corner; thence run North 01° 30' 00" West along the quarter section line for 337.26 feet to the Southerly right-of- way of the Caloosahatchee River (Canal C-43), Plat Book 8 at Page 51, Lee County Records; thence continue North 01° 30' 00" West along said quarter section line for 761.38 feet to the Northerly right-of-way line of said river; thence continue North 01° 30' 00" West for 111.71 feet to the POINT OF BEGINNING of the herein described parcel.

From said POINT OF BEGINNING continue North 01° 30' 00" West along said quarter section line for 111.71 feet to the Northwest corner of said Government Lot 8; thence run South 88° 18' 00" East along the North line of said Lot 8 for 515 feet, more or less, to the waters of the Caloosahatchee River; thence run Southerly along said waters to an intersection with the line bearing South 88° 10' 01" East passing through the POINT OF BEGINNING; thence run North 88° 10' 01" West along said line for 536 feet, more or less, to the POINT OF BEGINNING. Bearings hereinabove mentioned are based on the Plat of Unit No. 4, Fort Myers Shores, Plat Book 11 at Page 28, said Public Records and the North/South quarter section line as bearing North 01° 30' 00" West.

Ke

TRACT XX RCP-OWL CREEK: Exhibit "B"

Parcel 72 OWL CREEK:

A Parcel of land in Section 18, Township 43 South, Range 26 East, Lee County, Florida, described as follows:
Starting at the Northeast corner of the aforesaid Section 18; thence West along the Northerly line of the aforesaid Section 18, said line also being the centerline of State Road #78, a distance of 1173.37 feet; thence S 01° 14' 00" E a distance of 3072.14 feet; thence S 23° 01' 05" W a distance of 392.39 feet to a point on the Westerly edge of a Roadway Easement 30 feet wide as described below; thence West a distance of 500.00 feet to a point and the Principal Place of Beginning; thence East a distance of 500.00 feet to a point on the Westerly edge of the roadway easement as described in Exhibit "B": thence S 22°34' 15" W a distance of 99.22 feet; thence S 12° 15' 15" W a distance of 100.00 feet; thence S 2° 31' 45" E a distance of 100.00 feet; thence S 8° 35' 25" E a distance of 299.99 feet; thence S 1° 09' 00" W a distance of 100.00 feet; thence S 5° 55' 50" W a distance of 300.00 feet; S 0° 25' 30" E a distance of 118.06 feet; thence Southerly 2 feet more or less to the waters of Trout Creek; thence South and West along the waters of Trout Creek and crossing the Mouth of Owl Creek a distance of 500.00 feet more or less to a point bearing South 1300 feet more or less from the Place of Beginning; thence North a distance of 1300 feet more or less to the Place of Beginning. Bearings hereinabove mentioned are derived from assuming the Northerly Line of Section 18 to bear West.

TOGETHER WITH:

Roadway Easement 30.00 feet wide being a part of Section 18, Township 43 South, Range 26 East, Lee County, Florida, and further bounded and described as follows:

Starting at the Northeast corner of the aforesaid Section 18; thence West along the Northerly line of the aforesaid Section 18, said line also being the centerline of State Road #78, a distance of 1173.37 feet to a point on the centerline of a roadway easement 30.00 feet wide, said point also being the Principal Place of Beginning of said Easement; thence S 1° 24' 15" E a distance of 755.54 feet; thence S 3° 01' 45" E a distance of 200.00 feet; thence S 3° 51' 00" E a distance of 399.99 feet; thence S 0° 04'15" E a distance of 200.00 feet; thence S 2° 42' 45" E a distance of 200.00 feet; thence S 0° 32' 08" E a distance of 400.00 feet; thence S 0° 11' 00" E a distance of 200.00 feet; thence S 1° 03' 00" E a distance of 400.00 feet; thence S 1° 48' 00" W a distance of 200.00 feet; thence S 5° 37' 30" W a distance of 100.00 feet; thence S 9° 23' 45" W a distance of 100.00 feet; thence S 16° 24' 15" W a distance of 100.00 feet; thence S 20° 50' 15" W a distance of 100.00 feet; thence S 21° 49' 27" W a distance of 97.71 feet to a point that is 15.00 feet East of the Northeast corner of the parcel as described in Exhibit "A"; thence West a distance of 15.00 feet to the Northeast corner of a parcel as described in Exhibit "A", said point also being on the Westerly edge of the aforesaid Roadway Easement that is 30.00 feet wide; thence S 22° 34' 15" W along the Westerly edge of the aforesaid Roadway Easement a distance of 99.22 feet; thence S 12° 15' 15" W along the aforesaid Westerly edge of a Roadway Easement a distance of 100.00 feet; thence S 2° 31' 45" E along the aforesaid Westerly edge of a Roadway Easement a distance of 100.00 feet; thence S 8° 35' 25" E along the aforesaid Westerly edge of a Roadway Easement a distance of 299.99 feet; thence S 1° 09' 00" W along the aforesaid Westerly edge of a Roadway Easement a distance of 100.00 feet; thence S 5° 55' 50" W along the aforesaid Westerly edge of a Roadway Easement a distance of 300.00 feet; thence S 0° 25' 13" E along the aforesaid Westerly edge of a Roadway Easement a distance of 118.06 feet; thence Southerly along the aforesaid Westerly edge of a Roadway Easement a distance of 2 feet more or less to the waters of Trout Creek and the end of the aforesaid Roadway Easement (30.00 feet wide). LESS Right-of-Way of State Road #78. Bearings hereinabove mentioned are derived from assuming the Northerly line of Section 18 to bear West.

INSTR # 2006000281038, Doc Type D, Pages 3, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $1445.50 Rec. Fee $27.00 Deputy Clerk LAMBROSIO

10

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN,
STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

(Space Above This Line for Recording Data)

WARRANTY DEED

This Indenture made this 14 day of July, 2006 between **RAYMOND E. HARNEY and KATHY R. HARNEY, husband and wife, as an estate by they entireties,** as Grantors, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135**, as Grantee.

WITNESSETH

That said Grantors, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantors, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

And said Grantors do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantors has hereunto set Grantors' hands and seals this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

Lynda Swenson

Printed Name of First Witness

Kimi Spangler

Printed Name of Second Witness

Raymond E. Harney

Kathy R. Harney

STATE OF: WASHINGTON
COUNTY OF: KING

The foregoing instrument was acknowledged before me this 6th day of July, 2006 by Raymond E. Harney and Kathy R. Harney, husband and wife. They are personally known to me or produced Driver License as valid identification.

SEAL

Derek W. Jensen

Derek W. Jensen
NOTARY PUBLIC
Printed Name of Notary
Commission expires: 08/09/08
Commission Serial No.

V:\WPWIN\RE\Cary\Warranty Deed-File C.wpd

EXHIBIT "A"

Parcel Two D

Lot 8, P. JOHN HARTS SUBDIVISION, a subdivision according to the plat thereof, as recorded in Plat Book 3, at Page 7, of the Public Records of Lee County, Florida.

INSTR # 2006000281045, Doc Type D, Pages 3, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $27510.00 Rec. Fee $27.00 Deputy Clerk LAMBROSIO

19

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN,
STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

_____ (Space Above This Line for Recording Data)_____

WARRANTY DEED

This Indenture made this 14 day of July, 2006 between **RAYMOND HARNEY a/k/a RAYMOND E. HARNEY,** as Grantor, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135**, as Grantee.

WITNESSETH

That said Grantor, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantor, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

Grantor warrants that at the time of this conveyance, the subject property is not the Grantor's homestead within the meaning set forth in the constitution of the State of Florida, nor is it contiguous to or a part of homestead property.

And said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

Lynda Swenson
Printed Name of First Witness

Kim Spangler
Printed Name of Second Witness

Raymond Harney a/k/a Raymond E. Harney

STATE OF: WASHINGTON
COUNTY OF: KING

The foregoing instrument was acknowledged before me this 6th day of July, 2006 by Raymond Harney a/k/a Raymond E. Harney. He is personally known to me or produced Driver License as valid identification.

SEAL

Derek W. Jensen
NOTARY PUBLIC
Printed Name of Notary
Commission expires: 08/09/08
Commission Serial No.

V:\WPWIN\RE\Cary\Warranty Deed-File F.wpd

EXHIBIT "A"

Parcel Three C

A tract or parcel of land lying in Government Lot 1, Section 20, Township 43 South, Range 26 East, Lee County, Florida being more particularly described as follows:
From the Northwest corner of Government Lot 1 of said Section 20 run South 00°20'40" West along the West line of said lot for 30.00 feet to an intersection with the South Right-of-Way line of Duke Highway (60' right-of-way) and the Point of Beginning.
From said Point of Beginning run South 89°41'18" East along said South right-of-way line for 839.08 feet; thence run South 00°23'49" West for 859.10 feet to an intersection with the North line of the Caloosahatchee River Canal (800' right-of-way); thence run South 86°59'37" West along the said canal for 139.80 feet; thence run South 56°47'02" West for 672.60 feet; thence run North 33°12'35" West for 250.13 feet to an intersection with the above mentioned West line of said Government Lot 1; thence North 00°20'40" East along said West line for 1,030.17 feet to the Point of Beginning.
Bearings hereinabove mentioned are based on assuming the North line of Government Lot 1 of Section 20 to bear North 89°41'18" West.

INSTR # 2006000281036, Doc Type D, Pages 3, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $3601.50 Rec. Fee $27.00 Deputy Clerk LAMBROSIO

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN,
STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

_____ (Space Above This Line for Recording Data)_____

WARRANTY DEED

This Indenture made this 14th day of July, 2006 between **GLENN O. CARY, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993, joined by his spouse LINNIE M. CARY,** as Grantors, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 201, Bonita Springs, Florida 34135,** as Grantee.

WITNESSETH

That said Grantors, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantors, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

And said Grantors do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantors have hereunto set Grantors' hands and seals this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

_____
GAHAGA
Printed Name of First Witness

_____
Edward L. Wotitzky
Printed Name of Second Witness

_____
Glenn O. Cary, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993

_____
Linnie M. Cary

STATE OF: Florida
COUNTY OF: Charlotte

The foregoing instrument was acknowledged before me this 14 day of July, 2006 by Glenn O. Cary, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993 on behalf of said trust, and Linnie M. Cary. They are personally known to me, ~~or produced~~ ——— ~~as valid identification~~.

Lorie Gahagan

NOTARY PUBLIC
Printed Name of Notary ~~Lorie Gahagan~~
Commission expires
Commission Serial No.

MY COMMISSION # DD265289 EXPIRES
November 15, 2007
BONDED THRU TROY FAIN INSURANCE, INC.

SEAL

V:\WPWIN\RE\Cary\Warranty Deed-File B.wpd

Exhibit "A" Legal Description

Parcel Two B

Lots 1 and 2, P. JOHN HARTS SUBDIVISION, a subdivision according to the plat thereof, as recorded in Plat Book 3, at Page 7, of the Public Records of Lee County, Florida.

INSTR # 2006000281041, Doc Type D, Pages 3, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $8162.00 Rec. Fee $27.00 Deputy Clerk LAMBROSIO

B

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN,
STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

_____ (Space Above This Line for Recording Data)_____

WARRANTY DEED

This Indenture made this 14th day of July, 2006 between **LINNIE M. CARY, Individually and as Trustee of the Linnie M. Cary Revocable Trust Agreement dated May 26, 1993 joined by her spouse GLENN O. CARY,** as Grantors, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 201, Bonita Springs, Florida 34135**, as Grantee.

WITNESSETH

That said Grantors, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantors, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

And said Grantors do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantors have hereunto set Grantors' hands and seals this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

_____
Printed Name of First Witness

_____
Printed Name of Second Witness

_____
Linnie M. Cary, Individually and as Trustee of the Linnie M. Cary Revocable Trust Agreement dated May 26, 1993

_____
Glenn O. Cary

STATE OF: Florida
COUNTY OF: Charlotte

The foregoing instrument was acknowledged before me this 14 day of July, 2006 by Linnie M. Cary, Individually and as Trustee of the Linnie M. Cary Revocable Trust Agreement dated May 26, 1993 on behalf of said trust, and Glenn O. Cary. They are personally known to me. ~~or produced~~ _____ as valid ~~identification~~.

Lorie Gahagan

NOTARY PUBLIC
Printed Name of Notary: Lorie Gahagan
Commission expires: MY COMMISSION # DD265289 EXPIRES November 15, 2007
Commission Serial No. BONDED THRU TROY FAIN INSURANCE, INC.

SEAL

V:\WPWIN\RE\Cary\Warranty Deed-File D.wpd

EXHIBIT "A"

Parcel Three A

The East one-half of the East 1,320 feet of Government Lot 1, in Section 20, Township 43 South, Range 26 East, lying North of the Right-of-Way line of the Central and Southern Florida Flood Control District less and except the Easterly 330 feet of the said parcel.

INSTR # 2006000281043, Doc Type D, Pages 3, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $17178.00 Rec. Fee $27.00 Deputy Clerk LAMBROSIO

15

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN,
STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

_____ (Space Above This Line for Recording Data)_____

WARRANTY DEED

This Indenture made this 14th day of July, 2006 between **ALBERT NATHAN MILLER, JR., Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002,** as Grantor, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135,** as Grantee.

WITNESSETH

That said Grantor, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantor, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

Grantor warrants that at the time of this conveyance, the subject property is not the Grantor's homestead within the meaning set forth in the constitution of the State of Florida, nor is it contiguous to or a part of homestead property.

And said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

GAHAGA

Printed Name of First Witness

Edward L. Wotitzky

Printed Name of Second Witness

Albert Nathan Miller, Jr., Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002

STATE OF: Florida
COUNTY OF: Charlotte

The foregoing instrument was acknowledged before me this 14 day of July, 2006 by Albert Nathan Miller, Jr., as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002 on behalf of said trust. He is personally known to me ~~or produced~~ _____ as ~~valid identification~~.

Lorie Gahagan

NOTARY PUBLIC
Printed Name of Notary: ~~Lorie Gahagan~~
Commission expires: MY COMMISSION # DD265289 EXPIRES November 15, 2007
Commission Serial No. BONDED THRU TROY FAIN INSURANCE, INC.

SEAL

V:\WPWIN\RE\Cary\Warranty Deed-File E.wpd

EXHIBIT "A"

Parcel Three B

The East 1,320 feet of Government Lot 1, in Section 20, Township 43 South, Range 26 East, lying North of the Right-of-Way line of the Central and Southern Florida Flood Control District, less and except the East half of the said East 1,320 feet.

INSTR # 2006000281034, Doc Type D, Pages 5, Recorded 07/17/2006 at 11:19 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $146130.60 Rec. Fee $44.00 Deputy Clerk LAMBROSIO

This Instrument Prepared by:
Edward L. Wotitzky, Esquire
WOTITZKY, WOTITZKY, ROSS, GOLDMAN, STURGES & TUTTLE, P.A.
109 Taylor Street, Suite 112
Punta Gorda, FL 33950
Strap No.

(Space Above This Line for Recording Data)

WARRANTY DEED

This Indenture made this 14th day of July, 2006 between **GLENN O. CARY, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993, joined by his spouse, LINNIE M. CARY, RAYMOND E. HARNEY, and ALBERT NATHAN MILLER, JR., Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002,** as Grantors, to **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135**, as Grantee.

WITNESSETH

That said Grantors, for in consideration of TEN AND NO/100s DOLLARS, and other good and valuable considerations to said Grantors, in hand paid by said Grantee, the receipt whereof is hereby acknowledged, and does grant, bargain, sell, alien, remise, release, convey and confirm to Grantee and Grantee's heirs, successors and assigns forever the following described land located in the County of Lee, State of Florida, to wit:

See Exhibit "A" attached hereto and made a part hereof as if fully set forth herein.

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of records, if any.

Grantors, Raymond E. Harney and Albert Nathan Miller, Jr., Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002, each warrant that at the time of this conveyance, the subject property is not the Grantors' homestead within the meaning set forth in the constitution of the State of Florida, nor is it contiguous to or a part of homestead property.

And said Grantors do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantors have hereunto set Grantors' hands and seals this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

LORIE GAHAGAN
Printed Name of First Witness

Edward L. Wolitzky
Printed Name of Second Witness

Glenn O. Cary, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993

Linnie M. Cary

STATE OF: Florida
COUNTY OF: Charlotte

The foregoing instrument was acknowledged before me this 14 day of July, 2006 by Glenn O. Cary, Individually and as Trustee of the Glenn O. Cary Revocable Trust Agreement dated May 26, 1993 on behalf of said trust, and Linnie M. Cary. They are personally known to me ~~or produced~~ _____ ~~as valid identification.~~

SEAL

NOTARY PUBLIC
Printed Name of Notary
Commission expires:
Commission Serial No.

Lorie Gahagan
MY COMMISSION # DD265289 EXPIRES
November 15, 2007
BONDED THRU TROY FAIN INSURANCE, INC.

V:\WPWIN\RE\Cary\Warranty Deed-File A.wpd
File A

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

Kim Spangler
Kim Spangler
Printed Name of First Witness

Lyda Swenson
Lyda Swenson
Printed Name of Second Witness

Raymond E. Harney

STATE OF: WASHINGTON
COUNTY OF: KING

The foregoing instrument was acknowledged before me this 6th day of July, 2006 by Raymond E. Harney. He is personally known to me or produced Driver License as valid identification.

SEAL

NOTARY PUBLIC
DEREK W. JENSEN
NOTARY PUBLIC
STATE OF WASHINGTON
08-09-08

Derek W. Jensen
NOTARY PUBLIC
Printed Name of Notary
Commission expires: 08/09/08
Commission Serial No.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal this day and year first above written.

SIGNED, SEALED and DELIVERED
in the presence of:

Printed Name of First Witness

Printed Name of Second Witness

Albert Nathan Miller, Jr. , Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002

STATE OF: Florida
COUNTY OF: Charlotte

The foregoing instrument was acknowledged before me this 14 day of July, 2006 by Albert Nathan Miller, Jr., Individually and as Trustee of the Gladys Cleo Miller Revocable Trust created under Trust Agreement dated May 16, 2002 on behalf of said trust. He is personally known to me, ~~or produced~~ _____ as valid ~~identification~~.

SEAL

NOTARY PUBLIC
Printed Name of Notary: ~~Lorie Gahagan~~
Commission expires: MY COMMISSION # DD265289 EXPIRES November 15, 2007
Commission Serial No. BONDED THRU TROY FAIN INSURANCE, INC.

EXHIBIT "A"

Parcel One

A. The Southeast one-quarter of Section 17, Township 43 South Range 26 East, less and except the Southwest one-quarter of the Southwest one-quarter of the Southeast one-quarter of Section 17, Township 43 South, Range 26 East, and also less and except any portion of the subject property contained in the Order of Taking recorded in O.R. Book 353, Page 829, of the Public Records of Lee County, Florida.

AND

B. The Southwest one-quarter of Section 16, Township 43 South, Range 26 East, less and except therefrom Parcel No. 1.003 as reflected on the Lee County, Florida Tax Assessmant Rolls, and also less and except the following parcels:

(i) The East one-half of the Northeast one-quarter of the Southwest one-quarter of Section 16, Township 43 South, Range 26 East; and

(ii) The Easterly 60 feet of the Southeast one-quarter of the Southwest one-quarter of Section 16, Township 43 South, Range 26 East, Lee County, Florida.

Parcel Two A

The Northwest one-quarter of Section 17, Township 43 South, Range 26 East, less and except any portion of the subject property contained in the Order of Taking recorded in O.R. Book 353, Page 829, of the Public Records of Lee County, Florida.

Parcel Two C

Lots 3 through 7, inclusive, and Lots 9 and 10 of P. JOHN HARTS SUBDIVISION, a subdivision according to the plat thereof, as recorded in Plat Book 3, at Page 7, of the Public Records of Lee County, Florida.

INSTR # 2006000334334, Doc Type D, Pages 2, Recorded 08/25/2006 at 11:32 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $0.70 Rec. Fee $18.50 Deputy Clerk TBAER

Prepared by and return to:
Sharon M. Zuccaro, Esq.
Henderson, Franklin, Starnes & Holt, P.A. (Brooks)
9990 Coconut Road Suite 101
Bonita Springs, FL 34135
239-344-1372
File Number: **North River SMZ**

[Space Above This Line For Recording Data]

Special Warranty Deed

This Special Warranty Deed made this 14th day of August, 2006 between **E.W. Weathers, Individually and as Trustee pursuant to Trust Agreement dated March 26, 1999,** whose post office address is **2260 Bay Street, Suite 11, Fort Myers, FL 33901**, grantor, and **North River Commuinities LLC, a Florida limited liability company** whose post office address is **9990 Coconut Road, Suite 200, Bonita Springs, FL 34135**, grantee:

(Whenever used herein the terms grantor and grantee include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Lee County, Florida**, to-wit:

The Southwest 1/4 of Section 17, Township 43 South, Range 26 East, Lee County, Florida.

Parcel Identification Number: 17-43-26-00-00006.0000

SUBJECT TO: oil, gas and mineral reservations, if any; the right-of-way of Duke Highway created by the Board of County Commissioners on August 26, 1950 and recorded in CCMB 11, Page 199, Public Records of Lee County, Florida; and ad valorem and non ad valorem real property taxes for the current year of closing and subsequent years.

The real property described herein is not now nor has it ever been the homestead property or contiguous to the homestead property of the First Party who resides at 3001 Batman Road, Alva, Florida 33920

That grantor will warrant and defend the property hereby conveyed against the lawful claims and demands of all persons claiming by, through, or under it, but against none other.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Documentary Stamps were paid on previous Trustee's Deed dated 4/19/00 and recorded in O.R. Book 3229, Page 4308, Public Records of Lee County, FL

DoubleTime®

Signed, sealed and delivered in our presence:

Witness Name: Robin Bidaison

Witness Name: Francine Perez

E. W. Weathers, Individually and as Trustee
pursuant to Trust Agreement dated March 26, 1999

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 14th day of August, 2006, by **E. W. Weathers, Individually and as Trustee**, pursuant to Trust Agreement dated March 26, 1999, who [✓] is personally known or [ ] has produced a driver's license as identification.

[Notary Seal]

JESSICA NOLAN
MY COMMISSION #DD383930
EXPIRES: JAN 05, 2009
Bonded through 1st State Insurance

Notary Public

Printed Name: Jessica Nolan

My Commission Expires: 1-5-2009

DoubleTime®

INSTR # 2006000353027, Doc Type D, Pages 2, Recorded 09/12/2006 at 11:14 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $9800.00 Rec. Fee $18.50 Deputy Clerk LHINSPETER

Prepared by and return to:

Tarpon Title Services, LLC
9990 Coconut Road Suite 101
Bonita Springs, FL 34135-8488

File Number: **NorthRiver.3017**

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **11th** day of **September, 2006** between **Alfredo Luis Savigne and Patricia M. Savigne, husband and wife** whose post office address is **1405 SE 47th St., Ste. 1, Cape Coral, FL 33904**, grantor, and **North River Communities LLC, a Florida limited liability company** whose post office address is **9990 Coconut Road, Ste. 201, Bonita Springs, FL 34135**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Lee County, Florida** to-wit:

See Exhibit "A" attached hereto and made a part hereof.

Parcel Identification Number: 20-43-26-00-00001.0080

Subject to taxes for 2006 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2005**.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: DEBBIE TOWNS

Witness Name: RICHARD I TOWNS

_____(Seal)
Alfredo Luis Savigne

_____(Seal)
Patricia M. Savigne

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 11 day of September, 2006 by Alfredo Luis Savigne and Patricia M. Savigne, who [_] are personally known or [X] have produced a driver's license as identification.

[Notary Seal]

DEBORAH D. TOWNS
MY COMMISSION # DD 139175
EXPIRES: October 2, 2006
Bonded Thru Budget Notary Services

Notary Public

Printed Name:

My Commission Expires:

DEBORAH D. TOWNS
MY COMMISSION # DD 139175
EXPIRES: October 2, 2006
Bonded Thru Budget Notary Services

EXHIBIT "A"

LEGAL DESCRIPTION

DESCRIPTION
Parcel in Government Lot 1
Section 20, Twp. 43 S, Rge. 26 E
Lee County, Florida.

A tract or parcel of land lying in Government Lot 1, Section 20, Twp. 43 South, Rge. 26 East, Lee County, Florida which tract or parcel is described as follows:

From the Northeast corner of said Section 20 run N 89°41'18" W along the North line of said section along the centerline of a County road 60 Feet wide for 1320.0 Feet; thence run S 00°23'49" W parallel with the East line of said section for 30 Feet to a concrete monument marking a point on the South line of said County road and the Point Of Beginning of lands herein described.

From said Point Of Beginning run N 89°41'18" W parallel with the North line of said Section along the South line of said County road for 174.38 Feet to an iron rod; thence run S 00°23'49" W, 839.06 Feet to an iron rod marking the intersection with the Northerly Right-Of-Way line of the Central and Southern Florida Flood Control District Right-Of-Way for the Caloosahatchee River and Canal No. 43; thence run N 86°59'52" E along said Northerly Right-Of-Way line for 174.67 Feet to a concrete monument marking the intersection of a line parallel to and 1320 Feet Westerly of the East line of said Section 20; thence run N 00°23'49" E, along said parallel line 828.97 Feet to the Point Of Beginning.

Bearings hereinabove mentioned are from the Central and Southern Florida Flood Control District's survey of said Caloosahatchee River and Canal No. 43.

INSTR # 2006000405365, Doc Type D, Pages 4, Recorded 10/24/2006 at 04:39 PM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $140000.00 Rec. Fee $35.50 Deputy Clerk LAMBROSIO

35 50 Rec
140,000 Doc

Prepared by and return to:
DENIS H. NOAH
Attorney at Law
HENDERSON, FRANKLIN, STARNES & HOLT, P.A.
1715 Monroe St. P. O. Box 280
Fort Myers, FL 33902
239-344-1100
File Number: **DHN TALON BONIT**
Will Call No.: **35**

[Space Above This Line For Recording Data]

Special Warranty Deed

This Special Warranty Deed made this 17th day of **October, 2006** between **TALON VENTURES, LLC, a Florida limited liability company** whose post office address is **10 Wimbledon Ct, Frisco, TX 75034**, grantor, and **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company** whose post office address is **9990 Coconut Rd., Ste 200, Bonita Springs, FL 34135**, grantee:

(Whenever used herein the terms grantor and grantee include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Lee County, Florida**, to-wit:

Parcel 1

All that part of the East half (E 1/2) of Section 18 and Government Lot 2, Section 19, Township 43 South, Range 26 East, lying southerly of State Road 78 (O.R. Book 354, Page 660) (50 feet wide) and northerly of Trout Creek. LESS AND EXCEPT that parcel described in Exhibit "A" of the instrument recorded in O.R. Book 1100, Page 642, Public Records of Lee County, Florida.

Subject to easements granted or reserved in Deeds recorded in: O.R. Book 1100, Page 642; O.R. Book 2437, Page 2976; O.R. Book 2464, Page 1973; O.R. Book 2619, Page 3907; O.R. Book 2841, Page 1222; O.R. Book 2941, Page 3561; O.R. Book 3136, Page 1844; and O.R. Book 3136, Page 1849, all of the Public Records of Lee County, Florida. Subject to easements, restrictions and reservations of record and taxes for the year 2006 and subsequent years.

Parcel 2

A tract or parcel of land lying in the East half of Section 18, and part of Government Lots 1 and 2, Section 19, Township 43 South, Range 26 East, Lee County, Florida more particularly described as follows:

All that part of the East half (E 1/2) of Section 18 and Government Lots 1 and 2, Section 19, Township 43 South, Range 26 East lying Southerly of Trout Creek, Northerly of the waters of the Caloosahatchee River and Northwesterly of the North right of way line of the Caloosahatchee River described in deed recorded in O.R. Book 37 at page 220 of the Public Records of Lee County, Florida and being Easterly of the following described line: From the Northeast corner of said Section 19, run N89°53'37"W along the line common to said Sections 18 and 19, Township 43 South, Range 26 East for 1,257.90 feet to an intersection with a line 30 feet Easterly from (as measured on a perpendicular) and parallel with the centerline of an existing paved drive described in Residence Parcel in Schedule "A" recorded in O.R. Book 2290 at page 3479, of said Public Records; thence run the following

courses and distances along said parallel line: N45°45'00"W for 134.63 feet, N31°00'00"W for 128.59 feet, N23°43'00"E for 318.05 feet, N14°36'30"W for 189.78 feet passing through a point designated "A" at 50.49 feet along said line and N07°11'19"E for 93.02 feet to the Point of Beginning of the herein described line.

From said Point of Beginning run the following courses and distances along said parallel line: S07°11'19"W for 93.02 feet, S14°36'30"E for 189.78 feet, S23°43'00"W for 318.05 feet, S31°00'00"E for 128.59 feet, S45°45'00"E for 466.55 feet and S16°08'00"E for 53.03 feet to an intersection with a line parallel with and 30 feet Easterly from (as measured on a perpendicular) the Easterly line of said Residence Parcel described in said Schedule "A"; thence run the following courses and distances along said parallel line: N73°52'00"E for 18.55 feet, S16°08'00"E for 137.17 feet, S27°42'00"W for 219.46 feet, S36°49'00"W for 235.27 feet, S47°46'00"W for 266.81 feet, S43°43'00"W for 140.42 feet, S04°48'00"E for 86.00 feet, S43°19'00"E for 184.68 feet and S46°59'00"W for 268 feet, more or less to said waters of the Caloosahatchee River and the end of the herein described line. Subject to easements, restrictions and reservations of record and taxes for the year 2006 and subsequent years.

SUBJECT TO AND TOGETHER WITH the following easements for roadway, utilities and drainage described as follows:

EASEMENT 1

A non-exclusive easement for the benefit of Parcels 1 and 2 for roadway, utilities and drainage 60 feet wide lying 15 feet easterly and 45 feet westerly of the following described line:

Beginning at the hereinabove described point designated "A", run the following courses and distances along said line: S14°36'30"E for 50.49 feet, S23°43'00"W for 318.05 feet, S31°00'00"E for 128.59 feet, S45°45'00"E for 466.55 feet and S16°08'00"E for 53.03 feet to an intersection with a line parallel with and 30 feet Easterly from (as measured on a perpendicular) the Easterly line of the hereinabove referenced Residence Parcel; thence run the following courses and distances along said parallel line: N73°52'00"E for 18.55 feet, S16°08'00"E for 137.17 feet, S27°42'00"W for 219.46 feet, S36°49'00"W for 235.27 feet, S47°46'00"W for 266.81 feet, S43°43'00"W for 140.42 feet, S04°48'00"E for 86.00 feet, S43°19'00"E for 184.68 feet and S46°59'00"W for 268 feet, more or less to said waters of the Caloosahatchee River and the end of the herein described line, wherein the Northerly limits of the side lines of said easement will terminate at the South line of the 60' Roadway, Utility and Drainage Easement as described in Easement 2 below.

EASEMENT 2

A non-exclusive easement for the benefit of Parcels 1 and 2, sixty (60') feet in width for roadway, utilities and drainage purposes lying in the East one half (E 1/2) of Section 18, Township 43 South, Range 26 East, Lee County, Florida, more particularly described as follows:

From the Northeast corner of said Section 18 run West along the line common to said Section 18 and Section 7, Township 43 South, Range 26 East for 1188.37 feet; thence run S01°24'15"E for 25.01 feet to said South line of State Road 78 and the Point of Beginning of the herein described roadway easement. From said Point of Beginning run the following courses and distances along the Westerly line of the 30 foot wide roadway easement described in Exhibit "B" recorded in O.R. Book 1100 at page 645; S01°24'15"E for 731.11 feet, S03°01'45"E for 200.32 feet, S03°51'00"E for 399.60 feet, S00°04'15E for 199.85 feet, S02°42'45"E for 200.06 feet, S00°32'08"E for 399.67 feet, S00°11'00"E for 200.07 feet, S01°03'00"E for 399.74 feet, S01°48'00"W for 199.13 feet, S05°37'30"W for 99.01 feet, S09°23'45"W for 98.59 feet, S16°24'15"W for 98.50 feet, S20°50'15"W for 98.17 feet, S30°20'42"W for 113.33 feet; thence run East for 2.38 feet to the Northeast corner of parcel described in Exhibit "A" of the instrument recorded in O.R. Book 1100, page 645, Public Records of Lee County, Florida; thence run the following courses and distances along the Westerly line of said roadway easement (30 feet wide) being the East line of said parcel described in said Exhibit "A": S22°34'15"W for 99.22 feet, S12°15'15"W for 100.00 feet, S02°31'45"E for 100.00 feet, S08°35'25"E for 299.99 feet, S01°09'00"W for 100.00 feet, S05°55'50"W for 300.00 feet, S00°25'30"E for 118.06 feet, and South for 3.86 feet; thence run the following courses and distances: S07°11'19"W for 100.03

feet, S14°36'30"E for 136.11 feet, N89°42'57"E for 61.93 feet (passing through the hereinabove described point "A" at 46.44 feet), N14°36'30"W for 140.59 feet, N07°11'19"E for 93.68 feet; thence run the following courses parallel with the West line of said roadway easement, 30 feet wide: North for 5.75 feet, N00°25'30"W for 114.95 feet, N05°55'50"E for 299.17 feet, N01°09'00"E for 107.62 feet, N08°35'25"W for 301.93 feet, N02°31'45"W for 89.04 feet, N12°15'15"E for 86.80 feet, N22°34'15"E for 104.92 feet, N30°20'42"E for 97.98 feet, N20°50'15"E for 105.48 feet, N16°24'15"E for 104.50 feet, N09°23'45"E for 104.24 feet, N05°37'30"E for 102.98 feet, N01°48'00"E for 202.62 feet, N01°03'00"W for 400.78 feet, N00°11'00"W for 199.80 feet, N00°32'08"W for 400.99 feet, N02°42'45"W for 199.82 feet, N00°04'15"W for 200.45 feet, N03°51'00"W for 401.15 feet, N03°01'45"W for 199.04 feet and N01°24'15"W for 728.79 feet to an intersection with said Southerly line of State Road No. 78 (50 feet wide); thence run West along said South line of State Road 78 for 60.02 feet to the Point of Beginning.

Bearings hereinabove mentioned are based on the North line of the East half (E 1/2) of said Section 18 to bear West.

Parcel Identification Number: 18-43-26-00-00002.0000
18-43-26-00-00002.0020
19-43-26-00-00002.1010
19-43-26-00-00002.1020

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under grantor.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: Denis H. NoAh

Witness Name: Sandra A Patterson

TALON VENTURES, LLC, a Florida limited liability company

By: Belinda Ulrich
Belinda Ulrich, Manager

DoubleTime®

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 17th day of Oct., 2006, by Belinda Ulrich, Manager of TALON VENTURES, LLC, a Florida limited liability company, on behalf of said firm. He/she [✓] is personally known or [_] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name: _____

My Commission Expires: _____

Sandra A. Patterson
Commission # DD470980
Expires September 30, 2009
Bonded Troy Fain - Insurance, Inc 800-385-7019

DoubleTimee

INSTR # 2006000424647, Doc Type D, Pages 3, Recorded 11/09/2006 at 11:20 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $0.70 Rec. Fee $27.00 Deputy Clerk JCASOLA

THIS INSTRUMENT PREPARED BY:
Sharon M. Zuccaro, Esq.
Henderson, Franklin, Starnes & Holt, P.A..
9990 Coconut Road, Suite 101
Bonita Springs, Florida 34135

SPECIAL WARRANTY DEED

THIS INDENTURE, made this 3rd day of November, 2006, between **George D. Thomson, as Trustee under that certain Land Trust Agreement dated March 28, 2006**, whose address is 3451 Bonita Bay Blvd., Suite 206, Bonita Springs, FL 34134, Grantor, and **North River Communities LLC, a Florida limited liability company**, whose address is 9990 Coconut Road, Suite 200, Bonita Springs, Florida 34135, Grantee.

WITNESSETH that the said Grantor, for and in consideration of the sum of TEN DOLLARS ($10.00) and other good and valuable consideration, to them in hand paid by the said Grantee, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said Grantee, its heirs and assigns forever, the following described land, situate lying and being in the County of Lee, State of Florida, to wit:

See Exhibit "A", attached hereto and made a part hereof.

Parcel Identification Number: 20-43-26-00-00001.0070

The real property described herein is not now nor has it ever been the homestead property or contiguous to the homestead property of the Grantor.

Subject to easements, restrictions and reservations of record and real estate taxes for the year 2006 and subsequent years.

TOGETHER with all the tenements, hereditaments and appurtenances, with every privilege, right, title, interest and estate, reversion, remainder and easement thereto belonging or in anywise appertaining:

TO HAVE AND TO HOLD the same in fee simple forever.

AND the Grantor hereby covenants with said Grantee that Grantor is lawfully seized of said land in fee simple; that Grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under the said Grantor.

IN WITNESS WHEREOF, the said Grantor have hereunto set their hands and seals the day and year first above written.

SIGNED, SEALED, AND DELIVERED
IN THE PRESENCE OF:

Witness #1

Angel B Cavill
(Type/Print Name of Witness)

Witness #2

Lisa M Moore
(Type/Print Name of Witness)

George D. Thomson, as Trustee under that certain Land Trust Agreement dated March 28, 2006

STATE OF FLORIDA
COUNTY OF Lee

THE FOREGOING INSTRUMENT was acknowledged before me this 3 day of November 2006, by **George D. Thomson, as Trustee under that certain Land Trust Agreement dated March 28, 2006**, who is personally known to me or who has produced _____ as identification.

My Commission Expires:

Angel B. Cavill
MY COMMISSION # DD279916 EXPIRES
January 8, 2008
BONDED THRU TROY FAIN INSURANCE, INC.

Notary Public

Print/Type Name of Notary
Commission Expires: _____

EXHIBIT A

A TRACT OR PARCEL OF LAND LYING IN GOVERNMENT LOT 1, SECTION 20, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA WHICH TRACT OR PARCEL IS DESCRIBED AS FOLLOWS:

FROM THE NORTHEAST CORNER OF SAID SECTION 20 RUN NORTH 89 DEGREES 41 MINUTES 18 SECONDS WEST ALONG THE NORTH LINE OF SAID SECTION ALONG THE WIDE CENTERLINE OF A COUNTY ROAD 60 FEET WIDE FOR 1494.38 FEET; THENCE RUN SOUTH 00 DEGREES 23 MINUTES 49 SECONDS WEST PARALLEL WITH THE EAST LINE OF SAID SECTION FOR 30 FEET TO A IRON ROD MARKING A POINT ON THE SOUTH LINE OF SAID COUNTY ROAD AND THE POINT OF BEGINNING OF LANDS HEREIN DESCRIBED.

FROM SAID POINT OF BEGINNING RUN NORTH 89 DEGREES 41 MINUTES 18 SECONDS WEST PARALLEL WITH THE NORTH LINE OF SAID SECTION ALONG THE SOUTH LINE OF SAID COUNTY ROAD FOR 172.31 FEET TO AN IRON ROD; THENCE RUN SOUTH 00 DEGREES 23 MINUTES 49 SECONDS WEST, 849.04 FEET TO AN IRON ROD MARKING THE INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE OF THE CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL DISTRICT RIGHT-OF-WAY FOR THE CALOOSAHATCHEE RIVER AND CANAL NUMBER 43; THENCE RUN NORTH 86 DEGREES 59 MINUTES 52 SECONDS EAST ALONG SAID RIGHT-OF-WAY LINE FOR 172.61 FEET TO AN IRON ROD MARKING THE INTERSECTION OF A LINE PARALLEL TO AND 1494.38 FEET WESTERLY OF THE EAST LINE OF SAID SECTION 20; THENCE RUN NORTH 00 DEGREES 23 MINUTES 49 SECONDS EAST ALONG SAID PARALLEL LINE 839.06 FEET TO THE POINT OF BEGINNING. CONTAINING 3.34 ACRES MORE OR LESS.

Bearings hereinabove mentioned are from the Central and Southern Florida Flood Control District's survey of said Caloosahatchee River and Canal No. 43.

INSTR # 2006000467701, Doc Type D, Pages 4, Recorded 12/18/2006 at 01:39 PM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $96938.80 Rec. Fee $35.50 Deputy Clerk DMAYS

Prepared by and return to:
Thomas H. Gunderson
Attorney at Law
HENDERSON, FRANKLIN, STARNES & HOLT, P.A.
1715 Monroe St. P. O. Box 280
Fort Myers, FL 33902
239-344-1100
File Number: **THG Greenwell N**
Will Call No.:

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **15th** day of **December, 2006** between **Michael L. Greenwell and Tracy C. Greenwell, a/k/a Tracey C. Greenwell, as to Parcel 1; ThirtyNine Preserve, Inc., a Florida corporation, as to Parcel 2** whose post office address is **12250 North River Avenue, Alva, FL 33920**, grantor, and **North River Communities LLC, a Florida limited liability company** whose post office address is **9990 Coconut Rd., Ste 200, Bonita Springs, FL 34135**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Lee County, Florida** to-wit:

PARCEL 1:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 18, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S 88°52'38" E ALONG THE NORTH LINE OF SAID SECTION 18 AND THE CENTERLINE OF STATE ROAD 78, 1377.37 FEET, THENCE RUN S 00°16'25" W 50.00 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF SAID STATE ROAD 78 AND THE POINT OF BEGINNING OF THE LANDS HEREIN DESCRIBED; THENCE CONTINUE S 00°16'25" W 3876.00 FEET; THENCE RUN S 88°52'38" E 869.73 FEET; THENCE RUN S 00°16'25" W1384.64 FEET TO THE SOUTH SECTION LINE OF SAID SECTION 18; THENCE RUN S 02°12'51" E 599.52 FEET TO THE APPROXIMATE TOP BANK OF THE CALOOSAHATCHEE RIVER; THENCE RUN N 72°34'28" E 341.66 FEET ALONG SAID TOP BANK TO THE EAST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 19; THENCE RUN N 02°12'51" W 490.06 FEET ALONG SAID EAST' LINE TO THE SOUTH QUARTER (S 1/4) CORNER OF SECTION 18; THENCE RUN ALONG THE NORTH SOUTH QUARTER LINE OF SAID SECTION 18, N 00°16'25" E 5261.22 FEET TO THE SOUTH RIGHT-OF-WAY OF STATE ROAD 78; THENCE RUN ALONG SAID RIGHT-OF-WAY OF STATE ROAD 78, PARALLEL TO THE NORTH LINE OF SECTION 18, 50 FOOT OFFSET N 88°52'38" W 1200.00 FEET TO THE POINT OF BEGINNING.

BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 18 AS BEARING N 88°52'39" W.

LESS AND EXCEPT THE FOLLOWING PARCEL:

A tract or parcel of land lying in Sections 18 and 19, Township 43 South, Range 26 East, Lee County, Florida being a part of the lands as described in deed recorded in Official Record Book 2510 at Page 2120, Public Records of Lee County, Florida, which tract or parcel is described as follows:

Beginning at the southwest corner of the Southeast Quarter (SE-1/4) of said Section 18 run N 00° 16' 39" E along the North/South Quarter (N/S-1/4) section line of said Section 18 for 1,385.08 feet to an intersection with the easterly prolongation of the line common to the north line of the deed recorded in Official Record Book 2626 at Page 83 and the south line of the lands described in deed recorded in Official Record Book 2510 at Page 2120, said public records; thence run N 88° 52' 20" W along said prolongation for 330.61 feet to the northeast corner of the lands as described in deed recorded in Official Record Book 2626 at Page 83, said public records; thence run S 00° 16' 43" W along the east line of said deed, also being the west line of the lands as described in deed recorded in Official Record Book 2510 at Page 2120, said public records for 1,384.64 feet to an intersection with south line of said Section 18; thence run S 02° 12' 33" E along the line common to the lands described in deed recorded in Official Record Book 4830 at Page 1310 and the lands described in deed recorded in Official Record Book 2510 at Page 2120, said public records for 599.52 feet to the approximate top of bank of the Caloosahatchee River; thence run N 72° 34' 46" E along the approximate top of bank for 342.04 feet to an intersection with the east line of the Northwest Quarter (NW-1/4) of said Section 19, also being the east line of the lands described in deed recorded in Official Record Book 2510 at Page 2120, Public Records of Lee County, Florida; thence run N 02° 12' 33" W along said east line and deed line for 490.10 feet to the Point of Beginning.

BEARINGS HEREINABOVE MENTIONED ARE BASED ON THE WEST LINE OF THE SOUTHWEST QUARTER (SW-1/4) OF SECTION 18 TO BEAR N 00°16'39 E.

PARCEL 2:

A TRACT OR PARCEL OF LAND LYING IN SECTION 18, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 18, SAID CORNER LYING ON THE WESTERLY RIGHT-OF-WAY LINE OF STATE ROAD 31, (100 FEET WIDE), THENCE RUN S 88°46'28" E FOR 100.00 FEET TO THE EASTERLY RIGHT-OF-WAY OF SAID STATE ROAD 31 (BASIS OF BEARINGS); THENCE RUN N 00°26'31" W ALONG SAID EASTERLY RIGHT-OF-WAY LINE FOR 1381.01 FEET TO THE POINT OF BEGINNING TO THE HEREIN DESCRIBED PARCEL.

FROM SAID POINT OF BEGINNING CONTINUE RUNNING N 00°26'31" W ALONG SAID RIGHT-OF-WAY LINE FOR 2450.05 FEET TO A POINT OF CURVE TO THE RIGHT WITH A DELTA ANGLE OF 00°05'37" A RADIUS OF 68704.96 FEET, A CHORD OF 112.20 FEET THAT BEARS N 00°31'31" W; THENCE RUN NORTHERLY ALONG SAID CURVE FOR 112.20 FEET, THENCE RUN S 88°51'56" E FOR 1322.57 FEET; THENCE RUN S 00°16'25" W FOR 2561.15 FEET; THENCE RUN N 88°53'02" W FOR 1290.40 FEET TO THE POINT OF BEGINNING.

Parcel Identification Number: 18-43-26-00-00001.0000 & 0010

Subject to taxes for 2007 and subsequent years; and permitted exceptions as disclosed on Exhibit "A" attached hereto.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2006**.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: Thomas H. Gundersen

Witness Name: Nancy Moss

Michael L. Greenwell (Seal)

Witness Name: Thomas H. Gundersen

Witness Name: Nancy Moss

Tracy C. Greenwell (Seal)

Witness Name: Thomas H. Gundersen

Witness Name: Nancy Moss

ThirtyNine Preserve, Inc., a Florida corporation

By: Michael L. Greenwell, President

(Corporate Seal)

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 14th day of December, 2006 by Michael L. Greenwell and Tracy C. Greenwell, who [_] are personally known or [✓] have produced Drivers License as identification.

Nancy Moss
Notary Public

[Notary Seal]

Nancy Moss
Commission # DD544359
Expires June 3, 2010
Bonded Troy Fain - Insurance, Inc 800-385-7019

Printed Name: Nancy Moss

My Commission Expires: _____

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 14th day of December, 2006 by Michael L. Greenwell, President of ThirtyNine Preserve, Inc., a Florida corporation, on behalf of the corporation. He [_] is personally known to me or [✓] has produced Drivers License as identification.

Nancy Moss
Notary Public

[Notary Seal]

Nancy Moss
Commission # DD544359
Expires June 3, 2010
Bonded Troy Fain - Insurance, Inc 800-385-7019

Printed Name: Nancy Moss

My Commission Expires: _____

Exhibit A

Permitted Exceptions

1. Easement in favor of Lee County Electric Cooperative, Inc., recorded in O.R. Book 2546, Page 54, Public Records of Lee County, Florida. (As to Parcel 1).
2. Deed of Conservation Easement recorded in O.R. Book 3046, Page 3578 and O.R. Book 4295, Page 3423, as effected by that certain Partial Release of Conservation Easement dated 10/23/2006 and recorded as Instrument No. 2006000412915, all of the Public Records of Lee County, Florida. (As to Parcel 1).
3. Easement in favor of Florida Gas Transmission Company recorded in O.R. Book 3215, Page 3698, Public Records of Lee County, Florida. (As to Parcel 2)
4. Environmental Resource Permit Notice recorded in Instrument Number 2005-92690, Public Records of Lee County, Florida. (As to Parcel 2)
5. Deed of Conservation Easement recorded in O.R. Book 4295, Page 3454, Public Records of Lee County, Florida.
6. Easement in favor of Lee County Electric Cooperative, Inc., recorded in Instrument Number 2006-328925, Public Records of Lee County, Florida.

INSTR # 2006000467705, Doc Type D, Pages 3, Recorded 12/18/2006 at 01:39 PM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $2438.80 Rec. Fee $27.00 Deputy Clerk DMAYS

Prepared by and return to:

Sharon M. Zuccaro, Esq.
9990 Coconut Road, Suite 101
Bonita Springs, FL 34135-8488
PH: 239-344-1378

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Warranty Deed

This Warranty Deed made this 15th day of December, 2006 between **NORTH RIVER COMMUNITIES LLC, a Florida limited liability company**, whose post office address is **9990 Coconut Road, Suite 200, Bonita Springs, FL 34135,** Grantor, and **MICHAEL L. GREENWELL and TRACY C. GREENWELL, husband and wife,** whose post office address is **12250 North River Road, Alva Florida 33920,** collectively Grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Lee County, Florida, to-wit:

See Exhibit "A", attached hereto and made a part hereof.

Subject to easements, restrictions and reservations of record and real estate taxes for the year 2007 and subsequent years.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of said land in fee simple; that the Grantor has good right and lawful authority to sell and convey said land; that the Grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except as noted above.

In Witness Whereof, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered
in our presence:

NORTH RIVER COMMUNITIES LLC,
a Florida limited liability company,

By: RESOURCE CONSERVATION PROPERTIES, INC., a Florida corporation, Managing Member

Sandy Nagorski
Witness #1
Printed Name: Sandy Nagorski

By: Katherine C. Green
Katherine C. Green, Vice President

Bonnie Thinnes
Witness #2
Printed Name: Bonnie Thinnes

(Corporate Seal)

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was acknowledged before me this 14 day of December, 2006, by Katherine C. Green, as Vice President of Resource Conservation Properties, Inc., a Florida corporation, Managing Member of North River Communities LLC, a Florida limited liability company, on behalf of the corporation and the company. She is personally known to me or has produced _____ as identification.

(Seal)

LORETTA J. CHRISTOPOULOS
Comm# DD0476774
Expires 1/15/2010
Bonded thru (800)432-4254
Florida Notary Assn., Inc

Loretta J. Christopoulos
Notary Public
Printed Name: Loretta J. Christopoulos

Exhibit A
Page 1 of 1

August 25, 2006

DESCRIPTION

A PARCEL OF LAND
LYING IN
SECTIONS 18 & 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST
LEE COUNTY, FLORIDA

A parcel of land lying in Sections 18 and 19, Township 43 South, Range 26 East, Lee County, Florida, which tract or parcel is described as follows:

Beginning at the Southwest corner of the Southeast quarter (SE 1/4) of Section 18 run North 00° 16' 39" East along the west line of the Southeast Quarter (SE-1/4) of Section 18 for 208.26 feet; thence run the following courses and distances along the approximate top of bank of an apparent man-made ditch:
South 66° 57' 52" East for 51.84 feet; run South 62° 43' 21" East for 34.22 feet; run South 71° 07' 29" East for 40.46 feet; run South 75° 06' 06" East for 54.64 feet; run South 53° 48' 48" East for 60.20 feet; run South 40° 54' 01" East for 33.01 feet; run South 46° 00' 13" East for 43.84 feet; run South 32° 06' 30" East for 30.67 feet; run South 28° 21' 08" East for 39.90 feet; run South 12° 44' 14" East for 39.18 feet; run South 08° 55' 07" East for 28.95 feet; run South 06° 50' 33" East for 34.61 feet; run South 03° 48' 34" East for 29.62 feet; run South 24° 12' 33" East for 91.43 feet; run South 47° 24' 06" East for 64.61 feet; thence run South 17° 16' 52" East departing said approximate top of bank for 28.03 feet to the mean high water line of an oxbow of the Caloosahatchee River; thence run southwesterly along the said mean high water line for 556 feet, more or less to a line that bears South 02° 12' 33" East from the Point of Beginning, also being the east line of the Northwest Quarter (NW-1/4) of Section 19; thence run North 02° 12' 33" West along said east line for 591 feet, more or less, to the Point of Beginning.

Bearings hereinabove mentioned are based on the west line of the Southeast Quarter (SE-1/4) of Section 18 to bear South 00° 16' 39" West.

INSTR # 2007000334595, Doc Type D, Pages 5, Recorded 11/07/2007 at 12:49 PM, Charlie Green, Lee County Clerk of Circuit Court, Rec. Fee $44.00 Deputy Clerk CMASSEY

Prepared by and return to:

Tarpon Title Services, LLC
9990 Coconut Road Suite 101
Bonita Springs, FL 34135-8488
239-992-8706
File Number: **BB Refi.3188**
(Riverhaven)

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Trustee's Deed

This Trustee's Deed made this 10th day of October, 2007 between **E.W. Weathers, Individually and as Trustee pursuant to the Riverhaven Trust, dated June 20, 2000** whose post office address is 2260 Bay Street, Suite 11, Fort Myers, FL 33901, grantor, and **Resource Conservation Properties, Inc., a Florida corporation** whose post office address is 9990 Coconut Rd., Ste. 200, Bonita Springs, FL 34135, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Lee County, Florida** to-wit:

See Exhibit "A" attached hereto

The real property described herein is not now nor has it ever been the homestead property or contiguous to the homestead property of E.W. Weathers or his spouse.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under grantors.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

1st Witness

Print Name of Witness

2nd Witness

Print Name of Witness

E.W. Weathers, Individually and as Trustee

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was acknowledged before me this 10th day of October, 2007 by E.W. Weathers, Individually and as Trustee of the Riverhaven Trust dated June 20, 2000 who is personally known to me or produced FLDL as identification.

[Notary Seal]

Notary Public
Printed Name:
My Commission Expires:

JESSICA NOLAN
MY COMMISSION #DD383930
EXPIRES: JAN 05, 2009
Bonded through 1st State Insurance

(RCP.3188, Riverhaven)

EXHIBIT A

(NOTE: PARCELS 1, 2, 5 AND 6 ARE INTENTIONALLY OMITTED)

PARCEL 3:

NORTHERLY PARCEL IN GOVERNMENT LOT 8
SECTION 19, T. 43 S., R. 26 E.
LYING NORTH OF THE CALOOSAHATCHEE RIVER (CANAL C-43)
HAVENS ISLAND, LEE COUNTY, FLORIDA

A tract or parcel of land lying in Government Lot 8, Section 19, Township 43 South, Range 26 East, lying North of the Caloosahatchee River (Canal C-43), Havens Island, Lee County, Florida, which tract or parcel is described as follows:

From the Southwest corner of Section 19 run North 88° 18' 00" West along the South line of said section to the quarter section corner; thence run North 01° 30' 00" West along the quarter section line for 337.26 feet to the Southerly right-of- way of the Caloosahatchee River (Canal C-43), Plat Book 8 at Page 51, Lee County Records; thence continue North 01° 30' 00" West along said quarter section line for 761.38 feet to the Northerly right-of-way line of said river; thence continue North 01° 30' 00" West for 111.71 feet to the POINT OF BEGINNING of the herein described parcel.

From said POINT OF BEGINNING continue North 01° 30' 00" West along said quarter section line for 111.71 feet to the Northwest corner of said Government Lot 8; thence run South 88° 18' 00" East along the North line of said Lot 8 for 515 feet, more or less, to the waters of the Caloosahatchee River; thence run Southerly along said waters to an intersection with the line bearing South 88° 10' 01" East passing through the POINT OF BEGINNING; thence run North 88° 10' 01" West along said line for 536 feet, more or less, to the POINT OF BEGINNING. Bearings hereinabove mentioned are based on the Plat of Unit No. 4, Fort Myers Shores, Plat Book 11 at Page 28, said Public Records and the North/South quarter section line as bearing North 01° 30' 00" West.

PARCEL 4:

SOUTHERLY PARCEL IN GOVERNMENT LOT 8
SECTION 19, T. 43 S., R. 26 E.
LYING NORTH OF THE CALOOSAHATCHEE RIVER (CANAL C-43)
HAVENS ISLAND, LEE COUNTY, FLORIDA

A tract or parcel of land lying in Government Lot 8, Section 19, Township 43 South, Range 26 East, lying North of the Caloosahatchee River (Canal C-43), Havens Island, Lee County, Florida which tract or parcel is described as follows:

From the Southwest corner of Section 19 run North 88° 18' 00" West along the South line of said section to the quarter section corner; thence run North 01° 30' 00" West along the quarter section line for 337.26 feet to the Southerly right-of- way of the Caloosahatchee River (Canal C-43), Plat Book 8 at Page 51, Lee County Records; thence continue North 01° 30' 00" West along said quarter section line for 761.38 feet to the Northerly right-of-way line of said river & the POINT OF BEGINNING of the herein described parcel:
From said POINT OF BEGINNING continue North 01° 30' 00" West along said quarter section line for 111.71 feet; thence run South 88° 10' 01" East for 536 feet, more or less, to the waters of the Caloosahatchee River; thence run Southerly along said waters to an intersection with the Northerly line of said Caloosahatchee River (Canal C-43); thence run North 88° 02' 40" West for 570 feet, more or less, to the POINT OF BEGINNING;

Bearings hereinabove mentioned are based on the Plat of Unit No. 4, Fort Myers Shores, Plat Book 11 at Page 28, said Public Records and the North/South quarter section line as bearing North 01° 30' 00" West.

PARCEL 7:

PARCEL IN GOVERNMENT LOT 6
SECTION 19, T. 43 S., R. 26 E.
HAVENS ISLAND
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lot 6, Section 19, Township 43 South, Range 26 East, Havens Island, Lee County, Florida which lot or parcel is described as follows:

From a concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East, run along said quarter section line North 01° 30' 00" West for 337.26 feet to a concrete post near the

Southern shore of the Caloosahatchee River; thence continue North 01° 30' 00" West across said river for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 300.55 feet to a concrete monument; thence run North 01° 30' 00" West parallel to and 300.00 feet Westerly as measured on a perpendicular said quarter section line for 1394.00 feet to the Southeasterly corner of lands described in deed recorded in Official Record Book 1478 at Page 2163, Lee County Records, and the POINT OF BEGINNING of the herein described parcel.

From said POINT OF BEGINNING run South 77° 30' 00" West along a Southerly line of said lands for 235.00 feet; thence run South 40° 10' 00" West along a Southerly line of said lands for 265.00 feet to the Southerly most corner of said lands; thence run North 49° 50' 00" West for 205 feet, more or less, to the mean high water line of the Old Caloosahatchee River bed; thence run Southwesterly, Southeasterly, Northeasterly, Southeasterly, and Northeasterly along said mean high water line to an intersection with a line bearing South 01° 30' 00" East passing through the POINT OF BEGINNING; thence run North 01° 30' 00" West along said line for 110 feet, more or less, to the POINT OF BEGINNING.

Bearings hereinabove mentioned are based on the plat of Unit No. 4, Fort Myers Shores, Plat Book 11 at Page 28, said Public Records, and the North-South quarter section line as bearing North 01° 30' 00" West.

PARCEL 8:

PART OF PARCEL NO. 1
GOVERNMENT LOTS 6 AND 7
SECTION 19, T. 43 S., R. 26 E.
HAVENS ISLAND
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lots 6 and 7, Section 19, Township 43 South, Range 26 East, Havens Island, Lee County, Florida which lot or parcel is described as follows:

From a concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East, run North 01° 30' 00" West along said quarter section line for 337.26 feet to a concrete post near the Southern shore of the Caloosahatchee River; thence continue North 01° 30' 00" West across said river for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 670.55 feet to the Southeast corner of lands described in deed recorded in Official Record Book 1741 at Page 727, Lee County Records; thence run North 34° 00' 00" East along the Southeasterly line of said lands for 110.00 feet to an Easterly corner of said lands and the POINT OF BEGINNING of the herein described parcel:

From said POINT OF BEGINNING run South 34° 00' 00" West along the last mentioned course for 110.00 feet; thence run South 88° 02' 40" East for 370.00 feet; thence run North 01° 30' 00" West parallel to and 300.00 feet Westerly as measured on a perpendicular the North-South quarter section line for 685.35 feet to a concrete monument; thence run North 88° 02' 40" West for 10.02 feet to the Northeast corner of lands described in deed recorded in Official Record Book 1937 at Page 3675, said Public Records; thence run South 01° 30' 00" East along the Eastern line of said lands for 585.17 feet to the Southeast corner of said lands; thence run North 88° 02' 40" West along the Southern line of said lands for 240.44 feet; thence run North 01° 30' 00" West along the Western line of said lands for 418 feet, more or less, to the mean high water line of a cove in the Caloosahatchee River; thence run Southwesterly along said mean high water line for 59 feet, more or less, to an intersection with a line bearing North 01° 30' 00" West passing through the POINT OF BEGINNING; thence run South 01° 30' 00" East along said line for 400 feet, more or less, to the POINT OF BEGINNING.

Bearings hereinabove mentioned are based on the Plat of Unit No. 4, Fort Myers Shores, Plat Book 11 at Page 28, said Public Records, and the North-South quarter section line as bearing North 01° 30' 00" West.

PARCEL 9:

PARCEL NO. 2
GOVERNMENT LOT 6
SECTION 19, T. 43 S., R. 26 E.
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lot 6, Section 19, Township 43 South, Range 26 East, Lee County, Florida which lot or parcel is described as follows:

From the concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East run North 01° 30' West along the quarter section line for 337.26 feet to a concrete post near the Southern shore of the Caloosahatchee River; thence continue North 01° 30' West across said River for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 300.55 feet to a concrete monument; thence continue North 88° 02' 40"

West along said right-of-way line for 370 feet; thence run North 34° 00' East for 110 feet to the POINT OF BEGINNING of the herein described parcel:

From said POINT OF BEGINNING run South 34° 00' West along the last mentioned course for 110 feet; thence run North 88° 02' 40" West along said right-of-way line for 210 feet; thence run North 01° 30' West parallel with said quarter section line for 180 feet; thence run North 34° 00' East for 80 feet; thence run North 01° 30' West for 50 feet more or less, to the waters of a cove in the Caloosahatchee River; thence run Northeasterly along said waters to an intersection with the line parallel with said quarter section line passing through the POINT OF BEGINNING; thence run South 01° 30" East along said parallel line for 400 feet more or less, to the POINT OF BEGINNING.

Bearings mentioned are from plat of Unit No. 4, Fort Myers Shores, recorded in Plat Book 11, Page 28 of the Public Records of Lee County, Florida.

PARCEL 10:

PARCEL NO. 3
GOVERNMENT LOT 6
SECTION 19, T. 43 S., R. 26 E.
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lot 6, Section 19, Township 43 South, Range 26 East, Lee County, Florida which lot or parcel is described as follows:

From the concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East run North 01° 30' West along the quarter section line for 337.26 feet to a concrete post near the Southern shore of the Caloosahatchee River; thence continue North 01° 30' West across said River for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 300.55 feet to a concrete monument; thence continue North 88° 02' 40" West along said right-of-way line for 580 feet to the POINT OF BEGINNING of the herein described parcel.

From said POINT OF BEGINNING run North 01° 30' West parallel with said quarter section line for 180 feet; thence run North 34° 00' East for 80 feet; thence run North 01° 30' West for 50, feet more or less, to the waters of a cove in the Caloosahatchee River; thence run Westerly and Southwesterly along said waters to an intersection with said North right-of-way line of the Caloosahatchee River Canal; thence run South 88° 02' 40" East along said North right-of-way line for 740 feet more or less, to the POINT OF BEGINNING.

Bearings mentioned are from plat of Unit No. 4, Fort Myers Shores, recorded in Plat Book 11, Page 28 of the Public Records of Lee County, Florida.

PARCEL 11:

NORTHEASTERLY PARCEL
GOVERNMENT LOT 6
SECTION 19, T. 43 S., R. 26 E.
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lot 6, Section 19, Township 43 South, Range 26 East, Lee County, Florida which lot or parcel is described as follows:

From a concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East, run along said quarter section line North 01° 30' West for 337.26 feet to a concrete post near the Southern shore of the Caloosahatchee River; thence continue North 01° 30' West across said river for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 300.55 feet to a concrete monument; thence run parallel to said quarter section line at a distance of 300 feet, North 01° 30' West for 1394.00 feet to the POINT OF BEGINNING. From said POINT OF BEGINNING run South 77° 30' West for 235.00 feet; thence run South 44° 10' West for 265.00 feet; thence run North 49° 50' West for 205, feet more or less, to the waters of the old river bed of the Caloosahatchee River; thence run Northeasterly following the meanders of said waters to an intersection with a line bearing North 01° 30' West passing through the POINT OF BEGINNING; thence run along said line South 01° 30' East for 278, feet more or less, to the POINT OF BEGINNING.

PARCEL 12:

SOUTHEASTERLY PARCEL
GOVERNMENT LOT 6
SECTION 19, T. 43 S., R. 26 E.
LEE COUNTY, FLORIDA

A lot or parcel of land lying in Government Lot 6, Section 19, Township 43 South, Range 26 East, Lee County, Florida which lot or parcel is described as follows:

From a concrete monument marking the South quarter corner of Section 19, Township 43 South, Range 26 East, run North 01° 30' West along said quarter section line for 337.26 feet to a concrete post near the Southern shore of the Caloosahatchee River; thence continue North 01° 30' West across said river for 761.38 feet to a point on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 300.55 feet to a concrete monument; thence run North 01° 30' West, parallel with said quarter section line at a distance of 300 feet (as measured on a perpendicular) West of said quarter section line, for 685.35 feet to a concrete monument and the POINT OF BEGINNING. From said POINT OF BEGINNING run South 01° 30' East along a line parallel with and 300 feet (as measured on a perpendicular) Westerly of the aforementioned quarter section line, for 685.35 feet to a concrete monument on the North right-of-way line of the Caloosahatchee Canal C-43; thence run North 88° 02' 40" West along said North right-of-way line for 250.46 feet; thence run North 01° 30' West along a line parallel with and 550 feet (as measured on a perpendicular) Westerly from the aforementioned quarter section line for 518 feet, more or less, to the waters of the old river bed of the Caloosahatchee River; thence run Northeasterly along said waters to an intersection with a line bearing North 88° 02' 40' West passing through the POINT OF BEGINNING; thence run South 88° 02'40" East along said line for 20 feet more or less, to the POINT OF BEGINNING.

Bearings are derived from the plat of Unit No. 4, Fort Myers Shores, as recorded in Plat Book 11 at Page 28, Public Records, Lee County, Florida.

LESS AND EXCEPT the Southerly 100 feet and the Easterly 10 feet.

Also less and except any portion of the above described properties which may lie within the Central and Southern Florida Flood Control District by virtue of deeds recorded in O.R. Book 37, Page 244; O.R. Book 38, Page 30 and by Final Judgment recorded in O.R. Book 635, Page 657.

DeLisi Fitzgerald, Inc.
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NORTH RIVER VILLAGE
COMPREHENSIVE PLAN AMENDMENT
(ORIGINALLY SUBMITTED SEPTEMBER 2006)

INTRODUCTION

The subject site for this amendment to the Lee County Comprehensive Plan is located within Sections 16-20, Township 43 and Range 26E, in Lee County Florida. More specifically, the site is located near the Southeast intersection of State Road 31 and County Road 78, extending South to the Caloosahatchee River and East along Duke Highway. The total area of the property is approximately 1,232.5 acres. The Arial Location Map shows the location of the subject property with the surrounding road network.

The request of this application is to change the designation of the subject property on the Lee County Future Land Use map from Rural to proposed new category called "River Village". The proposed amendment would allow for a maximum of 2,500 dwelling units and 150,000 square feet of commercial floor area. It is structured as both a map amendment and a text amendment in order to provide for performance standards on the proposed development. The policies associated with the "River Village" land use category have been crafted to provide for certainty in how this property develops and the structure for how development may occur. The intent of the request is to work with Lee County and the surrounding community to implement county goals through the development of this property – to provide a community that will benefit surrounding areas. The text amendment will also include a change to the Lee County 2030 Overlay to include the River Village land use category and the projection of acres necessary to account for this development.

Surrounding Land Uses, Compatibility and Area Context

The North River Village property is located in an emerging growth corridor in Lee County. The property is located near the intersection of two arterial roads, State Road 31 and County Road 78, on the North side of the Caloosahatchee River. To the West of the property is a major destination point for Lee County, the Lee County Civic Center. Residential neighborhoods line County Road 78 going West to I-75. The South side of the river has long been developed with residential uses. The neighborhood of Fort Myers Shores was platted in the early 1970s and has gradually built out over time. Although the Future Land Use Map would allow for up to 6 dwelling units per acre, the area is built out at approximately 3-4 dwelling units per acre.

To the East of the North River Village is the Olga Community. Once closely related to the Olga Community on the South side of the River, with the removal of the Old Olga Bridge in the 1960s, the community has been bisected. North Olga contains a series of low density residential neighborhoods along County Road 78 and Duke Highway to the South and East of the North River Village.

Last year Lee County entered into a four party agreement with Charlotte County, the State of Florida and Kitson & Partners to entitle portions of the Babcock Ranch property. The

development area on Babcock Ranch will be located directly to the North and East of the North River Village. The North River Village property currently contains the Owl Creek Marina, an active marina that is part of the Water Dependant Overlay in the Lee Plan (Map 12, page 3 of 12). The existing marina, in conjunction with the Sweetwater Landing marina (Marina 31 in the Water Dependant Overlay) and the properties owned by the applicant on Williams Island between the two marinas creates an opportunity for water access and use that is unparalleled in Lee County. The proposed North River Village will create a unique destination that will benefit the county's existing and future residents.

Land Use Change Analysis

The North River Village property is currently designated as *Rural, Wetland and Outer Islands* on the Lee County Future Land Use Map. Policy 1.4.1 describes the Rural Land Use Designation and Policy 1.4.2 describes the Outer Islands designation:

> ***POLICY 1.4.1:*** *The Rural areas are to remain predominantly rural--that is, low density residential, agricultural uses, and minimal non-residential land uses that are needed to serve the rural community. These areas are not to be programmed to receive urban-type capital improvements, and they can anticipate a continued level of public services below that of the urban areas. Maximum density in the rural area is one dwelling unit per acre (1 du/acre).*

The subject property is in an area that no longer fits the rural character described in Policy 1.4.1. With SR 31, CR 78, the Lee County Civic Center and now the development of Babcock Ranch the property is in an area that is transitioning from a rural to suburban character. The category that is being proposed provides for more innovative planning techniques to better utilize the land as the area transitions.

> ***POLICY 1.4.2:*** *The Outer Islands are sparsely settled, have minimal existing or planned infrastructure, and are very distant from major shopping and employment centers. They are not expected to be programmed to receive urban-type capital improvements in the time frame of this plan, and as such can anticipate a continued level of public services below that of other land use categories. The continuation of the Outer Islands essentially in their present character is intended to provide for a rural character and lifestyle, and conserve open space and important natural upland resources. Maximum density is one dwelling unit per acre (1 du/acre).*

Policy 1.4.2 seems to be written more for properties on barrier islands, not for properties like Williams Island that are in the midst of development. Utilities are available in the area and could potentially be provided to Williams Island by directional bore under the Caloosahatchee River Oxbow. The island is in between two historic Marinas – Marina 31 and the Owl Creek Marina, as well as significant development in Fort Myers Shores and Olga. While the proposed amendment to the Lee Plan is not requesting a significant change from this policy, setting up a performance standard that is more applicable to the Williams Island property would serve the community well.

Population Accommodation (See additional analysis by Fishkind and Associates and related documents)

Over the last decade, Lee County has been experiencing rapid growth and development. The Lee County Comprehensive Plan in its current state is not set up to guide future growth in the best manner possible. While development pressures are increasing in the rural portions of the County, Lee County's projections of population for planning purposes and the reliance on population accommodation of the Future Land Use Map have significantly under-represented the growth pressures that exist. This has led to the under allocation of density and the designation of large areas for low density development, that will lead to sprawl. This is very important for planning because if Lee County under-projects development pressure and does not adequately plan for areas where the development pressure is increasing, unplanned growth will occur.

Table 2 below shows the latest population projection from the Bureau of Economic and Business Research at the University of Florida (BEBR). The published population projections are separated into three categories – Low, Medium and High. It is Lee County and State of Florida practice to use these population projections for planning purposes, and only plan for a mid-range timeframe. In 1994, Lee County made a shift from using the High to using the Medium range projections for planning purposes, which caused a significant under projection of growth.

Table 1 - 2006 BEBR Population Projections

	2005	2010	20015	2020	2025	2030
Low	549,442	594,800	652,800	700,200	736,500	764,200
Medium	549,442	648,400	741,700	828,500	906,200	979,000
High	549,442	698,200	830,800	966,900	1,104,700	1,246,900

Source: Projections of Florida Population by County, 2005-2030, Vol. 39, Bulletin 144, February 2006

Population projections from the Bureau of Economic and Business Research are established using the following methodology:

> *"For Counties, we made eight projections using four simple extrapolation techniques and three different historical base periods. The four techniques were:*
>
> 1. *Linear – the population will change by the same number of persons in each future year as the average annual change during the base period.*
> 2. *Exponential – the population will change at the same percentage rate in each future year as the average annual rate during the base period.*
> 3. *Share of growth – each county's share of state population growth in the future will be the same as its share during the base period.*
> 4. *Shift Share – each county's share of the state population will change by the same annual amount in the future as the average annual change during the base period."*
>
> *The low and high projections indicate the range into which two-thirds of actual future county populations will fall, if the future distribution of forecast errors is similar to the past distribution (emphasis added)... Given Florida's population growth history, the*

probability that a county's future population will be above the high projection is greater than the probability that it will be below the low projection."

There are three problems with using the Medium range of population projections for planning Lee County's future growth.

1. The first problem is there is a greater downside to under projecting development pressure and being forced into dealing with growth not adequately planned for than there is with over projecting population and over planning for an area that does not have the development pressure anticipated.

2. The second problem with using the Mid-Range BEBR projections is historically they have greatly underrepresented Lee County's growth. Tables 2 and 3 shows the BEBR projections released in the year 2000 and then in 2003 respectively. It is clear that although Lee County has been relying to some extent on the Mid-Range population projects, growth is actually occurring above even the High range projections. Creating a situation where there is an undersupply of housing will simply lead to rapid increases in residential home prices.

3. The BEBR population projections do not reflect seasonal populations. Although the future land use map is based on units, population allocations are based on permanent population. Lee County's 2030 Overlay Map makes assumptions about the percent distribution of seasonal vs. permanent population, but in coastal and resort communities the seasonal population is very significant, yet not reflected in growth projections.

Table 2 – 2000 - BEBR Population Projections

	2000*	2005	2010	2015	2020	2025	2030
Low	409,800	417,800	417,800	411,000	397,100	275,100	344,600
Medium	426,500	471,300	514,500	559,400	605,900	651,400	693,300
High	**443,900**	**531,700**	**626,700**	**730,600**	**843,900**	**964,700**	**1,091,100**

Source: Projections of Florida Population by Lee County, 1999-2030, Vol. 33, No. 2, Bulletin 126, February 2000

Table 3 – 2003 - BEBR Population Projections

	2002	2005	2010	2015	2020	2025	2030
Low	475,073	490,700	527,900	559,500	586,800	608,900	624,500
Medium	**475,073**	**507,300**	**565,700**	**621,600**	**678,400**	**733,400**	**783,900**
High	475,073	531,600	619,700	712,100	810,400	913,300	1,019,000

Source: Projections of Florida Population by County, 2002-2030, Vol. 36, No. 1, Bulletin 134, January 2003

In reviewing the growth trends of Lee County as they relate to the historical population projections by BEBR, it is clear Lee County is following the High range of projections. The population projection for 2005 in the most current BEBR projections shows a significantly larger population than even the BEBR high projections. However, the mid range projections under the most current BEBR study does not continue at the historic high range, suggesting that by using the Mid Range projections we are continuing to under allocate for the actual growth that Lee County is experiencing.

To accommodate the growth that is projected an amendment to the Lee County 2030 Overlay table is being requested.

Planning Objectives

Designating large areas of land for low density development is necessary for mid-range planning in areas with slow growth patterns. However, as areas begin to urbanize, as is the case with the area in Lee County North of the Caloosahatchee River, East of SR 31, then planning needs to occur in order to channel the growth pressures toward development that will enhance the quality of life for the area, not detract from the quality of life. If a change in the Lee Plan does not occur for this area, development at 1 du/acre spread over North Olga and Alva, with no commercial opportunities, will significantly detract from the quality of life in the area. This type of development pattern is classic urban sprawl. This type of single use low density development is an inefficient use of land and greatly diminished our ability to preserve contiguous areas of open space. Through the proportionately high costs of extending services, low density residential development also encourages the use of septic tanks, a know contributor to pollutants in the Caloosahatchee River and the County's red tide problem.

In creating the proposed amendment to the Lee Plan, careful consideration has been made toward implementing current county needs and goals. Most significant among those needs is the disappearing access to Lee County's most valuable resource – the waterfront. Over the last several years, the disappearance of water dependant uses and public access to the waterfront has become an issue of concern statewide. According to a 2004 report by the Florida Senate Committee on Community Affairs (See attached), there is a significant economic loss to the state that accompanies the diminishing public access to the waterfront and the diminishing availability of recreational waterfront opportunities. The report concludes that:

> *"...loss of commercial and recreational waterfront to residential development and the relative diminishing access to boat launch facilities may have a long term adverse economic impact on our state and local economies. Access to public waterfront is an amenity that adds to our quality of life and makes Florida a desirable destination for residents as well as tourists."*

The report also cites a study by the Florida Fish and Wildlife Conservation Commission, which found that, "Statewide, the total economic impact of public boat ramps is approximately $1.3 billion per year....In addition to the economic impact, over 25,000 jobs are created statewide and approximately $128 million generated in state and local tax revenue" ("Assessing the Economic Impact and Value of Florida's Public Piers and Boat Ramps," Florida Fish and Wildlife Conservation Commission, March 2001, p. 8.) With the rapidly increasing cost of land, especially along waterfront areas, it is nearly cost prohibitive for Lee County to purchase any significant area for public access. It is necessary for the economy of Lee County to work with private development to provide for better planned areas that allow for enjoyment of the waterfront.

In Lee County, the Water Dependant Overlay has been adopted in an effort to preserve water dependant uses and public access to the River. Owl Creek Marina is within the County's Water Dependant Overlay, as is Marina 31 (Sweetwater Landing located directly across the river from the subject property and under the same ownership). The Owl Creek Marina could be enhanced with a greater level of public access then that which currently exists, by adding uses that have a nexus to the waterfront.

The current plan calls for development of the property at 1 dwelling unit per acre, all residential, with very limited commercial "to service the rural community". The current Future Land Use Map in essence calls for privatization of the waterfront in the area. The Lee Plan provides no incentives for public access or the creation of communities that provide a sense of place or identity. Unless there are changes to the Lee Plan, public access and use of the waterfront will continue to diminish. Through the River Village land use category it is possible to create a community that provides for an area identity and sense of place that serves as an amenity for both the boating community as well as the greater Olga community and Lee County.

North River Village CPA Residential Needs and Population Analysis

March 11, 2008

Prepared for

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1.0 Introduction

1.1 Purpose

This report supports the need for the North River Village Comprehensive Plan Amendment ("CPA"). The North River Village CPA will establish a new land use category called North River Village within the Alva Planning Community of Lee County, FL. The North River Village site sits on approximately 1,263 acres of land that is currently zoned AG-2 which could accommodate 997 dwelling units. The proposed residential dwelling units allowed under the new future land use category would be 2,500 units. Table 1 below shows the planned residential units for the North River Village land use.

Table 1. Summary of Residential Land Use Plan for North River Village

Land Use	Units	Total
Single Family	DU	1,500
Multi-Family	DU	1,000

Source: North River Village CPA

1.2 Overview of needs analysis

In the context of amending the adopted Comprehensive Land Use Plan for Lee County ("Lee Plan") the applicant must demonstrate the need to amend the plan. Typically, this takes the form of a comparison of:

- The supply of existing land and allocated housing units
- The demand for land and housing units based on projected population

The applicant must demonstrate that there is an insufficient supply of land or housing units in the Plan to accommodate the projected future level of population.

2.0 Residential Dwelling Unit Supply

2.1 Planning Communities

The future land use plan for Lee County guides the County according to 22 geographically designated planning communities. Each planning community is analyzed independently with respect to projected land uses. The North River Village amendment will be located in the Alva planning community. In this report, Fishkind and Associates, Inc. has conducted an analysis of the Lee Plan to determine whether there is sufficient supply of allocated housing units as currently prescribed by the FLUM in the Alva planning community to accommodate the future demand for land required to support the projected future level of population.

2.2 Residential Acres in the Alva Planning Community

Table 2 shows the breakdown of vacant residential acres and future land use categories for the Alva planning community.

Table 2. Vacant Residential Acres by Planning Community

Land Use	Allocation - 2030	Existing	Remaining
Urban Community	520	494	26
Outlying Suburban	30	5	25
Rural	1,948	1,312	636
Outer Islands	5	1	4
Open Lands	250	94	156
Groundwater Resource	711	49	662
Total Residential Acres	**3,464**	**1,955**	**1,509**

Source: Lee County 2030 Allocation Table for Alva Planning Community

2.3 Lee Plan – Residential Holding Capacity

Having determined the supply of developable acres for the Alva planning community, the next step in the process is to translate the quantity of developable acres into a residential holding capacity. Using the existing acreage from Table 2, the number of existing housing units for the planning community was determined. Persons per household and the occupancy rate were obtained from the Lee County planning department and are specific to the Alva planning community. The population for Alva was taken from the Alva planning community allocation table. Table 3 shows the existing number of residential units for the planning community.

Table 3. Existing Housing Units in the Alva Planning Community

Population Distribution	3,404
PPH	2.58
Occupancy Rate	0.91
Housing Units	1,450
Average Density	0.74

Source: Lee County Alva Planning Community Allocation Table & Fishkind

A density of .74 was calculated. Next, we estimate implicit future densities which distribute the future housing units across the remaining land uses available to accommodate residential dwellings.

Each land use has the ability to develop at a different density. Groundwater resource and rural lands comprise the vast majority of remaining acreages left to be developed. These land uses will develop at low density. As a result, future growth throughout the entire Alva planning community will occur at lower overall densities than did earlier growth. The densities used for existing development are estimated by Fishkind & Associates, Inc. for each land use such that existing lands and units properly correspond to the existing 1,450 housing units. These densities were then applied to the remaining acres according to land use to determine the total carrying capacity of lands within the Alva Planning Community. As more than half of the allocated lands are developed at their respective densities, it is appropriate to apply these empirical findings for each land use category to vacant by land use moving forward. It is appropriate to expect future densities by category will closely resemble historic densities in these locations. However since lower density vacant lands remain, overall density in the Alva Community will decline. As Table 4 shows, a total of 2,002 housing units are currently allocated for the Alva planning community by the year 2030. These 2,002 dwelling units will support a population of 4,700 persons. By contrast, the Lee Plan indicates the population capacity of the Alva Planning Community is 5,090. Thus, the current land use allocations cannot support the capacity reported in the Lee Plan. Land use allocations in Alva can only support .92 of the stated capacity. It is likely actual capacity is still lower than this as some lands may not be available for development by existing owners or may face other constraints. By these measures, the Lee Plan overstates the carrying capacity of lands in the Alva Community.

Table 4. Total Allocated Housing Units for the Alva Planning Community – 2030

Land Use	Density	Total Alva Housing Capacity - 2030	Existing Housing Units	Remaining Housing Units
Urban Community	1.2	623	592	31
Outlying Suburban	1	30	5	25
Rural	0.635	1,237	833	404
Outer Islands	0.635	3	1	3
Open Lands	0.15	38	14	23
Groundwater Resource	0.1	71	5	66
	Totals	2,002	1,450	552

Source: Lee County Alva Planning Community Allocation Table & Fishkind & Associates, Inc.

3.0 Residential Dwelling Unit Demand

3.1 2030 Population Forecast

Having examined the residential holding capacity of the Alva planning community, further analysis is conducted to determine whether the residential capacity can accommodate the expected future demand for residential housing. The first step in the process is to determine the 2030 population estimate for the County.

The Lee Plan used the Bureau of Economic and Business Research (BEBR) publication, Florida Population Studies (Bulletin 144 February 2006), which shows a 2030 mid-range population projection for Lee County of 979,000. This figure was increased by Staff to 1,086,000 to accommodate a "population safety factor" equaling a 25 increase over the population growth from 2005-2030. The percentage of the 2030 population applied to the Alva planning community based on the Lee Plan Table 1(b) indicates Alva with 5,090 forecast population will accommodate 1.03% of the 495,000 persons projected for unincorporated Lee County, based on the forecast population projection (please see Table 5).

Table 5. Planning Community Population Percentage Share.

Unincorporated Lee Co	2030	%
Alva	5,090	1.03%
Total Unincorporated	495,000	100.00%

Source: Lee Plan – Table 1(b) 2007.

Thus, the County's 2030 analysis indicates Alva will accommodate 5,090 persons or 1.03% of unincorporated county population by 2030. This corresponds to .469% of county total population by 2030. Table 6 shows there is housing demand for 2,168 residential units stemming from forecast population. The housing unit need is in excess of the estimated carrying capacity of the allocated lands in the Alva Community.

In comparison with the 2020 plan, Alva was forecast to accommodate .587% of countywide population. There is no direct discussion in the Lee Plan which offers explanation as to why the population share accommodated in Alva declines. However, even with a decline in share the Alva Community has insufficient carrying capacity. Still, from a market perspective it would be anticipated the Alva share would stay constant or grow. This is because Alva is located in the path of growth along the SR 80 corridor and planning staff indicates the area shares similarities with the North Fort Myers planning area, which has average residential densities nearly 3x those found in Alva. Were the population shares to remain proportional at .587% of county population through year 2030, the

housing unit demand would increase to 2,718 units as shown in Table 7. Due to location and geographic market forces, the shortfall in the Alva Community will be exacerbated through year 2030.

Table 6a. Lee Plan Population Projections and Housing Unit Demand 2030. Under 2030 Reduced Population Share 2006 Forecast

Lee Plan mid-range 2030 population	1,086,200
Alva planning community population – 2030	5,090
PPH	2.58
Occupancy Rate	.91
Alva Housing Unit Demand – 2030	2,168

Source: Lee Plan, BEBR, Fishkind and Associates, Inc.

Table 6. Lee Plan Population Projections and Housing Unit Demand 2030. Under 2030 Reduced Population Share 2007 Forecast

Lee Plan mid-range 2030 population	1,180,025
Alva planning community population – 2030	5,530
PPH	2.58
Occupancy Rate	.91
Alva Housing Unit Demand – 2030	2,355

Source: Lee Plan, BEBR, Fishkind and Associates, Inc.

Table 7a. Revised Population and Housing Unit Demand 2030. Under 2030 Steady Population Share 2006 Forecast

Lee Plan mid-range 2030 population	1,086,200
Alva planning community population - 2030	6,382
PPH	2.58
Occupancy Rate	.91
Alva Housing Unit Demand – 2030	2,718

Source: Fishkind and Associates, Inc., based on maintaining Alva population share .587%

Table 7. Revised Population and Housing Unit Demand 2030. Under 2030 Steady Population Share 2007 Forecast

Lee Plan mid-range 2030 population	1,180,025
Alva planning community population – 2030	6,933
PPH	2.58
Occupancy Rate	.91
Alva Housing Unit Demand – 2030	2,953

Source: Fishkind and Associates, Inc., based on maintaining Alva population share .587%

4.0 Land Use and Allocation Ratio – 2030 Alva Planning Community

In Sections 2.0 and 3.0, supply and demand for residential housing was calculated for the year 2030 in the Alva planning community using BEBR updated population forecasts. The next step is to compare the supply and demand in order to determine the land allocation conditions for the Alva planning community. Land allocation conditions are measured by the allocation ratio. This ratio is the total allocated housing units / total housing unit demand. As Table 8a shows, the current 2030 allocation ratio is 1.0. There is no flexibility in the 2030 Lee Plan. Still, the demand includes a "safety factor" allocated to growth, however, this is insufficient to meet the population needs. This is because as shown in Table 4, the allocated lands in Alva cannot accommodate the 2,168 dwelling units. The Lee Plan allocation can only accommodate 2,002 dwelling units. Thus, the resulting allocation is .92 (see Table 9a). Should the proportional share of growth be maintained from 2020-2030, the resulting allocation would fall further to .74 (see Table 10a). This represents a chronic under allocation of housing units for the Alva planning community. The current Lee Plan cannot accommodate the expected population growth in the Alva Community, nor can lands accommodate the Plan's stated capacity. Thus, need is demonstrated and need exists for the plan to be modified to meet future housing unit demand. When these tables are updated for the most recent population forecast the allocation ratios fall further. There is increasing under-allocation because the latest long-term population forecast has increased (see Tables 8, 9 and 10).

Table 8a. Alva Planning Community Allocation Ratio - 2030

2006 Forecast	
Total Allocated Units (Lee Plan)	2,168
Total Housing Unit Demand (from Table 6a)	2,168
2030 Allocation Ratio	1.00

Source: Fishkind & Associates, Inc. and Lee Plan.

Table 8. Alva Planning Community Allocation Ratio - 2030

2007 Forecast	
Total Allocated Units (Lee Plan)	2,168
Total Housing Unit Demand (from Table 6)	2,355
2030 Allocation Ratio	.92

Source: Fishkind & Associates, Inc. and Lee Plan.

Table 9a. Alva Planning Community Allocation Ratio - 2030

2006 Forecast	
Total Allocated Units (density based)	2,002
Total Housing Unit Demand (from Table 6a)	2,168
2030 Allocation Ratio	.92

Source: Fishkind & Associates, Inc. and Lee Plan.

Table 9. Alva Planning Community Allocation Ratio - 2030

2007 Forecast	
Total Allocated Units (density based)	2,002
Total Housing Unit Demand (from Table 6)	2,637
2030 Allocation Ratio	.76

Source: Fishkind & Associates, Inc. and Lee Plan.

Table 10a. Alva Planning Community Allocation Ratio - 2030

2006 Forecast	
Total Allocated Units (density based)	2,002
Total Housing Unit Demand (Table 7a revised share)	2,718
2030 Allocation Ratio	.74

Source: Fishkind & Associates, Inc. and Lee Plan.

Table 10. Alva Planning Community Allocation Ratio - 2030

2007 Forecast	
Total Allocated Units (density based)	2,002
Total Housing Unit Demand (from Table 7 revised share)	2,953
2030 Allocation Ratio	.68

Source: Fishkind & Associates, Inc. and Lee Plan.

5.0 Allocation Ratio and the Incorrect Application of a Population "Safety Factor"

In each scenario shown in Tables 8-10, the ability of the Lee plan to accommodate expected population growth in Alva deteriorates. This is because the Lee Plan fails to adequately plan and anticipate future conditions. This failure manifests in the inclusion of the "safety factor" which changes the published BEBR forecast population growth. The Plan should be designed to accommodate forecast population. To do so, an over-allocation of land should be provided. With an over-allocation the Plan can be flexible enough to provide market choice and not constrain land supply such that prices sharply increase due to a lack of supply. The inclusion of a "safety factor" to correct for under allocation of land fails in three key aspects. First, the "safety factor" is incorrectly applied to population (demand) rather than applying an over allocation to developable lands (supply). Second, the "safety factor" is applied only to the forecast increment of growth from 2005 to 2030. To account for errors in forecasting, over allocation should be applied to the supply of all lands needed, rather than applying an increase to forecast demand of just population growth. Third, the level of the "safety factor" at 25% is too low to provide adequate flexibility to compensate for forecast error or to prevent escalating prices due to constrained land supply over the planning horizon. The "safety factor" is a misapplication of an over-allocation or

allocation ratio which is needed to adequately accommodate future population and forecast land use needs.

The allocation ratio is an important planning criterion regarding how developable lands should be provided in the comprehensive plan and what the appropriate number of acres should be over time to effectively meet demand. This ratio represents the number of available acres divided by the demand for development acres. It applies to the entire complement of built and vacant lands, not just the increment of growth. There should be excess allocation of land and acres such that sufficient lands will ultimately be available to meet demand. These excess allocations take into account the fact that certain lands may not be for sale or be developed by existing land owners. Further, over time development restrictions may change due to increased environmental protection which may limit development, effectively removing the development availability of some lands. Despite the FLUM designation, the developable capacity of the land may be considerably lower due to existing wetlands of other critical habitat concerns. This is often more common in rural locations. The supply of designated developable lands should be sufficiently in excess of demand such that the marketplace is not constrained causing an effective restriction of supply. Such an artificial restriction of supply will drive land prices much higher, contributing to ever increasing real estate and housing prices and compromising the provision of affordable and workforce housing. It is important there is some over allocation so residents can have some market choice and flexibility in choosing housing alternatives. Typically a home buyer will look at 2 or more homes before making a choice. A low allocation ratio limits the choices available to consumers and stifles economic growth.

For these reasons the allocation ratio of developable lands to demand should be well in excess of 1.0. The Florida Department of Community Affairs recognizes allocation ratios between 2.0 and 3.0 are generally within acceptable limits provided infrastructure, capital planning and concurrency needs are adequately addressed. Many approved comprehensive plans support allocation ratios which are considerably higher. These higher allocation ratios may occur both at the County level and within smaller planning areas within counties.

For example, in St. Johns County the year 2000 Comprehensive Plan provided for an overall allocation ratio within the County of greater than 3.0. However within the 4 planning communities countywide allocation ratios were significantly higher in some locations than the county average or the norms used at the DCA today. None were below 1.0 as is found in Lee County's Alva Planning Community. Since the adoption of the EAR amendment in St. Johns County, most of the additional capacity approved and changes which have occurred to the comprehensive plan have occurred in the Northeast and Northwest planning sectors where capacity and flexibility was needed most, based on comparatively low allocation ratios, and the trend in market forces. Increasing the allocation ratios in

these areas keeps rapid price escalation under control and provides needed market choice. An inflexible plan will hinder economic growth.

Table 11. St. Johns County May 2000 EAR Amendment Residential Land Use Allocation by Planning Community

Planning Community	Units Allocated	Units Needed	Difference	Ratio
Northwest	29,706	13,297	16,409	2.23
Northeast	17,632	10,816	6,816	1.63
Southeast	42,245	7,257	34,988	5.82
Southwest	9,529	822	8,707	11.59
Total	99,112	32,192	66,920	3.08

Finally, we point to rulings in two recent administrative hearings where DCA positions regarding comprehensive land use plan approvals were examined. The ruling in the first case was May 2004. The ruling in the second case was filed December 2006.

In the first case Manasota-88 vs. Department of Community Affairs and Sarasota County (case no 02-3897GM and 02-3898GM) the finding of facts include item #43 "There is no allocation ratio adopted by statute or rule by which all comprehensive plans are judged" Further the finding states that the allocation ratio of 1:1 for Sarasota county: "is more conservative than ratios found in other comprehensive plans determined to be in compliance by the Department. In those plans the ratios tend to be much greater than 1:1"

In the second matter Panhandle Citizens Coalition Inc. (PCC) vs. Department of Community Affairs, a petition was filed by PCC to challenge DCA's finding the West Bay Detailed Specific Area Plan (WB DSAP) was in compliance as an amendment to the County Comprehensive Plan. The findings of fact in this case include item #92 which reads: "In addition to projecting population growth and assessing capacity to accommodate growth and allocation needs ratio (or multiplier) is necessary to ensure housing affordability and variety in the market; otherwise, the supply and demand relationship is too tight, which may cause a rapid escalation of housing prices. Because the farther in time a local government projects growth, the less accurate those projections tend to be, actual need is multiplied by an allocation needs ratio to produce an additional increment of residential land to accommodate this potential error."

Item #93 states: "Small Counties that experience above-normal growth rates may use allocation ratios as high as three more in order to realistically allocate sufficient buildable land for future growth. The County's allocation ratio of 2.2 before the WB DSAP and FLUM

amendments was low from a long term forecasting perspective. When the WB DSAP amendments are factored into the allocation ratio, such growth would raise the allocation ratio to 2.3, which is still relatively low."

Further, in finding #94 it is stated: "A land use plan should allow for sufficient inventory to accommodate demand and to provide some choice in order to react to economic factors."

In each case the proposed land use amendments were found in compliance with section 163.3184 (1) (b) in part because the demonstration of need with respect to the allocation ratio indicated the allocation ratios of 1:1 or 2.3:1 were too low to properly accommodate projected future growth over the planning horizon.

In keeping with these findings which include recent administrative hearing rulings and actual allocation ratios found in other Florida locations it can be seen the allocation ratio found in the Alva Planning Community of .74 by year 2030 is far too low. By 2030 flexibility in the plan is gone and this will hinder economic growth. At these levels there is no over-allocation whatsoever and the result is there are insufficient lands to accommodate future growth. At a minimum the allocation in the Alva Planning Community should be 2:1. This is the threshold which DCA has acknowledged represents meaningful flexibility and in our view is appropriate for a small rural area facing rapid growth over an expanded time frame.

The proposed North River project supports the Lee Plan by adding additional needed capacity in response to the County expansion of the planning horizon and updated population growth forecasts.

With the North River lands factored into the Alva Planning Community, the allocation ratio moves to 1.66 by year 2030 as described in the section below. This additional development capacity is needed in this community to maintain flexibility and provide for an ability to accommodate projected future growth.

6.0 Housing Unit Deficit – 2020 and 2030 Alva Planning Community

The North River Village land use amendment calls for a total of 2,500 residential units to be located in the Alva planning community. As Tables 9 and 10 illustrate, the Alva planning community has a need for additional housing units in order to accommodate the expected population growth in the area. Table 12a displays the allocation ratio for the Alva planning community after including the North River Village's 2,500 residential units. The revised allocation ratio is 1.66 based on the 2006 BEBR population forecast. The allocation ratio falls to 1.52 based on the 2007 BEBR population forecast. This level is well below the recommended 2.0. North

River Village gives the Alva planning community the additional flexibility, proper market choice and housing units it needs to accommodate the forecasted population growth through the year 2030. There are no other residential land use amendments which will be considered in this amendment round at this time.

Table 12a. Alva Planning Community Allocation Ratio with North River Village 2030 - 2006 Forecast

Total Allocated Units (from Table 4)	2,002
North River Village Units	2,500
Revised Total Allocated Units	4,502
Total Housing Unit Demand (from Table 7a)	2,718
Revised Allocation Ratio	1.66

Source: Fishkind and Lee Plan.

Table 12. Alva Planning Community Allocation Ratio with North River Village 2030 - 2007 Forecast

Total Allocated Units (from Table 4)	2,002
North River Village Units	2,500
Revised Total Allocated Units	4,502
Total Housing Unit Demand (from Table 7)	2,953
Revised Allocation Ratio	1.52

Source: Fishkind and Lee Plan.

When taking into account the proposed North River project, the Alva planning community's revised allocation ratio remains below 2.0 by year 2030. Based on this analysis using data supplied by the County, in light of the extended planning horizon and updated population projections, there is currently insufficient allocated capacity to accommodate projected future residential development in the Alva planning community. Without the approval of North River the allocation ratio by 2030 is below 1:1 in the Alva Planning Community, and deteriorates further with the updated 2007 BEBR population forecast. The approval of the North River Village land use amendment is needed in order to insure proper plan flexibility and an adequate supply of housing units for the Alva Planning Community through the planning horizon. Based on these findings, the North River amendment to the Lee Plan is warranted and supported by the need to accommodate projected future population growth in the Alva Planning Community.

7.0 Housing Unit Deficit – 2030 Alva Planning Community Revised and Updated

As discussed, there are a number of aspects of the Lee Plan which result in insufficient land use allocations, specifically in the Alva Planning Community. These include the misallocation of the population "safety factor", the inability of the land to accommodate projected population, a more current and updated BEBR population forecast, a constant share of county population in Alva given market trends, rather than a declining share and the need for a properly applied allocation ratio.

As shown in Table 4 above, the capacity of the designated lands allocated for residential development is not expected to be able to accommodate the projected population. Rather than a population of 5,090, it is anticipated the allocated lands may only accommodate 4,700 persons.

The 25 percent "safety factor" applied to population growth rather than the supply of land accommodating the entire population represents an under allocation and a misapplication to demand (population) rather than supply (land). It does not build flexibility in land use into the plan for future lands, and implicitly assumes existing lands have no need for redevelopment or re-use. This is particularly constraining as counties mature and reach build out. For example, if residential properties redevelop with commercial uses, the residential needs lost through redevelopment must still be accommodated. The proper use of the allocation ratio should be applied to the supply of all lands within the Plan, not to incremental growth in demand.

The Lee Plan used the BEBR medium forecast as published in Bulletin 144, February 2006. Since that time, Bulletin 147 was published in February 2007, updating the 2030 population projections. It is appropriate to use the most updated population projections available. The implicit percent of unincorporated population in 2030 according to the County data is 45.57% of countywide population (495,000/1,086,200). This is below the current 53% mentioned in the Plan, however trend data suggests 45.57% is a reasonable expectation by year 2030.

Within the Alva Planning area however, the earlier 2020 Lee plan depicted the 2020 Alva population with a .587% share of countywide population. By contrast the 2030 plan depicts the Alva population as a .483% countywide share. There is no discussion in the Lee Plan regarding why the population share falls in Alva. It would be expected the Alva share would stay constant or grow since Alva is in the path of growth along the SR 80 corridor and planning staff indicates the area shares similarities with the North Fort Myers planning area which has average residential densities nearly 3 times those found in Alva. For these reasons we have estimated demand in Alva showing both the declining share of countywide

population and based on a constant share of population from 2020 to 2030.

Table 14. Alva Planning Community 2030 Population and Housing Demand

2030 Forecast Population (February 2007, BEBR Bulletin 147)	1,053,900
Unincorporated Percent	45.57%
Unincorporated Population	480,280
Alva Planning Area Population 2030 (.483% share)	4,939
Persons Per Household	2.58
Occupancy Rate	.91
Total Housing Unit Demand	2,104

The new 2007 BEBR medium population forecast (February 2007, Bulletin 147) for year 2030 is 1,053,900 persons. This is 74,900 persons higher than the 979,000 person forecast used in the current Lee Plan. The revised unincorporated population is expected to be 480,280. In this re-analysis the 25% safety factor is not added to change the BEBR population (demand) projections. Instead it is recommended land use allocations (supply) be adjusted to appropriate levels of between 2.0 and 3.0 of forecast population to accommodate 2030 population needs.

Building these changes into the Alva analysis we find by year 2030 the Alva planning community has insufficient lands to accommodate updated population forecasts, even without the 25% safety factor. Table 16 shows the allocation of lands with residential capacity to household demand is .95. The inclusion of the proposed North River project brings the allocation ratio to 2.14 as shown in Table 17. This level of capacity to demand is in range and appropriate for future long range planning purposes.

Table 15. Alva Planning Community Allocation Ratio - 2030

Total Allocated Units (from Table 4)	2,002
Total Housing Unit Demand (from Table 14)	2,104
Revised Allocation Ratio	.95

Table 16. Alva Planning Community Allocation Ratio with North River Village - 2030

Total Allocated Units (from Table 4)	2,002
North River Village Units	2,500
Revised Total Allocated Units	4,502
Total Housing Unit Demand (from Table 14)	2,104
Revised Allocation Ratio	2.14

Taking this same analysis and holding constant the growth in Alva such that the share of countywide population is maintained from 2020 -2030 results in a greater demand than shown in the Lee Plan. The 2020 share was .587% of countywide population. The 2030 Plan showed proportionately reduced demand in Alva to .483% of countywide population. This reduced share is unlikely given the SR 80 corridor growth pressures, the proximity to I-75, the similarities between Alva and the North Fort Myers planning area. The final analysis shown in Tables 17-19 account for updated population forecasts, constant shares of countywide population, the removal of the 25% safety factor and updated capacity of allocated lands. Table 18 indicates the allocation ratio remains below 1.0 by year 2030. This demonstrates need to increase land allocations in the Alva planning community. With the inclusion of recently approved projects and North River Table 19 shows the allocation remains below 2.0 at 1.71 in year 2030. Tables 17a, 18a and 19a, show this approach with the earlier 2006 population forecast. When these tables are updated for the most recent population forecast the allocation ratios fall further. There is increasing under-allocation because the latest long-term population forecast has increased (see Tables 17, 18 and 19).

Table 17a. Alva Planning Community 2030 Population and Housing Demand 2006 Forecast

2030 Forecast Population (February 2006, BEBR Bulletin 144)	979,000
Unincorporated Percent	45.57%
Unincorporated Population	446,130
Alva Planning Area Population 2030 (.587 countywide share)	5,747
Persons Per Household	2.58
Occupancy Rate	.91
Total Housing Unit Demand	2,448

Table 17. Alva Planning Community 2030 Population and Housing Demand 2007 Forecast

2030 Forecast Population (February 2007, BEBR Bulletin 147)	1,053,900
Unincorporated Percent	45.57%
Unincorporated Population	480,280
Alva Planning Area Population 2030 (.587 countywide share)	6,192
Persons Per Household	2.58
Occupancy Rate	.91
Total Housing Unit Demand	2,637

Table 18a. Alva Planning Community Allocation Ratio - 2030
2006 Forecast

Total Allocated Units (from Table 4)	2,002
Total Housing Unit Demand (from Table 17a)	2,448
Revised Allocation Ratio	.82

Table 18. Alva Planning Community Allocation Ratio - 2030
2007 Forecast

Total Allocated Units (from Table 4)	2,002
Total Housing Unit Demand (from Table 18)	2,637
Revised Allocation Ratio	.76

Table 19a. Alva Planning Community Allocation Ratio with North River Village - 2030
2006 Forecast

Total Allocated Units (from Table 4)	2,002
North River Village Units	2,500
Revised Total Allocated Units	4,502
Total Housing Unit Demand (from Table 17, .587 share)	2,448
Revised Allocation Ratio	1.84

Table 19. Alva Planning Community Allocation Ratio with North River Village - 2030
2007 Forecast

Total Allocated Units (from Table 4)	2,002
North River Village Units	2,500
Revised Total Allocated Units	4,502
Total Housing Unit Demand (from Table 17, .587 share)	2,637
Revised Allocation Ratio	1.71

We have found an under-allocation of residential capacity in the Alva Planning Community at year 2030. The under-allocation stems from 1) lower than anticipated carrying capacity of remaining lands, 2) increasing BEBR forecasts of population growth, and 3) increased market pressure for development along the SR 31 and SR 80 corridors. There are insufficient lands to accommodate expected demand as shown both by analysis of County data and revised forecast updates and other factors as indicated. There is a demonstration of need and the inclusion in the Lee Plan of the proposed North River lands is justified.

The Florida Senate

Interim Summary Report 2005-122 *November 2004*

Committee on Community Affairs — Senator Michael Bennett, Chair

WORKING WATERFRONTS

SUMMARY

Public access to marinas and boat ramps may be diminishing for recreational boating because the capacity to launch and moor boats has not kept pace with the surge in annual vessel registrations. In addition, there is evidence that, for both commercial-fishing and recreational working waterfronts, conversion from public to private use is contributing to this loss of access.

This report profiles the relative decrease in public access to waterways in the state, and the decline in commercial-fishing and recreational working waterfronts, In addition, it identifies current programs and strategies, and recommends new strategies, to help preserve or increase public access and to help recreational and fishing working waterfronts remain economically viable.

BACKGROUND

A diversified waterfront industry, both commercial and recreational, is an important component of the state economy. According to a recent study, the "marine industry represents a total economic output of over $14.1 billion and is responsible for over 180,000 jobs in the state."[1] Another study found that the marine industry in Broward County generated $8.8 billion in total economic output in 2000, providing $3 billion in wages and earnings. This study also found that the industry provided 109,820 full time jobs, making it among the county's largest employment sectors.[2]

A recent study commissioned by the Florida Fish and Wildlife Conservation Commission found that:

> "Statewide, the total economic impact of public boat ramps is approximately $1.3 billion per year....In addition to the economic impact, over 25,000 jobs are created statewide and approximately $128 million generated in state and local tax revenue."[3]

Changes in Florida's economy and land use may be affecting the economic viability of commercial-fishing and recreational working waterfronts. It is reported that, increasingly, development interests are buying traditional working waterfronts and converting them to private and residential use. "Water-enhanced" and "water-related" activities are replacing traditional or "water-dependent" activities.[4] This has the effect of both decreasing the availability of waterfront property necessary to sustain commercial-fishing and recreational boating activities, and increasing the value of nearby working waterfront property. This increase in property value results in higher property taxes, which may cause the working waterfronts to be decreasingly profitable, thereby compounding the pressure to convert to the "highest and best" use of the property.

The local and regional economic benefit of converting working waterfronts to residential uses varies, depending on the specific social and economic circumstances. However, a recent study in Maine found that while such conversions initially invigorate the local economy (during the construction stage), the positive benefit diminishes over the long term – especially in small jurisdictions.[5]

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[1] "Florida's Recreational Marine Industry – Economic Impact and Growth 1980-2000," March 2001, by Thomas J. Murray & Associates, for the Marine Industries Association of Florida, Inc., p. iii.

[2] "Marine Industries Association of South Florida Master Plan," published by the FAU Joint Center for Environmental & Urban Problems, 2002.

[3] "Assessing the Economic Impact and Value of Florida's Public Piers and Boat Ramps," Florida Fish and Wildlife Conservation Commission, March 2001, p. 8.

[4] "Watermarks: Technical Briefs on Coastal Waterfront Revitalization," Volume 1, Issue 3. Department of Community Affairs, July 1997.

[5] http://www.portlandphoenix.com/features/other_stories/multi3/documents/03919490.asp

Coastal residential development may also be decreasing the relative availability of public access to the water through boat ramps. Research indicates that the construction of new launch facilities has not kept pace with increases in annual vessel registrations. Escalating prices for coastal property make it difficult for state and local governments to purchase new access points to meet this growing demand.

Economic pressures to convert property from public accessible to private residential uses is not a recent development.

In 1983, the Governor appointed a Blue Ribbon Marina Committee to "investigate problems encountered by water-dependent activities in the state with an emphasis on marinas and recreational boating."[6] The committee concluded that increasingly waterfront is being developed for private as opposed to public access.

In 1995, the Florida Coastal Management Program commissioned a study to develop a profile of Florida's working waterfronts and the economic viability of those areas. The report found that "many working waterfronts are experiencing a decline in economic activity due to market forces and demands for waterfront property, the fishing net ban, and other trends affecting small-scale commercial fishing."[7]

Consequently, loss of commercial and recreational waterfront to residential development and the relative diminishing access to boat launch facilities may have a long term adverse economic impact on our state and local economies. Access to public waterfront is an amenity that adds to our quality of life and makes Florida a desirable destination for residents as well as tourists.

METHODOLOGY

Committee staff consulted staff of the Fish and Wildlife Conservation Commission, the Department of Community Affairs, the Department of Environmental Protection and other government entities, and surveyed local governments and representatives from the boating industries to obtain information and to identify strategies to expand public access and assist working waterfronts.

[6] *Economic Impact of Blue-belting Incentives on the Marina Industry in Florida*, by Frederick Bell, Department of Economics, FSU, July 1990. p. ii.
[7] *Profile of Working Waterfronts*, FAU/FIU Joint Center for Environmental and Urban Problems, 1995, p. v.

FINDINGS

Inventory of Facilities

Definitively documenting the conversion of working waterfronts to private and residential uses and the relative loss of access to boat ramps is problematic. First, a comprehensive current inventory of commercial-fishing and recreational working waterfronts in Florida (marinas, boatyards, and boat ramps) does not exist. However, various estimates are available.

In 1995, the FAU/FIU Joint Center for Environmental and Urban Problems identified thirty-one "traditional" or **commercial-fishing working waterfronts** throughout the state.[8] These are working waterfronts with commercial fishing and workboat repair yards, seafood processing and fish-house facilities that "are not part of a commercial port and may represent a part of Florida's history and culture threatened by urban development and market forces."[9]

The Division of Recreation and Parks within the Department of Environmental Protection (DEP) maintains an inventory of all outdoor **recreational facilities and resources** in the state provided by federal, state, regional, county and municipal governments, commercial enterprises (which may include retail sales facilities), non-profit organizations, and private clubs.[10] Preliminary tallies for 2004 indicate that there were 62,954 boat slips in 1,546 fresh and saltwater marinas. The inventory also shows 35,908 dry storage slips. [See TABLE 1] The Division of Law Enforcement within DEP also maintains a database of public marinas across the state. As of July, 2004, the database lists 944 marinas.[11] Approximately 25 percent are "boatyards", or boat repair facilities.

[8] *Profile of Working Waterfronts*, p. 5-9. The report acknowledged that the inventory "probably is not exhaustive..."
[9] Ibid, p. iv.
[10] *Outdoor Recreation in Florida – 2000, Florida's Statewide Comprehensive Outdoor Recreation Plan*, (SCORP) Florida DEP, February 2002. p. 2-62. The estimate does not include private facilities, such as condominium slips or "dockominiums." This information is self-reported.
[11] July, 2004. See: http://www.dep.state.fl.us/law/Grants/CVA/Marinas_Database.XLS These figures differ from the SCORP database because they do not include private clubs and retail facilities.

The Florida Wildlife Commission recently estimated that there are approximately 8,000 **boat ramps** across the state.[12] However, the report noted that many of these ramps are not available to the public – the use is "limited to their owners or members of exclusive marinas and yacht clubs." The report found that there are an "estimated 1,300 ramps statewide operated by public agencies (federal, state and local) explicitly for public use."[13] Approximately 200 of these ramps sites are maintained by the FWC. [14] TABLE 1 shows that DEP lists 2,714 public and private (non-residential) ramps with 3,404 lanes in the state.

However, measuring the change in access, as depicted in TABLE 1, is problematic because the information is self-reported and the totals for 2004 are preliminary. While the totals may capture new facilities, they do not capture facilities closed, or converted from public to private use since the most recent Florida's Statewide Comprehensive Outdoor Recreation Plan report (SCORP).

Given the limitations in the data presented in TABLE 1, it may be concluded that, since 1987, there has been no change in the number of marinas, a decline in dry storage units, and a small increase in marina slips and boat ramps (and ramp lanes).

Our limited research indicates that while the number of boat ramps and ramp lanes has increased slightly statewide, the public's relative access has declined due to the increase in the number of registered boats in the state. This is especially apparent in Florida's urban counties.

While the launching capacity of boat ramps is the primary problem, lack of parking for vehicles and trailers is another indication that existing facilities may be inadequate

Increased Demand for Recreational Access

In 2003, Florida had 978,225 registered boats, a 29.5 percent increase from 1997, and a 51.7 percent increase from 1987. This is approximately twice the rate of the population increase for the state over the same period.[15]

Visiting vessels registered in other states also require waterfront facilities. It is reported that Florida is the top ranked destination for marine recreation in the United States, with an estimated 4.3 million participants."[16] Consequently, it appears that our present inventory of waterfront facilities may be insufficient to meet current demand.

TABLE 1: DEP Estimate of Facilities*

	2004**	1998	1992	1987
Fresh Water Marinas	480	511	342	344
Salt Water Marinas	1,066	1,123	1,073	1,201
Total	**1,546**	**1,634**	**1,415**	**1,545**
Fresh Water Marina Slips	12,369	12,237	11,417	11,183
Salt Water Marina Slips	50,585	45,839	45,436	49,499
Total	**62,954**	**58,076**	**56,853**	**60,682**
Fresh Water Dry Storage	4,052	4,980	3,800	4,298
Salt Water Dry Storage	31,856	33,791	31,052	33,476
Total	**35,908**	**38,771**	**34,852**	**37,774**
Fresh Water Ramps	1,639	1,558	***	***
Salt Water Ramps	1,075	1,055	***	***
Total	**2,714**	**2,613**		
Fresh Water Ramp Lanes	2,031	2,017	1,817	1,761
Salt Water Ramp Lanes	1,373	1,328	1,256	1,232
Total	**3,404**	**3,345**	**3,073**	**2,993**

* This is an inventory of facilities owned by federal, state, regional, county and municipal governments, commercial enterprises (including retail sales facilities), non-profit organizations, and private clubs. It does not include condominium slips or "dockominiums."
** These totals represent preliminary tallies, which historically capture new facilities, but not facilities closed since the last SCORP report.
*** Information not compiled in this category
SOURCE: Tables from *Florida's Statewide Comprehensive Outdoor Recreation*, years 2000, 1995, & 1990.

Conversion of Commercial-Fishing Waterfronts

A number of factors have combined to exert pressure on the commercial-fishing industry to convert their property to other uses:

[12] *Assessing the Economic Impact and Value of Florida's Public Piers and Boat Ramps.* FWC, March 2001, pp. 13-14.
[13] Ibid., p. 14.
[14] http://www.floridaconservation.org/fishing/ramps/
[15] The estimated statewide population increase was 14.2 percent, from 14.9 to 17 million. See http://www.state.fl.us/edr/population/web7.xls)
[16] See *A Recreational Boating Characterization For Tampa and Sarasota Bays*, Sea Grant, University of Florida TP-130, June 2004, p. 1.

- The constitutional net-ban adopted by the electorate in 1994 resulted in reducing the catch and consequently, the income potential, of commercial fisheries;
- Increased regulation on commercial fishing;
- Recent increases in imported seafood has depressed the prices for locally harvested seafood, further reducing income potential;
- Escalations in waterfront property values have resulted in higher property taxes, thereby increasing the operating costs; and
- Regulatory impediments to new marina development make existing commercial-fishing waterfronts attractive to residential developers.

In response to these pressures, it is reported that some commercial fishermen have "down-sized" their operations and modified portions of their properties to include mixed-use development (recreational/transient marinas, restaurants, tourism), or sold their property to residential developers. Commercial fishermen who sell their working waterfront property may remain in operation by docking in other commercial-fishing facilities, or in private residential slips or recreational marinas.

We surveyed all counties and municipalities about changes in waterfront land use in their jurisdictions. In response to our survey, the ten counties and ten municipalities reported that commercial-fishing working waterfronts in their jurisdictions have been in the past five years or are currently being bought by private interests and converted to public or private marinas/dry docks.

Conversion of Recreational Waterfronts

Newspaper articles have documented the recent increase in demand for condominiums, for condominiums with marina access, and "marina condominiums" for boats. This demand may be a significant factor contributing to the conversion of recreational waterfront property to private or private residential uses. While this conversion probably may not decrease the relative number of slips statewide, it limits their availability.

We surveyed all counties and municipalities about conversion of recreational working waterfronts in their jurisdictions. In response to our survey, thirteen counties and twenty-three municipalities reported that, within their respective jurisdictions and within the past five years, the public has lost access to recreational working waterfronts because such facilities are being bought by development interests and converted to private marinas/dry docks or to private residential uses.

Recreational boating industry representatives report that fifty-seven marinas or boatyards have recently converted to condominiums or other private uses, and a number of sales of such facilities are pending or have been proposed.[17] Finally, industry representatives note that the recent hurricanes have also affected the inventory of public-accessible waterfront facilities.

Impediments to Development of New Access

Industry representatives identify two major impediments to development of new waterfront access: the cost to develop (land and infrastructure) and government approval of such development.

Balancing the demand for new marinas and boat ramps against protection of natural resources has proved to be difficult. Representatives of the marina industry report that obtaining the necessary permits for new marinas or expanding existing marinas is expensive and time-consuming.

To obtain a permit, applicants must obtain the approval of both the state and federal government. State permits are issued by DEP, or the applicable water management district for facilities in conjunction with larger commercial or residential developments. Each permitting entity reviews the application for, among other things, potential impact on sea grass, manatees, and water quality. Permits for facilities of more than 50 slips, or projects of "heightened concern" are approved by the Florida Board of Trustees (the Florida Cabinet). Permits for use of sovereign submerged lands are also approved by the Board of Trustees.

DEP reports that over the past five years, 368 permits have been granted for either the expansion or construction of public and private water-related recreational facilities (marinas, boat yards, moorings, dry docks, or boat ramps).

Applicants must also obtain a permit from the U.S. Army Corp of Engineers. In response to recent litigation in the federal courts addressing manatee protection, projects in specified areas of the state must be reviewed for their impact on manatees, and facility

[17] This information was provided by members of the Florida Water Access Coalition, an organization of various boating interest groups in the state.

permits may not be approved unless certain measures are in place. Over the past eleven years, an annual average of 450 permits have been granted for commercial, private, or public-owned recreational facilities. However, in those Florida counties that have not adopted Manatee Protection Plans, permitting for new or expanded large-scale projects may be delayed or denied.

In addition to the DEP permits, marinas with 150 or more wet slips, or 200 dry slips, must be approved through the Development of Regional Impact (DRI) program through the Department of Community Affairs (DCA). However, counties that have adopted countywide marina siting plans into the coastal management element of their local comprehensive plans are exempt from the DRI program. DCA reports that four marina DRIs have been approved by the department since 1997.[18]

State Strategies to Preserve or Increase Access

There are several state or regional government programs to assist local governments and the private sector in their efforts to preserve or increase access for commercial or recreational boating activities.

DCA provides technical assistance and limited funding to small waterfront communities through the *Waterfronts Florida Partnership Program.* This program helps participating communities develop a plan to revitalize, renew and promote interest in their waterfront district. Waterfront revitalization targets environmental resource protection, public access, retention of viable traditional waterfront economies, and hazard mitigation.

New Waterfronts Florida Partnership Communities are selected every two years and those communities receive technical assistance over a two-year period and a grant to reimburse the recipient for a portion of costs associated with preparing the plan. Once the plans are complete, communities can begin the process of financing implementation of the plan from sources such as state and federal grants, bonds issuances, private borrowing, and tax increment financing districts. Since 1997, DCA has designated 13 communities as Waterfronts Florida Partnership Communities. These communities have been the beneficiaries of 7,000 hours of volunteer services, $143,362 in private donations, and $7.4 million of other public investment. This program is funded, in part, by an award from the National Oceanic and Atmospheric Administration Award.

The *Florida Boating Improvement Program* of the Office of Boating and Waterways within the Fish and Wildlife Conservation Commission coordinates funding for projects to improve boating access.[19] In each fiscal year, a portion of the state taxes collected on motor fuel are transferred to the FWC to fund, in part, local projects that provide "recreational channel marking, public launching facilities, aquatic plant control, and other local boating related activities."[20] In addition, a portion of taxes collected on motor and diesel fuels at marinas is transferred to the FWC to be used, in part, to "provide funding for construction and maintenance of publicly owned boat ramps, piers, and docks, directly and through grants to counties and municipalities."[21] Also, a portion of vessel registration fees collected by the Department of Highway Safety and Motor Vehicles (DHSMV) is transferred to FWC to fund a variety of services, to include public launching facilities.[22]

Additional funding is available to local governments through the Florida Recreational Development Assistance Program,[23] the Land and Water Conservation Program,[24] the Florida Recreational Development Assistance Program,[25] and the Boating Infrastructure Grant Program.[26]

Counties have two sources of funds available to finance water access facilities. Counties receive a

[18] A total of 39 DRIs have been approved since 1974. All DRI applications were approved, after modifications or conditions. Ken Metcalf, Regional Planning Administrator, Div. of Community Planning, DCA. 8/04.

[19] Section 20.331, F.S.

[20] Section 206.606(1)(b)1., F.S. A minimum of $1.25 million must be used for this purpose. Section 206.606(1)(d), F.S., requires that $5 million be appropriated in FY 2004-5, increasing to $13.4 million in FY 2007/8, and each year thereafter.

[21] Section 370.0603(4)(c), F.S.

[22] Section 328.76(1), F.S. However, to date, it appears that this money has never been appropriated for public launching facilities.

[23] Federal funds administered by DEP. See http://www.dep.state.fl.us/parks/bdrs/

[24] Administered by DEP, last year, $3.9 million in federal funds were available, with preference given to projects on water bodies.

[25] Administered by Bureau of Design and Recreation Services, Division of Recreation and Parks in DEP.

[26] Administered by FWC, this program provides federal funds to local governments for tie-up facilities (slips, mooring buoys, docks, piers, etc.) for transient recreational boats 26' or longer. See http://myfwc.com/boating/grants/bigp.htm

portion of recreational vessel registration fees, proceeds of which are used, in part, to provide public launching facilities.[27] They are also authorized to levy an additional fee (which is 50 percent of the state fee) on vessels registered in their jurisdiction. Fee proceeds may only be used for "the patrol, regulation, and maintenance of the lakes, rivers, and waters and for other boating-related activities..."[28] DHSMV reports that the fee has generated $3.7 million in FY 03/04 in the 12 counties that levy the fee.

The *Florida Communities Trust* (FCT) is a state land acquisition grant program administered by DCA.[29] FCT provides funding to local governments and eligible non-profit environmental organizations for acquisition of community-based parks, open space and greenways, and access to water that further outdoor recreation and natural resource protection needs identified in local government comprehensive plans.[30] Matching and full grants for land acquisition projects are provided to communities through an annual competitive application cycle. Approximately $66 million is available to eligible applicants each year and applicants are eligible for up to 6.6 million.[31] Since 1991, the FTC has awarded 387 grants totaling $563,074,185 to local communities for projects that provided public access to water for recreational uses.

The *Florida Inland Navigation District*, an independent special taxing district comprised of all of the eastern coastal counties (Miami-Dade to Duval Counties), has two grant programs to, in part, assist local governments in increasing access to coastal waters. The Waterway Assistance Program and the Cooperative Assistance Program award approximately $7.2 million annually. Similarly, the *West Coast Inland Navigation District* has two similar grant programs: the Waterway Development Program and the Cooperative Assistance Program.

It has also been reported that the five Water Management Districts throughout the state may also have limited grants available to increase public access through boat ramps or similar facilities.

Local Initiatives to Preserve or Increase Access

We surveyed counties and municipalities to ascertain any action undertaken to preserve or create recreational and commercial-fishing working waterfronts, or public access to the water through boat ramps. The full report provides a brief overview of these local efforts.

Conclusion

Public access to marinas and boat ramps may be diminishing for the recreational boating public. It appears that the capacity to launch and moor boats has not kept pace with increases in annual vessel registrations. In addition, there is evidence that, for both commercial-fishing and recreational working waterfronts, conversion from public to private use is contributing to this loss of access. Other contributing factors include :

- the unavailability of suitable waterfront property for access development, especially in urban areas;
- the cost of developing new facilities; and
- the cost and length of time necessary to obtain state and federal permits for new facilities.

However, there are programs and strategies available to either preserve or increase public access. The Legislature could consider expanding such programs or initiating new strategies to facilitate this preservation or increase in access.

Property Tax Relief: Currently Available

Article VII, s. 4 of the State Constitution requires that all property be assessed at its just value for ad valorem tax purposes. Just value has been interpreted to mean fair market value.[32] However, this section also provides exceptions to this requirement for agricultural land and land used exclusively for non-commercial recreational purposes, all of which may be assessed solely on the basis of their character or use. Additionally, counties and cities may be authorized to assess historical property based solely on the basis of its character or use.

Absent any change in law, owners of commercial-fishing or recreational working waterfronts currently have three options available to them to decrease or eliminate their property tax burden, to include:

- **Sell the property to the county** and contract with the county to operate the marina. Property owned by subdivisions of the state are not taxed, thereby lowering the operating costs of enterprises situated on high-value property. If the property is leased back to a non-exempt

[27] Section 328.72(1) and (15), F.S.
[28] Section 328.66, F.S.
[29] Sections 380.501 – 380.515, F.S.
[30] http://www.dca.state.fl.us/ffct/
[31] ibid.
[32] *Walter v. Schuler*, 176 So.2d 81.

entity, the lease-hold interest is subject to the intangibles tax.

- **Sell the development rights** to a governmental (city or county) or non-profit entity, thereby substantially reducing the property tax burden. The property would be taxed on its current use, based on its "income stream," and not the speculative value or value of a comparable property.
- Create a **Conservation Easement** for land used for "outdoor recreation or park purposes." Section 193.501 F.S., allows property owners to contract with public agencies or charitable corporations to restrict the use of property for a variety of purposes, to include "boating" that is open to the general public for a term of years, thereby linking property values to the income stream generated by the current use. Current law provides for "recapture" of deferred taxes only if the covenant is rescinded.
- In a limited number of situations, some working waterfront property could qualify for an **"Historically Significant" classification,**[33] an **exemption** for the entire property,[34] or an **exemption** for improvements on the property.[35]

Property Tax Relief: Proposed Options

The Legislature could modify existing property tax relief provisions, or propose amending the constitution to create new provisions, such as:

- Create a **Deferred Property Tax Program** for working waterfront property. Currently, such a program exists for qualified low-income persons entitled to claim homestead tax exemption may annually defer payment of their property taxes and special assessments.[36]
- Pass a Joint Resolution to allow the electorate to consider a constitutional amendment that expands the **Agricultural Classification** to include commercial-fishing working waterfront property used to support commercial fishing operations. Such a benefit should include a "recapture" provision for all deferred property taxes, up through the last 10 year period.
- Pass a Joint Resolution to allow the electorate to consider a constitutional amendment to allow for a **property tax differential or "use-value" or "income" assessments** for working waterfronts. This preferential tax assessment should include a "recapture provision."

Industry/Intergovernmental Coordination

There may be no single program or strategy to preserve working waterfronts or increase public access to the water through boat ramps. Consequently, the industries should coordinate with appropriate state agencies and regional governments to craft long-term strategies. There are several state programs and regional governments whose policies impact waterfront industries, including the Florida Coastal Management Program, the Florida Regional Planning Councils, and the Florida Water Management Districts.

Perhaps the most important partners are the local governments with jurisdiction over the waterfront areas. These local governments are responsible for preparing comprehensive plans that, among other things, guide the use of land and water resources. Coastal communities must have a coastal management element to address the goals and policies for the coastal area. Affected industries should work with the local planning department in each community to assure that the comprehensive plan includes provisions and features that protect and preserve existing marine-dependent sites and give priority to these uses at suitable waterfront locations.

Specific strategies to implement the goals established in local comprehensive plans may include:

- Conditional permitting or rezoning which would allow redevelopment only if it maintains or provides public access or

[33] Under specified conditions, s. 193.505, F.S., allows property owners to covenant with county government to restrict the use of historically significant property, thereby potentially deferring a portion of their property taxes. Current law provides for "recapture" of deferred taxes only if the covenant is rescinded.

[34] Qualified properties may receive an exemption of up to 50 percent of the assessed value from county and municipal property taxes. Section 196.1961, F.S.

[35] Qualified properties may receive an exemption from county and municipal property taxes for improvements to designated historic properties. Section 196.1997, F.S.

[36] Section 197.252, F.S. The county maintains a lien on the property. When the property is sold, it collects the deferred taxes.

retention/expansion of specified waterfront uses;
- Creating a waterfront zoning district or overlay, which would add special requirements to the underlying zoning category; and
- Creating an inventory of working waterfronts and establish a **"no net loss policy,"** which would prohibit the rezoning of such property to residential uses.

Local governments could also invest directly in property preservation, either in **purchase of the property** or **purchase of the development rights** to the property. One strategy for funding these purchases includes using **tax increment financing** through a CRA.

Local governments could also **"trade" for development rights** with grants of density variances for adjoining or other property.

The acquisition or expansion of boat ramp facilities could also be financed using these strategies. In addition, such facilities could be financed with local **launch fees**.

Finally, industry and local governments should explore whether the **regional ports** have the capacity for new access facilities to provide public access to the water, or whether additional access may be available through the construction of mooring fields.

Additional Proposed Options

Additional strategies the Legislature could consider to preserve working waterfronts or increase public access to the water through boat ramps, include:

- Increase funding to expand the Waterfronts Florida Partnership Program;
- Expand access in appropriate state parks;
- Revise the fee structure for sovereign submerged land leases to encourage water-dependent uses and discourage water-enhanced and water-related uses; and
- Create a commission to coordinate and implement all public policy and projects for specific urban waterfront areas.[37]

The Legislature could also consider funding access acquisition in the following ways:

- Increase boat registration fees;
- Expand the boat registration fee base by including non-motorized craft (canoes, etc.);
- Provide a greater portion of marina motor fuel tax revenue to FWC for this purpose;
- Increase the local option vessel registration fee, designating the increase for regional use;
- Designate a portion of Florida Forever[38] bond revenue funds (which includes the Florida Communities Trust Program) or Conservation and Recreation Lands Program funds,[39] for access acquisition; or
- Create a new bond program specifically to fund access preservation and acquisition.

RECOMMENDATIONS

The Legislature should consider expanding current or initiating new programs and strategies to facilitate the preservation of commercial-fishing or recreational working waterfronts to facilitate the expansion of public access through boat ramps.

[37] Such as the Miami River Commission as established in s. 163.06, F.S. http://miamirivercommission.org/

[38] Section 259.105(3), F.S. Paragraph (4)(e) currently provides that purchases through this program include increasing "natural resource-based recreational and educational opportunities..."

[39] Section 259.032(3)(g), F.S. currently authorizes the Board of Trustees to allocate funds to "provide areas, including recreational trails, for natural resource based recreation and other outdoor recreation on any part of any site compatible with conservation purposes."

Florida Population Studies

Volume 33 Number 2 Bulletin 126 February 2000

UNIVERSITY OF FLORIDA

Population Program
Bureau of Economic and Business Research

Projections of Florida population by county, 1999-2030

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People are fascinated by the future. Palm readers, astrologers and crystal ball gazers down through the centuries have found eager buyers for their predictions. Modern-day researchers and forecasters, using computers and large-scale models, continue to find willing audiences. There is particularly great interest in population projections, and for good reason: many types of public and private planning—for schools, hospitals, stores, houses, service stations, roads and countless other projects—require some assessment of future population trends. Yet the future is essentially unknowable. No matter how scientific and sophisticated our projection techniques, we cannot perfectly predict future population trends. In spite of years of developing high-quality data, statistical techniques and computer programs, we still cannot "see" into the future.

We are not completely lost, of course. We can observe population trends that have occurred in the past. We can collect data and build models based on historical trends and relationships. We can then make projections from these models showing what would happen if past trends continued or varied in some particular way. Since the future is intimately tied to the past, these projections will often provide reasonably accurate forecasts of future population change. If constructed and interpreted properly, population projections—although certainly not perfect predictions of the future—can be extremely useful tools for planning and analysis.

The projections published in this bulletin are for the permanent resident population of Florida; they do not include tourists or seasonal residents. Since the future cannot be predicted with absolute certainty, we have produced three sets of projections: low, medium and high. We believe the medium projection is more likely to provide an accurate forecast of future population than either the low or high projections. The low and high projections, however, provide an indication of the range in which future populations might reasonably be expected to lie.

Although these projections provide useful benchmarks for planning and analysis, they should not be interpreted as the only possible scenarios for future population change. Other sources of information at the local level should also be considered when using the projections for planning purposes (particularly for small counties). These projections are designed to assist in the process of planning for future growth and change in Florida, **not** to form the sole basis for such planning.

State projections

State-level projections were made using a cohort-component methodology in which births, deaths and migration were projected separately for each age-sex cohort in the population. The starting point was the April 1, 1990 population of Florida by age and sex, as enumerated in the decennial census. The total

population number (12,937,926) is the same as was originally published, but the age-sex distribution has been modified by the U.S. Bureau of the Census. This modification had the greatest impact on the number of persons in the 0-4 age group.

Survival rates were applied to each age-sex cohort to project future mortality. These rates were based on Florida Life Tables for 1990, prepared by the Public Health Statistics Section of the Florida Department of Health and Rehabilitative Services. The survival rates were adjusted upward in 2000 and 2010 to account for projected increases in life expectancy (U.S. Census Bureau, *Current Population Reports*, Series P-25, No. 1130, February 1996).

Migration rates were based on 1980 and 1990 census data showing migration patterns for 1975-1980 and 1985-1990, respectively. For each period, domestic inmigration rates were calculated for each age-sex cohort by dividing the number of migrants from other states moving into Florida by the mid-decade population of the United States (minus Florida). Domestic outmigration rates for each cohort were calculated by dividing the number of migrants leaving Florida by Florida's mid-decade population. The domestic migration rates used in the projections were based on the average of these two sets of rates. Projections of inmigration were then made by applying inmigration rates to the population of the United States (minus Florida) and projections of outmigration were made by applying outmigration rates to the Florida population. The projections of the United States population were taken from *Current Population Reports*, Series P-25, No. 1130, February 1996.

Projections of foreign immigration were also based on 1990 decennial census data. The distribution of foreign immigrants by age and sex was projected to remain the same as between 1985 and 1990, but the level (389,868 for 1985-1990) was projected to increase by 25,000 for each five-year period from 2000 to 2020. Foreign emigration was assumed to be 20 percent of foreign immigration in each time period.

Projections were made in five-year intervals, with each projection serving as the base for the following projection. Projected inmigration for each five-year interval was added to the survived Florida population at the end of the interval and projected outmigration was subtracted, giving a projection of the population age five and older. Children less than age five were projected by applying age-specific birth rates (adjusted for child mortality) to the projected female population. These birth rates were based on recent Florida birth data and imply a total fertility rate of 2.05 births per woman. We have projected that this rate will gradually increase to 2.10 by 2020.

Three different migration assumptions were used, providing three sets of projections. The low set applied a weight of 0.9 to the inmigration rates for each age-sex cohort for years prior to 2000 and 0.8 thereafter. This set implies net inmigration (i.e., the excess of inmigrants over outmigrants) of 117,000 to 177,000 per year, about the same as during the low-growth years of the 1970s. The high set applied a weight of 1.25 to the adjusted inmigration rates, yielding net migration numbers of 335,000 to 347,000 per year. These numbers are similar to those occurring during the high-growth years of the 1970s and 1980s. The medium set used rates with no weights attached and produced net migration levels of 210,000 to 242,000 per year. To put these figures into perspective, net migration averaged around 270,000 per year during the 1970s and 1980s.

The medium projection for 1995 was controlled to the 1995 population estimate produced by the Bureau of Economic and Business Research (14,149,317). The medium projections for 2000 and 2005 were controlled to the state population forecasts produced by the State of Florida's Consensus Estimating Conference (15,594,326 and 16,882,836, respectively). We believe the medium projection is the most likely to provide an accurate forecast of Florida's future population growth.

County projections

Although the cohort-component technique is a good way to make projections at the state level, it is not necessarily the best way to make long-range projections of total population at the county level. Many counties in Florida are so small that the number of persons in each age-sex category is inadequate for reliable cohort-component projections. Even more important, county growth patterns are so volatile that a single technique based on migration data from one or two time periods may provide misleading results. We believe more useful projections can be made using several different projection techniques and historical base periods.

For counties we made eight projections using four techniques and three different historical base periods. The four techniques were:

1. Linear: population will change by the same number of persons in each future year as the average annual change during the base period.

2. Exponential: population will change at the same percentage rate in each future year as the average annual rate during the base period.

3. Share of growth: each county's share of state population growth in the future will be the same as its share during the base period.

4. Shift share: each county's share of the total state population will change by the same annual amount in the future as the average annual change during the base period.

For the linear and share-of-growth techniques we used base periods of five, ten and fifteen years, yielding three sets of projections for each technique. For the exponential and shift-share techniques we used a single base period of ten years, yielding one set of projections for each technique.

The starting point for each county's projection was the April 1, 1999, population estimate published by the Bureau of Economic and Business Research. The techniques described above provided eight projections for each county for each projection year (2000, 2005, 2010, 2015, 2020, 2025, 2030). In order to moderate the effects of extreme projections, the highest and lowest projections for each county were excluded. The medium projection was then calculated by taking an average of the remaining six projections and adjusting the sum of the county projections to be consistent with the total population change implied by the state projections.

In a number of counties we made special adjustments to the population before applying the techniques described above. This was done to account for special populations such as university students, military personnel and prison inmates. Adjustments were made for counties in which these special populations account for a large proportion of total population or where the special populations have moved counter to trends for the rest of the population. In the present set of projections adjustments were made for Alachua, Baker, Bradford, Calhoun, Charlotte, Columbia, De Soto, Dixie, Escambia, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Holmes, Jackson, Jefferson, Lafayette, Leon, Levy, Liberty, Madison, Martin, Okeechobee, Orange, Santa Rosa, Sumter, Taylor, Union, Wakulla, Walton and Washington counties.

We also made special adjustments in Dade County to account for the effects of Hurricane Andrew, which ripped through the southern tip of Florida in August 1992. This hurricane damaged or destroyed thousands of housing units and forced hundreds of thousands of people to move at least temporarily to other locations. We estimate that the hurricane permanently lowered Dade County's population by 40,000. The projections were adjusted accordingly.

Range of projections

The techniques described above were used to make the medium set of county projections. This is the set we believe is most likely to provide an accurate forecast of future county populations. We have also made low and high sets of projections to provide an indication of the potential variation around the medium projections. These projections were based on an analysis of the errors observed when the projection techniques were applied to a large data base covering three decades and almost 3,000 counties in the United States.

The low and high projections indicate the range in which two-thirds of actual future county populations will fall, if the future distribution of forecast errors is similar to the past distribution. The range varies according to county population size in 1999 (less than 25,000; 25,000 or more), growth rate between 1989 and 1999 (less than 25 percent; 25-50 percent; 50 percent or more), and the length of the projection horizon (forecast errors in each size-growth category are assumed to grow linearly with the length of the projection horizon). Our studies have found that the distribution of absolute percent errors tends to remain fairly stable over time, leading us to believe that the low and high projections provide a realistic indication of the potential degree of uncertainty surrounding the medium projections.

Note: For the medium set of projections, the sum of the county projections equals the state projection for each year (except for slight differences due to rounding). For the high and low sets, however, the sum of the county projections does not equal the state projection. This occurs because potential variation around the medium projection is much greater for counties (especially small and/or rapidly growing counties) than for the state as a whole. Thus the sum of the low projections for counties is lower than the state low projection and the sum of the high projections is higher than the state high projection.

Florida state and county population estimates for April 1, 1999, and projections for 2000-2030

COUNTY	ESTIMATE APRIL 1 1999	PROJECTIONS, APRIL 1 2000	2005	2010	2015	2020	2025	2030
ALACHUA	216,249							
LOW		213,600	216,700	217,600	214,900	209,800	202,600	193,200
MEDIUM		220,100	237,100	253,600	268,500	282,800	296,700	309,400
HIGH		226,800	259,600	294,500	329,200	364,900	402,200	440,300
BAKER	21,879							
LOW		21,400	21,400	20,900	20,300	19,300	18,000	16,300
MEDIUM		22,300	24,100	25,900	27,700	29,600	31,400	33,000
HIGH		23,200	27,200	31,400	36,000	41,000	46,200	51,700
BAY	150,119							
LOW		148,100	150,300	150,900	150,100	148,000	144,300	138,700
MEDIUM		152,600	164,300	175,500	187,100	199,000	210,600	221,200
HIGH		157,200	180,100	204,100	229,900	257,500	286,400	316,100
BRADFORD	25,500							
LOW		25,200	24,700	24,100	23,400	22,600	21,600	20,400
MEDIUM		25,900	27,100	28,200	29,400	30,600	31,800	32,800
HIGH		26,700	29,600	32,700	35,900	39,300	42,900	46,500
BREVARD	474,803							
LOW		469,200	480,200	485,600	486,200	482,200	472,400	456,200
MEDIUM		483,300	524,500	564,200	605,000	647,300	688,300	725,900
HIGH		498,200	575,200	656,900	744,700	838,900	937,700	1,039,600
BROWARD	1,490,289							
LOW		1,471,500	1,501,100	1,512,700	1,510,400	1,493,900	1,460,100	1,407,200
MEDIUM		1,516,000	1,640,000	1,758,500	1,880,700	2,007,000	2,129,500	2,241,400
HIGH		1,562,500	1,798,100	2,046,600	2,313,400	2,599,100	2,898,500	3,206,500
CALHOUN	14,117							
LOW		13,800	13,600	13,100	12,400	11,400	10,100	8,400
MEDIUM		14,500	15,900	17,300	18,700	20,200	21,800	23,100
HIGH		15,300	18,400	21,900	25,700	30,000	34,700	39,500
CHARLOTTE	136,773							
LOW		134,600	137,900	138,400	136,600	132,400	125,500	115,500
MEDIUM		140,100	155,500	170,400	185,800	201,900	217,700	232,200
HIGH		145,800	175,500	207,600	242,900	281,500	322,700	365,800
CITRUS	114,898							
LOW		112,800	114,800	114,700	112,700	108,800	102,700	94,200
MEDIUM		117,400	129,500	141,300	153,500	166,100	178,400	189,700
HIGH		122,200	146,100	172,100	200,400	231,200	264,100	298,400
CLAY	139,631							
LOW		137,800	143,600	146,100	145,900	142,800	136,400	126,500
MEDIUM		143,400	161,700	179,500	197,900	217,100	235,900	253,400
HIGH		149,300	182,700	219,200	259,300	303,400	350,800	400,600
COLLIER	219,685							
LOW		216,000	225,800	228,000	223,400	211,400	191,400	163,000
MEDIUM		227,100	262,900	297,800	334,300	372,500	410,100	445,200
HIGH		238,800	305,500	380,100	463,900	557,400	659,400	768,400
COLUMBIA	56,514							
LOW		56,600	57,600	57,600	56,700	54,800	51,800	47,600
MEDIUM		58,900	65,000	71,000	77,100	83,600	89,900	95,700
HIGH		61,300	73,400	86,400	100,800	116,400	133,100	150,600
DE SOTO	23,438							
LOW		28,200	29,000	29,000	28,700	28,300	27,500	26,400
MEDIUM		29,100	31,700	33,700	35,800	38,000	40,200	42,100
HIGH		29,900	34,700	39,200	44,000	49,200	54,600	60,100
DIXIE	13,478							
LOW		13,100	13,200	12,800	12,100	11,100	9,800	8,200
MEDIUM		13,800	15,400	16,800	18,300	19,800	21,300	22,700
HIGH		14,500	17,800	21,300	25,200	29,400	33,900	38,700

Florida state and county population estimates for April 1, 1999, and projections for 2000-2030 (continued)

COUNTY	ESTIMATE APRIL 1 1999	PROJECTIONS, APRIL 1 2000	2005	2010	2015	2020	2025	2030
DUVAL	762,846							
LOW		749,700	748,400	740,400	727,200	708,700	683,700	651,600
MEDIUM		772,500	818,900	863,100	908,800	956,100	1,001,900	1,043,700
HIGH		796,100	896,400	1,001,700	1,113,800	1,233,000	1,357,300	1,484,900
ESCAMBIA	301,613							
LOW		296,000	294,100	289,800	283,600	275,500	265,000	251,800
MEDIUM		305,100	321,900	338,100	354,700	372,000	388,700	403,900
HIGH		314,400	352,200	392,100	434,400	479,200	526,000	573,900
FLAGLER	45,818							
LOW		45,500	49,400	51,300	51,400	49,600	45,600	39,300
MEDIUM		47,800	57,400	66,800	76,600	86,900	97,100	106,600
HIGH		50,300	66,900	85,600	106,800	130,700	156,900	185,100
FRANKLIN	10,872							
LOW		10,600	10,600	10,300	10,000	9,500	8,800	8,000
MEDIUM		11,100	11,900	12,800	13,600	14,500	15,400	16,200
HIGH		11,500	13,400	15,500	17,700	20,100	22,700	25,300
GADSDEN	51,478							
LOW		50,400	50,300	49,500	48,100	45,900	42,900	39,000
MEDIUM		52,400	56,800	61,100	65,600	70,200	74,700	78,800
HIGH		54,600	64,000	74,300	85,500	97,500	110,200	123,400
GILCHRIST	13,406							
LOW		13,200	13,600	13,500	13,100	12,200	11,000	9,300
MEDIUM		13,900	15,800	17,700	19,600	21,600	23,600	25,500
HIGH		14,600	18,400	22,500	27,100	32,300	37,800	43,800
GLADES	9,867							
LOW		9,700	9,400	9,000	8,300	7,500	6,600	5,400
MEDIUM		10,200	11,000	11,800	12,600	13,400	14,300	15,000
HIGH		10,700	12,700	14,900	17,300	19,900	22,600	25,500
GULF	14,403							
LOW		13,900	14,200	13,200	12,100	10,700	9,200	7,500
MEDIUM		14,600	16,700	17,500	18,400	19,300	20,100	20,900
HIGH		15,300	19,200	22,100	25,100	28,300	31,700	35,200
HAMILTON	14,376							
LOW		14,500	14,200	13,600	12,700	11,600	10,200	8,400
MEDIUM		15,300	16,600	17,900	19,200	20,600	22,000	23,300
HIGH		16,000	19,200	22,700	26,500	30,600	35,000	39,600
HARDEE	22,594							
LOW		21,900	20,500	19,000	17,300	15,700	13,900	12,100
MEDIUM		22,800	23,200	23,600	24,000	24,400	24,700	25,000
HIGH		23,700	26,100	28,400	30,800	33,300	35,700	38,300
HENDRY	30,552							
LOW		30,200	30,600	30,600	30,300	29,800	29,000	27,800
MEDIUM		31,200	33,400	35,600	37,800	40,100	42,400	44,400
HIGH		32,100	36,600	41,400	46,500	51,900	57,600	63,400
HERNANDO	127,392							
LOW		125,500	129,800	131,600	130,800	127,600	121,500	112,400
MEDIUM		130,600	146,300	161,700	177,600	194,200	210,400	225,300
HIGH		136,000	165,200	197,400	232,600	271,100	312,400	355,800
HIGHLANDS	81,143							
LOW		80,100	81,700	82,400	82,300	81,400	79,600	76,800
MEDIUM		82,500	89,300	95,800	102,500	109,400	116,100	122,300
HIGH		85,100	97,900	111,500	126,000	141,700	158,100	174,900
HILLSBOROUGH	967,511							
LOW		953,500	964,500	966,000	959,900	944,700	919,300	882,700
MEDIUM		982,400	1,054,300	1,124,000	1,196,500	1,270,800	1,342,800	1,408,500
HIGH		1,012,500	1,155,200	1,306,900	1,470,200	1,643,500	1,824,800	2,011,300

Florida state and county population estimates for April 1, 1999, and projections for 2000-2030 (continued)

COUNTY	ESTIMATE APRIL 1 1999	PROJECTIONS, APRIL 1 2000	2005	2010	2015	2020	2025	2030
MIAMI-DADE	2,126,702							
LOW		2,088,100	2,074,800	2,044,400	2,000,600	1,943,200	1,869,200	1,776,700
MEDIUM		2,151,700	2,270,800	2,384,800	2,502,400	2,623,900	2,741,800	2,849,500
HIGH		2,217,200	2,485,200	2,765,900	3,064,300	3,380,700	3,710,400	4,048,500
MONROE	87,030							
LOW		85,400	84,700	83,400	81,600	79,200	76,200	72,400
MEDIUM		88,000	92,700	97,300	102,100	107,000	111,800	116,100
HIGH		90,700	101,500	112,900	125,000	137,900	151,200	164,900
NASSAU	57,381							
LOW		56,500	58,500	59,400	59,400	58,000	55,300	51,200
MEDIUM		58,800	66,000	73,000	80,600	88,200	95,700	102,600
HIGH		61,300	74,500	89,100	105,600	123,300	142,200	162,100
OKALOOSA	179,589							
LOW		176,200	178,400	177,500	173,700	167,200	157,400	144,100
MEDIUM		183,300	201,400	218,700	236,700	255,400	273,600	290,400
HIGH		190,800	227,100	266,200	308,900	355,300	404,700	456,300
OKEECHOBEE	35,510							
LOW		35,200	35,400	35,200	34,800	34,200	33,200	31,800
MEDIUM		36,200	38,700	41,000	43,600	46,100	48,500	50,800
HIGH		37,300	42,400	47,700	53,400	59,500	65,900	72,400
ORANGE	846,328							
LOW		833,000	856,700	862,900	854,200	829,900	787,900	726,700
MEDIUM		866,900	965,900	1,061,600	1,161,000	1,264,400	1,365,700	1,459,300
HIGH		902,400	1,090,400	1,294,400	1,518,500	1,763,600	2,026,000	2,301,400
OSCEOLA	157,376							
LOW		154,900	162,700	164,800	161,900	153,600	139,400	118,800
MEDIUM		162,800	189,400	215,200	242,200	270,500	298,300	324,300
HIGH		171,200	220,100	274,700	336,300	405,000	480,000	560,300
PALM BEACH	1,042,196							
LOW		1,031,300	1,062,200	1,079,200	1,085,600	1,081,000	1,062,900	1,029,900
MEDIUM		1,062,400	1,159,700	1,253,000	1,349,500	1,449,500	1,546,800	1,636,100
HIGH		1,095,100	1,272,300	1,460,100	1,662,800	1,880,600	2,110,000	2,346,800
PASCO	326,494							
LOW		322,000	326,800	328,400	327,300	322,900	314,900	302,900
MEDIUM		331,800	357,200	381,900	407,700	434,000	459,600	482,900
HIGH		341,900	391,500	444,300	501,300	561,700	625,000	690,100
PINELLAS	898,784							
LOW		877,400	848,700	816,400	781,200	743,100	701,400	655,600
MEDIUM		904,300	930,600	955,900	982,100	1,009,400	1,036,000	1,060,400
HIGH		931,600	1,016,600	1,104,500	1,196,500	1,292,800	1,392,300	1,493,800
POLK	474,704							
LOW		467,800	472,800	472,500	468,400	460,200	447,100	428,600
MEDIUM		482,000	516,800	550,000	584,200	619,400	653,400	684,400
HIGH		496,800	566,300	639,300	717,400	800,600	887,500	976,600
PUTNAM	72,883							
LOW		71,600	71,100	70,100	68,700	66,900	64,400	61,300
MEDIUM		73,700	77,900	81,800	85,900	90,200	94,400	98,200
HIGH		76,000	85,200	94,900	105,200	116,300	127,800	139,600
ST. JOHNS	113,941							
LOW		112,700	118,300	121,200	121,600	119,600	114,700	106,700
MEDIUM		117,200	133,200	148,700	164,800	181,600	198,100	213,400
HIGH		122,100	150,600	181,700	216,200	254,100	294,900	337,900
ST. LUCIE	186,905							
LOW		183,700	188,000	188,500	185,900	180,000	170,400	156,800
MEDIUM		191,200	212,000	232,000	252,900	274,500	295,600	315,100
HIGH		199,000	239,200	282,700	330,500	382,500	438,100	496,400

Florida state and county population estimates for April 1, 1999, and projections for 2000-2030 (continued)

COUNTY	ESTIMATE APRIL 1 1999	PROJECTIONS, APRIL 1 2000	2005	2010	2015	2020	2025	2030
SANTA ROSA	112,631							
LOW		111,400	116,700	119,200	119,500	117,400	112,500	104,600
MEDIUM		115,900	131,400	146,400	162,000	178,300	194,400	209,300
HIGH		120,700	148,500	178,900	212,500	249,500	289,300	331,300
SARASOTA	321,044							
LOW		316,300	319,600	319,300	316,400	310,900	302,200	289,800
MEDIUM		325,900	349,400	371,700	394,700	418,500	441,600	462,700
HIGH		335,900	382,800	432,000	484,700	541,000	599,800	660,400
SEMINOLE	354,148							
LOW		347,700	354,400	354,100	348,100	336,200	317,400	291,400
MEDIUM		361,900	399,800	436,100	473,900	513,000	551,300	586,500
HIGH		376,700	451,000	531,200	618,900	714,400	816,200	922,800
SUMTER	50,823							
LOW		50,100	52,300	53,000	51,900	49,100	44,500	37,800
MEDIUM		52,600	60,900	69,200	77,700	86,500	95,300	103,400
HIGH		55,300	70,800	88,300	107,800	129,500	153,200	178,400
SUWANNEE	34,386							
LOW		33,800	34,700	34,900	34,500	33,500	31,700	29,200
MEDIUM		35,200	39,100	43,000	46,900	51,000	55,100	58,800
HIGH		36,600	44,200	52,400	61,300	71,200	81,600	92,600
TAYLOR	19,836							
LOW		20,200	19,200	18,000	16,800	15,400	13,900	12,300
MEDIUM		21,000	21,700	22,400	23,100	23,900	24,600	25,200
HIGH		21,900	24,400	27,000	29,800	32,800	35,800	38,900
UNION	13,833							
LOW		13,800	13,400	12,700	11,800	10,700	9,300	7,700
MEDIUM		14,500	15,700	16,800	17,900	19,100	20,300	21,400
HIGH		15,300	18,100	21,200	24,600	28,300	32,200	36,300
VOLUSIA	426,815							
LOW		420,700	425,600	426,300	423,800	417,900	406,700	390,400
MEDIUM		433,400	465,300	496,100	528,300	562,000	594,000	623,000
HIGH		446,700	509,800	576,800	649,200	727,100	807,300	889,500
WAKULLA	20,648							
LOW		20,500	21,100	21,000	20,200	18,900	16,900	14,300
MEDIUM		21,600	24,600	27,400	30,400	33,400	36,400	39,200
HIGH		22,700	28,600	34,900	42,000	49,900	58,400	67,400
WALTON	40,466							
LOW		40,100	42,400	43,800	44,200	43,700	42,100	39,300
MEDIUM		41,700	47,800	53,700	59,800	66,200	72,600	78,400
HIGH		43,400	54,000	65,700	78,600	92,800	108,200	124,400
WASHINGTON	22,155							
LOW		21,500	21,100	20,300	19,100	17,500	15,300	12,700
MEDIUM		22,600	24,700	26,700	28,900	31,100	33,200	35,200
HIGH		23,800	28,600	33,800	39,700	46,100	52,800	59,900
FLORIDA	15,322,040							
LOW		15,080,400	15,708,700	16,373,400	17,102,800	17,901,200	18,697,400	19,429,200
MEDIUM		15,594,300	16,882,800	18,121,300	19,400,900	20,725,000	22,014,100	23,198,000
HIGH		16,052,800	17,892,900	19,716,500	21,555,100	23,411,200	25,197,400	26,835,800

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Florida BEBR
Population Studies

Projections of Florida Population by County, 2002-2030

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Florida is a rapidly growing but highly diverse state. Although its population has grown by around three million residents in each of the last three decades, this growth has not been distributed evenly throughout the state. Some areas have grown very rapidly while others have grown very slowly or even declined. Will these growth patterns continue? If not, how will they change?

This is an important question because many decisions—affecting schools, roads, houses, shopping centers, hospitals, amusement parks, and countless other projects—require some assessment of future population trends. In fact, the success or failure of those plans may depend in large part on the degree to which projected growth is realized over time. Yet the future is essentially unknowable. No matter how accurate our data, how powerful our computers, and how sophisticated our techniques, we still cannot "see" into the future.

We are not completely lost, of course. We can observe population trends that have occurred in the past. We can collect data and build models showing what would happen if past trends continued or varied in some particular way. Since the future is intimately tied to the past, these projections will often provide reasonably accurate forecasts of future population change. If constructed and interpreted properly, population projections—although incapable of providing perfect predictions of the future—can be extremely useful tools for planning and analysis.

State projections

State-level projections were made using a cohort-component methodology in which births, deaths, and migration were projected separately for each age-sex cohort in the population. The starting point was the population of Florida on April 1, 2000, as counted by the U.S. Census Bureau. Several small adjustments to the age-sex composition of the population were made, based on previously reported information on the misreporting of age data in decennial census counts.

Survival rates were applied to each age-sex cohort to project future deaths in the population. These rates were based on Florida Life Tables for 1990, published by the Public Health Statistics Section of the Florida Department of Health and Rehabilitative Services (now called the Florida Department of Health). The survival rates were adjusted upward in 2000, 2010, and 2020 to account for projected increases in life expectancy (U.S. Census Bureau, *Current Population Reports*, Series P-25, No. 1130, 1995).

Domestic migration rates were based on census data showing migration patterns for 1975-1980 and 1985-1990, respectively (1995-2000 migration data from the 2000 census are not yet available). For each period, domestic in-migration rates were calculated for each age-sex cohort by dividing the number of migrants from other states moving into Florida by the mid-decade population of the United States (minus Florida).

Domestic out-migration rates for each cohort were calculated by dividing the number of migrants leaving Florida by Florida's mid-decade population. The domestic migration rates used in these projections were based on the average of these two sets of rates.

Projections of domestic migration were made by applying in-migration rates to the population of the United States (minus Florida) and projections of out-migration were made by applying out-migration rates to the Florida population. The projections of the United States population were taken from the U.S. Census Bureau, *Current Population Reports*, Series P-25, No. 1130, 1996. Three different domestic migration assumptions were used, providing three sets of projections. The medium set used a weight of 1.1 to the domestic in-migration rates for each age-sex cohort, the low set used a weight of 0.9, and the high set used a weight of 1.3.

Projections of foreign immigration were also based on 1990 census data. The distribution of foreign immigrants by age and sex was projected to remain the same as it was from 1985-1990, but the level (389,868 for 1985-1990) was projected to increase by 25,000 for each five-year period from 1990 to 2030 (except for the low projection, in which it was projected to remain constant after 2000). Foreign emigration was assumed to equal 20 percent of foreign immigration in each time period.

Net migration is the difference between the number of in-migrants and the number of out-migrants during a particular time period. The medium projections produce net migration levels of 260,000-280,000 per year between 2000 and 2030 (including both domestic and foreign migration). The low and high projections produce net migration levels that average around 180,000 and 350,000 per year, respectively. To put these figures into perspective, net migration averaged about 270,000 per year during the 1980s and 260,000 per year during the 1990s. Annual net migration levels during the 1990s ranged from a low of 181,000 in 1992-1993 to a high of 365,000 in 1999-2000.

Projections were made in five-year intervals, with each projected population serving as the base for the following projection. Projected in-migration for each five-year interval was added to the survived Florida population at the end of the interval and projected out-migration was subtracted, giving a projection of the population age five and older. Births were projected by applying age-specific birth rates (adjusted for child mortality) to the projected female population. These birth rates were based on Florida birth data for 1999-2001 and imply a total fertility rate of approximately 2.1 births per woman.

The medium projection of total population for 2005 was adjusted to be consistent with the state population forecast produced by the State of Florida's Consensus Estimating Conference. None of the projections after 2005 had any additional adjustments. We believe the medium projection is the most likely to provide an accurate forecast of Florida's future population growth. Although there is no guarantee that the future population will fall within the range provided by the low and high projections, we believe there is a high probability that it will.

County projections

Although the cohort-component method is a good way to make population projections at the state level, it is not necessarily the best way to make long-range projections at the county level. Many counties in Florida are so small that the number of persons in each age-sex category is inadequate for making reliable cohort-component projections. Even more important, county growth patterns are so volatile that a single technique based on migration data from only one or two time periods may provide misleading results. We believe more useful projections of total population can be made if several different techniques and historical base periods are used.

For counties, we made eight projections using four simple extrapolation techniques and three different historical base periods. The four techniques were:

1. Linear – the population will change by the same number of persons in each future year as the average annual change during the base period.

2. Exponential – the population will change at the same percentage rate in each future year as the average annual rate during the base period.

3. Share of growth – each county's share of state population growth in the future will be the same as its share during the base period.

4. Shift share – each county's share of the state population will change by the same annual amount in the future as the average annual change during the base period.

For the linear and share-of-growth techniques we used base periods of five, ten, and fifteen years, yielding three sets of projections for each technique. For the exponential and shift-share techniques we used a single base period of ten years, yielding one set of projections for each technique.

The starting point for each county's projection was the population estimate produced by the Bureau of Economic and Business Research for April 1, 2002. These estimates were based on 2000 census counts and a variety of data and techniques showing population changes since 2000 (Bureau of Economic and Business Research, *Florida Estimates of Population: April 1, 2002*. Gainesville: University of Florida). The techniques described above provided eight projections for each county for each projection year (2005, 2010, ... 2030). In order to moderate the effects of extreme projections, the

highest and lowest projections for each county were excluded. The medium projection was then calculated by taking an average of the remaining six projections and adjusting the sum of the county projections to be consistent with the total population change implied by the state projections for each projection interval.

We made adjustments to the underlying population data in a number of counties before applying the techniques described above. This was done to account for special populations such as university students and prison inmates. Adjustments were made for counties in which these special populations account for a large proportion of total population or where changes in the special populations have been substantially different from changes in the rest of the population. In the present set of projections, adjustments were made for Alachua, Baker, Bay, Bradford, Calhoun, Charlotte, Columbia, De Soto, Dixie, Escambia, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Holmes, Jackson, Jefferson, Lafayette, Leon, Levy, Liberty, Madison, Martin, Okeechobee, Santa Rosa, Sumter, Taylor, Union, Wakulla, Walton, and Washington counties.

Range of projections

The techniques described above were used to make the medium set of county projections. This is the set we believe is most likely to provide an accurate forecast of future county populations. We have also made low and high sets of projections to provide an indication of uncertainty surrounding the medium projections. These alternative projections were based on analyses of past population forecast errors for counties in Florida and the United States. Based on recent analyses of forecast errors in Florida, the range between the low and high projections is smaller in this set of projections than in previous sets.

The low and high projections indicate the range into which two-thirds of actual future county populations will fall, if the future distribution of forecast errors is similar to the past distribution. That is, if future errors are similar to past errors, the populations of about two-thirds of Florida's 67 counties will fall somewhere between the low and high projections. The high and low projections themselves, however, do not have equal probabilities of occurring. Given Florida's population growth history, the probability that a county's future population will be above the high projection is greater than the probability that it will be below the low projection.

The range varies according to county population size in 2002 (less than 25,000; 25,000-249,999; and 250,000+) and the length of the projection horizon (mean absolute percentage forecast errors grow approximately linearly with the length of the projection horizon). Our studies have found that the distribution of absolute percent errors tends to remain fairly stable over time, leading us to believe that the low and high projections provide a realistic indication of the potential degree of uncertainty surrounding the medium projections.

For the medium set of projections, the sum of the county projections equals the state projection for each year (except for slight differences due to rounding). For the high and low sets, however, the sum of the county projections does not equal the state projections. This occurs because potential variation around the medium projection is much greater for counties (especially small counties) than for the state as a whole. Thus, the sum of the low projections for counties will be lower than the state's low projection and the sum of the high projections for counties will be higher than the state's high projection.

Note: The projections published in this bulletin refer solely to permanent residents of Florida; they do not include tourists or seasonal residents.

Florida State and County Population Estimates, April 1, 2002, and Projections for 2005-2030

	Estimate	Projections, April 1					
	April 1, 2002	2005	2010	2015	2020	2025	2030
ALACHUA	228,607						
Low		226,900	230,600	232,000	230,300	226,900	221,700
Medium		238,000	254,200	269,600	283,100	296,000	307,800
High		250,800	281,800	313,900	345,400	378,200	411,600
BAKER	22,992						
Low		22,600	22,800	22,700	22,400	21,900	21,100
Medium		23,900	25,600	27,200	28,900	30,500	31,900
High		25,500	29,000	32,600	36,500	40,600	44,800
BAY	152,186						
Low		150,000	151,000	150,800	149,700	147,500	144,000
Medium		157,300	166,500	175,200	183,900	192,400	200,000
High		165,800	184,500	204,000	224,500	245,800	267,500
BRADFORD	26,517						
Low		26,200	26,100	25,800	25,400	24,800	24,100
Medium		27,500	28,800	30,000	31,300	32,500	33,600
High		29,000	31,900	34,900	38,100	41,300	44,700
BREVARD	494,102						
Low		496,200	511,900	523,700	532,500	537,700	538,700
Medium		514,500	551,300	586,200	621,400	655,200	685,800
High		537,500	600,900	666,500	735,400	806,600	878,900
BROWARD	1,669,153						
Low		1,694,400	1,777,100	1,843,800	1,898,600	1,938,600	1,961,000
Medium		1,755,000	1,910,100	2,057,700	2,207,000	2,350,900	2,482,000
High		1,835,600	2,086,200	2,346,600	2,621,900	2,907,900	3,199,600
CALHOUN	13,231						
Low		12,900	12,600	12,300	11,900	11,400	10,800
Medium		13,700	14,300	14,800	15,400	16,000	16,500
High		14,500	16,100	17,700	19,400	21,100	22,900
CHARLOTTE	148,521						
Low		149,800	156,000	160,600	163,600	164,800	164,100
Medium		156,700	171,300	185,400	199,400	212,900	225,200
High		165,500	190,600	217,300	245,300	274,600	304,700
CITRUS	123,008						
Low		123,600	126,100	131,200	133,100	133,700	132,800
Medium		129,300	140,800	151,600	162,500	173,000	182,600
High		136,600	156,600	177,500	199,700	222,900	246,600
CLAY	149,901						
Low		153,100	162,600	170,000	175,600	179,300	180,500
Medium		160,000	178,100	195,500	213,200	230,400	246,100
High		169,200	198,700	230,000	263,500	298,800	335,300
COLLIER	277,457						
Low		296,800	335,200	369,200	399,700	425,900	446,700
Medium		305,800	357,200	406,900	457,700	507,400	553,300
High		321,500	393,500	469,900	552,000	638,800	728,900
COLUMBIA	58,372						
Low		60,200	62,000	63,200	63,800	63,800	63,200
Medium		63,100	68,200	73,100	78,000	82,700	87,100
High		66,600	75,800	85,400	95,700	106,400	117,400
DE SOTO	32,798						
Low		33,400	35,900	36,900	37,500	37,800	37,700
Medium		34,900	39,400	42,600	45,800	48,900	51,700
High		36,900	43,900	49,900	56,300	63,000	69,900
DIXIE	14,459						
Low		14,700	15,200	15,500	15,600	15,500	15,100
Medium		15,600	17,100	18,500	20,000	21,400	22,700
High		16,600	19,400	22,300	25,400	28,700	32,100

Florida State and County Population Estimates, April 1, 2002, and Projections for 2005-2030 (continued)

	Estimate	Projections, April 1					
	April 1, 2002	2005	2010	2015	2020	2025	2030
DUVAL	809,394						
Low		808,000	826,500	839,800	843,400	851,900	849,300
Medium		838,300	891,000	941,500	992,000	1,040,500	1,084,500
High		875,400	970,200	1,068,800	1,171,600	1,277,900	1,385,700
ESCAMBIA	299,485						
Low		295,200	295,800	294,900	293,100	289,900	285,300
Medium		306,700	319,700	332,000	344,500	356,400	367,200
High		319,800	347,200	375,400	404,700	434,900	465,500
FLAGLER	56,785						
Low		61,100	69,800	77,100	83,400	88,400	91,800
Medium		63,600	75,800	87,700	99,900	111,800	122,900
High		67,600	85,300	104,400	125,100	147,300	170,500
FRANKLIN	10,161						
Low		9,800	11,000	10,600	10,200	9,700	9,200
Medium		10,400	12,400	12,800	13,300	13,700	14,100
High		11,100	13,900	15,300	16,600	18,100	19,500
GADSDEN	45,911						
Low		44,500	43,300	42,000	40,500	38,900	37,100
Medium		46,800	48,000	49,100	50,200	51,300	52,300
High		49,200	53,000	56,800	60,700	64,800	68,900
GILCHRIST	15,023						
Low		15,500	16,500	17,200	17,700	17,900	17,800
Medium		16,300	18,400	20,500	22,500	24,600	26,400
High		17,400	21,000	24,700	28,900	33,200	37,800
GLADES	10,664						
Low		10,600	10,800	10,800	10,700	10,400	10,100
Medium		11,200	12,200	13,000	13,800	14,500	15,200
High		12,000	13,800	15,500	17,400	19,400	21,400
GULF	15,202						
Low		14,600	14,200	13,600	13,000	12,400	11,600
Medium		15,500	16,000	16,500	17,000	17,400	17,800
High		16,500	18,000	19,600	21,200	22,900	24,700
HAMILTON	13,925						
Low		13,300	12,900	12,400	11,900	11,300	10,600
Medium		14,200	14,600	15,100	15,500	15,900	16,300
High		15,000	16,400	17,900	19,400	21,000	22,600
HARDEE	27,437						
Low		27,100	27,600	27,800	27,800	27,500	27,100
Medium		28,400	30,400	32,200	34,100	35,800	37,400
High		30,000	33,700	37,600	41,700	45,900	50,200
HENDRY	36,154						
Low		37,400	39,200	40,600	41,600	42,200	42,300
Medium		39,100	43,100	46,800	50,700	54,400	57,800
High		41,300	48,000	55,000	62,500	70,300	78,500
HERNANDO	136,484						
Low		137,700	143,800	148,300	151,400	152,800	152,400
Medium		144,000	157,900	171,200	184,500	197,300	209,000
High		152,200	175,800	200,700	227,100	254,700	283,000
HIGHLANDS	89,038						
Low		89,000	91,600	93,200	94,000	94,000	92,900
Medium		93,200	100,700	107,800	115,000	121,800	128,000
High		98,400	111,900	126,100	141,000	156,600	172,500
HILLSBOROUGH	1,055,617						
Low		1,067,300	1,114,000	1,152,500	1,182,500	1,202,900	1,212,700
Medium		1,105,900	1,195,100	1,287,100	1,375,900	1,460,900	1,537,900
High		1,156,300	1,307,700	1,466,800	1,632,900	1,804,400	1,978,600

Florida State and County Population Estimates, April 1, 2002, and Projections for 2005-2030 (continued)

	Estimate	Projections, April 1					
	April 1, 2002	2005	2010	2015	2020	2025	2030
HOLMES	18,708						
Low		18,100	17,700	17,100	16,500	15,700	14,900
Medium		19,200	20,000	20,700	21,400	22,100	22,800
High		20,400	22,500	24,700	26,900	29,200	31,600
INDIAN RIVER	118,149						
Low		118,900	123,600	126,900	129,100	129,900	129,300
Medium		124,400	135,800	146,600	157,500	168,000	177,500
High		131,400	151,100	171,700	193,700	216,600	240,100
JACKSON	47,707						
Low		47,000	46,100	45,000	43,700	42,300	40,600
Medium		49,300	51,000	52,500	54,100	55,600	57,000
High		51,900	56,300	60,900	65,600	70,500	75,400
JEFFERSON	13,261						
Low		13,000	12,500	12,000	11,400	10,800	10,100
Medium		13,800	14,200	14,500	14,900	15,300	15,600
High		14,700	16,000	17,300	18,700	20,100	21,500
LAFAYETTE	7,205						
Low		7,300	7,200	7,100	6,900	6,700	6,400
Medium		7,700	8,100	8,500	9,000	9,400	9,700
High		8,200	9,200	10,200	11,300	12,400	13,600
LAKE	231,072						
Low		239,100	258,800	274,800	287,600	296,800	301,700
Medium		249,500	283,000	315,100	347,800	379,700	409,000
High		264,300	316,400	371,800	431,400	494,600	560,300
LEE	475,073						
Low		490,700	527,900	559,500	586,800	608,900	624,500
Medium		507,300	565,700	621,600	678,400	733,400	783,900
High		531,600	619,700	712,100	810,400	913,300	1,019,000
LEON	248,039						
Low		247,600	252,900	255,800	255,200	252,600	247,600
Medium		259,500	278,600	296,800	313,200	328,900	343,100
High		273,600	309,100	346,100	382,800	420,900	459,900
LEVY	36,013						
Low		36,500	38,300	39,700	40,700	41,300	41,300
Medium		38,100	42,000	45,700	49,500	53,200	56,500
High		40,300	46,800	53,700	61,000	68,800	76,700
LIBERTY	7,157						
Low		7,000	6,900	6,700	6,500	6,200	5,900
Medium		7,400	7,800	8,100	8,400	8,700	9,000
High		7,900	8,900	9,600	10,600	11,600	12,600
MADISON	18,932						
Low		18,200	17,600	17,000	16,300	15,500	14,600
Medium		19,300	20,000	20,600	21,200	21,800	22,400
High		20,500	22,500	24,500	26,600	28,800	31,000
MANATEE	277,362						
Low		281,900	296,200	307,800	317,300	324,300	328,300
Medium		292,000	318,300	343,400	368,700	393,100	415,300
High		305,400	347,800	391,700	438,200	486,500	535,700
MARION	271,096						
Low		278,100	296,300	311,500	324,500	334,700	341,600
Medium		287,800	317,900	346,700	375,900	404,200	430,100
High		301,300	347,800	396,500	448,100	502,100	557,300
MARTIN	131,051						
Low		132,000	136,900	140,300	142,500	143,200	142,300
Medium		138,100	150,400	162,100	173,900	185,200	195,500
High		145,800	167,300	189,800	213,700	238,600	264,200

Florida State and County Population Estimates, April 1, 2002, and Projections for 2005-2030 (continued)

	Estimate	Projections, April 1					
	April 1, 2002	2005	2010	2015	2020	2025	2030
MIAMI-DADE	2,312,478						
Low		2,310,200	2,363,600	2,401,000	2,426,300	2,436,600	2,429,600
Medium		2,396,600	2,548,200	2,691,800	2,836,700	2,975,800	3,102,200
High		2,502,700	2,774,700	3,055,800	3,350,500	3,655,000	3,964,100
MONROE	81,140						
Low		77,700	74,600	71,400	68,100	64,700	61,100
Medium		81,700	82,800	83,800	84,800	85,700	86,600
High		85,900	91,200	96,600	102,100	107,800	113,400
NASSAU	61,094						
Low		62,300	66,200	69,100	71,400	72,800	73,300
Medium		65,200	72,500	79,500	86,700	93,600	100,000
High		68,900	80,900	93,500	107,100	121,400	136,200
OKALOOSA	176,971						
Low		176,000	179,700	181,600	182,100	181,000	178,100
Medium		184,400	197,800	210,400	223,100	235,200	246,200
High		194,500	219,600	245,700	273,200	301,700	330,800
OKEECHOBEE	36,551						
Low		36,000	36,000	35,800	35,400	34,700	33,800
Medium		37,800	39,700	41,600	43,600	45,400	47,100
High		39,800	44,000	48,400	53,100	57,900	62,800
ORANGE	955,865						
Low		986,700	1,060,600	1,123,600	1,177,800	1,221,400	1,252,300
Medium		1,020,300	1,136,900	1,248,400	1,361,700	1,471,500	1,572,300
High		1,069,000	1,245,300	1,430,000	1,626,500	1,832,100	2,043,200
OSCEOLA	193,355						
Low		204,600	228,300	248,100	264,700	277,400	285,600
Medium		213,000	248,700	283,100	318,300	352,500	384,300
High		226,100	279,000	335,700	397,000	462,300	530,400
PALM BEACH	1,183,197						
Low		1,210,400	1,284,100	1,345,300	1,397,200	1,437,400	1,463,700
Medium		1,252,700	1,378,300	1,498,300	1,619,900	1,737,600	1,845,300
High		1,311,200	1,507,400	1,712,200	1,929,500	2,156,200	2,388,200
PASCO	361,468						
Low		366,500	383,700	397,400	408,500	416,400	420,600
Medium		379,700	412,500	443,700	475,100	505,300	532,800
High		397,100	450,400	505,800	564,100	624,600	686,200
PINELLAS	933,994						
Low		915,100	907,600	896,800	883,500	867,200	847,300
Medium		951,200	982,200	1,011,600	1,041,200	1,069,700	1,095,500
High		991,300	1,065,400	1,141,300	1,220,100	1,300,800	1,382,400
POLK	502,385						
Low		505,400	522,700	535,800	545,900	552,200	554,000
Medium		523,900	562,800	599,600	636,600	672,300	704,700
High		547,500	613,600	682,000	753,900	828,300	903,800
PUTNAM	71,329						
Low		69,100	67,500	66,100	64,300	62,100	59,700
Medium		72,600	75,000	77,200	79,500	81,700	83,800
High		76,400	82,900	89,500	96,400	103,600	110,800
ST. JOHNS	133,953						
Low		139,800	153,200	164,300	173,400	180,100	184,200
Medium		145,800	167,300	188,000	209,200	229,800	248,900
High		154,500	187,300	222,300	260,100	300,200	342,100
ST. LUCIE	203,360						
Low		205,600	215,200	222,200	227,200	229,700	229,400
Medium		215,100	236,200	256,300	276,700	295,300	314,300
High		227,300	263,000	300,600	340,700	382,800	426,000

Florida State and County Population Estimates, April 1, 2002, and Projections for 2005-2030 (continued)

	Estimate	Projections, April 1					
	April 1, 2002	2005	2010	2015	2020	2025	2030
SANTA ROSA	124,956						
Low		123,200	137,200	144,300	149,900	153,700	155,400
Medium		133,900	150,200	165,800	181,700	197,100	211,300
High		141,700	167,700	195,200	224,800	256,100	288,600
SARASOTA	339,684						
Low		341,000	351,900	360,200	366,300	369,900	370,700
Medium		353,600	378,900	403,100	427,400	450,700	471,900
High		369,400	413,000	458,400	505,800	554,900	604,800
SEMINOLE	387,626						
Low		395,900	419,400	438,600	454,600	466,800	474,400
Medium		409,800	450,300	488,600	527,400	564,700	598,700
High		428,900	492,300	558,200	627,800	700,200	774,000
SUMTER	61,348						
Low		65,000	73,500	79,800	85,200	89,300	92,000
Medium		67,700	80,100	91,100	102,400	113,500	123,700
High		71,800	89,800	108,000	127,800	148,800	170,900
SUWANNEE	35,727						
Low		35,900	37,100	38,000	38,500	38,700	38,400
Medium		37,500	40,800	43,900	47,100	50,100	52,800
High		39,600	45,400	51,400	57,800	64,500	71,400
TAYLOR	19,800						
Low		19,700	19,000	18,200	17,300	16,400	15,300
Medium		21,000	21,500	22,100	22,600	23,100	23,600
High		22,300	24,200	26,200	28,300	30,400	32,600
UNION	13,794						
Low		14,000	13,900	13,600	13,300	12,800	12,200
Medium		14,800	15,600	16,400	17,200	17,900	18,600
High		15,800	17,600	19,600	21,600	23,800	26,000
VOLUSIA	459,737						
Low		462,400	478,400	490,500	499,800	505,600	507,300
Medium		479,400	515,100	548,900	582,900	615,600	645,200
High		501,000	561,600	624,300	690,200	758,400	827,700
WAKULLA	24,217						
Low		25,100	26,900	28,200	29,100	29,500	29,500
Medium		26,500	30,000	33,500	37,000	40,500	43,700
High		28,300	34,200	40,600	47,500	54,900	62,600
WALTON	45,521						
Low		47,700	52,400	56,300	59,500	61,900	63,400
Medium		49,700	57,200	64,400	71,800	79,000	85,600
High		52,700	64,000	76,200	89,300	103,200	117,800
WASHINGTON	21,649						
Low		21,200	21,100	20,900	20,400	19,800	18,900
Medium		22,500	23,600	25,100	26,400	27,600	28,700
High		23,900	26,900	30,000	33,300	36,700	40,200
FLORIDA	16,674,608						
Low		16,633,000	17,718,300	18,606,600	19,515,100	20,391,800	21,174,700
Medium		17,498,300	18,978,400	20,386,900	21,807,100	23,177,700	24,428,300
High		17,803,000	19,762,700	21,626,700	23,474,800	25,238,700	26,841,600

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Florida Population Studies
BEBR

Projections of Florida Population by County, 2005–2030

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Florida is a rapidly growing but highly diverse state. Although its population has grown by around three million residents in each of the last three decades, this growth has not been distributed evenly throughout the state. Some areas have grown very rapidly while others have grown very slowly or even declined. Will these growth patterns continue? If not, how will they change?

This is an important question because many decisions—affecting schools, roads, houses, shopping centers, hospitals, amusement parks, and countless other projects—require some assessment of future population trends. In fact, the success or failure of those plans may depend in large part on the degree to which projected growth is realized over time. Yet the future is essentially unknowable. No matter how accurate our data, how powerful our computers, and how sophisticated our techniques, we still cannot "see" into the future.

We are not completely lost, of course. We can observe population trends that have occurred in the past. We can collect data and build models showing what would happen if past trends continued or varied in some particular way. Since the future is intimately tied to the past, these projections will often provide reasonably accurate forecasts of future population change. If constructed and interpreted properly, population projections—although incapable of providing perfect predictions of the future—can be extremely useful tools for planning and analysis.

Since the future cannot be predicted with absolute certainty, we publish three series of population projections: high, medium, and low. We believe the medium projection is more likely to provide an accurate forecast of future population growth than either the high or low projections, but the high and low projections provide an indication of the range in which future populations might reasonably be expected to lie. It should also be noted that—although the projections published here provide useful benchmarks for planning and analysis—they should not be interpreted as the only possible scenarios for future population change. Other sources of information should also be considered when using projections for planning purposes (especially in small counties).

State projections

State-level projections were made using a cohort-component methodology in which births, deaths, and migration were projected separately for each age-sex cohort in Florida, by race (white, nonwhite) and ethnicity (Hispanic, non-Hispanic). The starting point was the population of Florida on April 1, 2000, as counted by the U.S. Census Bureau. Survival rates were applied to each age-sex-race/ethnicity cohort to project future deaths in the population. These rates were based on Florida Life Tables for 2000, published by the Florida Department of Health. The survival rates were adjusted upward in 2005, 2010, 2015, 2020, and 2025 to account for projected increases in life expectancy (U.S. Census Bureau,

Population Division Working Paper No. 38, Series NP-05, 2000).

Domestic migration rates by age, sex, race/ethnicity were based on data for 1995–2000 as reported in the 2000 Census. Domestic in-migration rates were calculated by dividing the number of persons moving to Florida from other states by the mid-decade population of the United States (minus Florida). Domestic out-migration rates were calculated by dividing the number of persons leaving Florida by Florida's mid-decade population. In both instances, rates were calculated separately for males and females by race and ethnicity for each five-year age group up to 85+.

The domestic in-migration rates were weighted to provide three different scenarios of future population growth. For the high series, the weights ranged between 1.3 and 1.4, for the medium series, between 1.0 and 1.25, and for the low series the weight was 0.95. The domestic out-migration rates were not weighted. For each of the three series, projections of domestic in-migration were made by applying weighted in-migration rates to the projected population of the United States (minus Florida), using the most recent set of national projections produced by the U.S. Census Bureau. Projections of out-migration were made by applying the 1995–2000 out-migration rates to the Florida population.

Projections of foreign immigration were also based on data from Census 2000. For the high projections, foreign immigration was projected to exceed the 1995–2000 level by 40% during each five-year interval. For the medium projections, foreign immigration was projected to exceed the 1995–2000 level by 20% during each five-year interval. For the low projections, foreign immigration was projected to remain the same as between 1995 and 2000 for each five-year interval. Foreign emigration was assumed to equal 22.5% of foreign immigration for each series of projections. The distribution of foreign immigrants by age, sex, race, and ethnicity was based on the patterns observed between 1995 and 2000.

Net migration is the difference between the number of in-migrants and the number of out-migrants during a particular time period. The medium projections produce net migration levels (including both domestic and foreign migration) of 339,000 per year between 2005 and 2010. The levels decline gradually over time, reaching 266,000 between 2025 and 2030. The low projections produce net migration levels that average between 200,000 and 220,000 per year between 2005 and 2030, while the high projections produce net migration levels that average between 357,000 and 427,000. To put these numbers into perspective, net migration averaged 260,000–280,000 per year during the 1970s, 1980s, and 1990s and has averaged 345,000 per year since 2000. Since 1990, annual net migration levels have ranged between 181,000 and 400,000.

Projections were made in five-year intervals, with each projected population serving as the base for the following projection. Projected in-migration for each five-year interval was added to the survived Florida population at the end of the interval and projected out-migration was subtracted, giving a projection of the population age five and older. Births were projected by applying age-specific birth rates (adjusted for child mortality) to the projected female population of each race/ethnicity group. These birth rates were based on Florida birth data for 1999–2001 and imply a total fertility rate of approximately 1.8 births per woman for non-Hispanic whites, 2.3 for non-Hispanic nonwhites, and 2.2 for Hispanics. In the medium series, birth rates for non-Hispanic whites were projected to remain at their 1999–2001 levels while birth rates for non-Hispanic nonwhites and Hispanics were projected to decline gradually over time; in the high series, birth rates for all race/ethnic groups were projected to remain at their 1999–2001 levels; and in the low series they were projected to decline gradually for all three groups.

As a final step, projections for non-Hispanic whites, non-Hispanic nonwhites, and Hispanics were added together to provide projections of the total population. The medium projection of total population for 2010 was adjusted to be consistent with the state population forecast produced by the State of Florida's Consensus Estimating Conference. None of the projections after 2010 had any additional adjustments.

County projections

The cohort-component method is a good way to make population projections at the state level, but is not necessarily the best way to make long-range projections at the county level. Many counties in Florida are so small that the number of persons in each age-sex-race/ethnicity category are inadequate for making reliable cohort-component projections. Even more important, county growth patterns are so volatile that a single technique based on migration data from only one or two time periods may provide misleading results. We believe more useful projections of total population can be made if several different techniques and historical base periods are used.

For counties, we made eight projections using four simple extrapolation techniques and three different historical base periods. The four techniques were:

1. Linear – the population will change by the same number of persons in each future year as the average annual change during the base period.

2. Exponential – the population will change at the same percentage rate in each future year as the average annual rate during the base period.

3. Share of growth – each county's share of state population growth in the future will be the same as its share during the base period.

4. Shift share – each county's share of the state population will change by the same annual amount in the future as the average annual change during the base period.

For the linear and share-of-growth techniques we used base periods of five, ten, and fifteen years, yielding three sets of projections for each technique. For the exponential and shift-share techniques we used a single base period of ten years, yielding one set of projections for each technique.

The starting point for each county's projection was the population estimate produced by the Bureau of Economic and Business Research for April 1, 2005. These estimates were based on 2000 census counts and a variety of data and techniques showing population changes since 2000 (Bureau of Economic and Business Research, *Florida Estimates of Population: April 1, 2005*, Gainesville: University of Florida). The techniques described above provided eight projections for each county for each projection year (2010, 2015, 2020, 2025, 2030). In order to moderate the effects of extreme projections, the highest and lowest projections for each county were excluded. The medium projection was then calculated by taking an average of the six remaining projections and adjusting the sum of the county projections to be consistent with the total population change implied by the state projections for each projection interval.

We made adjustments to the underlying population data in a number of counties before applying the techniques described above. This was done to account for special events and institutional populations such as university students and prison inmates. Adjustments were made for counties in which institutional populations account for a large proportion of total population and where changes in those populations have been substantially different from changes in the rest of the population. In the present set of projections, adjustments for institutional populations were made for Alachua, Baker, Bradford, Calhoun, Columbia, DeSoto, Dixie, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Holmes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Okeechobee, Santa Rosa, Sumter, Taylor, Union, Wakulla, Walton, and Washington counties. We also made adjustments in Charlotte, DeSoto, Escambia, and Hardee counties to account for the impact of the 2004 hurricanes on population growth in those four counties.

Range of projections

The techniques described above were used to make the medium series of county projections. This is the series we believe will generally provide the most accurate forecasts of future population growth. We have also made a series of low and high projections to provide an indication of the uncertainty surrounding the medium projections. The low and high projections were based on analyses of past population forecast errors for counties in Florida and the United States.

The low and high projections indicate the range into which two-thirds of actual future county populations will fall, if the future distribution of forecast errors is similar to the past distribution. That is, if future errors are similar to past errors, the populations of about two-thirds of Florida's 67 counties will fall somewhere between the low and high projections. The high and low projections themselves, however, do not have equal probabilities of occurring. Given Florida's population growth history, the probability that a county's future population will be above the high projection is greater than the probability that it will be below the low projection.

The range between the low and high projections varies according to county population size in 2005 (less than 25,000; 25,000–249,999; and 250,000+) and the length of the projection horizon (forecast errors generally grow with the length of the projection horizon). Our studies have found that the distribution of absolute percent errors tends to remain fairly stable over time, leading us to believe that the low and high projections provide a realistic indication of the potential degree of uncertainty surrounding the medium projections.

For the medium series of projections, the sum of the county projections equals the state projection for each year (except for slight differences due to rounding). For the high and low series, however, the sum of the county projections does not equal the state projection. This occurs because potential variation around the medium projection is much greater for counties (especially small counties) than for the state as a whole. Thus, the sum of the low projections for counties is lower than the state's low projection and the sum of the high projections for counties is higher than the state's high projection.

Note: The projections published in this bulletin refer solely to permanent residents of Florida; they do not include tourists or seasonal residents.

Florida State and County Population Estimates, April 1, 2005, and Projections for 2010–2030

	Estimate	Projections, April 1				
	April 1, 2005	2010	2015	2020	2025	2030
ALACHUA	240,764					
Low		234,400	237,700	236,800	233,300	228,000
Medium		260,800	279,700	295,100	308,600	321,100
High		286,400	321,600	355,200	388,800	423,300
BAKER	23,953					
Low		22,600	22,500	22,100	21,400	20,500
Medium		25,800	27,400	29,000	30,300	31,500
High		28,800	32,400	36,000	39,700	43,500
BAY	161,721					
Low		157,600	159,600	159,900	158,600	155,900
Medium		175,400	187,700	199,300	209,600	219,300
High		192,700	215,900	239,900	264,400	289,600
BRADFORD	28,118					
Low		26,700	26,500	26,100	25,500	24,700
Medium		29,700	31,200	32,500	33,700	34,900
High		32,700	35,800	39,100	42,400	45,800
BREVARD	531,970					
Low		536,200	556,300	571,100	579,800	583,800
Medium		583,800	632,100	677,200	717,300	754,600
High		629,400	708,000	788,600	869,700	952,600
BROWARD	1,740,987					
Low		1,750,100	1,812,600	1,854,900	1,877,900	1,885,700
Medium		1,905,500	2,059,600	2,200,100	2,324,400	2,439,300
High		2,054,500	2,306,900	2,561,500	2,816,800	3,076,600
CALHOUN	13,945					
Low		13,000	12,800	12,500	12,000	11,500
Medium		14,800	15,600	16,400	17,100	17,700
High		16,500	18,400	20,400	22,400	24,400
CHARLOTTE	154,030					
Low		154,700	161,100	165,000	166,500	166,200
Medium		172,300	189,500	205,300	219,400	232,600
High		189,100	217,900	247,400	277,500	308,600
CITRUS	132,635					
Low		132,400	136,900	139,400	140,000	139,200
Medium		147,400	161,100	173,600	184,600	195,000
High		161,900	185,300	209,200	233,300	258,500
CLAY	169,623					
Low		177,500	190,400	199,800	205,700	208,700
Medium		197,800	223,900	248,400	270,300	290,700
High		217,000	257,600	299,800	342,900	387,600
COLLIER	317,788					
Low		354,600	397,300	433,400	462,000	484,800
Medium		386,800	451,500	512,400	567,400	619,100
High		416,300	505,700	598,500	693,000	791,000
COLUMBIA	61,466					
Low		61,500	62,900	63,500	63,300	62,500
Medium		68,500	74,000	79,000	83,500	87,700
High		75,200	85,100	95,200	105,500	116,000
DESOTO	32,606					
Low		32,400	34,300	34,900	34,900	34,600
Medium		36,100	40,400	43,400	46,100	48,500
High		39,600	46,400	52,300	58,200	64,300
DIXIE	15,377					
Low		14,900	15,100	15,100	14,900	14,500
Medium		17,000	18,500	19,800	21,000	22,200
High		19,000	21,800	24,700	27,600	30,700

Florida State and County Population Estimates, April 1, 2005, and Projections for 2010–2030 (continued)

	Estimate	Projections, April 1				
	April 1, 2005	2010	2015	2020	2025	2030
DUVAL	861,150					
Low		863,200	890,900	908,200	917,700	920,800
Medium		939,800	1,012,300	1,077,500	1,136,200	1,191,500
High		1,013,300	1,133,900	1,254,200	1,376,500	1,502,400
ESCAMBIA	303,623					
Low		295,000	296,900	296,700	294,700	291,000
Medium		320,900	337,300	352,400	365,800	378,400
High		346,300	377,800	409,800	442,000	474,800
FLAGLER	78,617					
Low		93,100	108,700	121,500	131,200	138,400
Medium		104,000	127,900	150,500	171,100	190,600
High		113,800	147,100	182,200	218,700	257,000
FRANKLIN	10,845					
Low		11,400	11,200	10,800	10,400	9,900
Medium		13,000	13,600	14,200	14,800	15,300
High		14,500	16,100	17,700	19,400	21,100
GADSDEN	47,713					
Low		45,100	44,100	42,900	41,400	39,800
Medium		50,100	51,800	53,500	55,000	56,400
High		55,100	59,600	64,300	69,100	74,000
GILCHRIST	16,221					
Low		16,300	17,000	17,400	17,400	17,200
Medium		18,600	20,700	22,700	24,600	26,300
High		20,800	24,400	28,300	32,400	36,600
GLADES	10,729					
Low		10,200	10,000	9,700	9,300	8,800
Medium		11,600	12,200	12,700	13,200	13,700
High		13,000	14,400	15,800	17,300	18,800
GULF	16,479					
Low		15,300	14,900	14,300	13,700	12,900
Medium		17,400	18,100	18,800	19,400	20,000
High		19,400	21,400	23,400	25,400	27,500
HAMILTON	14,315					
Low		13,100	12,700	12,100	11,500	10,800
Medium		14,900	15,400	15,900	16,300	16,700
High		16,700	18,200	19,800	21,300	22,900
HARDEE	27,333					
Low		26,000	25,800	25,400	24,800	24,100
Medium		28,900	30,300	31,600	32,800	34,000
High		31,800	34,900	38,000	41,300	44,700
HENDRY	38,376					
Low		38,500	39,500	40,200	40,300	39,900
Medium		42,800	46,500	50,100	53,100	56,000
High		47,000	53,500	60,300	67,100	74,100
HERNANDO	150,784					
Low		152,600	159,800	164,300	166,200	166,400
Medium		170,000	188,000	204,400	218,900	232,700
High		186,600	216,200	246,400	277,000	309,000
HIGHLANDS	93,456					
Low		91,100	92,500	93,000	92,200	90,600
Medium		101,400	108,800	115,800	121,900	127,400
High		111,400	125,100	139,400	153,700	168,200
HILLSBOROUGH	1,131,546					
Low		1,159,400	1,216,800	1,259,700	1,286,900	1,302,100
Medium		1,262,700	1,382,700	1,493,200	1,590,600	1,680,600
High		1,361,000	1,548,600	1,739,600	1,930,300	2,124,500

Florida State and County Population Estimates, April 1, 2005, and Projections for 2010–2030 (continued)

	Estimate	Projections, April 1				
	April 1, 2005	2010	2015	2020	2025	2030
HOLMES	19,157					
Low		17,500	16,900	16,200	15,400	14,600
Medium		19,900	20,600	21,300	21,900	22,500
High		22,300	24,300	26,500	28,700	31,000
INDIAN RIVER	130,043					
Low		132,000	138,200	142,200	144,100	144,100
Medium		147,000	162,500	177,000	189,700	201,600
High		161,300	186,900	213,400	240,100	267,600
JACKSON	49,691					
Low		47,900	47,000	45,800	44,300	42,600
Medium		53,200	55,300	57,100	58,800	60,300
High		58,500	63,600	68,600	73,800	79,100
JEFFERSON	14,233					
Low		13,200	12,800	12,400	11,800	11,200
Medium		15,000	15,600	16,200	16,800	17,300
High		16,800	18,500	20,200	22,000	23,800
LAFAYETTE	7,971					
Low		7,400	7,300	7,100	6,800	6,500
Medium		8,400	8,900	9,300	9,700	10,000
High		9,400	10,500	11,600	12,700	13,800
LAKE	263,017					
Low		287,200	316,700	341,300	360,400	375,100
Medium		313,200	359,900	403,800	443,200	480,100
High		337,200	403,100	471,300	540,500	612,000
LEE	549,442					
Low		594,800	652,800	700,200	736,500	764,200
Medium		648,400	741,700	828,500	906,200	979,000
High		698,200	830,800	966,900	1,104,700	1,246,900
LEON	271,111					
Low		272,300	282,700	288,400	291,300	292,200
Medium		296,500	321,200	342,200	360,700	378,100
High		319,700	359,700	398,300	437,000	476,700
LEVY	37,985					
Low		38,100	39,500	40,400	40,700	40,600
Medium		42,400	46,500	50,300	53,700	56,900
High		46,600	53,400	60,600	67,900	75,400
LIBERTY	7,581					
Low		7,000	6,800	6,600	6,300	5,900
Medium		8,000	8,300	8,600	8,900	9,200
High		8,900	9,800	10,700	11,700	12,600
MADISON	19,696					
Low		18,100	17,600	16,900	16,100	15,200
Medium		20,600	21,400	22,200	22,900	23,600
High		23,100	25,300	27,600	30,000	32,400
MANATEE	304,364					
Low		315,600	334,500	349,100	359,100	365,500
Medium		343,800	380,100	413,700	443,400	470,900
High		370,500	425,700	482,100	538,600	596,400
MARION	304,926					
Low		322,000	346,300	365,700	379,900	390,000
Medium		350,900	393,500	433,100	468,300	501,200
High		378,000	440,700	505,000	569,800	636,400
MARTIN	141,059					
Low		140,500	144,800	147,100	147,400	146,300
Medium		156,300	170,300	183,100	194,400	205,100
High		171,700	195,900	220,600	245,600	271,700

Florida State and County Population Estimates, April 1, 2005, and Projections for 2010–2030 (continued)

	Estimate	Projections, April 1				
	April 1, 2005	2010	2015	2020	2025	2030
MIAMI-DADE	2,422,075					
Low		2,394,200	2,439,000	2,466,700	2,474,200	2,465,500
Medium		2,605,900	2,771,500	2,927,600	3,067,000	3,196,800
High		2,810,600	3,104,200	3,406,400	3,711,300	4,022,600
MONROE	82,413					
Low		75,700	72,900	69,900	66,600	63,200
Medium		84,100	85,800	87,200	88,600	89,800
High		92,500	98,600	104,800	111,000	117,300
NASSAU	65,759					
Low		67,200	70,800	73,300	74,600	75,100
Medium		74,900	83,300	91,200	98,200	104,800
High		82,200	95,900	110,000	124,400	139,400
OKALOOSA	188,939					
Low		186,600	191,000	192,900	192,300	189,800
Medium		207,700	224,700	240,300	253,800	266,500
High		228,100	258,400	289,400	320,400	352,500
OKEECHOBEE	37,765					
Low		35,600	35,000	34,300	33,400	32,400
Medium		39,500	41,200	42,800	44,300	45,700
High		43,500	47,400	51,500	55,700	60,100
ORANGE	1,043,437					
Low		1,099,200	1,179,800	1,244,400	1,291,400	1,324,900
Medium		1,197,700	1,340,600	1,473,700	1,592,300	1,703,000
High		1,290,400	1,501,500	1,718,400	1,937,100	2,161,800
OSCEOLA	235,156					
Low		262,500	294,800	320,500	339,100	351,900
Medium		292,700	346,700	397,700	443,600	486,900
High		320,800	398,800	480,700	565,200	653,500
PALM BEACH	1,265,900					
Low		1,301,300	1,369,400	1,422,700	1,459,800	1,483,700
Medium		1,417,300	1,556,100	1,686,200	1,803,100	1,912,400
High		1,527,600	1,742,900	1,964,700	2,189,700	2,420,700
PASCO	406,898					
Low		425,500	455,400	478,400	494,800	506,000
Medium		463,600	517,400	566,700	610,400	651,000
High		499,600	579,600	660,600	742,100	825,600
PINELLAS	947,744					
Low		899,600	886,500	870,600	851,800	830,200
Medium		978,500	1,007,400	1,034,900	1,060,100	1,083,700
High		1,056,100	1,128,300	1,202,300	1,277,700	1,354,500
POLK	541,840					
Low		550,100	573,100	589,500	598,800	602,800
Medium		599,000	651,200	699,000	740,800	779,200
High		645,700	729,400	814,000	898,200	983,500
PUTNAM	73,764					
Low		69,200	68,000	66,400	64,300	62,000
Medium		77,000	80,000	82,800	85,300	87,700
High		84,600	92,000	99,500	107,200	115,100
ST. JOHNS	157,278					
Low		171,200	188,900	202,800	212,600	218,900
Medium		190,800	222,200	251,800	278,500	303,600
High		209,200	255,600	304,200	354,300	406,500
ST. LUCIE	240,039					
Low		252,000	272,400	287,000	296,200	301,200
Medium		280,800	320,500	356,700	389,000	419,200
High		308,000	368,600	430,500	493,700	559,300

Florida State and County Population Estimates, April 1, 2005, and Projections for 2010–2030 (continued)

	Estimate	Projections, April 1				
	April 1, 2005	2010	2015	2020	2025	2030
SANTA ROSA	136,443					
Low		142,400	150,900	156,900	160,700	162,400
Medium		158,600	177,500	195,100	211,200	226,400
High		174,100	204,200	235,400	267,800	301,500
SARASOTA	367,867					
Low		373,600	390,300	401,900	408,600	411,700
Medium		406,900	443,500	476,500	505,400	532,000
High		438,600	496,700	554,900	612,900	671,700
SEMINOLE	411,744					
Low		422,300	443,600	459,500	469,600	475,700
Medium		460,000	504,100	544,700	580,400	613,700
High		495,800	564,600	634,600	704,400	776,100
SUMTER	74,052					
Low		82,700	92,900	101,100	107,200	111,400
Medium		92,200	109,300	125,500	140,200	154,100
High		101,100	125,700	151,700	178,700	206,900
SUWANNEE	38,174					
Low		37,900	39,100	39,800	39,900	39,600
Medium		42,200	46,000	49,500	52,600	55,500
High		46,400	52,900	59,600	66,500	73,500
TAYLOR	21,310					
Low		20,000	19,500	18,900	18,100	17,200
Medium		22,800	23,800	24,800	25,700	26,500
High		25,500	28,100	30,800	33,600	36,500
UNION	15,046					
Low		14,300	14,000	13,600	13,000	12,300
Medium		16,300	17,100	17,800	18,400	19,000
High		18,200	20,200	22,100	24,100	26,200
VOLUSIA	494,649					
Low		500,600	520,400	534,100	541,600	545,800
Medium		545,100	591,300	633,400	670,200	705,400
High		587,600	662,300	737,500	812,400	890,600
WAKULLA	26,867					
Low		29,900	31,700	33,200	34,100	34,500
Medium		33,300	37,300	41,200	44,800	48,100
High		36,500	42,900	49,700	56,800	64,200
WALTON	53,525					
Low		58,700	65,200	70,300	74,000	76,400
Medium		65,500	76,700	87,300	96,800	105,800
High		71,800	88,200	105,500	123,300	141,900
WASHINGTON	23,097					
Low		23,300	23,300	22,900	22,200	21,300
Medium		26,500	28,400	30,000	31,500	32,800
High		29,700	33,500	37,300	41,200	45,400
FLORIDA	17,918,227					
Low		19,136,900	20,388,800	21,655,500	22,896,500	24,071,000
Medium		19,920,300	21,767,500	23,475,800	24,998,000	26,419,200
High		20,376,600	22,613,100	24,838,500	27,001,800	29,057,600

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North River Village

Growth Management Analysis (Lee Plan Objectives 2.1 and 2.2) (Originally Submitted September 2006)

FAC 9J-5.006(5) provides specific guidance for reviewing plan amendments to determine how well they discourage urban sprawl. The purpose of the referenced subsection of 9J-5 is stated as to "give guidance to local governments and other interested parties about how to make sure that plans and plan amendments are consistent with relevant provisions of the state comprehensive plan, regional policy plans, Chapter 163, Part II, Florida Statutes, and the remainder of this chapter [9J-5] regarding discouraging urban sprawl, including provisions concerning the efficiency of land use, the efficient provisions of public facilities and services, the separation of urban and rural land uses, and the protection of agriculture and natural resources."

Lee County implements this section of 9J5 through Objectives 2.1 and 2.2 in the Lee Comprehensive Plan. Objective 2.1 deals with Development Location and the need for development to be located in such a way that development does not create sprawl and public facilities become financially feasible. Objective 2.2 deals with Development Timing and is primarily implemented through the rezoning process.

The following point-by-point analysis demonstrates how the proposed amendment not only discourages sprawl, but helps the county transition from a plan that currently calls for low density single use development, while creating a sense of place for the community through development of the North River Village property. While this analysis is structured as a point-by-point answer as to how this proposal implements 9J5, the comments point out how this proposal is consistent with Objectives 2.1 and 2.2.

9J-5 lists thirteen "Primary Indicators" of urban sprawl. These are provided below with a brief analysis of how each is relevant to the proposed amendment.

1. *Promotes, allows, or designates for development substantial areas of the jurisdiction to develop as low-intensity, low-density, or single-use development or uses in excess of demonstrated need. (Restated in Lee Plan Objective 2.1)*

   The current comprehensive plan allows for only single use development at low densities on the subject property and over most of the land North of the Caloosahatchee River East of SR 31. The current Lee Plan promotes a scattering of low density residential subdivisions with few to no service or commercial areas. Under this pattern of development, the costs of infrastructure increase significantly, making most services financially infeasible.

   Furthermore, CR 78 was not designed to handle the pass through traffic that is building up along the corridor in low density subdivisions in Lee County, as well as new residential developments in Hendry and Glades Counties. CR 78 has numerous residential units fronting directly on CR 78, a design more characteristic of a local road,

not the type of road to handle the pass through traffic that is building up. The Babcock plan shows the need to widen CR 78 from Broadway to SR 31.

Golden Gate Estates (Collier County) is a visualization of the current low density single use development pattern that the Lee Plan is promoting with the Rural land use category. East-west traffic out of and into Golden Gate is a significant issue, as is the difficulty of extending central water and sewer facilities to the area. Furthermore, as with Golden Gate in Collier County, the Rural land use category would not require the clustering of units or the preservation of significant areas of common open space. Creating an AG subdivision, which would not have an open space requirement, would be the easiest way to construct a development in the Rural land use category.

The proposed amendment is transitioning the Lee Plan from a developing pattern of low density single use development that overly burdens the roads and makes utility infrastructure financially infeasible to a mixed use community with a range of uses. As demonstrated in the population accommodation section, this amendment will only funnel the current demand for housing into a more desirable land use pattern.

The proposed plan of development implements Objection 2.1, *which states that, "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."*

2. *Promotes, allows, or designates significant amounts of urban development to occur in rural areas at substantial distances from existing urban areas while leaping over undeveloped lands which are available and suitable for development. (Restated in Lee Plan Objective 2.1)*

   The subject property is in an area with existing development. Directly West is the Lee County Civic center, a major urban attractor. Directly across the river is the Fort Myers Shores community. The subject property is at the intersection of two major roadway corridors, State Road 31 and County Road 78. While historically the North Olga community has a rural character it is now transitioning away from that with the development in the area, including Babcock, which is located directly North of the subject property.

   The North River Village cannot be considered "leap frog development". There is existing development immediately to the West along SR 78 and immediately to the South along SR 31 and in the Fort Myers Shores Community. Urban services are available to nearby properties and the extension of urban services would not require "leaping" over undeveloped areas.

3. *Promotes, allows, or designates urban development in radial, strip, isolated or ribbon patterns generally emanating from existing urban developments.*

   The proposed North River Village future land use map amendment proposes to break from the *"radial, strip, isolated or ribbon patterns"* of development currently allowed in the Lee Plan by protecting and restoring sensitive environmental lands and clustering density. This district creates a viable "node" of development that will be mixed use and mixed density in nature. It will act as a destination point for river oriented recreation uses.

4. *As a result of premature or poorly planned conversion of rural land to other uses, fails adequately to protect and conserve natural resources, such as wetlands, floodplains, native vegetation, environmentally sensitive areas, natural groundwater aquifer recharge areas, lakes, rivers, shorelines, beaches, bays, estuarine systems, and other significant natural systems.*

   The proposed amendment aims to create a land use category that moves the planning of this property from a blanket 1 dwelling unit per acre of residential development, to a form of development that meets environmental performance standards. By creating the performance standards, it is the intent of the North River Village land use category to improve upon the protections for natural areas beyond that which is currently in place in the Rural land use category.

5. *Fails to adequately protect adjacent agricultural areas and activities, including silviculture, and including active agricultural and silviculture activities as well as passive agricultural activities and dormant, unique and prime farmlands and soils.*

   The subject property is not surrounded by active agricultural uses. The property is surrounded on the West and North by arterial roads, on the South by the Caloosahatchee River and suburban development and on the East by low density residential development. Active agricultural uses are not present immediately adjacent to this property.

6. *Fails to maximize use of existing public facilities and services. (Restated in Lee Plan Objective 2.2)*

   There are currently limited public facilities and services in the North Olga area, because public services are not financially feasible with the type of development pattern that is occurring under the current Lee Plan – low density, spread out single use residential. This application is to create a land use category that would promote a mixed housing and commercial area that could make public services financially feasible for both this district and the adjacent neighborhoods. The applicant will be required to provide central water and sewer. With the extension of utility lines to the subject property, central water and sewer becomes financially feasible for the surrounding residential development.

7. *Fails to maximize use of future public facilities and services. (Restated in Lee Plan Objective 2.2)*

   The developer will be responsible for providing future facilities and services to community residents as stated in #6 above.

8. *Allows for land use patterns or timing which disproportionately increase the cost in time, money and energy, of providing and maintaining facilities and services, including roads, potable water, sanitary sewer, stormwater management, law enforcement, healthcare, fire and emergency response, and general government. (Restated in Lee Plan Objective 2.2)*

   This area of Lee County is faced with enormous growth pressure. Developments are being planned to the East and North that will have a very significant impact on the community unless the road network is improved, water and sewer are available and

other services are planned for. This property creates an opportunity to make public infrastructure financially feasible.

9. *Fails to provide a clear separation between rural and urban areas.*

   The subject property is surrounded on the West and North by arterial roads, on the South by the Caloosahatchee River and suburban development and on the East by low density residential development. With the development of Babcock Ranch and the current projected growth, this area is no longer of rural nature. The North River Village property is a natural extension of the surrounding urban uses including the residential development to the South and the Lee County Civic Center to the West.

10. *Discourages or inhibits infill development or the redevelopment of existing neighborhoods and communities.*

    The approval of the proposed North River Village community will not discourage or inhibit infill development for existing neighborhoods. The character of the development that would take place in the proposed North River Village land use category is unlike anything else that exists in Lee County, and would draw from a different market than infill development.

11. *Fails to encourage an attractive and functional mix of uses.*

    The policies within the proposed text amendment allow for and require a mix of uses within the North River Village land use category.

12. *Results in poor accessibility among linked or related land uses.*

    The proposed land use amendment creates a district that is mixed use in nature. Pedestrian connections will be provided between related uses so that commercial and residential uses are integrated.

13. *Results in the loss of significant amounts of functional open space.*

    The property is currently being used for citrus production and grazing. The current condition of the site contains no functional open space. The proposed development will include public access to recreational facilities on the Caloosahatchee River, creating a vastly improved environment over the current condition.

Population Accommodation
(Originally Submitted March 2008)

The use of population allocations was meant to prevent premature development or to direct development to the areas of each community that are most able to provide for infrastructure. The proposed North River Village is located at the intersection of two state roads and on the edge of the service areas for both central water and sewer utilities. Urban areas are directly adjacent to the property on the south and commercial destinations are in very close proximity. All other public services are or can be easily made available to the subject property. Development at this location is clearly timed appropriately.

Development trends are and have been moving to the east and north parts of Lee County. This is evidenced by the number of recent developments on State Road 80, the four party agreement for the Babcock property, as well as the approval of the Babcock comprehensive plan amendment in Charlotte County and the Babcock AMDA. With the foreseeable widening of State Road 31, the area will be changing. Babcock is now doing a State Environmental Impact Report (SEIR) for SR 31 north of CR 78 and a Project Development and Environment (PD&E) report for SR 31 from CR 78 to SR 80.

Utility infrastructure is in close proximity and the Lee County Utility Service area is contiguous to the property. Water service will be provided by Lee County Utilities which has nearly completed construction of a new water treatment plant, in close proximity to the subject property, adding 5.0 MGD of water treatment capacity to its current capacity. LCU maintains transmission lines sufficient to serve the property within a mile of the subject property. Lee County is currently in negotiations with North Fort Myers Utilities to purchase their service area. North Fort Myers Utilities has a permitted capacity to serve 3.5 million gallons per day (MGD) while operating at 1.85 MGD. NFMU is also in the process of constructing an additional 4.0 MGD of wastewater capacity. Their expansion plans include extending transmission lines to within one and a quarter mile of the subject property. The proposed amendment therefore can easily be serviced by utility infrastructure and will make efficient use of existing capacity.

All of this is further backed up by the Florida 2060 assessment funded by 1,000 Friends of Florida that suggest growth patterns in this area. In response to the movement of population to Alva, staff increased the allocation in the Alva Planning Community primarily in the Rural land use category by over 400 acres through the EAR round of comprehensive plan amendments. Within the Alva Planning community locating that density in the most urban section, at the intersection of two state roads, across the river from urban land uses and in close proximity to public and commercial services should be the priority location for the construction of new units. The character of this intersection is not rural and it is defined more by the commercial uses at CR 78 and SR 31 and the Lee County Civic Center, a major county-wide attraction that is located directly west of the property. The property is further defined as waterfront, the areas in the County and the State that have historically seen the

most development pressure. The adjacent waterfront oriented residential development is clearly not rural in nature, but simply estate housing.

In recognition of the shifting development patterns in the area, the applicant has been working on creating a development node that can act as a destination point providing character and identity to the surrounding community. The different communities north of the river, in both Lee and Hendry County all have plans for higher residential densities and commercial uses clustered around major intersections. Creating a destination point for North Olga at the major road intersection in the community is no different then the destination point in Alva at Broadway and CR 78/SR80, except that the density being proposed on the future land use map for this area is 1/3 the density in downtown Alva.

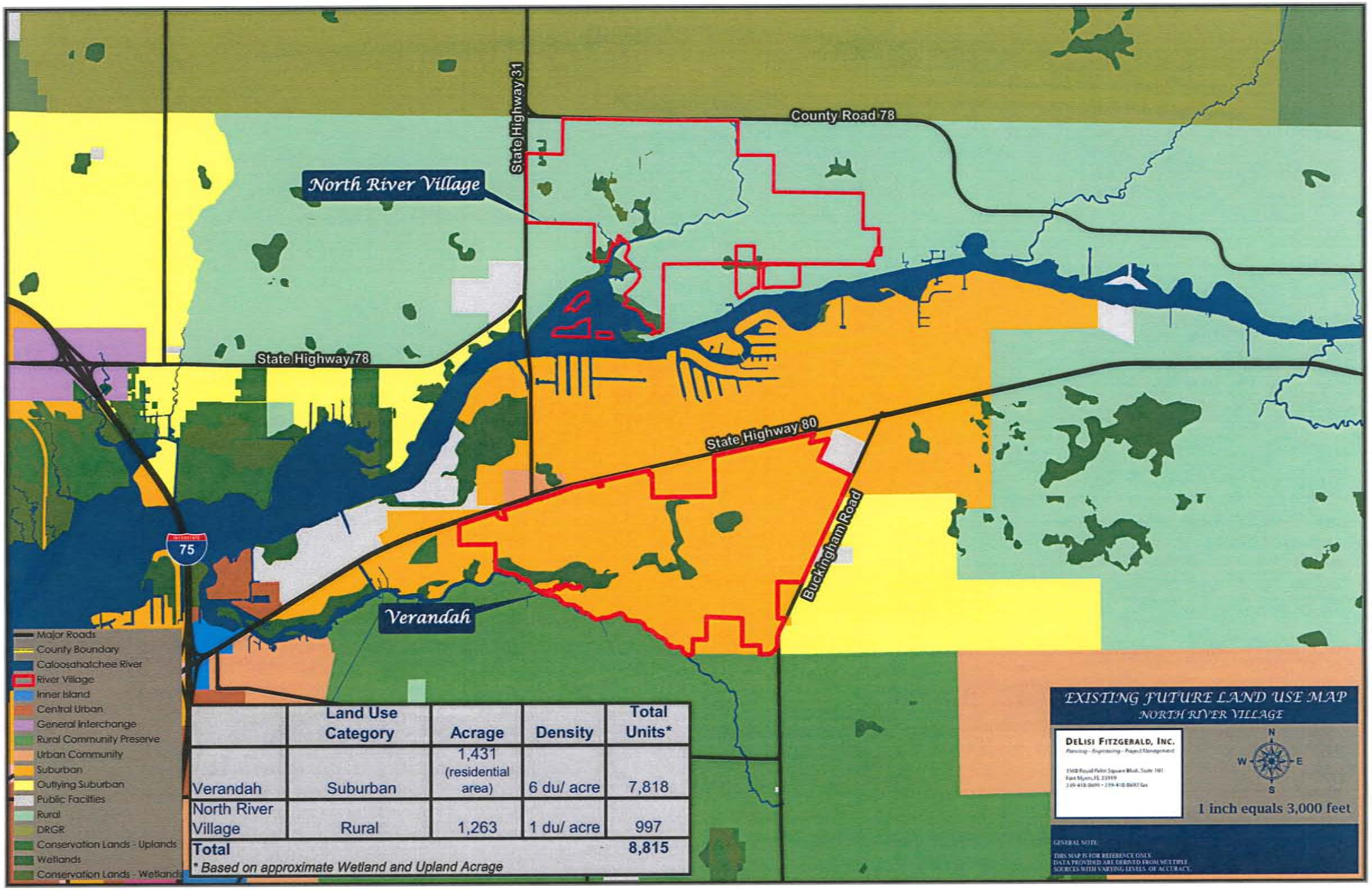
The node concept is backed up by lower densities on the perimeter and a greenbelt separating the node from adjacent Alva. Not only has the applicant been working with the county and environmental agencies to locate appropriate wildlife corridors extending through the Babcock property to the north, but a major greenbelt already exists separating North Olga from the Alva community. The portion of the Babcock property that Lee County acquired for preservation creates a north-south greenbelt that connects to the Caloosahatchee Regional Park and the Caloosahatchee River, effectively creating the greenbelt and development separation that fits in to the idea of creating separate compact development nodes.

The data and analysis provided by Fishkind and Associates provides the justification for amending the Lee County 2030 Allocations Table. According to the analysis, the Alva community is currently under allocated for population. Further, Fishkind correctly argues that best planning practices allow for comfortable over allocation ratios. As the report states:

> *"There should be excess allocation of land and acres such that sufficient lands will ultimately be available to meet demand. These excess allocations take into account the fact that certain lands may not be for sale or be developed by existing land owners. Further, over time development restrictions may change due to increased environmental protection which may limit development, effectively removing the development availability of some lands. Despite the FLUM designation, the developable capacity of the land may be considerably lower due to existing wetlands of other critical habitat concerns. This is often more common in rural locations. The supply of designated developable lands should be sufficiently in excess of demand such that the marketplace is not constrained causing an effective restriction of supply. Such an artificial restriction of supply will drive land prices much higher, contributing to ever increasing real estate and housing prices and compromising the provision of affordable and workforce housing. It is important there is some over allocation so residents can have some market choice and flexibility in choosing housing alternatives. Typically a home buyer will look at 2 or more homes before making a choice. A low allocation ratio limits the choices available to consumers and stifles economic growth."*

The River Village plan amendment therefore applies best planning practices to create a land use category and designate it in a location appropriate for development. It is appropriately timed due to the proximity of urban land uses and infrastructure, and as

discussed in the Fishkind analysis is consistent with the application of population accommodation methodologies. Population accommodation was created as a tool for planners to have some means to project urban infrastructure. The waterfront character of the area, the adjacent urban uses and the available infrastructure all make development at the requested density appropriate for this location.



	Land Use Category	Acrage	Density	Total Units*
Verandah	Suburban	1,431 (residential area)	6 du/ acre	7,818
North River Village	Rural	1,263	1 du/ acre	997
Total				**8,815**

** Based on approximate Wetland and Upland Acrage*

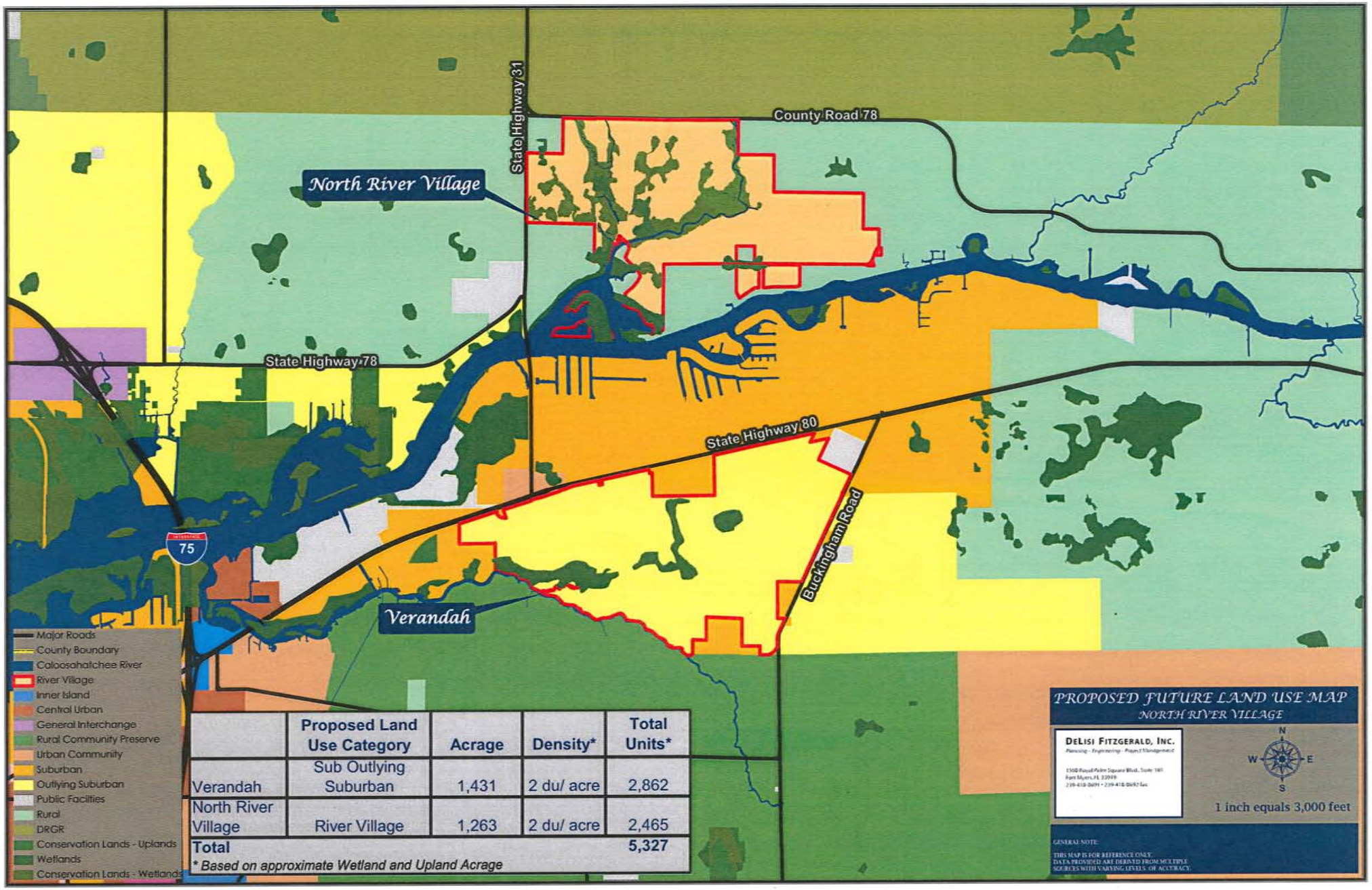
EXISTING FUTURE LAND USE MAP
NORTH RIVER VILLAGE

DeLisi Fitzgerald, Inc.
Planning - Engineering - Project Management

N W E S

1 inch equals 3,000 feet

GENERAL NOTE:
THIS MAP IS FOR REFERENCE ONLY.
DATA PROVIDED ARE DERIVED FROM MULTIPLE SOURCES WITH VARYING LEVELS OF ACCURACY.

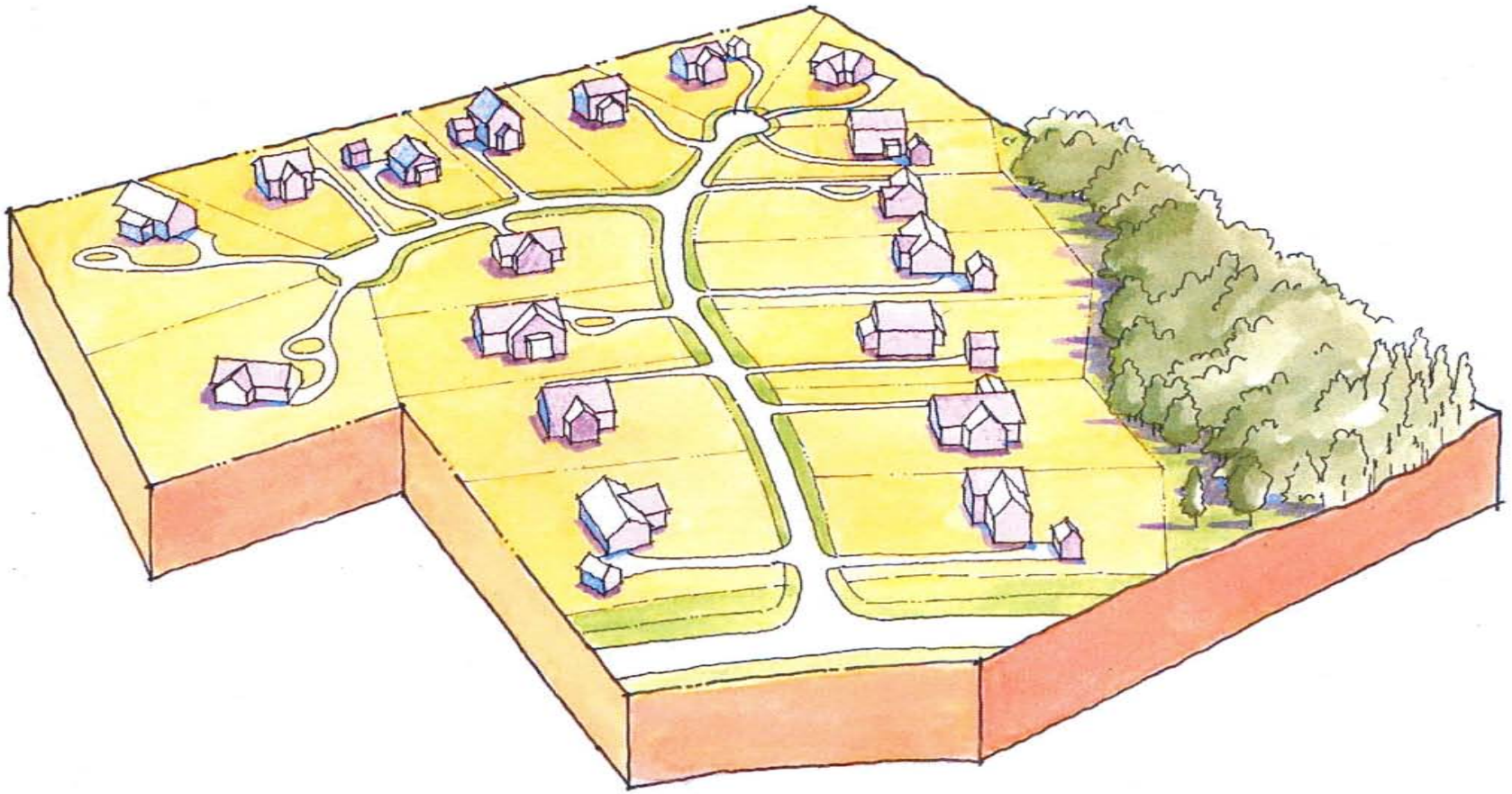


	Proposed Land Use Category	Acrage	Density*	Total Units*
Verandah	Sub Outlying Suburban	1,431	2 du/ acre	2,862
North River Village	River Village	1,263	2 du/ acre	2,465
Total				**5,327**

** Based on approximate Wetland and Upland Acrage*

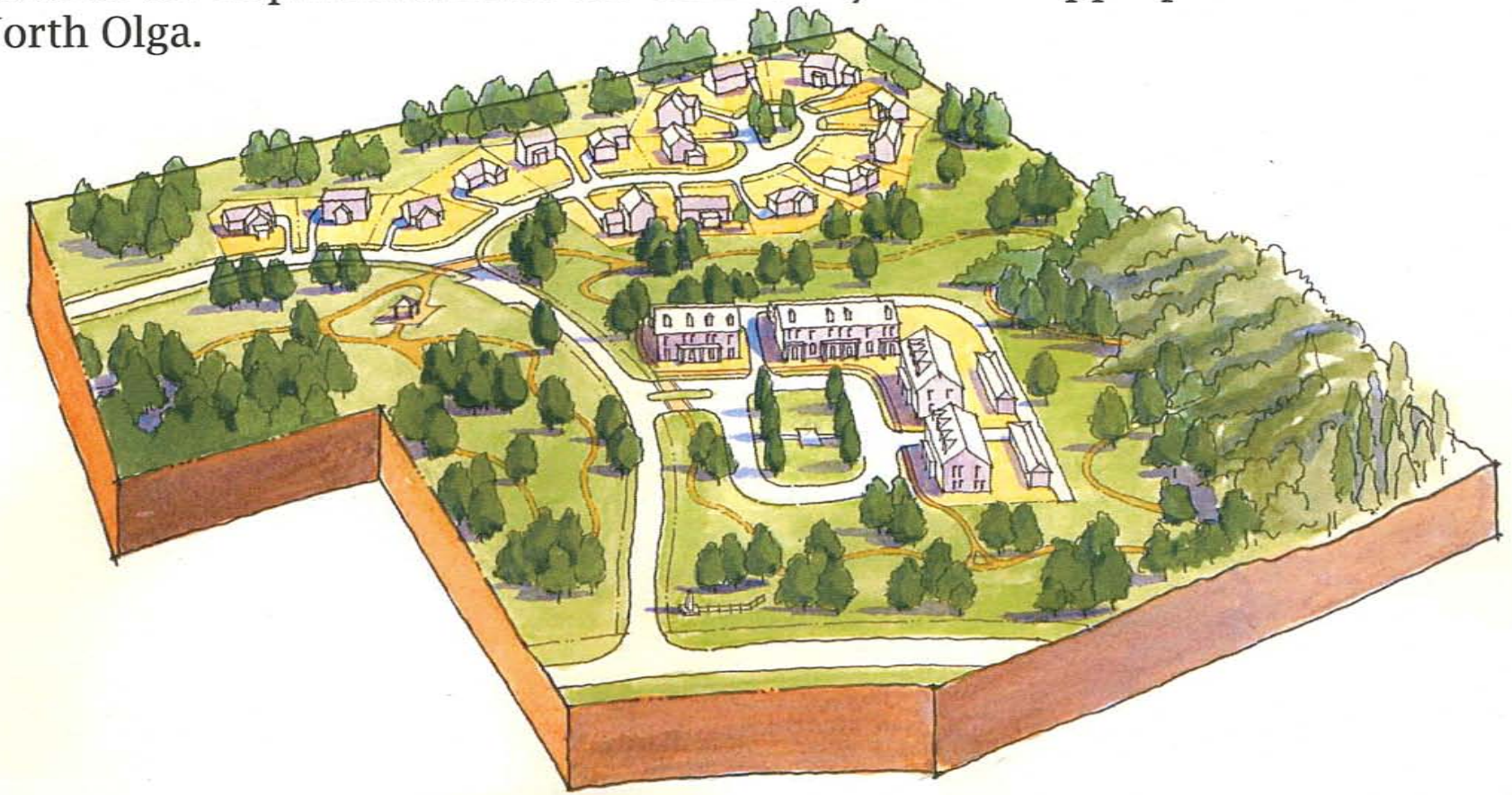
Density Scenario A – Low Density

The current sprawling land use pattern that is characterized by the low density development that is occurring under the Rural land use category is not "rural" in character, does little to protect natural areas and more closely depicts a suburban land use pattern.



Density Scenario B – Double the Density, Double the Open Space/Preserve

Compact development patterns that use common open space areas to create a sense of place contribute to community identity. Locating this form of development around the community node is appropriate for North Olga.



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Summary of Remaining Issues
(Originally Submitted March 2008)

Density/Rural Character

As we stated in the Rural Character analysis, there is a mistaken notion that the only measure of rural character is density or intensity of development, and this is simply not the case. The preservation of the Owl Creek and Trout Creek tributaries, the protection of the edges of the development and the provision of public access to the property provide for the protection of the rural aspects of this property that the neighboring residents treasure. The best way to protect the community character is to cluster development in a way that restores and preserves environmental areas, rather then developing all upland areas with low density as the plan would currently allow. The ability to provide for significant open areas, conservation areas, and public access to the waterfront comes from the ability to provide a diversity of product type internal to the property at a density that provides the economic foundation for the "no build" portions of the community.

The development of the property at one unit an acre in accordance with the existing comprehensive plan would not provide the character the adjoining community is seeking, and it would not provide for the more intense node and destination point that are common in rural areas. Clustered density around development nodes is consistent with commonly accepted rural by design principles as touted by experts like Bill Spikowski, Randall Arendt and Ian McHarg. It is also consistent with the way other counties have approached development in transitioning areas. The Collier County Rural Fringe guidelines for Rural Villages require a minimum density of 2 dwelling units per acre of intensely clustered development. Allowing for increased density provides the economic incentive to implement community character goals.

A land use category that allows up to 1 dwelling unit per acre is generally considered suburban, not rural in nature. As has been pointed out in the past, much of the suburban development, the gated golf course communities that have occurred in Lee County for example, are consistent with the Rural land use category. Yet these developments would not be considered rural in character. To illustrate this point, please see the attached sketches that depict development density scenarios. Picture A shows a low density design, consistent with the general development pattern that is prevalent in Alva. There is only minimal environmental preservation and the character of the development is anything but rural. Picture B shows the same land area with a development design that has twice the residential density and significantly more preserve and open space area. It is possible to design development B in a rural character while it is very difficult to do the same for development A. Further the environmental benefits of development B are clear.

It is important to reemphasize the need for the increase in density. There is a misperception among the general community that increasing density will lead to sprawl, when all the planning literature and experience points to the opposite conclusion. It is clear from the

proposed text amendment and the attached diagrams that allowing for additional units will not decrease the open space and preserve area on the property. We are proposing a requirement to *increase* open space and preserve on site.

Low density product does not realistically allow for the extension of utilities and does not provide the same ability to create the sense of place and community identity that our immediate neighbors desire and the Alva residents enjoy with the Alva core. The Alva Community has created a core area that is shown for 6 dwelling units per acre on the future land use map. The downtown Alva area is one that is embraced by the Alva community as it provides a destination and a sense of place. North Olga deserves to have the community identity and sense of place if that is desired. The appropriate location for the place of identity is at the node created by CR 78 and SR 31.

Population Accommodation

The attached population accommodation study was conducted by Fishkind and Associates. In the study, Fishkind noted that there are several factors that lead to an under accommodation of population in the Alva Planning community. First, the revised population projections from the University of Florida's Bureau of Economic and Business Research (BEBR) show that there will be 74,900 more people then anticipated in 2006 coming to Lee County by 2030. Some of this increase in assumed population will get distributed to the Alva Planning Community. Second, the percent of total population distributed to Alva over the next 20 years has decreased. The expectation would be that the percent would remain constant or increase, given the direction of growth and development pressure. For these two primary reasons, the Alva community is under allocated. In addition it is consistent with prior Lee County practice to increase population accommodation along corridors where the market looks to be expanding. This was done for both State Road 80 and Estero during the last revision to the 2020 Overlay. Finally, Fishkind points out that DCA now commonly accepts ratios of 2.0 to 3.0, rather then the 1.25 based on BEBR projections. The reason is that a greater density buffer is needed to ensure that an adequate facility planning takes place. The proposed amendment would bring the allocation ratio to 1.74 for Alva, well below accepted ratios of population and with enough capacity to adequately plan for the future.

It should also be noted that this population accommodation analysis does not address the question of where development should be located. The North River property is on the edge of urbanized areas with adequate public services to meet infrastructure demands. It is at the intersection of two state roads. Rather then funnel development pressure of low density residential throughout Alva, it makes greater planning sense to incentivise clustered development in this location and relieve building pressure further east in Alva.

Coastal High Hazard Area/ Hurricane Shelter Mitigation

Lee County requires mitigation for any home built in a Category 2 Storm Surge Zone or lower. Even though half of the North River property is not in the Coastal High Hazard Area (Category 2 zone), the entire project will be paying for mitigation according to Lee County's ordinance. Further, according to FEMA guidelines, home sites will need to be elevated out of Coastal High Hazard Area elevations for this area.

From the start Bonita Bay Group has taken the approach that any River Village development would go above and beyond simply mitigating for our impacts to hurricane evacuation times. The approach has been to make an improvement to the ability of Lee County residents to evacuate and seek shelter. We have added a policy to require that any development in the North River Village must mitigate for impacts in accordance with the land development code. In addition, there will need to be mitigation provided to further assist Lee County in meeting evacuation needs. Our hope is to provide a regional evacuation shelter, west of the region's most constrained chokepoint for evacuees, the intersection of State Road 80 and State Road 29. In discussions with Regional Planning Council staff, this would be of great benefit to area wide evacuation.

We have therefore provided a policy in the text amendment that requires mitigation in excess of the mitigation fees defined in the land development code. The mitigation that is being provided therefore will far exceed the impacts of this development.

It should be noted that from a practicality of safety, evacuation and minimization of property damage, both the road infrastructure and the homes sites will, based on FEMA standards, need to be elevated above out of the Coastal High Hazard Area. The elevation for the category one land falling storm is 4.4 to 7.4 feet. The first habitable floor of the residential development within North River will be elevated above the 7.4. However, despite this, and even though the Land Development Code defines the required mitigation for all properties in the *Category 2 zone* (even more strict then the Coastal High Hazard Area) or lower as offsetting the impacts of new development, this project is proposing to not simply mitigate for impacts, but improve the existing situation.

Transportation

Similar to providing a net benefit for hurricane evacuation, our goal with transportation has been to go beyond simply paying impact fees, but taking measures to ensure that actual roads get built. The applicant has been working diligently with staff to define the transportation impacts. To this end, we are proposing an additional text amendment that would allow for non DRI level projects to enter into development agreements to mitigate for road impacts. That mitigation is specifically defined in the policies below:

Footnote to Table 1A

The property that is the subject of CPA 2006-0012 must enter into a development agreement *at time of the adoption of CPA 2006-0012.* The development agreement will address the payment of funds necessary to permit the county to program the construction of four lanes on SR 31 from the project entrance to the intersection of State Road 78, as specified in Policy 36.1.1. The development agreement will also require the Developer to contribute any needed right of way under Developer's ownership for the four lane cross section. The development agreement must also include the payment of the funds necessary to make the intersection improvements listed in Policy 36.1.1 at the SR 80/SR 31 intersection and the SR 80/Buckingham Road intersection, plus any additional right of way needed to construct the intersection improvements (including condemnation if necessary). Lee County agrees that, once this development agreement is executed, the County will add the four-laning of this section of SR 31 and the identified SR 80 intersection improvements to Map 3A as financially-feasible improvements.

Policy 36.1.1. The Lee County Metropolitan Planning Organizations 2030 Financially Feasible Plan Map series is hereby incorporated as part of the Transportation Map series for this Lee Plan comprehensive plan element. The MPO 2030 Financially Feasible Highway Plan Map, as adopted December 7, 2005 and as amended through March 17, 2006, is incorporated as Map 3A of the Transportation Map series. Also, the comprehensive plan amendment analysis for the Simon Suncoast (Coconut Point) DRI identified the need for improvements at key intersections on US 41 from Estero Parkway to Alico Road to address the added impacts from the project for year 2020, and a mitigation payment has been required as part of the DRI development order. Lee County considers the following intersection improvements to be part of Map 3A and will program the necessary funds to make these improvements at the point they are required to maintain adopted level of service standards on US 41 if they have not been addressed by FDOT;

Intersection	Improvements
US 41/Constitution Boulevard	Southbound Dual Left Turn Lanes
US 41/B & F Parcel	Northbound, Southbound, Eastbound and Westbound Dual Left Turn Lanes
US 41/Sanibel Boulevard	Southbound Dual Left Turn Lanes
US 41/Estero Parkway	Southbound and Westbound Dual Left Turn Lanes

The comprehensive plan amendment traffic analysis for the North River Village identified the need for the construction of four lanes on State Road (SR) 31 from Bayshore Road (SR 78) to the North River Village entrance and a set of intersection improvements on SR 80. The Developer for North River Village will fund the design and construction of four lanes on SR 31 from the North River Village entrance to SR 78. The Developer of the North River Property must also fund the construction of the intersection improvements listed below at the SR 80/SR 31 and SR 80/Buckingham Road intersections, including any additional right-of-way needed to construct the identified intersection improvements for SR 80. Once this funding is committed through a development agreement between North River Village and Lee County, Lee County will amend Map 3A to include the four-laning of this section of SR 31 and the following SR 80 intersection improvements as financially-feasible improvements and will program the necessary funds to make these improvements at the point the improvements are required to maintain the adopted level of service standards on SR 31 and SR 80:

Intersection	Improvement
SR 80/Buckingham Road	Add 2nd Northbound to Westbound Left Turn Lane
	Add 2nd Westbound to Southbound Left Turn Lane
	Add Northbound Right Turn Lane
	Add Southbound Right Turn Lane
	Add 2,500 foot 3rd Eastbound Through Lane

		Add 2,500 foot 3rd Westbound Through Lane
SR 80/SR 31	Lane	Add 2nd Southbound to Eastbound Left Turn Add 2nd Eastbound to Northbound Left Turn Lane Add a third through lane Westbound in advance of the SR 31 intersection

The desire is to ensure that the Transportation Element of the comprehensive plan is financially feasible. The policies would allow us to meet the test of having the road segments fully funded in the plan with the increased densities. The policies also commit the developer to specific tangible improvements.

Environmental Questions

The proposed Conservation map represents 65 upland acres and 185 wetland acres that will be reclassified from Rural to Conservation during this plan amendment process. In addition to these conservation lands, there are additional preserve that will be designated through the zoning process. These lands include the Gopher Tortoise preserves located along the old spoil berm in the southeast corner of the site along Duke Highway and the remnant scrub oak habitat in the central portion of the site along the north side of Trout Creek as well as the flow way recreated in the area shown in blue on the Conservation map. Additional preserve area need site planning level detail and are more appropriate to designate during the zoning process. It is difficult to determine the exact location of these areas until a site plan goes through the local zoning process and the state and federal permitting processes.

Through the permitting process lands will also be preserved in order to protect eagle habitat around nest LE-039B as defined in the Gopher Tortoise and Bald Eagle narrative submitted with the 3rd Sufficiency Response.

The Conservation map that is being submitted is a big step forward in cleaning up and restoring a valuable tributary system to the Caloosahatchee River, providing connectivity with historic flow ways and those shown on the Lee County Mitigation Map, while implementing the County's Greenways an Blueways goals. There are several policies that were adopted into the Lee Plan through CPA-2005-11 that direct the County and private property owners to implement this vision of public Greenway/Blueway planning and design. For instance the following two policies direct the County and development community to implement the vision of a greenway system throughout the County. Even though this property was never designated as part of the Greenway system and the proposed North River Category requires the implementation of these policies without incentives or impact fee credits, the project is making a significant contribution to the County's water access and passive recreation goals.

> POLICY 77.3.6: Coordinate trails and greenway planning and construction efforts with private landowners to identify, protect, develop, and manage linear open space

connectors for recreation and conservation greenway corridors and encourage private landowners to dedicate greenway facilities for public recreational use through incentives and impact fee credits.

POLICY 77.3.7: New development and redevelopment in areas containing a component of the greenways trail system, as identified by the Greenways Master Trail Plan, must incorporate the greenway trail into their development design. In addition to counting towards the project's general open space requirements, developments constructing the onsite portions of the greenway trail will be eligible for community and regional park impact fee credit.

Goal 80, which is to "Increase the recreation potential of Lee County's natural waterways," more specifically encourages this type of planning. The Conservation map supports several important environmental goals from the restoration and preservation of environmental lands, to the connection of the historic flow ways shown on the Lee County Mitigation Map, to providing needed and valuable recreation and water access opportunities to the public. This development is an opportunity to plan a new type of community that is entirely unique to Lee County.

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Rural Character Analysis
(Originally Submitted December 2007)

Over the last year the applicant has worked closely with the Alva community and county staff to ensure that any proposed development on the North River Village property would not have a negative impact on the existing character of areas north of the river they are striving to protect their rural character. Our goal is to create a community that "fits" with the existing neighborhoods immediately adjacent to the property and the community at large. One of the goals is to preserve the rural look and feel that exists in the community at large. In order to accomplish this there are a number of planning and design criteria that need to be addressed. These criteria include the appearance of development from surrounding communities, the traffic generated from this area, look at how other urban development nodes within rural areas have supplemented the community character.

It is also important to look at historic patterns of development and their effect on the area's rural character. The different communities north of the river, in both Lee and Hendry County all have plans for higher residential densities and commercial uses clustered around, major intersections. The North Fort Myers community has commercial development and higher densities around the US 41, Pondella, Pine Island, Bayshore and the Old 41 intersections. There is also higher densities and commercial located at Old 41 and Bayshore Road. The Bayshore community has commercial and industrial uses located at or near the I-75 and Bayshore Road interchange, and public and commercial uses approved and in existence at the SR 31 and Bayshore Road intersection. The Bayshore plan targets these intersections for the more intensive uses. Beyond these nodes is a development pattern that consists of a transition area and then moves into a more rural setting.

Alva is centered around a historic plat and an area of approximately one section of land designated as Urban Community in the Lee Plan. The "Downtown Alva" area is generally considered an asset to the community even though the standard density allowed is 6 dwelling units per acre because it provides a sense of identity and destination. The design and layout of "downtown Alva" fits in with the rural character that serves and enhances the rural community, not detracts from it.

The intersection of SR 29 and SR 78 in Labelle also provides for commercial uses. The conclusion is that even though there may be lower densities as one moves away from the major intersections, all of the communities provide for higher densities and intensities near the major intersections. This is consistent with good planning as it provides for community needs to be met within the community.

The North Olga community (add a description of what or where the Olga community is) does not have an established community center which acts as a destination point. Similar to Downtown Alva, an area of higher density can be designed as an asset to the community, creating a sense of place, rather then detracting from the rural environment. Slightly higher density in selected locations, such as at major community transportation intersections in and of itself is clearly not contrary to rural character.

The applicant understands that Alva and Bayshore want to be protected from outside influences that will change their community. The attached graphic shows that the Alva and Bayshore community centers are a significant distance away from the subject property, making the provision of a higher intensity node justifiable and providing Olga the same ability to have its needs met within its community that the other communities enjoy.

In designing a community destination point such as the North River Village, it is necessary to make sure that the surrounding rural areas are not overwhelmed by new traffic. Significant increases in traffic through the rural areas could impact the rural lifestyle. However, through careful design of a development this can be avoided. For example, locating the development node at the intersection(s) of CR/SR 78 and SR 31 will create that destination point for the local community for some needs while the majority of the traffic from this development to go south for other needs. With minimal or no attractors located to the east or west north of the river vehicles have minimal need or likelihood of going through the rural areas. Being on the edge of an urban area allows the development of a destination point without funneling traffic through surrounding rural areas. The attached map shows the projected traffic distribution as assumed in the traffic impact study. 91% of the project traffic is projected to head south to State Road 80, an urbanized area in Lee County. This would limit the amount of traffic that has to travel into and through the surrounding communities, thereby reducing the transportation impacts on their communities. To the south is the river and a large area of Suburban development at higher gross densities then the proposed development node. The North River community provides a nice transition from the urban densities on the south to the lower density areas to the north and to the east.

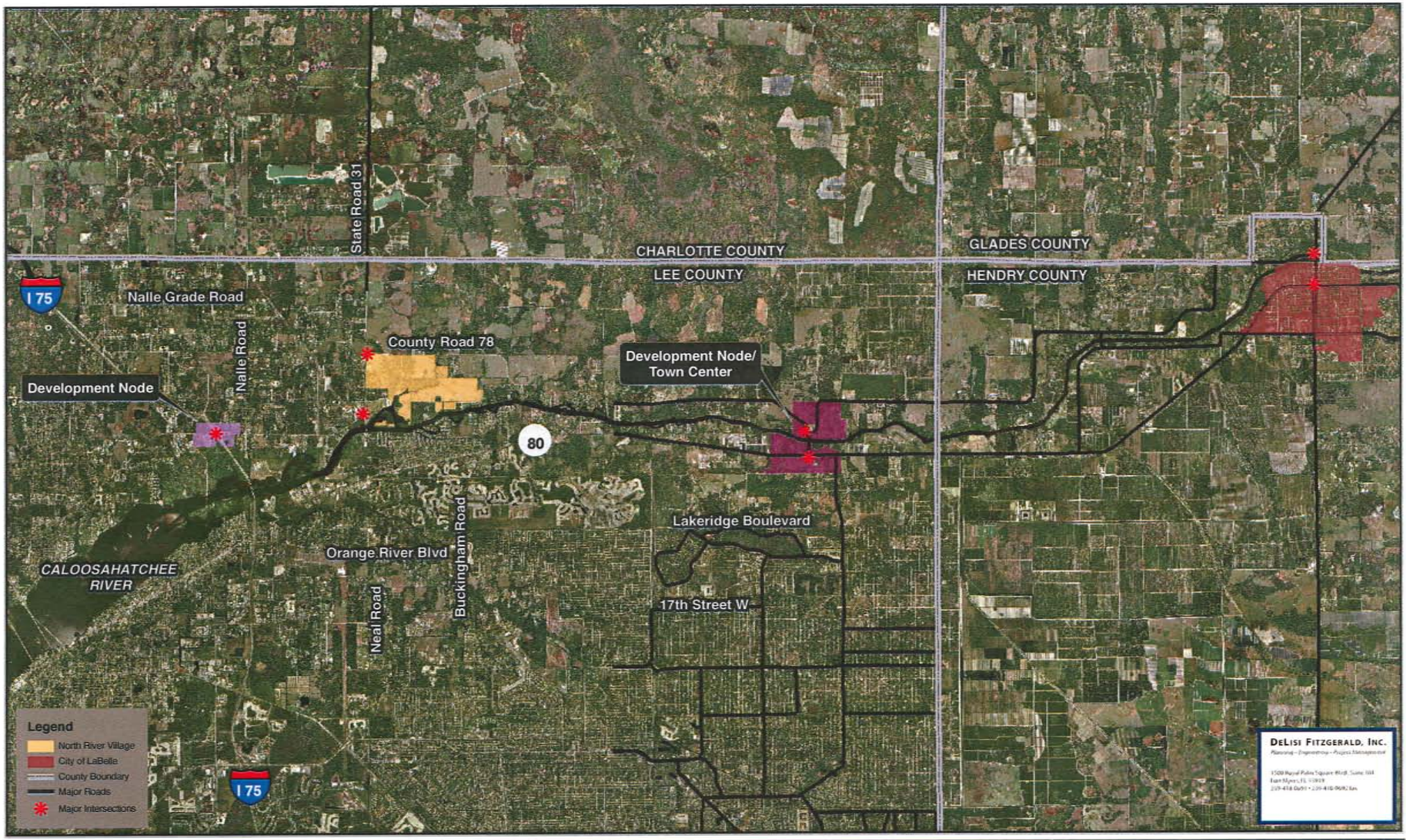
In approaching this development and understanding that the vast majority of traffic impacts will be to the already urbanized areas of the county and development nodes can be an asset to the community, the applicant has taken the final step of providing design criteria so that the development blends in with the surrounding community, creating the asset that the community desires. One of the things the applicant learned is that the community does not believe large berms are representative of a rural character. They want the North River development to be part of the fabric of the community. The community also determined that they want something along the edges that retained elements of agricultural development, such as citrus trees or horse trails. In one location, the community wants a single family development that fronts on the road so that it mirrors existing development. Lee Plan text policies were created to implement the suggestions of residents to how this development could blend into the surrounding character. The response from the most immediate neighbors, the ones that should be most impacted by the visualization of the community and the ones that have already set the character of the immediate North Olga community has been very positive.

There is a mistaken notion that the only measure of rural character is density or intensity of development, and this is simply not the case. The Owl Creek boat works is an intensive industrial marine area that has been in existence for decades, and it has not disrupted the rural lifestyle of anyone in Olga. The reason is because the intense use is buffered appropriately from other uses. The preservation of the Owl Creek and Trout Creek tributaries and the protection of the edges of the community and the provision of public access to the property provides for the protection of the rural aspects of this property that

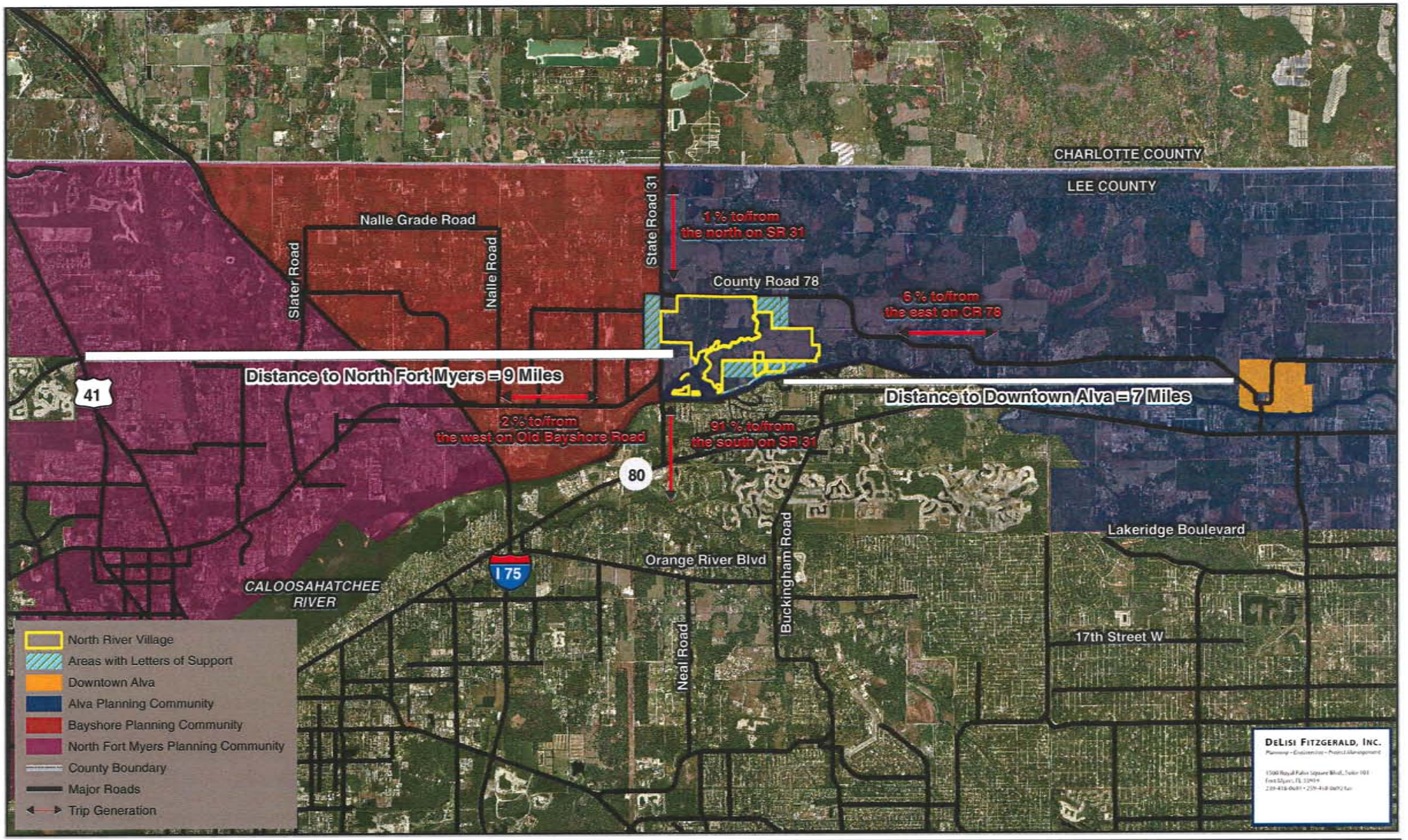
the neighboring residents treasure. The best way to protect the parts of the property that are treasured by the community is cluster development in a way that preserves and restores valued environmental areas. The ability to provide for significant open areas, conservation areas, and public access to the waterfront comes from the ability to provide a diversity of product type internal to the property at a density that provides the economic foundation for the "no build" portions of the community. The development of the property at one unit an acre in accordance with the existing comprehensive plan would not provide the character the adjoining community is seeking, and it would not provide for the more intense node that occurs everywhere else north of the river in Lee and Hendry County.

The proposal of a development node at this location is therefore appropriate for the following reasons:

1. Development nodes have historically been provided in rural areas and if designed right can add character to the community and a sense of place. The Alva Community generally embraces development of "downtown Alva" as a community destination point. It is appropriate for North Olga to have a community destination point at the community's major transportation intersection(s).
2. Standards are in place to ensure that any development on the property is sensitive to a rural character. With the proposed design standards, this community will provide an asset to the rural lifestyle.
3. The rural communities of Bayshore and Alva will not be inundated with traffic. The vast majority of traffic from development on this property will go south into the urbanized areas of Lee County, not having a detrimental effect on Bayshore or Alva.



North River Village
DEVELOPMENT NODES



North River Village

0 0.5 1 2 Miles

LEE PLAN COMPLIANCE
(ORIGINALLY SUBMITTED SEPTEMBER 2007)

The following is a comprehensive list of policies from the Lee County Comprehensive Plan that are affected by the proposed amendment.

POLICY 1.7.5: The Water-Dependent overlay zone designates shoreline areas where priority will be granted to water-dependent land uses.

The Owl Creek Marina, a property within this amendment, is part of the Water Dependant Overlay. The proposed amendment provides policies to create new access points for the public to the Caloosahatchee River for both passive and active recreational uses.

POLICY 1.7.6: The Planning Communities Map and Acreage Allocation Table

This amendment proposes a shift in the Planning Communities Allocation Table. The subject property is an ideal location for the concentration of new units that would otherwise be spread out, or accommodated over a larger area of land. The property is at the intersection of two arterial roads, adjacent to an urban land use category and in very close proximity to all urban services, making the extension of urban services feasible and practical.

GOAL 2: GROWTH MANAGEMENT. To provide for an economically feasible plan which coordinates the location and timing of new development with the provision of infrastructure by government agencies, private utilities, and other sources.

The proposed amendment provides for an economically feasible plan to extend urban services to the property and the area. Please see the attached Growth Management Analysis for more discussion of Goal 2.

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. (Amended by Ordinance No. 94-30, 00-22)

The subject property is in an area with existing development. Directly West is the Lee County Civic center, a major urban attractor. Directly across the river is the Fort Myers Shores community. The subject property is at the intersection of two major roadway corridors, State Road 31 and County Road 78. While historically the North Olga community has a rural character it is now transitioning away from that with the development in the area, including Babcock, which is located directly North of the subject property.

The proposed amendment cannot be considered "leap frog development". There is existing development immediately to the West along SR 78 and immediately to the South along SR 31 and in the Fort Myers Shores Community. Urban services are available to nearby properties and the extension of urban services would not require "leaping" over undeveloped areas.

POLICY 2.1.1: Most residential, commercial, industrial, and public development is expected to occur within the designated Future Urban Areas on the Future Land Use Map through the assignment of very low densities to the non- urban categories.

The proposed amendment is to create a new future urban area within the Lee Plan.

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.

There are currently limited public facilities and services in the North Olga area, because public services are not financially feasible with the type of development pattern that is occurring under the current Lee Plan – low density, spread out single use residential. This application is to create a land use category that would promote a mixed housing and commercial area that could make public services financially feasible for both this district and the adjacent neighborhoods. The applicant will be required to provide central water and sewer. With the extension of utility lines to the subject property, central water and sewer becomes financially feasible for the surrounding residential development.

POLICY 2.3.2: The cost for the provision and expansion of services and facilities that benefit new development will be borne primarily by those who benefit.

The proposed text amendment reinforces Policy 2.3.2 by requiring new development to extend utility service, a requirement that currently is not in place for the Rural land use category.

POLICY 2.4.4: Lee Plan amendment applications to expand the Lee Plan's employment centers, which include light industrial, commercial retail and office land uses, will be evaluated by the Board of County Commissioners in light of the locations and cumulative totals already designated for such uses, including the 1994 addition of 1,400 acres to the Tradeport category just south of the Southwest Florida International Airport.

The proposed amendment will contain commercial development only to the extent to accommodate two county goals. The first is to provide for uses that are water dependant in nature, in accordance with the Water Dependant Overlay and Policy 1.7.5. The second goal is to provide for retail development that would create a sense of place for North Olga and provide for some of the retail needs of the surrounding community without having to access the surrounding road network.

OBJECTIVE 2.7: HISTORIC RESOURCES. Historic resources will be identified and protected pursuant to the Historic Preservation element and the county's Historic Preservation Ordinance.

A Historic Resource Survey is being conducted for the subject property.

Policy 4.1.1 - requires development to be integrated with the natural features of the site.

The comprehensive plan amendment requires the preservation of existing natural features, where feasible. Development is encouraged to be placed in disturbed uplands, lower-quality wetlands, and small, isolated systems.

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.

The applicant is in the process of working with the Lee County Division of Public Safety Emergency Management to come up with a mitigation package that off sets concerns of development within the Coastal High Hazard Area. Mitigation can include the generation of fees to assist in the widening of State Road 78 to I-75, a central choke point for evacuation traffic and or the provision of a shelter in a Category 4/5 zone.

POLICY 5.1.8: Provide for adequate locations of low- and moderate-income housing through the rezoning process, the provision of public facilities and services, and the elimination of unnecessary administrative and legal barriers.

The proposed text amendment contains a policy that requires the provision of workforce housing. The amendment is unique in this respect as it will be the only Future Land Use Category in the Lee Plan to require the provision of workforce housing.

Policy 6.1.3 - requires that commercial developments protect natural resources.

The comprehensive plan amendment will require the preservation and enhancement of indigenous wetlands and uplands that will serve as habitat for native species.

OBJECTIVE 8.1: Existing marinas, fish houses, and port facilities indicated on the Future Land Use Map as having water-dependent overlay zones will be reclassified by the county to commercial and industrial marine zoning categories to protect their rights to rebuild and expand and to prevent their conversion to non-water-dependent uses without a public hearing.

The proposed amendment provides for policies to both expand the water dependant use and allow for increase public access to the water through the Owl Creek Marina and Trout Creek. The proposed amendment furthers the intent of Objective 8.1.

STANDARD 11.1: WATER.
1. Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development in excess of 30,000 square feet of gross leasable (floor) area per parcel, must connect to a public water system (or a "community" water system as that is defined by Chapter 17-22, F.A.C.).

The proposed text amendment requires that any development must connect to central water.

STANDARD 11.2: 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.

The proposed text amendment requires that any development must connect to central sewer.

GOAL 39: PROTECTION OF LIFE AND PROPERTY. To reduce the hazards to life, health, and property created by flooding due to rainfall in a manner consistent with the community's criteria for the preservation of environmental values and the conservation of natural resources.

The proposed land use change will meet this goal as outlined in the responses to the Objectives and Policies below.

OBJECTIVE 39.1: Lee County will continue its efforts in developing a surface water management planning process designed to produce and maintain an up-to-date body of technical information, and, based on that information, the necessary surface water management plans, regulatory mechanisms, and facility proposals that will improve the protection of present and future uses of real property from stormwater flooding, while preserving or enhancing the environmental and natural resource values of both land and water.

The applicant will work with Lee County Natural Resource Management to provide updated information related to the site and areas downstream and upstream from the property so that the Lee County database will be maintained as an up-to-date technical document.

POLICY 39.1.1: The County will continue to prepare and implement a comprehensive countywide surface water management master plan, with full attention to issues of regional water quality and environmental integrity. The County will complete basin plans for all of the remaining watersheds in Lee County by 2005. As each basin plan is completed, it will be scheduled for adoption by the Board of County Commissioners.

Lee County has information for this part of the County from the Master Plan developed in 1992. More recent data has been developed through a study of the area by the Federal Emergency Management Agency. Lee County is in the process of determining the information that will be used since there are substantial differences. The applicant will utilize the results to

establish a water management plan for the site that will integrate with the County's Master Plan.

POLICY 39.1.2: From technical data underlying the surface water management plan, criteria will be established and utilized to identify floodways and other areas of special flood risk not already identified by the Federal Flood Hazard Map and Flood Insurance Study.

The water management plan for the site will address the flood risk for it by reviewing and analyzing the backwater profile information available on the receiving waters. The receiving waters for the site are Owl Creek, Trout Creek, Otter Creek and directly to the Caloosahatchee.

POLICY 39.1.4: Continue to develop, update, and improve technical information, with the assistance of the U.S.D.A. Natural Resources Conservation Service, United States Geological Survey, Federal Emergency Management Agency, South Florida Water Management District, and other agencies, in order to better determine the current flooding risks associated with severe rainfall events.

The applicant is agreeable to provide information used to analyze the streams in the vicinity of this site to assist Lee County in developing, updating and improving the technical information used to determine current flooding risks associated with severe rainfall events.

POLICY 39.1.5: The county will, through appropriate land use and engineering regulations, continue to control the introduction of obstructions or impediments within floodways.

The applicant will follow the land use and engineering regulations to keep any mapped floodways unobstructed and free from further impediments from this project. There are no mapped floodways that would affect this site at this time. There are floodways shown on draft maps from FEMA. An appeal has been made for this site to the FEMA contractor. Either way, the development will meet the requirements of the FEMA floodway designation from the maps when they are adopted.

POLICY 39.1.6: The county will, through appropriate regulations, continue to provide standards for construction of artificial drainageways compatible with natural flow ways and otherwise provide for the reduction of the risk of flood damage to new development.

The applicant will follow the existing regulations if artificial drainageways are added as a part of the project.

POLICY 39.1.7: Priorities in public investment in surface water management facilities will be limited to new or expanded facilities serving the future urban areas, existing development, public facilities, and the maintenance of existing infrastructure; and outside the future urban areas, only to the prevention or reversal of environmental degradation, or the alleviation of bona fide health and safety emergencies.

The applicant understands this policy and will work within its constraints to develop this site. The site plan will be established in such a way that it enhances existing flowways. It will also address existing ditches to remove them if they cause onsite over drainage or enhance them where practical if they convey offsite waters.

GOAL 40: COORDINATED SURFACE WATER MANAGEMENT AND LAND USE PLANNING ON A WATERSHED BASIS. To protect or improve the quality of receiving waters and surrounding natural areas and the functions of natural groundwater aquifer recharge areas while also providing flood protection for existing and future development.

The proposed land use change will meet this goal as outlined in the responses to the Objectives and Policies below.

OBJECTIVE 40.1: COUNTY-WIDE PROGRAM. Lee County will continue its efforts in developing a surface water management program that is multi-objective in scope and is geographically based on basin boundaries.

The applicant will work within the existing Lee County Surface Water Master Plan in developing this site. The applicant will also work with Lee County staff to assist in new issues raised by the recently published FEMA analysis.

POLICY 40.1.2: Develop surface water management systems in such a manner as to protect or enhance the groundwater table as a possible source of potable water.

The applicant will work to at least protect and as reasonable enhance the groundwater table even though South Florida Water Management District now discourages the use of this aquifer as a source of potable water. The surficial aquifer does provide baseflow for the Caloosahatchee. Increasing the baseflow will be help meet the goals for the Minimum Flows and Levels of SFWMD.

POLICY 40.1.3: Incorporate, utilize, and where practicable restore natural surface water flowways and associated habitats.

The applicant is committed to incorporating existing flowways on the site as a part of the comprehensive plan amendment. The flowways will provide conveyances across the site much as they existed prior to the farming activities that have and are occurring now. These flowways are in addition to the named streams that cross the site. One of the flowways will continue to convey offsite flow from west of SR 31 to Trout Creek. This will be a feature adjacent to the main entrance road.

POLICY 40.1.4: The county will examine steps necessary to restore principal flow-way systems, if feasible, to assure the continued environmental function, value, and use of natural surface water flow-ways and associated wetland systems.

The applicant will assist Lee County with the steps necessary to restore the principal flowway in the western portion of the project. This one takes water from west of SR 31 and to the north from ditches along SR 31.

POLICY 40.1.5: Additional public hearings on Lee Plan amendments will be held to incorporate each phase of the Surface Water Management Master Plan. These amendments will specifically address:
(a) incorporating the additions to the database into the Lee Plan;
(b) modifying the interim level-of-service standards; and
(c) modifying the Future Land Use, Community Facilities and Services, and Capital Improvements elements as necessary to incorporate the study's initial findings.

We do not believe that there is a need for amendments at this time. The applicant will work with Lee County to fit this project within the Surface Water Master Plan if shown to be needed.

POLICY 40.1.6: Lee County will maintain in its land development regulations requirements that proper stormwater management systems be installed when land is being redeveloped. Appropriate exemptions will be provided to this requirement for individual residential structures and for historic districts. The regulations may also provide modified stormwater management standards for publicly sponsored projects within community redevelopment areas (as defined by Chapter 163, Part III, Florida Statutes). However, this policy will not be interpreted so as to waive any concurrency level-of-service standards.

The applicant agrees to provide a surface water management system that meets current standards to the extent possible considering offsite constraints. The water quality treatment will be designed to include an additional 50 percent of the required treatment volume as now required by SFWMD. For example, the site now is anticipated to have an average impervious coverage of less than 40 percent and would require water quality treatment volume of one inch. The applicant will agree to provide one and a half inches of treatment volume.

OBJECTIVE 40.2: BASIN PROGRAM. Promote water management permitting on a basin-wide basis, as opposed to the current individual-site approach used by Lee County and the South Florida Water Management District, through pilot or demonstration programs in two or more basins by 1996.

This is a County policy. The applicant will work with Lee County to fit this project within the Surface Water Master Plan. The applicant is willing to work with a public-private partnership with Lee County or SFWMD that would benefit the Caloosahatchee for a water quality improvement as outlined in Policy 1.10.17.

POLICY 40.2.1: The Surface Water Management Master Plan will identify those basins (or subbasins) which may be most suitable for basin-wide surface water management, based on:

1. natural flow ways and drainage patterns;
2. existing development patterns;
3. land ownership patterns; and
4. development potential based on the Future Land Use element of this plan.

The applicant will work with Lee County to reasonably meet this requirement as long as it is not contrary to permit requirements of other agencies.

POLICY 40.2.2: Taxing/benefit districts or other financing mechanisms established pursuant to Goal 3 of this plan will include an examination of the potential for basin-wide surface water management within the designated area.

There is not an existing taxing district over the area of this Comprehensive Plan Amendment at this time. The applicant is willing to participate in a basin-wide surface water management plan if one is created by Lee County to address water quality.

POLICY 40.3.1: The following surface water management standards are adopted as minimum acceptable levels of service for unincorporated Lee County (see Policy 70.1.3).

A. Existing Infrastructure/Interim Standard. The existing surface water management system in the unincorporated areas of the county will be sufficient to prevent the flooding of designated evacuation routes (see Map 15) from the 25-year, 3-day storm event (rainfall) for more than 24 hours.

The applicant commits to provide a level of flood protection to the major roads such that they will not flood for more than 24 hours in a 25 year-3 day event.

D. Regulation of Private and Public Development Surface water management systems in new private and public developments (excluding widening of existing roads) must be designed to SFWMD standards (to detain or retain excess stormwater to match the predevelopment discharge rate for the 25-year, 3-day storm event [rainfall]).

The applicant agrees to obtain an overall storm water permit with SFWMD to meet the changes in land use and the permit will meet current standards. Current permitting only covers a portion of the lands within the site.

POLICY 40.3.2: The county will continue to maintain and update annually the CIP to provide for the needs of the surface water management program.

The applicant does not believe that there is a need to change the CIP at this time to provide for the needs of the surface water management system. If a need is later identified, the change will be incorporated ass part of the proposed amendment.

OBJECTIVE 40.5: INCORPORATION OF GREEN INFRASTRUCTURE INTO THE SURFACE WATER MANAGEMENT SYSTEM. The long-term benefits of incorporating green infrastructure as part of the surface water management system include improved water quality, improved air quality, improved water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment.

The applicant proposes to enhance a flowway in the western portion of the project to promote green infrastructure in the surface water management system. The flowway will pass offsite surface waters from upstream of the project that are currently routed through the project site, but are interrupted by internal roads and driveways. The enhanced flowway will certainly provide improved water quality, improved air quality, water storage, wildlife habitat, recreational opportunities and visual relief within an urban environment. A flowway will not provide improved water recharge/infiltration due to the fine soils that made it mostly a wetland before its conversion to agriculture.

POLICY 40.5.1: The County encourages new developments to design their surface water management systems to incorporate best management practices including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flow-ways.

The applicant will use best management practices (BMP's) within the surface water management system as practical to meet the needs of the development. The matrix of BMPs used for sites south of the Caloosahatchee will also be used here even though they are not required. The text amendment outlines the BMPs that are proposed.

POLICY 40.5.2: The County encourages new developments to design their surface water management system to incorporate existing wetland systems.

The applicant will where possible incorporate existing wetlands into the surface water management system. In addition, the applicant will enhance some previously disturbed wetlands within the flowway in the western portion of the project.

POLICY 40.5.3: The County encourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways.

The applicant will enhance the flowway in the western portion of the site.

POLICY 40.5.4: The County will continue to identify and map flow-ways as part of the Lee County Surface Water Management Plan. The Plan provides a general depiction of watersheds and their trunk and major tributaries and has been expanded to some degree in the DRGR area. As new information is assembled, the Plan will be updated for public use. Due to its magnitude and need for site specific information, not all flow-ways will be shown.

The applicant will provide a shapefile for use by Lee County to update their map once the existing flowways are fully identified on the site by staff and the applicant to assist the county in implementing this policy.

GOAL 41: PROTECTION OF WATER RESOURCES. To protect the county's water resources through the application of innovative and sound methods of surface water management and by ensuring that the public and private construction, operation, and maintenance of surface water management systems are consistent with the need to protect receiving waters.

The applicant intends to uphold this goal through sound methods of surface water management including both water quantity and quality.

POLICY 41.1.1: 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 fresh water compatible with that use, consistent with financial and technical constraints.

The applicant supports utilizing water resources wisely and will follow applicable regulations to fulfill this policy.

OBJECTIVE 41.2: MIMICKING THE FUNCTIONS OF NATURAL SYSTEM. Support a surface water management strategy that relies on natural features (flow ways, sloughs, strands, etc.) and natural systems to receive and otherwise manage storm and surface water.

The site is altered, but the applicant supports a surface water management strategy that will mimic natural systems. The applicant is willing to work with a public-private partnership with Lee County or SFWMD that would benefit the Caloosahatchee for a water quality improvement as outlined in Policy 1.10.17.

POLICY 41.2.1: All development proposals outside the future urban areas must recognize areas where soils, vegetation, hydrogeology, topography, and other factors indicate that water flows or ponds; and require that these areas be utilized to the maximum extent possible, without significant structural alteration, for on-site stormwater management; and require that these areas be integrated into area-wide coordinated stormwater management schemes.

The applicant recognizes that this altered site had features including soils, hydrology and topography that conveyed water. To that end, the applicant is proposing the restoration/enhancement of a flowway in the western portion of the site.

POLICY 41.2.2: Where no natural features of flow or ponding exist on a site outside the future urban areas, the county will require that water management structures be designed and constructed in such a manner as to mimic the functions of natural systems. Special engineering and design standards for such structures will be incorporated into revised development regulations.

The surface water management system for the site beyond the restored flowway will incorporate features that will mimic the functions of natural systems.

POLICY 41.2.3: Outside the future urban areas where traditional drainage structures exist (ditches, canals, dikes, etc.), the county may permit their continued existence and maintenance, but will discourage their expansion or extension.

The applicant proposes to continue to utilize some of the existing ditches, canals, dikes and other water management features as necessary to continue the site's obligations to offsite interests and onsite features dependent on them. Where practical, the applicant will modify ditches to make them look and function more like a natural conveyance.

POLICY 41.2.4: Where feasible within future urban areas, surface water management plans are encouraged that mimic the functions of natural systems, notwithstanding the type or intensity of development permitted.

Where new systems are proposed, the design will incorporate features to have the new mimic natural systems.

POLICY 41.2.6: The county will maintain regulations that require reclamation standards for future excavation that mimic natural systems through the techniques that improve water quality, wildlife utilization, and enhance groundwater recharge.

The applicant will follow applicable regulations related to reclamation of future excavation areas.

OBJECTIVE 41.3: GENERAL SURFACE WATER MANAGEMENT STANDARDS. Lee County will continue to provide sufficient performance and/or design standards for development protective of the function of natural drainage systems.

The applicant will follow the applicable performance and/or design standards.

POLICY 41.3.1: Provide sufficient performance and design standards to require postdevelopment runoff to approximate the total characteristics of the natural flow prior to development.

The project has current surface water permit for portions of the site. The post development runoff will not exceed the current rate for each watershed as listed in the Lee County Surface Water Master Plan.

POLICY 41.3.2: Floodplains must be managed to minimize the potential loss of life and damage to property by flooding.

The ultimate site plan will incorporate features to limit encroachments into the floodplain in conformance with the guidelines of FEMA. The design will minimize the adverse impacts to the flood plain.

POLICY 41.3.3: Floodways should be kept as unobstructed as possible.

There are no known floodways on this site. There are proposed floodways. The extent of these is being appealed to FEMA by the applicant. The ultimate floodways will have minimum impacts by this development.

POLICY 41.3.4: Natural flow patterns will be publicly restored where such action is of significant public or environmental benefit, and feasible.

With the exception of the western flowway, there have been limited interruptions to the natural flow patterns. One of the crossings of Owl Creek is undersized. It is proposed by the applicant to remove this crossing and replace it in another location with an adequately sized crossing.

POLICY 41.3.6: Developments must have and maintain an adequate surface water management system, provision for acceptable programs for operation and maintenance, and post-development runoff conditions which reflect the natural surface water flow in terms of rate, direction, quality, hydroperiod, and drainage basin. Detailed regulations will continue to be integrated with other county development regulations.

It is anticipated that the project will use either a Chapter 190 Community Development District (CDD) or a Master Home Owner's Association to maintain the water management system.

POLICY 41.3.7: Channelization of natural streams and rivers is prohibited; channelization of other natural watercourses is discouraged.

There are no proposals to channelize the natural streams, rivers or other natural watercourses on the site. It is the applicant's plan to enhance the natural watercourses by removing exotic vegetation that is adversely impacting upstream properties.

POLICY 41.3.8: The banks of wet retention and detention areas must be sloped to promote growth of vegetation and safeguard against accidents.

The side slopes of storm water ponds on this site will be designed to promote growth of vegetation for improvement of water quality. The slopes will also be designed to reasonably safeguard against accidents.

POLICY 41.3.9: The county will adopt appropriate regulations to protect the natural functions of riparian systems from incompatible development practices along their banks.

Buffers with a minimum width of 50 feet are being proposed to protect the riparian systems on this site as outlined in Policy 1.10.16.

POLICY 41.3.10: New artificial drainage systems must not channel runoff directly into natural waterbodies.

The site will use existing discharge points to the greatest practical extent.

POLICY 41.3.11: Runoff must be routed through retention or detention areas and vegetated swales in order to reduce flow velocity, allow for percolation, and trap and remove suspended solids and pollutants.

The proposed water management system will convey runoff through a detention system to reduce velocity, allow for percolation and trap and remove solids and other pollutants.

POLICY 41.3.12: The design of shorelines of retention and detention areas and other excavations must be sinuous rather than straight.

Sinuous shorelines will be used on the new detention areas.

POLICY 41.3.13: Installation of erosion control devices for development activities adjacent to waterbodies, water courses, and wetlands will be required. Such control devices must be maintained to ensure operational effectiveness.

Erosion control devices to meet the NPDES requirements will be used as necessary.

POLICY 41.3.14: Artificial watercourses must be designed so as to reduce velocity of runoff and prevent erosion.

If needed, new artificial watercourses will be designed to reduce velocity and prevent erosion as required.

Goal 77: Development Design Requirements - To require new development to provide adequate open space for improved aesthetic appearance, visual relief, environmental quality, preservation of existing native trees and plant communities, and the planting of required vegetation.

The comprehensive plan amendment establishes a requirement for 50 percent open space as defined in Chapter 10-416 of the Lee county Land Development Code. The amendment also establishes that native trees will be preserved, as much as feasible, and where impacts to live oak and laurel oak trees that have a ten inch diameter at breast height (DBH) or greater can not be avoided, these trees will be relocated to the greatest extent feasible and used within the landscape design.

Goal 79: Boat Ramps - To provide a shore of the boat ramps needed to allow county residents and visitors inexpensive access to public waterways.

The comprehensive plan amendment provides for public access to the Caloosahatchee River and other adjoining water bodies.

Goal 82: Maintained Water Accesses - To improve access to public beaches and other bodies of water.

The comprehensive plan amendment provides for public access to the Caloosahatchee River and other adjoining water bodies.

Goal 86: Environmental and Historic Programs - To provide programs and information to promote knowledge and understanding of Lee County's unique environmental and cultural heritage.

The comprehensive plan amendment will identify historical sites.

Goal 107: Resource Protection - manage county's wetland and upland ecosystems to maintain and enhance native habitats, floral and faunal species diversity, water quality and natural surface water characteristics.

The comprehensive plan amendment requires the preservation of native wetlands and uplands that will be enhanced and serve as habitat for indigenous flora and fauna species.

Objective 107.1: Resource Management Plan - The county will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydroecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape.

The comprehensive plan amendment will encourage preservation of upland and wetland habitats.

Objective 107.3: Wildlife - Maintain and enhance the fish and wildlife diversity and distribution within Lee County for the benefit of a balanced ecological system.

The comprehensive plan amendment encourages upland and wetland restoration and preservation to provide habitat diversity.

Objective 107.4: Endangered and Threatened Species in General - Lee County will continue to protect habitats of endangered and threatened species and species of special concern in order to maintain or enhance existing population numbers and distributions of listed species.

The comprehensive plan amendment encourages design to promote the preservation and restoration of listed species habitat.

Objective 107.7: West Indian Manatee - Minimize injuries and mortalities of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.

The comprehensive plan amendment encourages the preservation and restoration of listed species habitat.

Objective 107.8: Gopher Tortoises - The county will protect gopher tortoise through the enforcement of the protected species regulations and by operating and maintaining, in coordination with the Florida Game and Fresh Water Fish Commission, the Hickey Creek Mitigation Park.

The comprehensive plan amendment encourages the preservation and restoration of listed species habitat.

Objective 107.9: Red-Cockaded Woodpecker - County staff will coordinate with the Florida Game and Fresh Water Fish Commission to determine on a case-by-case basis the appropriate mitigation for the protection of the red-cockaded woodpecker's habitat. Mitigation may include on-site preservation, on-site mitigation, off-site mitigation, and associated habitat management.

The comprehensive plan amendment encourages the preservation and restoration of listed species habitat.

Objective 107.10: Wood Stork - Lee County will maintain regulatory measures to protect the wood storks feeding and roosting areas and habitat.

The comprehensive plan amendment encourages the preservation and restoration of listed species habitat.

Goal 108: Estuarine Water Quality - To manage estuarine ecosystems so as to maintain or improve water quality and wildlife diversity; to reduce or maintain current pollution loading and system imbalances in order to conserve estuarine productivity; and to provide the best use of estuarine areas.

The comprehensive plan amendment will enhance the water quality within the Caloosahatchee River basin; analyze opportunities to improve water quality in degraded water bodies directly connected to the property; and provide increased lake area to improve off-site water quality.

Goal 114: Wetlands - To maintain and enforce a regulatory program for development in wetlands that is cost-effective, complements federal and state permitting processes, and protects the fragile ecological characteristics of wetland systems.

The comprehensive plan amendment will preserve and enhance the higher quality, contiguous wetland systems, where feasible. The amendment encourages development to avoid or minimize adverse impacts on wetlands through clustering and other site planning techniques. No wetland impacts will be conducted without appropriate state agency permit or authorization. Mitigation banks and the issuance and use of mitigation bank credits will be permitted to the extent authorized by applicable state agencies.

Goal 115: Water Quality and Wastewater - To ensure that water quality is maintained or improved for the protection of the environment and people of Lee County.

The comprehensive plan amendment requires the enhancement of water quality through the use of Best Management Practices, where practicable. In addition, a minimum 50 foot buffer along natural waterways will be provided.

Goal 117: Water Resources - To conserve, manage, and protect the natural hydrologic system of Lee County to insure continued water resource availability.

The comprehensive plan amendment requires that new development provide or connect to central water and sewer facilities. Also, water conservation measures will be implemented during site construction.

Objective 117.1: Water Supplies - Insure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.

The comprehensive plan amendment requires that new development provide or connect to central water and sewer facilities. Also, water conservation measures will be implemented during site construction.

Objective 117.2: Xeriscape Landscape - The county will continue to promote xeriscape landscaping techniques.

The comprehensive plan amendment requires the use of drought tolerant landscape material for 70 percent of all required landscaping in common areas and limits the amount of irrigated turf to 50 percent for all residential lots.

Goal 121: Fisheries Management - To preserve and ecosystem that nourishes and shelters the commercial and sport fisheries in Lee County.

The comprehensive plan amendment requires the preservation of existing natural water bodies and improves on-site and off-site water quality.

Goal 125: Water Access - To develop and implement a public water access program.

The comprehensive plan amendment provides for public access to the Caloosahatchee River and other adjoining water bodies.

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North River Village CPA

State and Regional Policy Plans (Originally Submitted September 2006)

The proposed North River Village amendment to the Lee Plan aims to create a land use category that guides development toward the creation of a mixed use river oriented district. Development within the North River Village will have an emphasis on allowing for recreational usage of the waterfront and adding to Lee County's inventory of water dependant uses, while raising the bar for development to occur in an environmentally sustainable manner through requiring increased standards for energy and water conservation as well as environmental preservation. Specifically, the proposed amendment implements the following Goals and Policies of the Regional Policy Plan:

Regional Policy Plan

Housing - Goal 2 – Livable Communities

The proposed amendment implements Goal 2 of the Regional Policy Plan by creating a mixed use development that will act as a waterfront destination. The proposed amendment allows for housing opportunities in close proximity to retail and office uses **(Action 2)**.

Economic Development - Goal 1, Strategy 3 – Maintain the physical infrastructure to meet growth demands

The proposed development is in an area where infrastructure and services are available and/or will be extended in conjunction with the development of the North River Village. The property is surrounded on the West and South by urban uses and on the North is the proposed Babcock development. The proposed North River Village will help make the needed infrastructure in this area financially feasible for the existing and future residents. This development will be required to pay impact fees for new For example, extending central water and sewer into this area under the current low density plan would not be practical. This land use change would make it feasible for many existing residents to access utility infrastructure.

Economic Development - Goal 1, Strategy 4 – Ensure adequacy of lands for commercial and industrial centers, with suitable service provided.

The proposed North River Village is for a residential/commercial mixed-use center that will promote the goal of economic development in Lee County. The location of the North River Village is a "suitable urban area" based on the surrounding uses and existing infrastructure. Commercial uses will be provided as part of any future development plans.

Economic Development - Goal 3, Strategy 1 - Maintain and improve the natural, historic, cultural, and tourist-related resources as primary regional economic assets.

As demonstrated in the planning narrative, creating a water oriented mixed use destination center provides very significant economic benefits to Lee County. According to a 2004 report published by the Florida Senate's Community Affairs Committee, the loss of public access to the waterfront for recreational purposes has a staggering effect on the economy. The current plan would allow for and has resulted in the total privatization of the waterfront in this area. The North River Village would create a tourist and community amenity that will serve to promote economic development in Lee County.

Transportation - Goal 1, Strategy 3 – Promote Smart Growth where residential communities are linked with job centers.

The mixed-use nature of this proposed development implements this smart growth idea. Residential areas are being proposed as either adjacent to or integrated with job centers such as the Civic center and the commercial area, where a mix of uses is being requested. A system of pedestrian and bicycle ways will be developed, linking the residential with the commercial areas and creating a multi-modal environment.

Transportation - Goal 2, Strategy 1 – Promote a good environment for driving, walking, bicycling, and public transit using a highly connected network of public streets, green space, and community centers.

The proposed North River Village Policies require the preservation and enhancement of the natural features on site. Pedestrian linkages will be made so that these natural areas are linked with public spaces, private amenities, public amenities, the commercial area and the Caloosahatchee River.

State Policy Plan

The proposed North River Village is consistent with the State Comprehensive Plan. Below are specific policies as they relate to this proposed development.

(3) The Elderly

Policy (b) 10. Improve and expand transportation services to increase mobility of the elderly.

The goal of the North River Village is to create a mixed use environment where residential is integrated with and adjacent to civic and commercial uses. Mobility through the project is a key component of the project's design and functionality. The mixed use environmental is especially important for those with constraints on mobility such as the elderly.

(9) Natural Systems and Recreational Lands

The proposed Comprehensive Plan Amendment does not impact any natural resources or species on or off-site. The River Village land use category contains policies that aim to enhance the environment and create new recreational lands or access to recreational features, such as the Caloosahatchee River. Furthermore, this amendment proposes a series of policies to protect the natural environment and a simultaneous change to the FLUM for the environmentally sensitive portions of the property to the "Preservation" land use category.

(15) Land Use

(a) Goal. In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally acceptable manner.

Policy (b) (1) – Promote state programs, investments, development and redevelopment activities which encourage efficient development and occur in areas which will have the capacity to service new population and commerce.

The proposed development is in an area where infrastructure and services are available and/or will be extended in conjunction with the development of the North River Village. The property is surrounded on the West and South by urban uses and on the North is the proposed Babcock development. The proposed North River Village will help make the needed infrastructure in this area financially feasible for the existing and future residents. This development will be required to pay impact fees for new public facilities based on the impact of this project.

Policy (b) (3) – Enhance the livability and character of urban areas through the encouragement of an attractive and functional mix of living, working, shopping, and recreational activities.

The proposed amendment creates a mixed use district and as such will "enhance the livability and character of urban areas through the encouragement of attractive and functional mix of living, working, shopping, and recreational activities." The North River Village is being planned to include residential, commercial and recreational uses all mixed together with a strong emphasis on pedestrian connections and access to the river.

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FACILITIES ANALYSIS
(Revised August 2008)

The following analysis, demonstrates how the proposed North River Community land use category will support the additional public facilities to service the property.

Parks

Level of Service and generation rates for park and recreational facilities are adopted as part of the Lee County Comprehensive Plan in the Capital Improvements Element. The level of service for Parks is established in Policy 95.1.3.5 as follows:

> *(a) Regional Parks 6 acres of developed regional park land open for public use per 1000 total seasonal county population.*
>
> *(b) Community Parks 0.8 acres of developed standard community parks open for public use per 1000 permanent population, unincorporated county only.*

In establishing a facility needs analysis for park and recreation lands, the most recent available demographic data is still the 2000 US Census. According to the census data we can assume an average permanent population of 77%. This is very conservative number based on similar developments with much higher seasonal populations. It is envisioned that the North River Community property will be marketed substantially toward a seasonal and second home buyer population. However, to be very conservative we are using a county wide average. According to the census data the average household size is 2.31 people per household.

Table 1 below shows the park generation created by the proposed development:

Park Type	Generation Rate	Population	Park Acreage
Regional Park	6 acres/1,000 people total	5,775	34.7
Community Park	.8 acres/1,000 people permanent	4,447	3.6

In addition to park area, the Lee County Land Development Code specifies general open space and preserve guidelines for development. The requirement in the LDC is generally 40% open space for residential developments and 30% for commercial. The River Village Land Use Category requires a minimum of 50% open space as well as the provision for public water access areas.

The North River Village will need to pay impact fees, which will pay the proportionate amount of money to off set any impacts that are created for new parks in Lee County. In addition to impact fees, the North River Village amendment proposes a significant public waterfront access opportunity for both the new residents added by this development as well as existing Lee County residents. The proposed public access to Trout Creek, the marina areas and connections to the existing blue ways and green way trails will well exceed the additional need generated by this Lee Plan amendment.

Libraries

The level of service for Libraries is also established in Policy 95.1.3.5 as follows:

> *Libraries: Maintain existing per-capita inventory; provide 1.6 items and .274 square feet of library space per capita (permanent residents).*

	Generation Rate	Population	Square Feet
Library	.274 Square Feet Per Capita	5,775	1,582

In accordance with the county's level of service standards, the development will generate the need for 1,582 square feet of additional library space. Impact fees will also address any mitigation for new facilities that may be needed.

EMS and Fire Services

Based on the LOS standard adopted into the Lee Plan (below) and the rule of thumb response time of 2 minutes per mile the North River Village property can be serviced by the existing station on SR 80. A letter of service availability has been provided. Note that any future development will also need to pay impact fees to off set the impact to fire and EMS services.

> *Emergency Medical Service: 3.18 advanced life support ambulance stations per 100,000 population with a five and one half (5 1/2) minute average response time.*

Schools

The Lee County School Board projects student generation by dwelling unit. According to the School Impact Fee Study prepared by Duncan and Associates and adopted by Lee County in 2005, students are projected to be generated at a rate of .334 students per single-family dwelling unit and .132 students per multi-family dwelling unit (Table 9 of the Duncan study). The assumed distribution of single family and multi family units is consistent with the distribution in the transportation impact study conducted by David Plummer and Associates (1,500 single family units and 1,000 multi family units).

Table 1 below shows how the student generation rates break down by school type, in accordance with Table 15 in the School Impact Fee study. According to the study, an allocation of 50.4% was made for elementary schools, 21.4% for middle schools and 28.2% for high school students.

Table 1 - Student Generation Rates*

	Elementary	Middle	High
Single Family	0.168	0.071	0.094
Multi-Family	0.067	0.028	0.037

*Based on the Lee County School Impact Fee Study, September 2005

Table 2 - Estimated Number of Students Generated			
	Elementary	**Middle**	**High**
Single Family	252	106	141
Multi-Family	67	28	37
Total	**319**	**134**	**178**

Table 3 - Estimated Facility Impacts from Comp Plan Amendment			
Educational Facility	**Capacity**	**Current Enrollment**	**Remaining Capacity**
Alva Elementary School	391	444	(53)
River Hall Elementary School	1,046	744	302
Alva Middle School	703	557	146
Riverdale Middle School	-	-	-
Riverdale High School	2,386	2,096	290

Note: This table is based on the Lee County School District 2007-2008 Work Plan

Several of the schools in this district have available capacity. Therefore, the timing of development will be more in line with the availability of public services. It is important to note that given the characteristics of the property – the waterfront and location, it is likely that any development occurring on this property will have a higher distribution of seasonal residents and retirees. It is expected that student generation would be lower then the averages assumed in the Impact Fee Study.

The Impact Fee ordinance was adopted requiring that all new units pay for their proportionate impact on the school system. Therefore there will be no impact on the school system through this plan amendment. Any students generated will have been mitigated for through the payment of impact fees.

THE SCHOOL DISTRICT OF LEE COUNTY
2005-2006 ELEMENTARY SCHOOLS

Enrollment as of December 7, 2005

ELEMENTARY (K - 5th) SCHOOLS	PreK Cycle 4 Enrollment	K-5th Cycle 4 Enrollment	Total Cycle 4 Enrollment[1]	Enrollment Minority Percentage[2]	Free/ Reduced Lunch %[3]
Allen Park Elem.	66	837	903	48.6%	47%
Alva Elem.	20	444	464	30.9%	43%
Bayshore Elem.	20	580	600	29.1%	44%
Bonita Springs Elem.	50	362	412	58.6%	67%
Caloosa Elem.	55	907	962	36.4%	41%
Cape Elem.	12	895	907	29.6%	34%
Colonial Elem.	56	710	766	71.5%	77%
Diplomat Elem.	0	929	929	31.0%	37%
Edgewood Elem.	62	646	708	80.2%	86%
Edison Park Elem.	0	420	420	36.4%	25%
Fort Myers Beach Elem.	0	203	203	16.3%	34%
Franklin Park Elem.	121	458	579	83.6%	87%
Gateway Elem.	28	900	928	53.2%	49%
Gulf Elem.	2	1,465	1,467	26.6%	30%
Gulf Middle (ESE K-5th)	0	4	4	50.0%	26%
Hancock Creek Elem.	19	923	942	37.3%	47%
Harns Marsh Elem.	12	877	889	70.0%	71%
Hector Cafferata Elem.	0	693	693	51.1%	57%
Heights Elem.	8	744	752	68.0%	69%
J.Colin English Elem.	28	686	714	54.4%	75%
Lehigh Elem.	32	946	978	57.5%	66%
Littleton Elem.	33	834	867	34.8%	54%
Michigan Montessori (K-5th)	20	377	397	79.8%	84%
Mirror Lakes Elem.	45	845	890	52.2%	61%
N Ft Myers Acad. (K-5th)	37	727	764	45.1%	75%
Orange River Elem.	34	783	817	61.9%	74%
Orangewood Elem.	43	754	797	53.3%	52%
Pelican Elem.	47	917	964	26.0%	34%
Pine Island Elem.	20	391	411	22.0%	50%
Pinewoods Elem.	50	865	915	40.1%	42%
Ray Pottorf Elem.	10	648	658	76.1%	75%
Rayma Page Elem.	11	522	533	53.8%	58%
San Carlos Park Elem.	0	880	880	48.2%	47%
Sanibel School (K-5th)	1	265	266	8.3%	7%
Skyline Elem.	48	898	946	32.7%	43%
Spring Creek Elem.	19	782	801	69.1%	71%
Sunshine Elem.	13	1,005	1,018	53.2%	54%
Tanglewood/Rs Elem. (K-5th)	58	650	708	58.3%	55%
Three Oaks Elem.	52	897	949	39.1%	32%
Tice Elem.	53	638	691	80.3%	88%
Trafalgar Elem.	1	891	892	37.1%	39%
Tropic Isles Elem.	79	992	1,071	45.3%	62%
Veterans Park (Kg-5th)	24	932	956	55.2%	52%
Villas Elem.	46	837	883	55.7%	61%
Elem. Totals	**1,335**	**31,959**	**33,294**	**48.6%**	**54%**

1. Cycle Report--Enrollment totals includes ALL PreK students.
2. Minority percentages excludes ALL PreK students.
3. Free/Reduced Lunch percentages as of November 30, 2005; provided by Food & Nutrition Services.

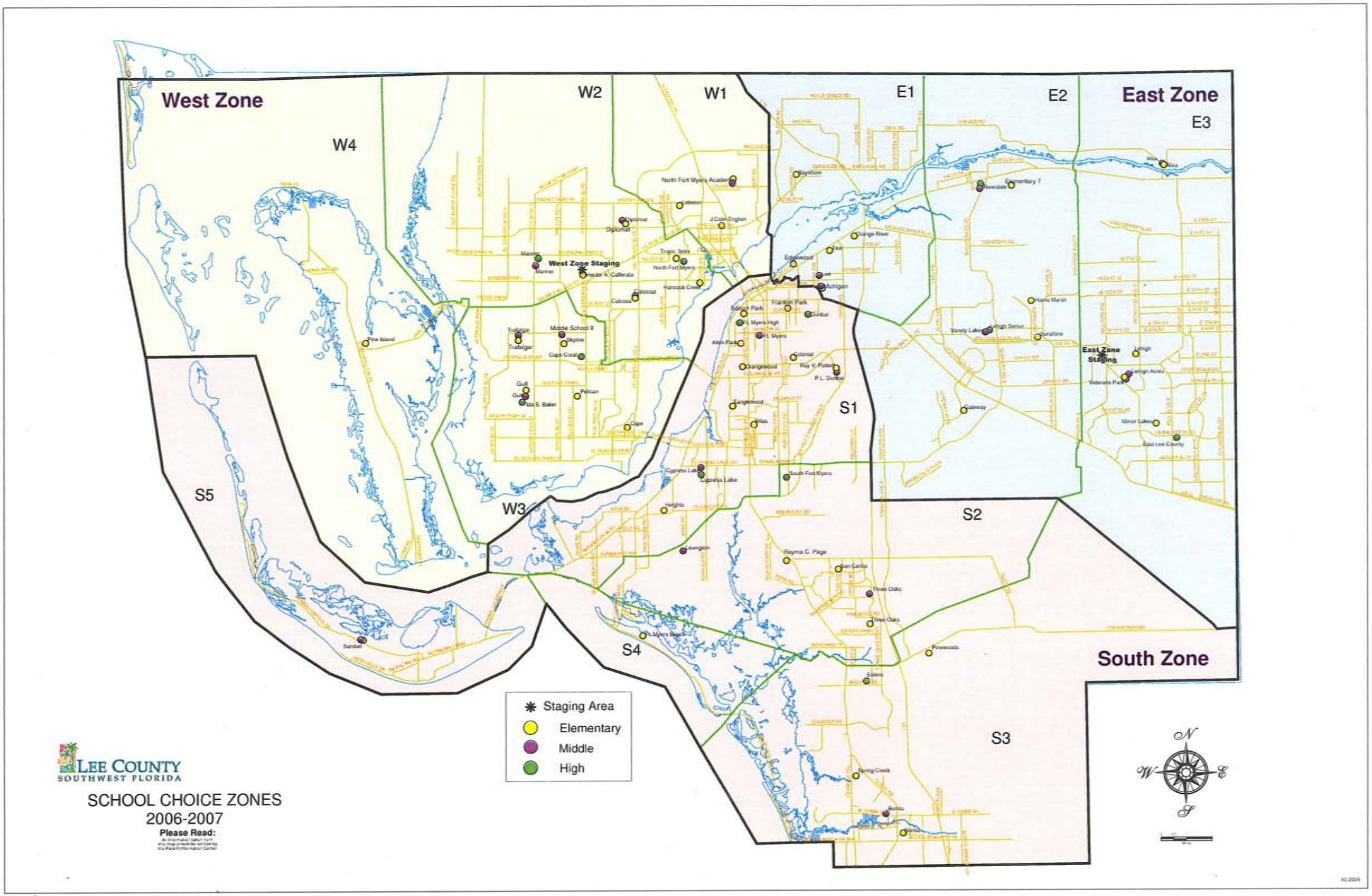
THE SCHOOL DISTRICT OF LEE COUNTY

2005-2006 MIDDLE & HIGH SCHOOLS

Enrollment as of December 7, 2005

MIDDLE (6th - 8th) & HIGH (9th - 12th) SCHOOLS	PreK Cycle 4 Enrollment	6th-12th Cycle 4 Enrollment	Total Cycle 4 Enrollment[1]	Enrollment Minority Percentage[2]	Free/ Reduced Lunch %[3]
MIDDLE SCHOOLS		6th-8th			
Alva Middle	0	508	508	30.9%	44%
Bonita Springs Middle	0	660	660	53.2%	55%
Caloosa Middle	0	1,134	1,134	31.8%	37%
Cypress Lake Middle	0	984	984	33.1%	33%
Diplomat Middle	0	1,122	1,122	26.9%	39%
Fort Myers Middle	0	753	753	70.3%	67%
Gulf Middle	0	1,147	1,147	26.2%	26%
Lee Middle	0	627	627	69.9%	69%
Lehigh Acres Middle	0	846	846	64.9%	73%
Lexington Middle	0	783	783	49.9%	50%
Mariner Middle	0	1,233	1,233	43.1%	49%
Michigan Montessori (6th-8th)	0	241	241	71.0%	84%
P. L. Dunbar Middle	0	980	980	46.6%	44%
Sanibel School (6th-8th)	0	132	132	7.6%	7%
N Ft Myers Acad. (6th-8th)	0	510	510	36.1%	75%
Riverdale (6th-8th)	0	430	430	32.3%	38%
Tanglewood/Riverside (ESE 6-8th)	0	2	2	50.0%	55%
Three Oaks Middle	0	873	873	34.7%	32%
Trafalgar Middle	0	1,353	1,353	31.3%	37%
Veterans Park (6th-8th)	0	460	460	59.3%	52%
Varsity Lakes Middle	0	896	896	56.7%	55%
Middle Totals	**0**	**15,674**	**15,674**	**42.8%**	**44%**
HIGH SCHOOLS		9th-12th			
Cape Coral High	2	2,078	2,080	43.7%	36%
Cypress Lake High	1	1,707	1,708	34.6%	27%
Dunbar High	2	953	955	74.2%	56%
East Lee County High	0	395	395	60.5%	60%
Estero High	6	1,689	1,695	32.9%	28%
Fort Myers High	1	2,081	2,082	31.4%	20%
Ida Baker High	0	1,570	1,570	31.0%	33%
Lehigh Sr. High	5	2,244	2,249	59.9%	52%
Mariner High	0	2,032	2,032	28.3%	29%
North Fort Myers High	1	2,119	2,120	23.7%	29%
Riverdale High	1	1,593	1,594	30.7%	38%
South Fort Myers High	1	1,019	1,020	43.0%	39%
Tanglewood/Riverside (ESE 9-12th)	0	4	4	25.0%	55%
High Totals	**20**	**19,484**	**19,504**	**38.4%**	**35%**
SUB TOTALS	**1,355**	**67,117**	**68,472**	**44.3%**	**46%**

1. Cycle Report--Enrollment totals includes ALL PreK students.
2. Minority percentages excludes ALL PreK students.
3. Free/Reduced Lunch percentages as of November 30, 2005; provided by Food & Nutrition Services.



LEE COUNTY
SOUTHWEST FLORIDA

SCHOOL CHOICE ZONES
2006-2007

Please Read:

02/2005

LEE SCHOOL DISTRICT - - TENTATIVE FACILITIES WORK PROGRAM

LEE SCHOOL DISTRICT - - WORKSHEET Last Revised

THIS SCHEDULE SHALL CONSIDER:

3 Locations, capacities, and planned utilization rates of current educational facilities of the district. (Include both permanent and relocatable facilities)

Location	2005-06 FISH Satisfactory Student Stations	Actual 2005-06 FISH Capacity	Actual 2004-05 COFTE	Actual 2005-06 Utilization	New Stu Capacity to be added (removed)	Projected 2009-10 COFTE	Projected 2009-10 Utilization
Allen Park Elementary	994	994	925	93%	63	848	80%
Alva Elementary	303	303	464	153%	-	243	80%
Bayshore Elementary	595	595	632	106%	70	534	80%
Bonita Springs Elementary	473	473	368	78%	(84)	312	80%
Caloosa Elementary	756	756	1,070	142%	292	841	80%
Cape Elementary	777	777	979	126%	236	813	80%
Colonial Elementary	893	893	755	85%	88	787	80%
Diplomat Elementary	944	944	1,011	107%	99	837	80%
Edgewood Renaissance Academy	777	777	694	89%	(36)	595	80%
Edison Park Elementary	449	449	466	104%	-	360	80%
Franklin Park Elementary	703	703	535	76%	(124)	465	80%
Ft Myers Beach Elementary	200	200	203	102%	-	160	80%
Gateway Elementary	824	824	989	120%	(66)	608	80%
Gulf Elementary	1,396	1,396	1,570	112%	-	1120	80%
Hancock Creek Elementary	756	756	993	131%	282	833	80%
Harns Marsh Elementary	963	963	-	0%	-	773	80%
Hector A Cafferata Jr. Elementary	695	695	-	0%	188	709	80%
Heights Elementary	805	805	869	108%	(110)	558	80%
J. Colin English Elementary	737	737	845	115%	(148)	473	80%
Lehigh Elementary	866	866	931	108%	(102)	613	80%
Littleton Elementary	774	774	951	123%	(36)	592	80%
Michigan Montessori K-8	799	799	609	76%	(62)	591	80%
Mirror Lakes Elementary	659	659	832	126%	396	847	80%
NFM Academy for the Arts K-8	1,509	2,095	1,344	64%	(737)	1090	80%
Orange River Elementary	790	790	788	100%	1	635	80%
Orangewood Elementary	759	759	832	110%	(122)	511	80%
Pelican Elementary	904	904	977	108%	486	1115	80%
Pine Island Elementary	413	413	456	110%	(22)	314	80%
Pinewoods Elementary	924	924	957	104%	109	829	80%
Ray V. Pottorf Elementary	963	963	-	0%	-	773	80%
Rayma C. Page Elementary	856	856	-	0%	-	687	80%
San Carlos Park Elementary	857	857	987	115%	166	821	80%
Skyline Elementary	836	836	974	117%	552	1114	80%
Spring Creek Elementary	879	879	774	88%	(126)	604	80%
Sunshine Elementary	1,067	1,067	1,023	96%	163	987	80%
Tanglewood/Riverside Elementary	677	677	729	108%	104	627	80%
The Sanibel School K-8	512	461	426	92%	-	370	80%
Three Oaks Elementary	858	858	985	115%	(120)	592	80%
Tice Elementary	777	777	678	87%	(190)	471	80%
Trafalgar Elementary	959	959	586	61%	-	770	80%
Tropic Isles Elementary	875	875	1,025	117%	188	853	80%
Veterans Park Academy K-8	1,964	1,768	852	48%	-	1419	80%
Villas Elementary	893	893	862	97%	24	736	80%
New East Elementary School T					1,000	802	80%
New East Elementary School U					1,000	802	80%

LEE SCHOOL DISTRICT - - TENTATIVE FACILITIES WORK PROGRAM

LEE SCHOOL DISTRICT - - WORKSHEET

								Last Revised
	New East Elementary School Z					1,000	802	80%
	New East Elementary School G					1,000	802	80%
	New East Elementary School H					1,000	802	80%
	New South Elementary School B					1,000	802	80%
	New South Elementary School D					1,000	802	80%
	New West Elementary School Y					1,000	802	80%
	New West Elementary School A					1,000	802	80%
	New West Elementary School C					1,000	802	80%
	New West Elementary School E					1,000	802	80%
	Alva Middle	703	633	577	91%	(119)	463	90%
	Bonita Springs Middle	973	876	861	98%	(0)	790	90%
	Caloosa Middle	1,117	1,005	1,202	120%	0	906	90%
	Cypress Lake Middle	1,176	1,058	1,230	116%	(178)	794	90%
	Diplomat Middle	1,082	974	1,233	127%	(0)	878	90%
	Ft Myers Middle Academy	953	858	766	89%	(0)	773	90%
	Gulf Middle	1,135	1,022	1,267	124%	(99)	832	90%
	Lee Middle	1,117	1,005	649	65%	23	927	90%
	Lehigh Acres Middle	1,340	1,206	910	75%	(190)	916	90%
	Lexington Middle	1,161	1,045	-	0%	(0)	942	90%
	Mariner Middle	1,268	1,141	765	67%	0	1029	90%
	P. L. Dunbar Middle	1,126	1,013	1,136	112%	0	914	90%
	Three Oaks Middle	1,141	1,027	1,048	102%	(40)	890	90%
	Trafalgar Middle	1,401	1,261	1,423	113%	(227)	932	90%
	Varsity Lakes Middle	1,138	1,024	730	71%	0	923	90%
	New East Middle School KK					1,200	1082	90%
	New South Middle School LL					1,200	1082	90%
	New West Middle School II					1,200	1082	90%
	New West Middle School MM					1,200	1082	90%
	Cape Coral High	2,142	2,035	2,270	112%	(214)	1395	77%
	Cypress Lake High	2,268	2,155	2,033	94%	(452)	1305	77%
	Dunbar High	1,307	1,242	1,043	84%	(0)	951	77%
	East Lee County High - GGG	809	769	-	0%	1,317	1598	77%
	Estero High	2,034	1,831	2,059	112%	(136)	1298	77%
	Ft Myers High	1,960	1,862	2,259	121%	(119)	1335	77%
	Ida S. Baker High	2,175	2,066	603	29%	-	1583	77%
	Lehigh Senior High	1,962	1,864	2,059	110%	(0)	1428	77%
	Mariner High	2,062	1,959	2,208	113%	(238)	1319	77%
	North Fort Myers High	2,296	2,181	2,199	101%	(332)	1416	77%
	Riverdale High 6-12	2,336	2,102	1,984	94%	(49)	1573	77%
	South Ft. Myers High	2,196	2,086	-	0%	0	1598	77%
	New West High School HHH					2,000	1532	77%
	New West High School III					2,000	1532	77%
	High Tech Center Central	1,025	1,230	145	12%		145	12%
	New Directions/LAMP/ALC	665	665	283	43%		283	43%
	High Tech Center North	324	324	79	24%		79	24%
	Royal Palm Exceptional	230	230	193	84%		193	84%
	Buckingham Exceptional	128	128	113	88%		113	88%
	Ft Myers Edison Center	141	141	81	57%		81	57%
	New West ALC					300	89	30%
3	**LEE Total**	**78,301**	**75,767**	**65,354**	**86%**	**20,470**	**76,735**	**80%**

The District believes the CO-FTE projection for 76,735 for the year 2009-10 is low. District estimates show the number closer to 93,430 which results in a projected 2009-10 utilization rate of 96 percent.

THE SCHOOL DISTRICT OF LEE COUNTY

2055 CENTRAL AVENUE • FORT MYERS, FLORIDA 33901 • (239) 334-1102 • TTD/TTY (239) 335-1512

STEVEN K. TEUBER, J.D.
CHAIRMAN · DISTRICT 4

ELINOR C. SCRICCA, PH.D.
VICE CHAIRMAN · DISTRICT 5

ROBERT D. CHILMONIK
DISTRICT 1

JEANNE S. DOZIER
DISTRICT 2

JANE E. KUCKEL, PH.D.
DISTRICT 3

JAMES W. BROWDER, ED.D.
SUPERINTENDENT

KEITH B. MARTIN
BOARD ATTORNEY

September 29, 2006

Ms. Debbie Strach
DeLisi, Fitzgerald, Inc.
1500 Royal Palm Square Blvd. Suite 101
Fort Myers, Fl 33902

Re: North River Village

Dear Ms. Strach:

Thank you for the opportunity to review the proposed North River Village Comprehensive Plan Amendment for comments with regard to educational impacts. This proposed development is in the East Choice Zone of the District. This letter is in response to your request dated September 21, 2006.

The proposed maximum total of 2,013 dwelling units which was specified in the letter, did not state whether these are single family or multi-family units. At this time I will use the generation rate for single family units because it is the higher of the two rates. The School District of Lee County is estimating that the proposal could generate up to 636 additional school-aged children. This uses the single family generation rate of 0.316 students per dwelling unit (if you need the multi-family generation rate it is 0.125). **Based on the impact of this project to the school system, the School District of Lee County is requesting donation of land suitable for a school site, either within the project itself or within the same Choice Zone.**

The Lee County Board of County Commissioners adopted a School Impact Fee Ordinance on November 27, 2001, which was revised in November, 2005. This letter uses the revised generation rate. The developers will be expected to pay the impact fee at the appropriate time if a school site is not donated.

Thank you for your attention to this issue. If I may be of further assistance, please give me a call at (239) 335-1415.

Sincerely,

Ellen Lindblad

Ellen Lindblad, Long Range Planner
Planning, Growth, & School Capacity Department

21023

Bayshore Fire Protection and Rescue Service District
17350 Nalle Road, North Fort Myers, Florida 33917

October 3, 2006

Debbie Strach
DeLisi Fitzgerald, Inc.
1500 Royal Palm Square Blvd. Suite 101
Fort Myers, FL 33919

Dear Ms. Strach:

Based on the limited information that you have provided referencing the proposed amendment, Bayshore Fire & Rescue would require fire hydrants or their equivalent to be installed prior to development.

In addition, depending on the exact nature of the development further modifications may be required. The exact requirements can be referenced through the Lee County Land Planning Code.

If I may be of any further assistance, or if you would like to discuss this issue further, please do not hesitate to contact me at the numbers listed below.

Sincerely,

Edwin B. Campbell

Edwin B. Campbell
Fire Chief

Office (239) 543-3443 FAX (239) 543-7075 24 Hours (239) 567-2833

Rec'd 10/6/06 DS

Lee County
Southwest Florida

Statement of Initial Review

Lee County Emergency Medical Services (LCEMS) has performed a preliminary review of the project referenced herein. Based upon the limited amount of information provided, LCEMS has no initial concerns with the ability to provide service to this project.

The Comprehensive Plan Amendment for North River Village, located on the east side of State Road 31 and the south side of County Road 78, seeks approval for a maximum increase of 1,468 residential dwelling units plus 150,000 square feet of commercial floor area.

This current location is served by LCEMS Station 11, located at 10941 Palm Beach Blvd., which is approximately 2.5 miles away, and LCEMS Station 19, located at 17350 Nalle Road which is approximately 3 miles away.

This statement does not indicate that any plans have been received, it just identifies that Lee County EMS has no initial concerns with the ability to provide service to this area.

(Signature)

EMS Operations Chief
(Title)

Kim Dickerson
(Printed Name)

July 3, 2008
(Date)

LEE COUNTY EMERGENCY MEDICAL SERVICES

Kim Dickerson, EMT-P, RN, MBA
EMS Operations Chief
Lee County Emergency Medical Services
14752 Ben Pratt/Six Mile Cypress Parkway
Fort Myers, FL 33912
Phone: 239-335-1661
Fax: 239-335-1671
Email: kdickerson@leegov.com
Website: www.lee-ems.com

RODUCTION

The 5-Year District Facilities Work Program is a very important document. The Department of Education, Legislature, Governor's Office, Division of Community Planning (growth management), local governments, and others use the work program information for various needs including funding, planning, and as the authoritative source for school facilities related information.

The district's facilities work program must be a complete, balanced capital outlay plan that is financially feasible. The first year of the work program is the districts capital outlay budget. To determine if the work program is balanced and financially feasible, the "Net Available Revenue" minus the "Funded Projects Costs" should sum to zero for "Remaining Funds".

If the "Remaining Funds" balance is zero, then the plan is both balanced and financially feasible.
If the "Remaining Funds" balance is negative, then the plan is neither balanced nor feasible.
If the "Remaining Funds" balance is greater than zero, the plan may be feasible, but it is not balanced.

Summary of revenue/expenditures available for new construction and remodeling projects only.

	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	Five Year Total
Total Revenues	$273,491,823	$236,568,393	$118,388,125	$219,950,625	$161,397,000	$1,009,795,966
Total Project Costs	$273,491,823	$236,568,393	$118,388,125	$219,950,625	$161,397,000	$1,009,795,966
Difference (Remaining Funds)	$0	$0	$0	$0	$0	$0

District LEE COUNTY SCHOOL DISTRICT

Fiscal Year Range

ERTIFICATION

By submitting this electronic document, we certify that all information provided in this 5-year district facilities work program is accurate, all capital outlay resources are fully reported, and the expenditures planned represent a complete and balanced capital outlay plan for the district. The district Superintendent and Chief Financial Officer have approved the information contained in this 5-year district facilities work program, and they have approved this submission and certify to the Department of Education, Office of Educational Facilities, that the information contained herein is correct and accurate. We understand that any information contained in this 5-year district facilities work program is subject to audit by the Auditor General of the State of Florida.

DISTRICT SUPERINTENDENT	Dr. James Browder
CHIEF FINANCIAL OFFICER	Mr. Lee Legutko
DISTRICT POINT-OF-CONTACT PERSON	Jennifer Roode
JOB TITLE	Senior Accountant
PHONE NUMBER	239-337-86
SUN COM NUMBER	759-8635
E-MAIL ADDRESS	JenniferLRo@leeschools.net

Expenditures

Expenditure for Maintenance, Repair and Renovation

Annually, prior to the adoption of the district school budget, each school board must prepare a tentative district facilities work program that includes a schedule of major repair and renovation projects necessary to maintain the educational and ancillary facilities of the district.

Item	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
HVAC	$18,543,155	$6,474,205	$12,357,438	$8,675,319	$8,675,319	$54,725,436
Locations:	ALLEN PARK ELEMENTARY, Alternative Learning Center West, ALVA ELEMENTARY, ALVA MIDDLE, BAYSHORE ELEMENTARY, BONITA SPRINGS ELEMENTARY, BONITA SPRINGS MIDDLE, BUCKINGHAM EXCEPTIONAL STUDENT CENTER, CALOOSA ELEMENTARY, CALOOSA MIDDLE, CAPE CORAL ELEMENTARY, CAPE CORAL SENIOR HIGH, CHALLENGER MIDDLE, COLONIAL ELEMENTARY, CYPRESS LAKE MIDDLE, CYPRESS LAKE SENIOR HIGH, DIPLOMAT ELEMENTARY, DIPLOMAT MIDDLE, DUNBAR ATHLETICS, DUNBAR COMMUNITY SCHOOL, DUNBAR HIGH SCHOOL, EAST LEE COUNTY HIGH SCHOOL, EAST ZONE STAGING SCHOOL, EDGEWOOD ACADEMY, EDISON PARK CREATIVE AND EXPRESSIVE ARTS SCHOOL, ESTERO SENIOR HIGH, FORT MYERS BEACH ELEMENTARY, FORT MYERS MIDDLE ACADEMY, FORT MYERS SENIOR HIGH, FRANKLIN PARK ELEMENTARY, GATEWAY ELEMENTARY, GULF ELEMENTARY, GULF MIDDLE, GULF PRIMARY, GWYNNE, HANCOCK CREEK ELEMENTARY, HARNS MARSH ELEMENTARY SCHOOL, HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL, HEIGHTS ELEMENTARY, HIPPS BUILDINGS, IDA S. BAKER HIGH SCHOOL, J COLIN ENGLISH ELEMENTARY, LEE ASSOCIATION FOR RETARDED CITIZENS (LARC), LEE COUNTY DETENTION HOME, LEE COUNTY HIGH TECH CENTRAL, LEE MIDDLE, LEE SUPERINTENDENT'S OFFICE, LEHIGH ACRES MIDDLE, LEHIGH ELEMENTARY, LEHIGH SENIOR HIGH, LEXINGTON MIDDLE SCHOOL, LITTLETON ELEMENTARY, MAINTENANCE DEPARTMENT, MANATEE ELEMENTARY, MARINER MIDDLE, MARINER SENIOR HIGH, MICHIGAN INTERNATIONAL ACADEMY, MIRROR LAKES ELEMENTARY, NEW ADMINISTRATIVE COMPLEX, NEW DIRECTIONS SCHOOL, NORTH FORT MYERS ACADEMY OF THE ARTS, NORTH FORT MYERS SENIOR HIGH, NORTH VO-TECH, ORANGE RIVER ELEMENTARY, ORANGEWOOD ELEMENTARY, PATRIOT ELEMENTARY, PAUL LAURENCE DUNBAR MIDDLE, PELICAN ELEMENTARY, PINE ISLAND ELEMENTARY, PINEWOODS ELEMENTARY, RAY V. POTTORF ELEMENTARY SCHOOL, RAYMA C. PAGE ELEMENTARY, RIVER HALL ELEMENTARY, RIVERDALE HIGH, ROYAL PALM EXCEPTIONAL SCHOOL, SAN CARLOS PARK ELEMENTARY, SKYLINE ELEMENTARY, SOUTH FORT MYERS HIGH SCHOOL, SPRING CREEK ELEMENTARY, SUNSHINE ELEMENTARY, SUPPLY DEPARTMENT, TANGLEWOOD RIVERSIDE SCHOOL, THE SANIBEL SCHOOL, THREE OAKS ELEMENTARY, THREE OAKS MIDDLE, TICE ELEMENTARY, TRAFALGAR ELEMENTARY, TRAFALGAR MIDDLE, TRANSPORTATION CENTRAL ANNEX, TRANSPORTATION EAST BUS FACILITY, TRANSPORTATION SERVICES NORTH, TRANSPORTATION SOUTH, TRANSPORTATION SOUTH -- ESTERO, TROPIC ISLES ELEMENTARY, VARSITY LAKES MIDDLE, VETERAN'S PARK ACADEMY FOR THE ARTS, VILLAS ELEMENTARY, WEST ZONE STAGING SCHOOL					
Flooring	$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.					
Roofing	$9,202,948	$1,086,486	$1,330,029	$2,645,906	$2,645,906	$16,911,275
Locations:	ALLEN PARK ELEMENTARY, Alternative Learning Center West, ALVA ELEMENTARY, ALVA MIDDLE, BAYSHORE ELEMENTARY, BONITA SPRINGS ELEMENTARY, BONITA SPRINGS MIDDLE, BUCKINGHAM EXCEPTIONAL STUDENT CENTER, CALOOSA ELEMENTARY, CALOOSA MIDDLE, CAPE CORAL ELEMENTARY, CAPE CORAL SENIOR HIGH, CHALLENGER MIDDLE, COLONIAL ELEMENTARY, CYPRESS LAKE MIDDLE, CYPRESS LAKE SENIOR HIGH, DIPLOMAT ELEMENTARY, DIPLOMAT MIDDLE, DUNBAR ATHLETICS, DUNBAR COMMUNITY SCHOOL, DUNBAR HIGH SCHOOL, EAST LEE COUNTY HIGH SCHOOL, EAST ZONE STAGING SCHOOL, EDGEWOOD ACADEMY, EDISON PARK CREATIVE AND EXPRESSIVE ARTS SCHOOL, ESTERO SENIOR HIGH, FORT MYERS BEACH ELEMENTARY, FORT MYERS MIDDLE ACADEMY, FORT MYERS SENIOR HIGH, FRANKLIN PARK ELEMENTARY, GATEWAY ELEMENTARY, GULF ELEMENTARY, GULF MIDDLE, GULF PRIMARY, GWYNNE, HANCOCK CREEK ELEMENTARY, HARNS MARSH ELEMENTARY SCHOOL, HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL, HEIGHTS ELEMENTARY, HIPPS BUILDINGS, IDA S. BAKER HIGH SCHOOL, J COLIN ENGLISH ELEMENTARY, LEE ASSOCIATION FOR RETARDED CITIZENS (LARC), LEE COUNTY DETENTION HOME, LEE COUNTY HIGH TECH CENTRAL, LEE MIDDLE, LEE SUPERINTENDENT'S OFFICE, LEHIGH ACRES MIDDLE, LEHIGH ELEMENTARY, LEHIGH SENIOR HIGH, LEXINGTON MIDDLE SCHOOL, LITTLETON ELEMENTARY, MAINTENANCE DEPARTMENT, MANATEE ELEMENTARY, MARINER MIDDLE, MARINER SENIOR HIGH, MICHIGAN INTERNATIONAL ACADEMY, MIRROR LAKES ELEMENTARY, NEW ADMINISTRATIVE COMPLEX, NEW DIRECTIONS SCHOOL, NORTH FORT MYERS ACADEMY OF THE ARTS, NORTH FORT MYERS SENIOR HIGH, NORTH VO-TECH, ORANGE RIVER ELEMENTARY, ORANGEWOOD ELEMENTARY, PATRIOT ELEMENTARY, PAUL LAURENCE DUNBAR MIDDLE, PELICAN ELEMENTARY, PINE ISLAND ELEMENTARY, PINEWOODS ELEMENTARY, RAY V. POTTORF ELEMENTARY SCHOOL, RAYMA C. PAGE ELEMENTARY, RIVER HALL ELEMENTARY, RIVERDALE HIGH, ROYAL PALM EXCEPTIONAL SCHOOL, SAN CARLOS PARK ELEMENTARY, SKYLINE ELEMENTARY, SOUTH FORT MYERS HIGH SCHOOL, SPRING CREEK ELEMENTARY, SUNSHINE ELEMENTARY, SUPPLY DEPARTMENT, TANGLEWOOD RIVERSIDE SCHOOL, THE SANIBEL SCHOOL, THREE OAKS ELEMENTARY, THREE OAKS MIDDLE, TICE ELEMENTARY, TRAFALGAR ELEMENTARY, TRAFALGAR MIDDLE, TRANSPORTATION CENTRAL ANNEX, TRANSPORTATION EAST BUS FACILITY, TRANSPORTATION SERVICES NORTH, TRANSPORTATION SOUTH, TRANSPORTATION SOUTH -- ESTERO, TROPIC ISLES ELEMENTARY, VARSITY LAKES MIDDLE, VETERAN'S PARK ACADEMY FOR THE ARTS, VILLAS ELEMENTARY, WEST ZONE STAGING SCHOOL					

ty to Life		$4,148,905	$1,857,288	$1,987,298	$2,086,663	$2,190,996	$12,271,150
Locations:	ALLEN PARK ELEMENTARY, Alternative Learning Center West, ALVA ELEMENTARY, ALVA MIDDLE, BAYSHORE ELEMENTARY, BONITA SPRINGS ELEMENTARY, BONITA SPRINGS MIDDLE, BUCKINGHAM EXCEPTIONAL STUDENT CENTER, CALOOSA ELEMENTARY, CALOOSA MIDDLE, CAPE CORAL ELEMENTARY, CAPE CORAL SENIOR HIGH, CHALLENGER MIDDLE, COLONIAL ELEMENTARY, CYPRESS LAKE MIDDLE, CYPRESS LAKE SENIOR HIGH, DIPLOMAT ELEMENTARY, DIPLOMAT MIDDLE, DUNBAR ATHLETICS, DUNBAR COMMUNITY SCHOOL, DUNBAR HIGH SCHOOL, EAST LEE COUNTY HIGH SCHOOL, EAST ZONE STAGING SCHOOL, EDGEWOOD ACADEMY, EDISON PARK CREATIVE AND EXPRESSIVE ARTS SCHOOL, ESTERO SENIOR HIGH, FORT MYERS BEACH ELEMENTARY, FORT MYERS MIDDLE ACADEMY, FORT MYERS SENIOR HIGH, FRANKLIN PARK ELEMENTARY, GATEWAY ELEMENTARY, GULF ELEMENTARY, GULF MIDDLE, GULF PRIMARY, GWYNNE, HANCOCK CREEK ELEMENTARY, HARNS MARSH ELEMENTARY SCHOOL, HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL, HEIGHTS ELEMENTARY, HIPPS BUILDINGS, IDA S. BAKER HIGH SCHOOL, J COLIN ENGLISH ELEMENTARY, LEE ASSOCIATION FOR RETARDED CITIZENS (LARC), LEE COUNTY DETENTION HOME, LEE COUNTY HIGH TECH CENTRAL, LEE MIDDLE, LEE SUPERINTENDENT'S OFFICE, LEHIGH ACRES MIDDLE, LEHIGH ELEMENTARY, LEHIGH SENIOR HIGH, LEXINGTON MIDDLE SCHOOL, LITTLETON ELEMENTARY, MAINTENANCE DEPARTMENT, MANATEE ELEMENTARY, MARINER MIDDLE, MARINER SENIOR HIGH, MICHIGAN INTERNATIONAL ACADEMY, MIRROR LAKES ELEMENTARY, NEW ADMINISTRATIVE COMPLEX, NEW DIRECTIONS SCHOOL, NORTH FORT MYERS ACADEMY OF THE ARTS, NORTH FORT MYERS SENIOR HIGH, NORTH VO-TECH, ORANGE RIVER ELEMENTARY, ORANGEWOOD ELEMENTARY, PATRIOT ELEMENTARY, PAUL LAURENCE DUNBAR MIDDLE, PELICAN ELEMENTARY, PINE ISLAND ELEMENTARY, PINEWOODS ELEMENTARY, RAY V. POTTORF ELEMENTARY SCHOOL, RAYMA C. PAGE ELEMENTARY, RIVER HALL ELEMENTARY, RIVERDALE HIGH, ROYAL PALM EXCEPTIONAL SCHOOL, SAN CARLOS PARK ELEMENTARY, SKYLINE ELEMENTARY, SOUTH FORT MYERS HIGH SCHOOL, SPRING CREEK ELEMENTARY, SUNSHINE ELEMENTARY, SUPPLY DEPARTMENT, TANGLEWOOD RIVERSIDE SCHOOL, THE SANIBEL SCHOOL, THREE OAKS ELEMENTARY, THREE OAKS MIDDLE, TICE ELEMENTARY, TRAFALGAR ELEMENTARY, TRAFALGAR MIDDLE, TRANSPORTATION CENTRAL ANNEX, TRANSPORTATION EAST BUS FACILITY, TRANSPORTATION SERVICES NORTH, TRANSPORTATION SOUTH, TRANSPORTATION SOUTH -- ESTERO, TROPIC ISLES ELEMENTARY, VARSITY LAKES MIDDLE, VETERAN'S PARK ACADEMY FOR THE ARTS, VILLAS ELEMENTARY, WEST ZONE STAGING SCHOOL						
Fencing		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
Parking		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
trical		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
Fire Alarm		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
Telephone/Intercom System		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
Closed Circuit Television		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
Paint		$0	$0	$0	$0	$0	$0
Locations:	No Locations for this expenditure.						
District Wide Maintenance		$19,357,506	$6,096,864	$7,234,902	$8,155,863	$8,814,096	$49,659,231

Locations:	ALLEN PARK ELEMENTARY, Alternative Learning Center West, ALVA ELEMENTARY, ALVA MIDDLE, BAYSHORE ELEMENTARY, BONITA SPRINGS ELEMENTARY, BONITA SPRINGS MIDDLE, BUCKINGHAM EXCEPTIONAL STUDENT CENTER, CALOOSA ELEMENTARY, CALOOSA MIDDLE, CAPE CORAL ELEMENTARY, CAPE CORAL SENIOR HIGH, CHALLENGER MIDDLE, COLONIAL ELEMENTARY, CYPRESS LAKE MIDDLE, CYPRESS LAKE SENIOR HIGH, DIPLOMAT ELEMENTARY, DIPLOMAT MIDDLE, DUNBAR ATHLETICS, DUNBAR COMMUNITY SCHOOL, DUNBAR HIGH SCHOOL, EAST LEE COUNTY HIGH SCHOOL, EAST ZONE STAGING SCHOOL, EDGEWOOD ACADEMY, EDISON PARK CREATIVE AND EXPRESSIVE ARTS SCHOOL, ESTERO SENIOR HIGH, FORT MYERS BEACH ELEMENTARY, FORT MYERS MIDDLE ACADEMY, FORT MYERS SENIOR HIGH, FRANKLIN PARK ELEMENTARY, GATEWAY ELEMENTARY, GULF ELEMENTARY, GULF MIDDLE, GULF PRIMARY, GWYNNE, HANCOCK CREEK ELEMENTARY, HARNS MARSH ELEMENTARY SCHOOL, HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL, HEIGHTS ELEMENTARY, HIPPS BUILDINGS, IDA S. BAKER HIGH SCHOOL, J COLIN ENGLISH ELEMENTARY, LEE ASSOCIATION FOR RETARDED CITIZENS (LARC), LEE COUNTY DETENTION HOME, LEE COUNTY HIGH TECH CENTRAL, LEE MIDDLE, LEE SUPERINTENDENT'S OFFICE, LEHIGH ACRES MIDDLE, LEHIGH ELEMENTARY, LEHIGH SENIOR HIGH, LEXINGTON MIDDLE SCHOOL, LITTLETON ELEMENTARY, MAINTENANCE DEPARTMENT, MANATEE ELEMENTARY, MARINER MIDDLE, MARINER SENIOR HIGH, MICHIGAN INTERNATIONAL ACADEMY, MIRROR LAKES ELEMENTARY, NEW ADMINISTRATIVE COMPLEX, NEW DIRECTIONS SCHOOL, NORTH FORT MYERS ACADEMY OF THE ARTS, NORTH FORT MYERS SENIOR HIGH, NORTH VO-TECH, ORANGE RIVER ELEMENTARY, ORANGEWOOD ELEMENTARY, PATRIOT ELEMENTARY, PAUL LAURENCE DUNBAR MIDDLE, PELICAN ELEMENTARY, PINE ISLAND ELEMENTARY, PINEWOODS ELEMENTARY, RAY V. POTTORF ELEMENTARY SCHOOL, RAYMA C. PAGE ELEMENTARY, RIVER HALL ELEMENTARY, RIVERDALE HIGH, ROYAL PALM EXCEPTIONAL SCHOOL, SAN CARLOS PARK ELEMENTARY, SKYLINE ELEMENTARY, SOUTH FORT MYERS HIGH SCHOOL, SPRING CREEK ELEMENTARY, SUNSHINE ELEMENTARY, SUPPLY DEPARTMENT, TANGLEWOOD RIVERSIDE SCHOOL, THE SANIBEL SCHOOL, THREE OAKS ELEMENTARY, THREE OAKS MIDDLE, TICE ELEMENTARY, TRAFALGAR ELEMENTARY, TRAFALGAR MIDDLE, TRANSPORTATION CENTRAL ANNEX, TRANSPORTATION EAST BUS FACILITY, TRANSPORTATION SERVICES NORTH, TRANSPORTATION SOUTH, TRANSPORTATION SOUTH -- ESTERO, TROPIC ISLES ELEMENTARY, VARSITY LAKES MIDDLE, VETERAN'S PARK ACADEMY FOR THE ARTS, VILLAS ELEMENTARY, WEST ZONE STAGING SCHOOL						
Maintenance Expenditure Totals:		**$51,252,514**	**$15,514,843**	**$22,909,667**	**$21,563,751**	**$22,326,317**	**$133,567,092**

Local Two Mill Expenditure For Maintenance, Repair and Renovation

Anticipated expenditures expected from local funding sources over the years covered by the current work plan.

Item	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
...or Maintenance/Repair	$11,000,000	$11,000,000	$11,000,000	$11,000,000	$11,000,000	$55,000,000
Maintenance/Repair Salaries	$0	$0	$0	$0	$0	$0
School Bus Purchases	$9,748,516	$9,783,052	$10,359,749	$10,863,834	$11,365,430	$52,120,581
Other Vehicle Purchases	$0	$0	$0	$0	$0	$0
Capital Outlay Equipment	$7,053,197	$7,405,857	$7,776,149	$8,164,957	$8,573,205	$38,973,365
Rent/Lease Payments	$262,528	$441,476	$441,476	$441,476	$441,476	$2,028,432
COP Debt Service	$47,997,044	$47,783,545	$47,786,380	$47,784,252	$41,678,134	$233,029,355
Rent/Lease Relocatables	$3,423,794	$3,252,604	$3,089,974	$2,935,475	$2,788,702	$15,490,549
Environmental Problems	$0	$0	$0	$0	$0	$0
s.1011.14 Debt Service	$0	$0	$0	$0	$0	$0
Remodeling	$0	$0	$0	$0	$0	$0
One Cent - 1/2 Cent Sales Surtax Debt Service	$0	$0	$0	$0	$0	$0
Special Facilities Account	$0	$0	$0	$0	$0	$0
Survey Recommendations	$3,526,325	$3,526,325	$3,526,325	$3,526,325	$3,526,325	$17,631,625
School Improvements/Construction	$808,702	$1,646,700	$1,671,000	$1,696,000	$1,721,000	$7,543,402
Safety & Inspections	$77,652	$247,224	$264,530	$232,110	$239,000	$1,060,516
Technology Equipment/Software	$10,848,081	$11,173,524	$11,508,729	$11,853,991	$12,210,000	$57,594,325

struction Technology	$3,287,628	$3,386,000	$3,488,000	$3,593,000	$3,701,000	$17,455,628
Insurance Contingency-East Zone	$671,440	$1,161,204	$799,976	$1,418,186	$1,054,870	$5,105,676
Insurance Contingency-South Zone	$199,100	$44,800	$0	$90,000	$210,000	$543,900
Insurance Contingency-West Zone	$357,498	$1,159,680	$383,905	$691,320	$349,100	$2,941,503
Document Imaging	$13,005	$0	$0	$0	$0	$13,005
District Software Systems	$11,085,366	$0	$0	$0	$0	$11,085,366
Capitalized Personnel	$1,845,380	$1,993,024	$2,152,434	$2,324,200	$2,510,300	$10,825,338
Reserves	$167,940,906	$65,323,050	$85,180,514	$21,339,587	$39,563,519	$379,347,576
Local Expenditure Totals:	**$280,146,162**	**$169,328,065**	**$189,429,141**	**$127,954,713**	**$140,932,061**	**$907,790,142**

State PECO Funds For Maintenance, Repair and Renovation

Anticipated expenditures expected from state funding sources over the years covered by the current work plan.

Item	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
PECO Used for Maintenance, Repair, and Renovation	$5,549,091	$5,324,013	$4,757,019	$4,435,654	$4,406,997	$24,472,774
State PECO Maintenance Totals:	**$5,549,091**	**$5,324,013**	**$4,757,019**	**$4,435,654**	**$4,406,997**	**$24,472,774**

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2 Mill Revenue Source

Schedule of Estimated Capital Outlay Revenue from each currently approved source which is estimated to be available for expenditures on the projects included in the tentative district facilities work program. All amounts are NET after considering carryover balances, interest earned, new COP's, 1011.14 and 1011.15 loans, etc. Districts cannot use 2-Mill funds for salaries except for those explicitly associated with maintenance/repair projects. (1011.71 (5), F.S.)

Item	Fund	2007 - 2008 Actual Value	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
(1) Non-exempt property assessed valuation		$96,696,583,658	$106,366,242,024	$117,002,866,226	$128,703,152,850	$141,573,468,134	$590,342,312,892
(2) The Millege projected for discretionary capital outlay per s.1011.71		2.00	2.00	2.00	2.00	2.00	
(3) Full value of the 2-Mill discretionary capital outlay per s.1011.71		$183,723,509	$202,095,860	$222,305,446	$244,535,990	$268,989,589	$1,121,650,394
(4) Value of the portion of the 2-Mills ACTUALLY levied	370	$183,723,509	$202,095,860	$222,305,446	$244,535,990	$268,989,589	$1,121,650,394
(5) Difference of lines (3) and (4)		$0	$0	$0	$0	$0	$0

PECO Revenue Source

The figure in the row designated "PECO Maintenance" will be subtracted from funds available for new construction because PECO maintenance dollars cannot be used for new construction.

Item	Fund	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
PECO New Construction	340	$15,925,949	$4,237,782	$2,310,272	$3,395,962	$3,632,177	$29,502,142
PECO Maintenance		$5,549,091	$5,324,013	$4,757,019	$4,435,654	$4,406,997	$24,472,774
		$21,475,040	**$9,561,795**	**$7,067,291**	**$7,831,616**	**$8,039,174**	**$53,974,916**

CO & DS Revenue Source

Revenue from Capital Outlay and Debt Service funds.

Item	Fund	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
CO & DS Cash Flow-through Distributed	360	$873,572	$873,572	$873,572	$873,572	$873,572	$4,367,860
CO & DS Interest on Undistributed CO	360	$78,040	$78,040	$78,040	$78,040	$78,040	$390,200
		$951,612	**$951,612**	**$951,612**	**$951,612**	**$951,612**	**$4,758,060**

Fair Share Revenue Source

All legally binding commitments for proportionate fair-share mitigation for impacts on public school facilities must be included in the 5-year district work program.

ing reported for this section.

Sales Surtax Referendum

Specific information about any referendum for a 1-cent or ½-cent surtax referendum during the previous year.

Did the school district hold a surtax referendum during the past fiscal year (2006 - 2007) ? No

Additional Revenue Source

Any additional revenue sources

Item	2007 - 2008 Actual Value	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total
Classrooms for Kids	$35,776,033	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$95,776,033
Proceeds from a s.1011.14/15 F.S. Loans	$0	$0	$0	$0	$0	$0
District Bonds - Voted local bond referendum proceeds per s.9, Art VII State Constitution	$0	$0	$0	$0	$0	$0
Proceeds from Special Act Bonds	$0	$0	$0	$0	$0	$0
Estimated Revenue from CO & DS Bond	$0	$0	$0	$0	$0	$0
Proceeds from Voted Capital Improvements millage	$0	$0	$0	$0	$0	$0
Other Revenue for Other Capital Projects	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
Proceeds from 1/2 cent sales surtax authorized by school board	$0	$0	$0	$0	$0	$0
Proceeds from local governmental infrastructure sales surtax	$0	$0	$0	$0	$0	$0
Proceeds from Certificates of Participation (COP's) Sale	$0	$0	$0	$0	$0	$0
Classrooms First Bond proceeds amount authorized in FY 1997-98	$0	$0	$0	$0	$0	$0
Effort Index Grants	$0	$0	$0	$0	$0	$0
District Equity Recognition	$0	$0	$0	$0	$0	$0
Federal Grants	$0	$0	$0	$0	$0	$0
Proportionate share mitigation (actual cash revenue only, not in kind donations)	$0	$0	$0	$0	$0	$0
Impact fees received	$30,000,000	$25,000,000	$20,000,000	$15,000,000	$10,000,000	$100,000,000
Private donations	$0	$0	$0	$0	$0	$0
Grants from local governments or not-for-profit organizations	$0	$0	$0	$0	$0	$0
Interest, Including Profit On Investment	$6,867,173	$6,085,141	$4,736,553	$5,305,011	$4,642,413	$27,636,291
Revenue from Bonds pledging proceeds from 1 cent or 1/2 cent Sales Surtax	$0	$0	$0	$0	$0	$0

J Balance Carried Forward	$331,546,223	$167,940,906	$65,323,050	$85,180,514	$21,339,587	$671,330,280
Obligated Fund Balance Carried Forward	$0	$0	$0	$0	$0	$0
Special Facilities Account	$0	$0	$0	$0	$0	$0
Subtotal	**$404,289,429**	**$214,126,047**	**$105,159,603**	**$120,585,525**	**$51,082,000**	**$895,242,604**

Total Revenue Summary

Item Name	2007 - 2008 Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Five Year Total
Local Two Mill Discretionary Capital Outlay Revenue	$183,723,509	$202,095,860	$222,305,446	$244,535,990	$268,989,589	$1,121,650,394
Maintenance Expenditures	($51,252,514)	($15,514,843)	($22,909,667)	($21,563,751)	($22,326,317)	($133,567,092)
2 Mill Other Eligible Expenditures	($280,146,162)	($169,328,065)	($189,429,141)	($127,954,713)	($140,932,061)	($907,790,142)
PECO Maintenance Expenditures	($5,549,091)	($5,324,013)	($4,757,019)	($4,435,654)	($4,406,997)	($24,472,774)
PECO Maintenance Revenue	$5,549,091	$5,324,013	$4,757,019	$4,435,654	$4,406,997	$24,472,774
	($147,675,167)	**$17,252,952**	**$9,966,638**	**$95,017,526**	**$105,731,211**	**$80,293,160**

Item Name	2007 - 2008 Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Five Year Total
CO & DS Revenue	$951,612	$951,612	$951,612	$951,612	$951,612	$4,758,060
PECO New Construction Revenue	$15,925,949	$4,237,782	$2,310,272	$3,395,962	$3,632,177	$29,502,142
Other/Additional Revenue	$404,289,429	$214,126,047	$105,159,603	$120,585,525	$51,082,000	$895,242,604
Subtotal	**$421,166,990**	**$219,315,441**	**$108,421,487**	**$124,933,099**	**$55,665,789**	**$929,502,806**
Grand Total	**$273,491,823**	**$236,568,393**	**$118,388,125**	**$219,950,625**	**$161,397,000**	**$1,009,795,966**

Project Schedules

Capacity Project Schedules

A schedule of capital outlay projects necessary to ensure the availability of satisfactory classrooms for the projected student enrollment in K-12 programs.

Project Description	Location		2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	Total	Funded
New Elementary U/East Zone (K-5)	MANATEE ELEMENTARY	Planned Cost:	$9,195,445	$0	$0	$0	$0	$9,195,445	Yes
		Student Stations:	1,000	0	0	0	0	1,000	
		Total Classrooms:	54	0	0	0	0	54	
		Gross Sq Ft:	117,500	0	0	0	0	117,500	
New Elementary Y/West Zone (K-5)	PATRIOT ELEMENTARY	Planned Cost:	$4,076,761	$0	$0	$0	$0	$4,076,761	Yes
		Student Stations:	1,000	0	0	0	0	1,000	
		Total Classrooms:	54	0	0	0	0	54	
		Gross Sq Ft:	117,500	0	0	0	0	117,500	
New High School CCG (9-12)	EAST LEE COUNTY HIGH SCHOOL	Planned Cost:	$4,981,141	$0	$0	$0	$0	$4,981,141	Yes
		Student Stations:	2,106	0	0	0	0	2,106	
		Total Classrooms:	92	0	0	0	0	92	
		Gross Sq Ft:	301,871	0	0	0	0	301,871	
New Middle School II/West Zone (6-8)	CHALLENGER MIDDLE	Planned Cost:	$4,508,714	$0	$0	$0	$0	$4,508,714	Yes
		Student Stations:	1,334	0	0	0	0	1,334	
		Total Classrooms:	59	0	0	0	0	59	
		Gross Sq Ft:	161,867	0	0	0	0	161,867	
New Elementary Z/East Zone (K-5) Actual building	Location not specified	Planned Cost:	$24,134,807	$0	$0	$0	$0	$24,134,807	Yes
		Student Stations:	0	1,000	0	0	0	1,000	
		Total Classrooms:	0	54	0	0	0	54	
		Gross Sq Ft:	0	117,500	0	0	0	117,500	
Oak Hammock New Middle School KK/East (6-8)	Location not specified	Planned Cost:	$16,699,964	$0	$0	$0	$0	$16,699,964	Yes

		Student Stations:	0	1,334	0	0	0	1,334	
		Total Classrooms:	0	59	0	0	0	59	
		Gross Sq Ft:	0	161,867	0	0	0	161,867	
New Middle School LL/East (6-8)	Location not specified	Planned Cost:	$13,065,107	$25,434,893	$0	$0	$0	$38,500,000	Yes
		Student Stations:	0	0	1,334	0	0	1,334	
		Total Classrooms:	0	0	59	0	0	59	
		Gross Sq Ft:	0	0	161,867	0	0	161,867	
New Elementary V/East (K-5)	Location not specified	Planned Cost:	$7,759,500	$18,105,500	$0	$0	$0	$25,865,000	Yes
		Student Stations:	0	0	1,000	0	0	1,000	
		Total Classrooms:	0	0	54	0	0	54	
		Gross Sq Ft:	0	0	117,500	0	0	117,500	
Addition	LEHIGH ELEMENTARY	Planned Cost:	$4,500,000	$10,500,000	$0	$0	$0	$15,000,000	Yes
		Student Stations:	0	348	0	0	0	348	
		Total Classrooms:	0	18	0	0	0	18	
		Gross Sq Ft:	0	27,279	0	0	0	27,279	
New Elementary G1/East (K-5)	Location not specified	Planned Cost:	$0	$8,160,000	$19,040,000	$0	$0	$27,200,000	Yes
		Student Stations:	0	0	0	1,000	0	1,000	
		Total Classrooms:	0	0	0	54	0	54	
		Gross Sq Ft:	0	0	0	117,500	0	117,500	
New Elementary W/East (K-5)	Location not specified	Planned Cost:	$0	$0	$8,568,000	$19,992,000	$0	$28,560,000	Yes
		Student Stations:	0	0	0	0	1,000	1,000	
		Total Classrooms:	0	0	0	0	54	54	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Middle NN/East (6-8)	Location not specified	Planned Cost:	$0	$0	$38,219,625	$4,246,625	$0	$42,466,250	Yes
		Student Stations:	0	0	0	0	1,334	1,334	
		Total Classrooms:	0	0	0	0	59	59	
		Gross Sq Ft:	0	0	0	0	161,867	161,867	

/ High School JJJ/East (9-12)	Location not specified	Planned Cost:	$6,740,000	$53,920,000	$6,740,000	$0	$0	$67,400,000	Yes
		Student Stations:	0	0	0	2,106	0	2,106	
		Total Classrooms:	0	0	0	80	0	80	
		Gross Sq Ft:	0	0	0	301,871	0	301,871	
New Elementary/East (K-5)	Location not specified	Planned Cost:	$0	$0	$0	$9,000,000	$21,000,000	$30,000,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Middle OO/East (6-8)	Location not specified	Planned Cost:	$0	$0	$0	$40,140,000	$4,460,000	$44,600,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	161,867	161,867	
New Middle/East (6-	Location not specified	Planned Cost:	$0	$0	$0	$0	$42,147,000	$42,147,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	161,867	161,867	
New High School/East	Location not specified	Planned Cost:	$0	$0	$7,430,000	$59,440,000	$7,430,000	$74,300,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	301,871	301,871	
Replacement Building	HEIGHTS ELEMENTARY	Planned Cost:	$30,002,738	$0	$0	$0	$0	$30,002,738	Yes
		Student Stations:	0	1,000	0	0	0	1,000	
		Total Classrooms:	0	54	0	0	0	54	
		Gross Sq Ft:	0	117,500	0	0	0	117,500	
Addition	SPRING CREEK ELEMENTARY	Planned Cost:	$1,920,000	$4,480,000	$0	$0	$0	$6,400,000	Yes

		Student Stations:	0	318	0	0	0	318	
		Total Classrooms:	0	20	0	0	0	20	
		Gross Sq Ft:	0	27,279	0	0	0	27,279	
New Elementary/South (K-5)	Location not specified	Planned Cost:	$0	$0	$0	$9,000,000	$21,000,000	$30,000,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Elementary/East (K-5)	Location not specified	Planned Cost:	$0	$0	$0	$9,000,000	$21,000,000	$30,000,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Elementary/East (K-5)	Location not specified	Planned Cost:	$0	$0	$0	$0	$9,450,000	$9,450,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Elementary A/West Zone	Location not specified	Planned Cost:	$0	$0	$8,568,000	$19,992,000	$0	$28,560,000	Yes
		Student Stations:	0	0	0	1,000	0	1,000	
		Total Classrooms:	0	0	0	54	0	54	
		Gross Sq Ft:	0	0	0	117,500	0	117,500	
New ALC/West	Alternative Learning Center West	Planned Cost:	$1,165,097	$0	$0	$0	$0	$1,165,097	Yes
		Student Stations:	300	0	0	0	0	300	
		Total Classrooms:	17	0	0	0	0	17	
		Gross Sq Ft:	18,936	0	0	0	0	18,936	
New High School III/West Zone	Location not specified	Planned Cost:	$6,740,000	$53,920,000	$6,740,000	$0	$0	$67,400,000	Yes
		Student Stations:	0	0	0	2,106	0	2,106	
		Total Classrooms:	0	0	0	80	0	80	
		Gross Sq Ft:	0	0	0	301,871	0	301,871	

/ Elementary C1/West Zone	Location not specified	Planned Cost:	$7,759,500	$18,105,500	$0	$0	$0	$25,865,000	Yes
		Student Stations:	0	1,000	0	0	0	1,000	
		Total Classrooms:	0	54	0	0	0	54	
		Gross Sq Ft:	0	117,500	0	0	0	117,500	
New Elementary E/West Zone	Location not specified	Planned Cost:	$300,000	$7,860,000	$19,040,000	$0	$0	$27,200,000	Yes
		Student Stations:	0	0	1,000	0	0	1,000	
		Total Classrooms:	0	0	54	0	0	54	
		Gross Sq Ft:	0	0	117,500	0	0	117,500	
New Elementary/West Zone	Location not specified	Planned Cost:	$0	$0	$0	$9,000,000	$21,000,000	$30,000,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Elementary/West e	Location not specified	Planned Cost:	$0	$0	$0	$0	$9,450,000	$9,450,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	117,500	117,500	
New Middle MM/West Zone	Location not specified	Planned Cost:	$300,000	$36,082,500	$4,042,500	$0	$0	$40,425,000	Yes
		Student Stations:	0	0	1,334	0	0	1,334	
		Total Classrooms:	0	0	59	0	0	59	
		Gross Sq Ft:	0	0	161,867	0	0	161,867	
New Middle/West Zone	Location not specified	Planned Cost:	$0	$0	$0	$40,140,000	$4,460,000	$44,600,000	Yes
		Student Stations:	0	0	0	0	0	0	
		Total Classrooms:	0	0	0	0	0	0	
		Gross Sq Ft:	0	0	0	0	161,867	161,867	
New High School HHH-Island Coast High/West Zone	Location not specified	Planned Cost:	$49,423,733	$0	$0	$0	$0	$49,423,733	Yes

	Student Stations:	0	2,106	0	0	0	2,106	
	Total Classrooms:	0	80	0	0	0	80	
	Gross Sq Ft:	0	274,171	0	0	0	274,171	

Planned Cost:	**$193,272,507**	**$236,568,393**	**$118,388,125**	**$219,950,625**	**$161,397,000**	**$929,576,650**
Student Stations:	**5,740**	**7,106**	**4,668**	**6,212**	**2,334**	**26,060**
Total Classrooms:	**276**	**339**	**226**	**268**	**113**	**1,222**
Gross Sq Ft:	**717,674**	**843,096**	**558,734**	**838,742**	**1,771,839**	**4,730,085**

Other Project Schedules

Major renovations, remodeling, and additions of capital outlay projects that do not add capacity to schools.

Project Description	Location	2007 - 2008 Actual Budget	2008 - 2009 Projected	2009 - 2010 Projected	2010 - 2011 Projected	2011 - 2012 Projected	Total	Funded
Lee County Public Education Center	NEW ADMINISTRATIVE COMPLEX	$2,748,477	$0	$0	$0	$0	$2,748,477	Yes
East Transportation Facility at Leonard & Leonard	TRANSPORTATION EAST BUS FACILITY	$228,590	$0	$0	$0	$0	$228,590	Yes
West Transportation Depot	Location not specified	$49,350	$0	$0	$0	$0	$49,350	Yes
East Transportation Depot at Tice Street	TRANSPORTATION EAST BUS FACILITY	$209,688	$0	$0	$0	$0	$209,688	Yes
th Transportation Depot at .ero	TRANSPORTATION SOUTH -- ESTERO	$35,700	$0	$0	$0	$0	$35,700	Yes
Land/East Zone	Location not specified	$37,500,021	$0	$0	$0	$0	$37,500,021	Yes
Land/West Zone	Location not specified	$37,500,000	$0	$0	$0	$0	$37,500,000	Yes
Addition	ORANGE RIVER ELEMENTARY	$4,618	$0	$0	$0	$0	$4,618	Yes
Addition	SUNSHINE ELEMENTARY	$16,760	$0	$0	$0	$0	$16,760	Yes
Addition	MIRROR LAKES ELEMENTARY	$21,646	$0	$0	$0	$0	$21,646	Yes
Addition	BAYSHORE ELEMENTARY	$9,060	$0	$0	$0	$0	$9,060	Yes
New School in FY07	RIVER HALL ELEMENTARY	$852,268	$0	$0	$0	$0	$852,268	Yes
South Zone Land/Oakbrook Property Purchase	Location not specified	$50,000	$0	$0	$0	$0	$50,000	Yes
Addition	ALLEN PARK ELEMENTARY	$90,998	$0	$0	$0	$0	$90,998	Yes
Addition	SAN CARLOS PARK ELEMENTARY	$9,500	$0	$0	$0	$0	$9,500	Yes
Addition	TANGLEWOOD RIVERSIDE SCHOOL	$406	$0	$0	$0	$0	$406	Yes
Addition	VILLAS ELEMENTARY	$2,880	$0	$0	$0	$0	$2,880	Yes
Addition	COLONIAL ELEMENTARY	$13,500	$0	$0	$0	$0	$13,500	Yes
Balance remaining within project/not closed.	HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL	$109,280	$0	$0	$0	$0	$109,280	Yes

ance remaining within project/not closed	IDA S. BAKER HIGH SCHOOL	$2,198	$0	$0	$0	$0	$2,198	Yes
Addition	PELICAN ELEMENTARY	$18,247	$0	$0	$0	$0	$18,247	Yes
Addition	SKYLINE ELEMENTARY	$149,162	$0	$0	$0	$0	$149,162	Yes
Addition	HANCOCK CREEK ELEMENTARY	$11,120	$0	$0	$0	$0	$11,120	Yes
Addition	CALOOSA ELEMENTARY	$9,520	$0	$0	$0	$0	$9,520	Yes
Addition	TROPIC ISLES ELEMENTARY	$6,375	$0	$0	$0	$0	$6,375	Yes
Addition	DIPLOMAT ELEMENTARY	$11,880	$0	$0	$0	$0	$11,880	Yes
Addition	CAPE CORAL ELEMENTARY	$54,735	$0	$0	$0	$0	$54,735	Yes
Ida S. Baker/Gulf Athletic Field	Location not specified	$1,737	$0	$0	$0	$0	$1,737	Yes
Appraisals for Buildings	Location not specified	$1,600	$0	$0	$0	$0	$1,600	Yes
Treeline Staging School	EAST ZONE STAGING SCHOOL	$500,000	$0	$0	$0	$0	$500,000	Yes
		$80,219,316	**$0**	**$0**	**$0**	**$0**	**$80,219,316**	

Additional Project Schedules

Any projects that are not identified in the last approved educational plant survey.

Nothing reported for this section.

Non Funded Growth Management Project Schedules

Schedule indicating which projects, due to planned development, that CANNOT be funded from current revenues projected over the next five years.

Nothing reported for this section.

Tracking

Capacity Tracking

Location	2007 - 2008 Satis. Stu. Sta.	Actual 2007 - 2008 FISH Capacity	Actual 2006 - 2007 COFTE	# Class Rooms	Actual Average 2007 - 2008 Class Size	Actual 2007 - 2008 Utilization	New Stu. Capacity	New Rooms to be Added/Removed	Projected 2011 - 2012 COFTE	Projected 2011 - 2012 Utilization	Projected 2011 - 2012 Class Size
THE SANIBEL SCHOOL	498	448	387	24	16	86.00 %	-95	-3	346	98.00 %	16
TICE ELEMENTARY	699	699	629	37	17	90.00 %	-160	-8	521	97.00 %	18
TROPIC ISLES ELEMENTARY	1,087	1,087	993	59	17	91.00 %	-90	-4	979	98.00 %	18
VILLAS ELEMENTARY	1,015	1,015	867	55	16	85.00 %	-158	-6	839	98.00 %	17
MICHIGAN INTERNATIONAL ACADEMY	857	771	671	44	15	87.00 %	-159	-11	606	99.00 %	18
HARNS MARSH ELEMENTARY SCHOOL	930	930	937	50	19	101.00 %	-58	-2	854	98.00 %	18
WEST ZONE STAGING SCHOOL	714	643	340	29	12	53.00 %	-714	-29	0	0.00 %	0
NORTH FORT MYERS SENIOR HIGH	2,296	2,181	1,981	92	22	91.00 %	-413	-16	1,764	100.00 %	23
[illegible]NGE RIVER [illegible]EMENTARY	925	925	844	50	17	91.00 %	-160	-6	747	98.00 %	17
ORANGEWOOD ELEMENTARY	764	764	706	41	17	92.00 %	-210	-9	531	96.00 %	17
PINE ISLAND ELEMENTARY	409	409	345	22	16	84.00 %	-62	-2	329	95.00 %	16
NEW ADMINISTRATIVE COMPLEX	0	0	0	0	0	0.00 %	0	0	0	0.00 %	0
Alternative Learning Center West	265	0	0	12	0	0.00 %	378	17	353	93.00 %	12
RIVER HALL ELEMENTARY	1,046	1,046	744	56	13	71.00 %	-36	-1	1,002	99.00 %	18
LEXINGTON MIDDLE SCHOOL	1,141	1,027	920	51	18	90.00 %	-7	0	999	98.00 %	20
EAST LEE COUNTY HIGH SCHOOL	2,040	0	0	85	0	0.00 %	2,020	85	2,022	100.00 %	12
MANATEE ELEMENTARY	1,070	0	0	59	0	0.00 %	1,070	59	1,016	95.00 %	9
PATRIOT ELEMENTARY	1,070	0	0	59	0	0.00 %	1,070	59	1,016	95.00 %	9
CHALLENGER MIDDLE	1,397	0	0	62	0	0.00 %	1,397	62	1,170	84.00 %	9
NORTH VO-TECH	324	324	75	17	4	23.00 %	0	0	0	0.00 %	0
NEW DIRECTIONS SCHOOL	665	665	531	37	14	80.00 %	-25	-2	217	34.00 %	6
VETERAN'S PARK ACADEMY FOR THE ARTS	1,964	1,768	1,529	91	17	86.00 %	-164	-3	1,602	100.00 %	18
[illegible]ARINER MIDDLE	1,268	1,141	981	54	18	86.00 %	-12	0	1,108	98.00 %	21

F PRIMARY	0	0	0	0	0	0.00 %	0	0	0	0.00 %	0
RAY V. POTTORF ELEMENTARY SCHOOL	930	930	738	50	15	79.00 %	-54	-2	858	98.00 %	18
HANCOCK CREEK ELEMENTARY	1,062	1,062	944	58	16	89.00 %	-47	-1	997	98.00 %	17
LEHIGH SENIOR HIGH	2,112	2,006	2,101	84	25	105.00 %	-170	-6	1,820	99.00 %	23
COLONIAL ELEMENTARY	1,019	1,019	755	55	14	74.00 %	-34	-4	912	93.00 %	18
LITTLETON ELEMENTARY	774	774	746	42	18	96.00 %	-125	-5	631	97.00 %	17
GATEWAY ELEMENTARY	824	824	881	43	20	107.00 %	-144	-5	662	97.00 %	17
THREE OAKS MIDDLE	1,141	1,027	838	50	17	82.00 %	-44	-2	965	98.00 %	20
MARINER SENIOR HIGH	2,162	2,054	1,998	85	24	97.00 %	-438	-17	1,613	100.00 %	24
ESTERO SENIOR HIGH	2,034	1,932	1,606	82	20	83.00 %	-290	-11	1,632	99.00 %	23
THREE OAKS ELEMENTARY	810	810	812	44	18	100.00 %	-108	-7	684	97.00 %	18
VARSITY LAKES MIDDLE	1,138	1,024	995	50	20	97.00 %	-32	-1	973	98.00 %	20
TRAFALGAR ELEMENTARY	977	977	896	50	18	92.00 %	-65	0	894	98.00 %	18
RAYMA C. PAGE ELEMENTARY	836	836	687	44	16	82.00 %	22	3	840	98.00 %	18
IDA S. BAKER HIGH SCHOOL	2,137	2,030	1,969	86	23	97.00 %	-45	-1	1,962	99.00 %	23
OUTH FORT MYERS H SCHOOL	2,027	1,926	1,283	81	16	67.00 %	-49	-1	1,854	99.00 %	23
MIRROR LAKES ELEMENTARY	1,089	1,089	1,060	60	18	97.00 %	-79	-3	982	97.00 %	17
PAUL LAURENCE DUNBAR MIDDLE	1,126	1,013	875	49	18	86.00 %	-37	-1	958	98.00 %	20
PELICAN ELEMENTARY	1,362	1,362	1,146	76	15	84.00 %	-48	-1	1,276	97.00 %	17
GULF MIDDLE	1,113	1,002	1,120	49	23	112.00 %	-98	-4	892	99.00 %	20
GULF ELEMENTARY	1,396	1,396	1,364	76	18	98.00 %	-102	-4	1,276	99.00 %	18
PINEWOODS ELEMENTARY	1,080	1,080	906	59	15	84.00 %	-45	-2	1,017	98.00 %	18
ROYAL PALM EXCEPTIONAL SCHOOL	230	230	185	23	8	80.00 %	20	4	226	90.00 %	8
DIPLOMAT MIDDLE	1,082	974	1,041	47	22	107.00 %	-8	0	945	98.00 %	20
CALOOSA MIDDLE	1,117	1,005	1,095	50	22	109.00 %	-54	-2	935	98.00 %	19
RIVERDALE HIGH	2,386	2,147	2,096	96	22	98.00 %	-375	-15	1,885	106.00 %	23
NORTH FORT MYERS ACADEMY OF THE ARTS	1,876	1,688	1,331	82	16	79.00 %	-455	-19	1,263	102.00 %	20
BONITA SPRINGS MIDDLE	973	876	560	44	13	64.00 %	-32	-1	825	98.00 %	19
CAPE CORAL SENIOR HIGH	2,092	1,987	2,119	86	25	107.00 %	-177	-7	1,772	98.00 %	22
SAN CARLOS PARK ELEMENTARY	1,081	1,081	868	59	15	80.00 %	-82	-4	981	98.00 %	18
HEIGHTS ELEMENTARY	911	911	675	49	14	74.00 %	395	22	1,288	99.00 %	18

'SHORE ELEMENTARY	711	711	628	39	16	88.00 %	-76	-2	621	98.00 %	17
CYPRESS LAKE SENIOR HIGH	1,818	1,727	1,470	71	21	85.00 %	25	-1	1,655	94.00 %	24
LEE COUNTY HIGH TECH CENTRAL	885	1,062	121	45	3	11.00 %	-304	-11	0	0.00 %	0
TANGLEWOOD RIVERSIDE SCHOOL	793	793	698	44	16	88.00 %	-46	-1	729	98.00 %	17
CALOOSA ELEMENTARY	1,093	1,093	974	60	16	89.00 %	-31	-2	1,038	98.00 %	18
SKYLINE ELEMENTARY	1,398	1,398	1,105	78	14	79.00 %	-108	-5	1,242	96.00 %	17
TRAFALGAR MIDDLE	1,413	1,272	1,279	60	21	101.00 %	-276	-14	1,001	101.00 %	22
DIPLOMAT ELEMENTARY	1,086	1,086	941	59	16	87.00 %	-121	-3	955	99.00 %	17
LEE MIDDLE	1,095	986	669	48	14	68.00 %	-76	-3	895	98.00 %	20
LEHIGH ELEMENTARY	1,002	1,002	1,007	54	19	100.00 %	52	3	1,040	99.00 %	18
SPRING CREEK ELEMENTARY	897	897	772	48	16	86.00 %	137	9	1,016	98.00 %	18
LEHIGH ACRES MIDDLE	1,262	1,136	998	54	18	88.00 %	-98	-4	985	95.00 %	20
BUCKINGHAM EXCEPTIONAL STUDENT CENTER	115	115	107	12	9	93.00 %	-15	-2	88	88.00 %	9
SUNSHINE ELEMENTARY	1,271	1,271	1,129	69	16	89.00 %	-163	-7	1,090	98.00 %	18
EDISON PARK 'EATIVE AND 'RESSIVE ARTS SCHOOL	449	449	377	24	16	84.00 %	-13	0	418	96.00 %	17
FORT MYERS BEACH ELEMENTARY	200	200	192	10	19	96.00 %	-13	0	161	86.00 %	16
FORT MYERS MIDDLE ACADEMY	953	858	756	43	18	88.00 %	8	0	843	97.00 %	20
FORT MYERS SENIOR HIGH	2,192	2,082	1,918	92	21	92.00 %	-145	8	1,920	99.00 %	19
FRANKLIN PARK ELEMENTARY	699	699	466	37	13	67.00 %	-129	-6	552	97.00 %	18
J COLIN ENGLISH ELEMENTARY	651	651	608	35	17	93.00 %	-69	-3	566	97.00 %	18
BONITA SPRINGS ELEMENTARY	467	467	390	25	16	84.00 %	-62	-3	365	90.00 %	17
CAPE CORAL ELEMENTARY	916	916	862	50	17	94.00 %	-5	-1	855	94.00 %	17
CYPRESS LAKE MIDDLE	1,154	1,039	834	51	16	80.00 %	-198	-9	838	100.00 %	20
DUNBAR COMMUNITY SCHOOL	260	0	0	11	0	0.00 %	0	0	0	0.00 %	0
DUNBAR HIGH SCHOOL	1,307	1,176	834	51	16	71.00 %	-151	-5	958	93.00 %	21
EDGEWOOD ACADEMY	777	777	690	42	16	89.00 %	-64	-1	695	97.00 %	17
HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL	883	883	762	47	16	86.00 %	-103	-3	762	98.00 %	17
EAST ZONE STAGING SCHOOL	788	709	835	41	20	118.00 %	-78	-3	692	110.00 %	18
LEN PARK ELEMENTA	1,061	1,061	872	58	15	82.00 %	-51	-3	992	98.00 %	18

A MIDDLE	703	633	557	30	19	88.00 %	-132	-6	492	98.00 %	21
ALVA ELEMENTARY	391	391	444	21	21	113.00 %	-1	0	284	73.00 %	14
	90,031	**80,455**	**70,458**	**4,304**	**16**	**87.57 %**	**-1,694**	**5**	**75,587**	**95.97 %**	**18**

The COFTE Projected Total (75,587) for 2011 - 2012 must match the Official Forecasted COFTE Total (84,869) for 2011 - 2012 before this section can be completed. In the event that the COFTE Projected Total does not match the Official forecasted COFTE, then the Balanced Projected COFTE Table should be used to balance COFTE.

Projected COFTE for 2011 - 2012	
Elementary (PK-3)	28,912
High (9-12)	23,055
Middle (4-8)	32,902
	84,869

Grade Level Type	Balanced Projected COFTE for 2011 - 2012
Elementary (PK-3)	3,163
Middle (4-8)	3,598
High (9-12)	2,521
	84,869

Relocatable Replacement

Number of relocatable classrooms clearly identified and scheduled for replacement in the school board adopted financially feasible 5-year district work program.

Location	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	Year 5 Total
ALLEN PARK ELEMENTARY	0	0	1	0	0	1
ALVA MIDDLE	0	0	6	0	0	6
BONITA SPRINGS ELEMENTARY	0	0	3	0	0	3
CYPRESS LAKE MIDDLE	0	0	0	8	0	8
HANCOCK CREEK ELEMENTARY	0	0	0	1	0	1
LEHIGH SENIOR HIGH	0	0	0	6	0	6
Alternative Learning Center West	0	12	0	0	0	12
GULF MIDDLE	0	0	4	0	0	4
PINEWOODS ELEMENTARY	0	0	2	0	0	2
MIRROR LAKES ELEMENTARY	0	0	0	1	0	1
EDGEWOOD ACADEMY	0	0	2	0	0	2
FORT MYERS SENIOR HIGH	0	0	0	5	0	5
FRANKLIN PARK ELEMENTARY	0	0	4	2	0	6
J COLIN ENGLISH ELEMENTARY	0	0	0	3	0	3
LEE MIDDLE	0	3	0	0	0	3
LEHIGH ELEMENTARY	0	0	6	7	0	13
SPRING CREEK ELEMENTARY	0	0	0	6	2	8

IGH ACRES MIDDLE	0	0	4	0	0	4
BUCKINGHAM EXCEPTIONAL STUDENT CENTER	0	0	2	0	0	2
SUNSHINE ELEMENTARY	0	3	0	0	0	3
MARINER SENIOR HIGH	0	0	0	7	7	14
ESTERO SENIOR HIGH	0	5	5	0	0	10
THREE OAKS ELEMENTARY	0	0	0	6	0	6
SKYLINE ELEMENTARY	0	0	0	1	0	1
TRAFALGAR MIDDLE	0	0	0	8	6	14
COLONIAL ELEMENTARY	0	0	0	3	0	3
LITTLETON ELEMENTARY	0	0	0	2	0	2
GATEWAY ELEMENTARY	0	0	0	0	3	3
THREE OAKS MIDDLE	0	0	2	0	0	2
WEST ZONE STAGING SCHOOL	0	0	0	0	29	29
NORTH FORT MYERS SENIOR HIGH	0	0	7	7	0	14
ORANGE RIVER ELEMENTARY	0	0	6	0	0	6
ORANGEWOOD ELEMENTARY	0	0	0	7	0	7
PINE ISLAND ELEMENTARY	0	0	0	0	1	1
E SANIBEL SCHOOL	0	0	0	0	3	3
E ELEMENTARY	0	0	0	5	2	7
TROPIC ISLES ELEMENTARY	0	0	2	0	0	2
VILLAS ELEMENTARY	0	0	0	4	0	4
MICHIGAN INTERNATIONAL ACADEMY	0	0	0	2	4	6
HEIGHTS ELEMENTARY	0	10	2	0	0	12
BAYSHORE ELEMENTARY	0	1	0	0	0	1
CYPRESS LAKE SENIOR HIGH	0	3	0	0	0	3
LEE COUNTY HIGH TECH CENTRAL	0	0	0	6	6	12
CALOOSA ELEMENTARY	0	0	1	0	0	1
RIVERDALE HIGH	0	0	0	5	4	9
NORTH FORT MYERS ACADEMY OF THE ARTS	0	12	5	0	0	17
CAPE CORAL SENIOR HIGH	0	0	0	7	0	7
Total Relocatable Replacements:	**0**	**49**	**64**	**109**	**67**	**289**

Charter Schools Tracking

Information regarding the use of charter schools.

Location-Type	# Relocatable units or permanent classrooms	Owner	Year Started or Scheduled	Student Stations	Students Enrolled	Years in Contract	Total Charter Students projected for 2011 - 2012
The Island School K-5	4	PRIVATE	2000	60	45	8	60
The Richard Milburn Academy	16	PRIVATE	2001	350	275	2	350
Bonita Springs Charter K-8	70	PRIVATE	2002	1,367	1,295	6	1,367
Gateway Charter K-8	47	PRIVATE	2003	1,000	1,532	5	1,600
Gateway Charter High	67	PRIVATE	2004	1,600	745	4	1,000
Cape Coral Charter K-8	60	PRIVATE	2004	1,340	619	4	1,340
Lee Charter Academy K-8	17	PRIVATE	2004	330	193	4	356
Oasis South K-5	32	MUNICIPAL	2004	608	608	3	580
Goodwill L.I.F.E. Academy 6-12	7	PRIVATE	2005	75	34	3	48
Six Mile Charter Academy K-8	60	PRIVATE	2005	1,340	1,002	3	1,340
Oasis Middle 6-8	28	MUNICIPAL	2006	660	246	2	246
Life Skills Center 9-12	8	PRIVATE	2006	133	249	2	440
City of Cape Coral Charter High 9 -12	4	MUNICIPAL	2007	50	34	1	600
Christa McAuliffe Charter K-5	32	MUNICIPAL	2006	596	556	2	596
	452			**9,509**	**7,433**		**9,923**

Special Purpose Classrooms Tracking

The number of classrooms that will be used for certain special purposes in the current year, by facility and type of classroom, that the district will, 1), not use for educational purposes, and 2), the co-teaching classrooms that are not open plan classrooms and will be used for educational purposes.

School	School Type	# of Elementary K-3 Classrooms	# of Middle 4-8 Classrooms	# of High 9-12 Classrooms	# of ESE Classrooms	# of Combo Classrooms	Total Classrooms
Total Educational Classrooms:		**0**	**0**	**0**	**0**	**0**	**0**

School	School Type	# of Elementary K-3 Classrooms	# of Middle 4-8 Classrooms	# of High 9-12 Classrooms	# of ESE Classrooms	# of Combo Classrooms	Total Classrooms
VARSITY LAKES MIDDLE	Co-Teaching	0	1	0	0	0	1
TRAFALGAR ELEMENTARY	Co-Teaching	1	0	0	0	0	1
RAYMA C. PAGE ELEMENTARY	Co-Teaching	3	0	0	0	0	3
MIRROR LAKES ELEMENTARY	Co-Teaching	1	0	0	0	0	1
PELICAN ELEMENTARY	Co-Teaching	0	1	0	0	0	1
GULF ELEMENTARY	Co-Teaching	2	2	0	0	0	4
WEST ZONE STAGING SCHOOL	Co-Teaching	0	0	1	0	0	1
NORTH FORT MYERS SENIOR HIGH	Co-Teaching	0	0	3	0	0	3
ORANGEWOOD ELEMENTARY	Co-Teaching	0	1	0	0	0	1

ERAN'S PARK ACADEMY FOR THE ARTS	Co-Teaching	7	1	0	0	0	8
MARINER MIDDLE	Co-Teaching	0	3	0	0	0	3
CAPE CORAL ELEMENTARY	Co-Teaching	10	4	0	0	0	14
CYPRESS LAKE MIDDLE	Co-Teaching	0	6	0	0	0	6
ALVA MIDDLE	Co-Teaching	0	6	0	0	0	6
DIPLOMAT MIDDLE	Co-Teaching	0	5	0	0	0	5
NORTH FORT MYERS ACADEMY OF THE ARTS	Co-Teaching	1	0	0	0	0	1
HEIGHTS ELEMENTARY	Co-Teaching	1	0	0	0	0	1
BAYSHORE ELEMENTARY	Co-Teaching	0	2	0	0	0	2
CALOOSA ELEMENTARY	Co-Teaching	6	3	0	0	0	9
THE SANIBEL SCHOOL	Co-Teaching	8	4	0	0	0	12
TROPIC ISLES ELEMENTARY	Co-Teaching	3	2	0	0	0	5
THREE OAKS MIDDLE	Co-Teaching	0	6	0	0	0	6
THREE OAKS ELEMENTARY	Co-Teaching	1	0	0	0	0	1
DIPLOMAT ELEMENTARY	Co-Teaching	3	0	0	0	0	3
LEE MIDDLE	Co-Teaching	0	2	0	0	0	2
Total Co-Teaching Classrooms:		**47**	**49**	**4**	**0**	**0**	**100**

Infrastructure Tracking

Necessary offsite infrastructure requirements resulting from expansions or new schools. This section should include infrastructure information related to capacity project schedules and other project schedules (Section 4).

East Elementary U (PK-5) Utilities, Sidewalks
New East Elementary Z (PK-5) Utilities, Sidewalks
New East Elementary G1 (PK-5) Utilities, Sidewalks
New East Elementary H (PK-5) Utilities, Sidewalks
New East Elementary I (PK-5) Utilities, Sidewalks
New Elementary East V (PK-5) Utilities, Sidewalks
New Elementary East W (PK-5) Utilities, Sidewalks
New Elementary East (PK-5) Utilities, Sidewalks
New Elementary East (PK-5) Utilities, Sidewalks
New Elementary East (PK-5) Utilities, Sidewalks
New Elementary East (PK-5) Utilities, Sidewalks
New Elementary East (PK-5) Utilities, Sidewalks
New East Middle KK (Orange River) (6-8) Utilities, Sidewalks
New East Middle LL (6-8) Utilities, Sidewalks
New East Middle NN (6-8) Utilities, Sidewalks
New East Middle OO (6-8) Utilities, Sidewalks
New East Middle (6-8) Utilities, Sidewalks
New East Middle (6-8) Utilities, Sidewalks
New East Middle (6-8) Utilities, Sidewalks
New East High School GGG (East Lee County High) (9-12) Utilities, Sidewalks
New East High School JJJ (9-12) Utilities, Sidewalks
New East High School (9-12) Utilities, Sidewalks
New East High School (9-12) Utilities, Sidewalks
East Zone Staging School None Needed
South Elementary Utilities, Sidewalks
South Elementary Utilities, Sidewalks
New South High School (9-12) Utilities, Sidewalks
Challenger Middle School II (6-8) Utilities, Sidewalks
New West Middle MM (6-8) Utilities, Sidewalks
New West Middle (6-8) Utilities, Sidewalks
New West Middle (6-8) Utilities, Sidewalks
New West Middle (6-8) Utilities, Sidewalks
New C West (6-12) Utilities, Sidewalks
West Elementary Y (PK-5) Utilities, Sidewalks
West Elementary E (PK-5) Utilities, Sidewalks
West Elementary A (PK-5) Utilities, Sidewalks
West Elementary C1(PK-5) Utilities, Sidewalks
West Elementary (PK-5) Utilities, Sidewalks
West Elementary (PK-5) Utilities, Sidewalks
West Elementary (PK-5) Utilities, Sidewalks
West Elementary (PK-5) Utilities, Sidewalks
West Middle MM (6-8) Utilities, Sidewalks
West High School HHH (9-12)(Island Coast High) Utilities, Sidewalks
West High School III (9-12) Utilities, Sidewalks
West High (9-12) Utilities, Sidewalks

Proposed location of planned facilities, whether those locations are consistent with the comprehensive plans of all affected local governments, and recommendations for infrastructure and other improvements to land adjacent to existing facilities. Provisions of 1013.33(12), (13) and (14) and 1013.36 must be addressed for new facilities planned within the 1st three years of the plan (Section 5).

East Zone Elementary U for 1000 student stations to be completed in FY07 to accommodate growth
New East Zone Elementary Z for 1000 student stations to be completed in FY08 to accommodate growth
New East Zone Elementary V for 1000 student stations to be completed in FY09 to accomodate growth.
Lehigh Elementary Addition to be completed in FY09 to accommodate growth
New East Elementary G1 for 1000 student stations to be completed in FY10 to accommodate growth
New East Zone Elementary I for 1000 student stations to be completed in FY10 to accommodate growth
New East Elementary W for 1000 student stations to be completed in FY11 to accommodate growth
New East Elementary H for 1000 student stations to be completed in FY12 to accommodate growth
New East Elementary for 1000 student stations to be completed in FY12 to accommodate growth
New East Zone Middle School KK for 1334 student stations to be completed in FY08 to accommodate growth
New East Zone Middle School LL for 1334 student stations to be completed in FY09 to accommodate growth
New East Zone Middle School NN for 1334 student stations to be completed in FY11 to accommodate growth
New East Zone Middle School OO for 1334 student stations to be completed in FY12 to accommodate growth
New East Zone High School GGG for 2106 student stations to be completed in FY07
New East Zone High School JJJ for 2106 student stations to be completed in FY10 to accommodate growth
New East Zone High School for 2106 student stations to be completed in FY12 to accommodate growth
New West Zone Elementary Y for 1000 student stations to be completed in FY07 to accommodate growth
New West Zone Elementary C1 for 1000 student stations to be completed in FY09 to accommodate growth
New West Zone Elementary E for 1000 student stations to be completed in FY10 to accommodate growth
New West Zone Elementary A for 1000 student stations to be completed in FY11 to accommodate growth
New West Zone Elementary for 1000 student stations to be completed in FY12 to accommodate growth
New West Zone Middle School II for 1334 student stations to be completed in FY07
New West Zone Middle School MM for 1334 student stations to be completed in FY10 to accommodate growth
New West Zone Middle School for 1334 student stations to be completed in FY12 to accommodate growth
New West Zone High School HHH for 2106 student stations to be completed in FY08
New West Zone High School III for 2106 student stations to be completed in FY10
South Zone Heights Elementary School Replacement to be completed in FY08 to accommodate growth
South Zone Spring Creek Elementary Addition to be completed in FY09 to accommodate growth
New South Zone Elementary for 1000 student stations to be completed in FY12 to accommodate growth

Consistent with Comp Plan? Yes

New Classrooms

The number of classrooms, by grade level and type of construction, that were added during the last fiscal year.

List the net new classrooms added in the 2006-07 fiscal year.					List the net new classrooms to be added in the 2007-08 fiscal year.			
"Classrooms" is defined as capacity carrying classrooms that are added to increase capacity to enable the district to meet the Class Size Amendment.					Totals for fiscal year 2007-08 should match totals in Section 15A.			
Location	2006 - 2007 # Permanent	2006 - 2007 # Modular	2006 - 2007 # Relocatable	2006 - 2007 Total	2007 - 2008 # Permanent	2007 - 2008 # Modular	2007 - 2008 # Relocatable	2007 - 2008 Total
Elementary (PK-3)	452	0	0	452	82	0	0	82
Middle (4-8)	0	0	29	29	95	0	0	95
High (9-12)	0	0	12	12	85	0	0	85
	452	**0**	**41**	**493**	**262**	**0**	**0**	**262**

Relocatable Student Stations

Number of students that will be educated in relocatable units, by school, in the current year, and the projected number of students for each of the years in the workplan.

Site	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	5 Year Average
VARSITY LAKES MIDDLE	0	0	0	0	0	0
TRAFALGAR ELEMENTARY	0	0	0	0	0	0

'MA C. PAGE ELEMENTARY	0	0	0	0	0	0
IDA S. BAKER HIGH SCHOOL	0	0	0	0	0	0
SOUTH FORT MYERS HIGH SCHOOL	0	0	0	0	0	0
HECTOR A. CAFFERATA, JR. ELEMENTARY SCHOOL	0	0	0	0	0	0
EAST ZONE STAGING SCHOOL	0	0	0	0	0	0
ALLEN PARK ELEMENTARY	5	5	0	0	0	2
ALVA MIDDLE	132	132	0	0	0	53
ALVA ELEMENTARY	0	0	0	0	0	0
BONITA SPRINGS ELEMENTARY	62	62	0	0	0	25
CAPE CORAL ELEMENTARY	0	0	0	0	0	0
CYPRESS LAKE MIDDLE	176	176	176	0	0	106
HANCOCK CREEK ELEMENTARY	18	18	18	0	0	11
LEHIGH SENIOR HIGH	150	150	150	0	0	90
NORTH VO-TECH	0	0	0	0	0	0
NEW DIRECTIONS SCHOOL	0	0	0	0	0	0
VETERAN'S PARK ACADEMY FOR THE ARTS	0	0	0	0	0	0
MARINER MIDDLE	0	0	0	0	0	0
'LF PRIMARY	0	0	0	0	0	0
.. .Y V. POTTORF ELEMENTARY SCHOOL	0	0	0	0	0	0
EAST LEE COUNTY HIGH SCHOOL	0	0	0	0	0	0
MANATEE ELEMENTARY	0	0	0	0	0	0
PATRIOT ELEMENTARY	0	0	0	0	0	0
CHALLENGER MIDDLE	0	0	0	0	0	0
NEW ADMINISTRATIVE COMPLEX	0	0	0	0	0	0
Alternative Learning Center West	265	0	0	0	0	53
SAN CARLOS PARK ELEMENTARY	0	0	0	0	0	0
PELICAN ELEMENTARY	0	0	0	0	0	0
GULF MIDDLE	88	88	0	0	0	35
GULF ELEMENTARY	0	0	0	0	0	0
PINEWOODS ELEMENTARY	36	36	0	0	0	14
ROYAL PALM EXCEPTIONAL SCHOOL	0	0	0	0	0	0
DIPLOMAT MIDDLE	0	0	0	0	0	0
MIRROR LAKES ELEMENTARY	18	18	18	0	0	11
PAUL LAURENCE DUNBAR MIDDLE	0	0	0	0	0	0
DUNBAR COMMUNITY SCHOOL	0	0	0	0	0	0

NBAR HIGH SCHOOL	0	0	0	0	0	0
EDGEWOOD ACADEMY	36	36	0	0	0	14
EDISON PARK CREATIVE AND EXPRESSIVE ARTS SCHOOL	0	0	0	0	0	0
FORT MYERS BEACH ELEMENTARY	0	0	0	0	0	0
FORT MYERS MIDDLE ACADEMY	0	0	0	0	0	0
FORT MYERS SENIOR HIGH	125	125	125	0	0	75
FRANKLIN PARK ELEMENTARY	120	120	36	0	0	55
J COLIN ENGLISH ELEMENTARY	54	54	54	0	0	32
LEE MIDDLE	66	0	0	0	0	13
LEHIGH ELEMENTARY	238	238	126	0	0	120
SPRING CREEK ELEMENTARY	144	144	144	36	0	94
LEHIGH ACRES MIDDLE	88	88	0	0	0	35
BUCKINGHAM EXCEPTIONAL STUDENT CENTER	15	15	0	0	0	6
SUNSHINE ELEMENTARY	62	0	0	0	0	12
MARINER SENIOR HIGH	350	350	350	175	0	245
ESTERO SENIOR HIGH	250	125	0	0	0	75
THREE OAKS ELEMENTARY	72	72	72	0	0	43
YLINE ELEMENTARY	18	18	18	0	0	11
RAFALGAR MIDDLE	264	264	264	132	0	185
DIPLOMAT ELEMENTARY	0	0	0	0	0	0
COLONIAL ELEMENTARY	54	54	54	0	0	32
LITTLETON ELEMENTARY	36	36	36	0	0	22
GATEWAY ELEMENTARY	66	66	66	66	0	53
THREE OAKS MIDDLE	44	44	0	0	0	18
RIVER HALL ELEMENTARY	0	0	0	0	0	0
LEXINGTON MIDDLE SCHOOL	0	0	0	0	0	0
HARNS MARSH ELEMENTARY SCHOOL	0	0	0	0	0	0
WEST ZONE STAGING SCHOOL	714	714	714	714	0	571
NORTH FORT MYERS SENIOR HIGH	350	350	175	0	0	175
ORANGE RIVER ELEMENTARY	108	108	0	0	0	43
ORANGEWOOD ELEMENTARY	127	127	127	0	0	76
PINE ISLAND ELEMENTARY	18	18	18	18	0	14
THE SANIBEL SCHOOL	59	59	59	59	0	47
TICE ELEMENTARY	112	112	112	36	0	74
TROPIC ISLES ELEMENTARY	36	36	0	0	0	14

LAS ELEMENTARY	72	72	72	0	0	43
MICHIGAN INTERNATIONAL ACADEMY	120	120	120	43	0	81
HEIGHTS ELEMENTARY	216	36	0	0	0	50
BAYSHORE ELEMENTARY	18	0	0	0	0	4
CYPRESS LAKE SENIOR HIGH	0	0	0	0	0	0
LEE COUNTY HIGH TECH CENTRAL	210	210	210	105	0	147
TANGLEWOOD RIVERSIDE SCHOOL	0	0	0	0	0	0
CALOOSA ELEMENTARY	18	18	0	0	0	7
CALOOSA MIDDLE	0	0	0	0	0	0
RIVERDALE HIGH	225	225	225	100	0	155
NORTH FORT MYERS ACADEMY OF THE ARTS	367	110	0	0	0	95
BONITA SPRINGS MIDDLE	0	0	0	0	0	0
CAPE CORAL SENIOR HIGH	175	175	175	0	0	105

Totals for LEE COUNTY SCHOOL DISTRICT						
Total students in relocatables by year.	**5,997**	**5,024**	**3,714**	**1,484**	**0**	**3,244**
Total number of COFTE students projected by year.	**70,458**	**74,401**	**77,196**	**80,624**	**84,135**	**77,363**
Percent in relocatables by year.	**9 %**	**7 %**	**5 %**	**2 %**	**0 %**	**4 %**

Leased Facilities Tracking

Exising leased facilities and plans for the acquisition of leased facilities, including the number of classrooms and student stations, as reported in the educational plant survey, that are planned in that location at the end of the five year workplan.

Location	# of Leased Classrooms 2007 - 2008	FISH Student Stations	Owner	# of Leased Classrooms 2011 - 2012	FISH Student Stations
GULF ELEMENTARY	0	0	Williams	0	0
NORTH FORT MYERS ACADEMY OF THE ARTS	11	251	Williams	0	0
HEIGHTS ELEMENTARY	12	216	Mobile Modular	0	0
LEE COUNTY HIGH TECH CENTRAL	0	0	G.E. Capital	0	0
THE SANIBEL SCHOOL	2	44	Williams	0	0
WEST ZONE STAGING SCHOOL	28	689	Williams	0	0
NORTH FORT MYERS SENIOR HIGH	5	125	Williams	0	0
ORANGE RIVER ELEMENTARY	4	72	Workspace	0	0
GATEWAY ELEMENTARY	3	66	Williams	0	0
ESTERO SENIOR HIGH	10	250	Williams	0	0
SPRING CREEK ELEMENTARY	5	90	Williams	0	0
BUCKINGHAM EXCEPTIONAL STUDENT CENTER	1	10	Williams	0	0

RT MYERS SENIOR HIGH	3	75	Williams	0	0
CYPRESS LAKE MIDDLE	2	44	Williams	0	0
ALVA ELEMENTARY	0	0	Williams	0	0
	86	**1,932**		**0**	**0**

Failed Standard Relocatable Tracking

Relocatable units currently reported by school, from FISH, and the number of relocatable units identified as 'Failed Standards'.

Nothing reported for this section.

Planning

Class Size Reduction Planning

Plans approved by the school board that reduce the need for permanent student stations such as acceptable school capacity levels, redistricting, busing, year-round schools, charter schools, magnet schools, public-private partnerships, multitrack scheduling, grade level organization, block scheduling, or other alternatives.

Implementation of Amendment 9 has hampered strategies to reduce the need for permanent student stations. Lee County already capitalizes on efficiencies afforded by our open-enrollment student assignment system. Transporting higher percentages of students is one of the cost inefficiences to more fully utilizing our schools. Charter schools are a factor in reducing the apparent future need; however, the District is reluctant to plan on stead percentages of students enrolling in Charters as the cost of construction will likely preclude similar private investment levels as in recent past.

School Closure Planning

Plans for the closure of any school, including plans for disposition of the facility or usage of facility space, and anticipated revenues.

None

Long Range Planning

Ten-Year Maintenance

District projects and locations regarding the projected need for major renovation, repair, and maintenance projects within the district in years 6-10 beyond the projects plans detailed in the five years covered by the work plan.

Project	2011 - 2012 / 2016 - 2017 Projected Cost
Replace Flooring Covers	$6,930,613
Replace Ceiling Tiles	$19,249,010
Roofing	$5,644,590
HVAC Repairs	$18,345,799
Paving (Overlay)	$8,674,630
Paving Seal Coat	$5,115,584
Painting	$18,145,523
Gym Floors Resurfaced	$414,491
Restroom Repairs/Refurbished	$2,017,767
Replace Cork Boards	$610,448
Replace Marker Boards	$1,028,221
Gutters	$163,665
Security & Emergency Lighting	$302,173
Resurfacing Tracks	$442,169
Staduim Maintenance	$150,560
Fire Alarms	$6,409,230
Replace P.A. Systems	$1,867,987
Replace/Repair Lighting	$10,157,429
	$105,669,889

Ten-Year Capacity

Schedule of capital outlay projects projected to ensure the availability of satisfactory student stations for the projected student enrollment in K-12 programs for the future 5 years beyond the 5-year district facilities work program.

Project	Location,Community,Quadrant or other general location	2011 - 2012 / 2016 - 2017 Projected Cost
New Elementary	East	$31,500,000
New Elementary	East	$33,075,000
New Elementary	East	$34,728,750

/ Elementary	East	$36,465,188
New Elementary	East	$36,465,188
New Middle	East	$44,600,000
New Middle	East	$46,830,000
New Middle	East	$49,171,500
New Middle	East	$51,630,075
New Middle	East	$56,922,158
New High School	East	$1,000,000
New Elementary	South	$36,465,188
New High School	South	$94,827,721
New Elementary	West	$31,500,000
New Elementary	West	$33,075,000
/ Elementary	West	$36,465,188
New Middle	West	$51,530,075
New Middle	West	$56,922,158
New High School	West	$90,312,115
New Elementary	East	$30,000,000
New Elementary	East	$30,000,000
New Elementary	West	$30,000,000
		$943,485,304

Ten-Year Planned Utilization

Schedule of planned capital outlay projects identifying the standard grade groupings, capacities, and planned utilization rates of future educational facilities of the district for both permanent and relocatable facilities.

Je Level Projections	FISH Student Stations	Actual 2006 - 2007 FISH Capacity	Actual 2006 - 2007 COFTE	Actual 2006 - 2007 Utilization	Actual 2007 - 2008 / 2016 - 2017 new Student Capacity to be added/removed	Projected 2016 - 2017 COFTE	Projected 2016 - 2017 Utilization
Elementary - District Totals	35,925	35,925	31,455.83	87.56 %	10,973	46,898	100.00 %
Middle - District Totals	18,325	16,494	14,693.23	89.08 %	5,413	21,907	100.00 %
High - District Totals	27,758	25,923	23,291.18	89.85 %	8,803	34,726	100.00 %
Other - ESE, etc	8,460	2,545	1,017.93	40.00 %	0	1,518	59.65 %
	90,468	**80,887**	**70,458.17**	**87.11 %**	**25,189**	**105,049**	**99.03 %**

Ten-Year Infrastructure Planning

Proposed Location of Planned New, Remodeled, or New Additions to Facilities in 11 thru 20 out years (Section 28).

New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY12
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY12
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY13
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY14
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY15
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY16
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open in FY16
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open in FY12
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open in FY13
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open in FY14
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open in FY15
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open in FY17
w High School (2106 Stu Sta) in the eastern part of the district to accommodate growth to open in FY12
High School (2106 Stu Sta) in the eastern part of the district to accommodate growth to open in FY15
...w Elementary School (1000 Stu Sta) in the southern part of the district to accommodate growth to open in FY16
New High School (2106 Stu Sta) in the southern part of the district to accommodate growth to open in FY17
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open in FY12
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open in FY13
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open in FY14
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open in FY16
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open in FY12
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open in FY15
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open in FY17
New High School (2106 Stu Sta) in the western part of the district to accommodate growth to open in FY16

Plans for closure of any school, including plans for disposition of the facility or usage of facility space, and anticipated revenues in the 11 thru 20 out years (Section 29).

None

Twenty-Year Maintenance

District projects and locations regarding the projected need for major renovation, repair, and maintenance projects within the district in years 11-20 beyond the projects plans detailed in the five years covered by the work plan.

Project	2016 - 2017 / 2026 - 2027 Projected Cost
Replace Floor Covers	$11,886,241
Replace Ceiling Tile	$64,021,254
Roofing	$7,425,498

.C Repairs	$57,947,629
Paving (Overlay)	$16,684,080
Paving Seal Coat	$14,145,314
Painting	$54,060,869
Gym Floors Resurfaced	$905,591
Restroom Repairs/Refurbished	$2,783,425
Replace Cork Boards	$2,933,830
Replace Marker Boards	$4,693,000
Gutters	$126,825
Security & Emergency Lighting	$602,208
Resurfacing Tracks	$838,583
Fire Alarms	$15,636,733
Replace PA Systems	$4,983,622
Replace/Repair Lighting	$26,409,516
Other Maintenance Repairs	$60,313,577
	$346,397,795

ənty-Year Capacity

Schedule of capital outlay projects projected to ensure the availability of satisfactory student stations for the projected student enrollment in K-12 programs for the future 11-20 years beyond the 5-year district facilities work program.

Project	Location,Community,Quadrant or other general location	2016 - 2017 / 2026 - 2027 Projected Cost
New Elementary School	East	$36,370,666
New Elementary School	West	$36,370,666
New Elementary School	East	$38,189,199
New Elementary School	South	$38,189,199
New Elementary School	West	$38,189,199
New Elementary School	East	$40,098,659
New Elementary School	East	$40,098,659
New Elementary School	West	$40,098,659
New Elementary School	East	$42,103,592

Elelmentary School	West	$42,103,592
New Elementary School	East	$44,208,772
New Elementary School	West	$44,208,772
New Elementary School	South	$44,208,772
New Elementary School	East	$46,419,210
New Elementary	West	$46,419,210
New Elementary	South	$46,419,210
New Elementary	East	$48,740,171
New Elementary	West	$48,740,171
New Elementary	East	$51,177,179
New Elementary	West	$51,177,179
New Elementary	South	$51,177,179
.v Elementary	West	$53,736,038
New Elementary	East	$56,422,840
New Middle School	West	$52,338,677
New Middle School	East	$54,955,611
New Middle School	South	$54,955,611
New Middle School	West	$57,703,391
New Middle School	East	$60,588,561
New Middle School	West	$63,617,989
New Middle School	East	$66,798,888
New Middle School	West	$70,138,833
New Middle School	South	$73,645,774
New Middle School	East	$77,328,063

Middle School	East	$85,254,191
New High School	West	$77,580,244
New High School	East	$81,459,257
New High School	South	$85,532,219
New High School	West	$89,808,830
New High School	East	$99,014,235
New High School	West	$109,163,195
New High School	South	$114,621,354
New High School	East	$120,352,422
		$2,519,724,138

Twenty-Year Planned Utilization

Schedule of planned capital outlay projects identifying the standard grade groupings, capacities, and planned utilization rates of future educational facilities of the ict for both permanent and relocatable facilities.

Grade Level Projections	FISH Student Stations	Actual 2006 - 2007 FISH Capacity	Actual 2006 - 2007 COFTE	Actual 2006 - 2007 Utilization	Actual 2007 - 2008 / 2026 - 2027 new Student Capacity to be added/removed	Projected 2026 - 2027 COFTE	Projected 2026 - 2027 Utilization
Elementary - District Totals	35,925	35,925	31,455.83	87.56 %	48,809	84,734	100.00 %
Middle - District Totals	18,325	16,494	14,693.23	89.08 %	20,485	36,979	100.00 %
High - District Totals	27,758	25,923	23,291.18	89.85 %	18,827	44,750	100.00 %
Other - ESE, etc	8,460	2,545	1,017.93	40.00 %	1,672	4,217	100.00 %
	90,468	**80,887**	**70,458.17**	**87.11 %**	**89,793**	**170,680**	**100.00 %**

Twenty-Year Infrastructure Planning

Proposed Location of Planned New, Remodeled, or New Additions to Facilities in 11 thru 20 out years (Section 28).

/ Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY17
..ew Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY17
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY18
New Elementary School (1000 Stu Sta) in the southern part of the district to accommodate growth to open FY18
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY18
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY19
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY19
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY19
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY20
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY20
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY21
New Elementary School (1000 Stu Sta) in the southern part of the district to accommodate growth to open FY21
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY21
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY22
New Elementary School (1000 Stu Sta) in the southern part of the district to accommodate growth to open FY22
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY22
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY23
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY23
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY24
New Elementary School (1000 Stu Sta) in the southern part of the district to accommodate growth to open FY24
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY24
New Elementary School (1000 Stu Sta) in the western part of the district to accommodate growth to open FY25
New Elementary School (1000 Stu Sta) in the eastern part of the district to accommodate growth to open FY26
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open FY16
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open FY17
New Middle School (1334 Stu Sta) in the southern part of the district to accommodate growth to open FY17
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open FY18
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open FY19
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open FY20
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open FY21
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open FY22
New Middle School (1334 Stu Sta) in the southern part of the district to accommodate growth to open FY23
New Middle School (1334 Stu Sta) in the eastern part of the district to accommodate growth to open FY24
New Middle School (1334 Stu Sta) in the western part of the district to accommodate growth to open FY25
v High School (2106 Stu Sta) in the western part of the district to accommodate growth to open FY16
/ High School (2106 Stu Sta) in the eastern part of the district to accommodate growth to open FY17
ıew High School (2106 Stu Sta) in the southern part of the district to accommodate growth to open FY18
New High School (2106 Stu Sta) in the western part of the district to accommodate growth to open FY19
New High School (2106 Stu Sta) in the eastern part of the district to accommodate growth to open FY21
New High School (2106 Stu Sta) in the western part of the district to accommodate growth to open FY23
New High School (2106 Stu Sta) in the southern part of the district to accommodate growth to open FY24
New High School (2106 Stu Sta) in the eastern part of the district to accommodate growth to open FY25

Plans for closure of any school, including plans for disposition of the facility or usage of facility space, and anticipated revenues in the 11 thru 20 out years (Section 29).

None

DeLisi Fitzgerald, Inc.
Planning - Engineering - Project Management

1500 Royal Palm Square Blvd., Suite 101
Fort Myers, FL 33919
239-418-0691 · 239-418-0692 fax

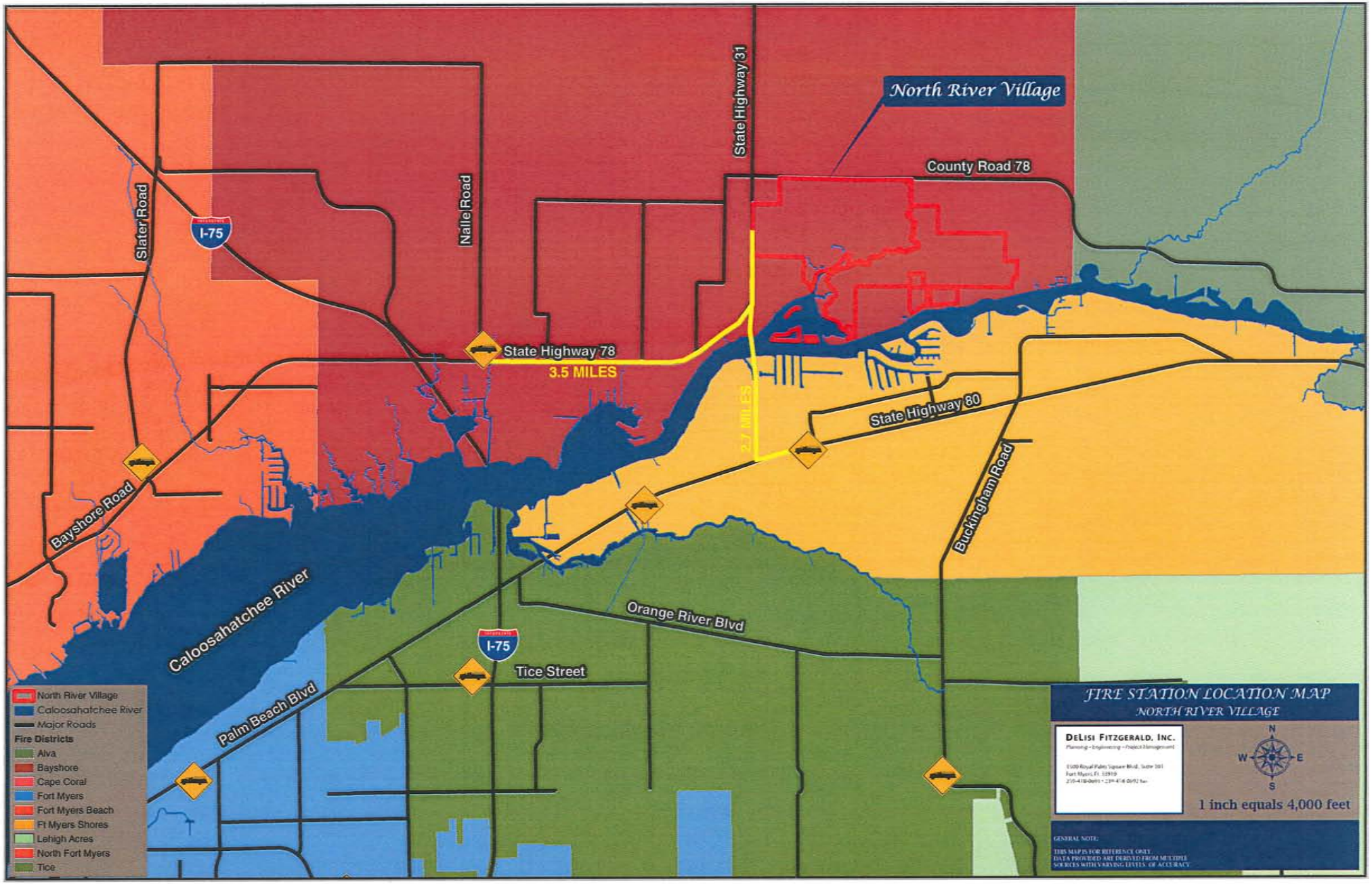
Utilities Analysis

Under the current land use designation of the Comprehensive Plan, the subject property can be developed with 997 units generating an approximate water and wastewater demand of 249,250 gallons-per-day (GPD). With the amendment, 2,500 residential units and 150,000 square-feet of commercial will be allowed increasing the demand by 475,750 GPD, for a total demand of 725,000 GPD. The projected build-out year is 2018.

Wastewater service will be provided by North Fort Myers Utility, Inc. (NFMU) with a plant capacity to serve 3.5 million gallons per day (MGD) while operating at 2.0 MGD. NFMU recently permitted (see Attachment A) an additional 4.0 MGD of wastewater capacity through the Florida Department of Environmental Protection (FDEP) to serve a total demand of 7.5 MGD. Expansion of their plant facilities under the permit is planned to occur as new users create a demand for it. Based on the attached "Updated Capacity Analysis Report" (Attachment B) filed by North Fort Myers Utility pursuant to its permit request, the projected demand on the NFMU system in 2018 is 5.34 MGD including the sewer demand of this project. North Fort Myers Utility maintains a 16" forcemain along Bayshore Road within a mile of the subject property. NFMU also has an FDEP permit to extend the forcemain along Bayshore Road to SR 31.

Potable water service will be provided by the Lee County Utilities (LCU) system which is permitted for a total of 33.5 MGD. Current demand on the system is 25.6 MGD. The capacity of the system will be increased by 5.0 MGD in a couple of months when the Corkscrew Wellfield Expansion project is completed. The projected demand for the Lee County Utilities System in 2018 is 40.4 MGD. The projected capacity is 60.13 MGD. A copy of a recent South Florida Water Management District Water Use permit modification to expand its well-field serving the North Lee County Water Treatment Plant is attached as Attachment C. The North Lee County plant is in closest proximity to the proposed project. LCU also maintains transmission lines sufficient to serve the property within a mile of the subject property.

Based on current capacities and planned expansions of the utilities, there will be excess capacity for each utility serving the demand of the proposed development. For NFMU, there will be nearly 2.2 MGD of permitted excess capacity available for wastewater service when including this project. For LCU, there will be as much as 19.0 MGD of excess capacity for potable water service when including this project.


North River Village
State Highway 31
County Road 78
Slater Road
Nalle Road
I-75
State Highway 78
3.5 MILES
2.7 MILES
State Highway 80
Buckingham Road
Bayshore Road
Caloosahatchee River
Orange River Blvd
I-75
Tice Street
Palm Beach Blvd
North River Village
Caloosahatchee River
Major Roads
Fire Districts
Alva
Bayshore
Cape Coral
Fort Myers
Fort Myers Beach
Ft Myers Shores
Lehigh Acres
North Fort Myers
Tice
FIRE STATION LOCATION MAP
NORTH RIVER VILLAGE
DeLisi Fitzgerald, Inc.
N
W
E
S
1 inch equals 4,000 feet
GENERAL NOTE:
THIS MAP IS FOR REFERENCE ONLY.
DATA PROVIDED ARE DERIVED FROM MULTIPLE
SOURCES WITH VARYING LEVELS OF ACCURACY.

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

North River Village

Large Scale Plan Amendment
CPA2006-12

Attachment A

North Fort Myers Utility
FDEP Wastewater Expansion Permit

1500 Royal Palm Square Blvd., Suite 101 • Fort Myers, FL 33919 • 239-418-0691 • 239-418-0692 fax

Florida Department of Environmental Protection

South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

CERTIFIED MAIL NO.: 7007 1490 0003 7130 6044
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

North Fort Myers Utility, Inc.
A. A. Reeves III, Vice President
P.O. Box 2547
Fort Myers, FL 33902

Lee County - DW
North Fort Myers Utility WWTF
PA File No. FLA014548-013-DW1P
Caloosahatchee TMDL Basin

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number FLA014548 to operate and expand an existing 3.5 million gallon per day annual average daily flow (MGD AADF) domestic wastewater treatment facility and associated reuse and disposal systems. Upon completion of the second phase of the two- phase expansion, the facility will have a permitted capacity of 7.5 MGD AADF. This permit is issued under Section 403.087, Florida Statutes.

Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this notice is filed with the clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart
Director of
District Management

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52, Florida Statutes, with the designated deputy clerk, receipt of which is hereby acknowledged.

Juliet LaMear 2-5-08
[Clerk] [Date]

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on February 5, 2008, to the listed persons.

JMI/NWM/jl

Copies furnished to:
J. Richard Voorhees, P.E.
David Rhodes, P.G.
Keith Kleinmann

Florida Department of
Environmental Protection
South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

STATE OF FLORIDA
DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:

North Fort Myers Utility, Inc.

PERMIT NUMBER: FLA014548
PA FILE NUMBER: FLA014548-013-DW1P
ISSUANCE DATE: February 5, 2008
EXPIRATION DATE: February 4, 2013

RESPONSIBLE AUTHORITY:

Mr. A. A. Reeves, III
Vice President
P.O. Box 2547
Fort Myers, FL 33902

(239) 543-1005

FACILITY:

North Fort Myers Utility WWTF
4100 Del Prado Blvd. North
North Fort Myers, FL 33903
Lee County
Latitude: 26° 43' 58" N Longitude: 81° 53' 54" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to operate and expand the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

TREATMENT FACILITIES:

EXISTING
The facility is an existing 3.5 million gallons per day (MGD), annual average daily flow (AADF), extended aeration process domestic wastewater treatment facility consisting of a headworks with an influent mechanical screen, a by-pass bar screen, grit removal, two 0.5 million gallons (MG) surge tanks, a 2.217 MG oxidation ditch, two 90 foot diameter clarifiers, a chemical feed system to aid in suspended solids removal, two 1.75 MGD travelling bridge filters, two 36,170 gallon chlorine contact chambers, a 48,586 gallon reject chlorine contact chamber, a sodium hypochlorite disinfection system, a 0.4 MG sludge holding tank, a residuals drum thickener with polymer feed system, a lime silo, two 41,700 gallon lime stabilization basins, and a 1.0 MG reclaimed water storage tank.

PHASE 1 EXPANSION
The permittee shall expand the facility to 5.0 MGD, AADF in Phase 1. Phase 1 consists of the addition of the following:

A second headworks with a manual bar screen, a mechanical bar screen, and a grit removal system,
A flow splitter box for the biological treatment systems,
A 2.5 MGD AADF oxidation ditch system (1.370 MG aeration basin and 0.404 MG anoxic basin),
A flow splitter box for the clarifiers,
A 100 foot diameter clarifier,
Three disk filters (twelve 53 square foot disks per filter),
A clarifier sludge collection structure,
A 0.106 MG chlorine contact chamber,
A belt filter press for residuals,

A SCADA system,
An electrical building,
An emergency power generator, and
Pump stations for the equalization basins, return activated sludge, waste activated sludge, the new chlorine contact basins, the existing injection well, reuse, and sludge transfer.

The permittee shall construct the piping and appurtenances associated with the above modifications. The existing oxidation ditch shall be limited to 2.5 MGD AADF.

PHASE 2 EXPANSION
The permittee shall expand the facility to 7.5 MGD, AADF in Phase 2. Phase 2 consists of the addition of the following:

A third 2.5 MGD AADF oxidation ditch system (1.370 MG aeration basin and 0.404 MG anoxic basin),
A fourth clarifier (100 foot diameter),
The fourth and fifth disk filters (twelve 53 square foot disks per filter),
A fourth chlorine contact chamber (0.106 MG),
A second belt filter press, and
A 1.15 MG reuse storage tank, and
A second deep injection well.

The permittee shall construct the piping, appurtenances, and additional pumps associated with the above modifications.

DISPOSAL:

Underground Injection: An existing 4.0 MGD maximum flow permitted capacity underground injection well system U-001 consisting of one Class I injection wells discharging to Class G-IV ground water. The injection well system is permitted under Department permit number 128646-002-UO/1M and must comply with the conditions contained therein. Underground injection well system U-001 is located approximately at latitude 26 ° 43' 58" N, longitude 81 ° 52' 54" W.

Underground Injection: A new 7.9 MGD maximum flow permitted capacity underground injection well system U-002 consisting of one Class I underground injection wells discharging to Class G-IV ground water. Underground injection well system U-002 is located approximately at latitude 26 ° 43' 48" N, longitude 81 ° 52' 51" W. The injection well system U-002 is permitted under Department permit number 128646-004-UC/1M and must comply with the conditions contained therein.

REUSE:

Land Application: An existing 6.25 MGD AADF permitted capacity slow-rate public access (R-001) consisting of irrigation of golf courses, residential areas, and other common irrigation areas within a general reuse service area as outlined in the map attached to this permit. Reject is disposed in Class I injection well U-001, located at the wastewater treatment facility.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Pages 1 through 29 of this permit.

FACILITY: North Fort Myers Utility WWTF
PERMITTEE: North Fort Myers Utility, Inc.
P.O. Box 2547
Fort Myers, FL 33902

PERMIT NUMBER: FLA014548
PA FILE NUMBER: FLA014548-013-DW1P/RA

I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Underground Injection Control Systems

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to Underground Injection Well Facility U-001 located at the wastewater treatment facility. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.10:

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow	MGD	Maximum	-	-	-	-	Continuous	Recording flow meters and totalizers	FLW-03	See Cond.I.A.3, 5
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	30.0	45.0	60.0	5 Days/Week	16-hour flow proportioned composite	EFF-01	
Solids, Total Suspended	MG/L	Maximum	20.0	30.0	45.0	60.0	5 Days/Week	16-hour flow proportioned composite	EFF-01	
pH	SU	Range	-	-	-	6.0 to 8.5	Continuous	Meter	EFF-01	See Cond.I.A.4

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I. A. 1. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFF-01	Sample point at discharge outlet of the reject chlorine contact chamber.
FLW-03	Flow meter that measures effluent flow discharged into deep injection well #1.

3. The maximum flow to Injection Well Facility U-001 shall not exceed 4.0 MGD.

4. Hourly measurement of pH during the period of required operator attendance may be substituted for continuous measurement. *[Chapter 62-601, Figure 2]*

5. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. *[62-601.200(17) and .500(6)]*

6. Disinfection is not required for discharge to Class G-IV waters using Class I wells. However, the permittee must maintain the capability for disinfection at a level that is consistent with the alternate disposal mechanism approved for this facility pursuant to Rule 62-600.540(5), F.A.C. *[62-600.540(1)]*

7. During the period beginning upon placing the new facilities into operation and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent to Underground Injection Well Facility U-002 located at onsite. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.10:

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow	MGD	Maximum	-	-	-	-	Continuous	Recording flow meters and totalizers	FLW-04	See Cond.I.A.9, 11
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	30.0	45.0	60.0	5 Days/Week	16-hour flow proportioned composite	EFF-01	
Solids, Total Suspended	MG/L	Maximum	-	-	-	5.0	5 Days/Week	Grab	EFB-01	
Total Residual Chlorine (For Disinfection)	MG/L	Minimum	-	-	-	1.0	Continuous	Meter	EFA-01	See Cond.I.B.6
pH	SU	Range	-	-	-	6.0 to 8.5	Continuous	Meter	EFF-01	See Cond.I.A.10

8. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I. A. 7. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	At the discharge outlet of the reuse chlorine contact chambers.
EFF-01	Sample point at discharge outlet of the reject chlorine contact chamber.
FLW-04	Flow meter on piping to deep injection well #2.

9. The peak hourly flow to Underground Injection Well Facility U-002 shall not exceed 7.9 MGD.

10. Hourly measurement of pH during the period of required operator attendance may be substituted for continuous measurement. *[Chapter 62-601, Figure 2]*

11. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. *[62-601.200(17) and .500(6)]*

B. Reuse and Land Application Systems

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.10:

			Reclaimed Water Limitations				Monitoring Requirements			
Parameter	**Units**	**Max/Min**	**Annual Average**	**Monthly Average**	**Weekly Average**	**Single Sample**	**Monitoring Frequency**	**Sample Type**	**Monitoring Location Site Number**	**Notes**
Flow (Total Reuse)	MGD	Maximum	6.25	-	-	-	Continuous	Recording flow meters and totalizers	FLW-02	See Cond.I.B.4
Flow (Six Lakes Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02a	See Cond.I.B.4
Flow (Riverbend Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02b	See Cond.I.B.4
Flow (Sabal Springs Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02c	See Cond.I.B.4
Flow (Oldbridge Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02d	See Cond.I.B.4
Flow (Tree Farm Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02e	See Cond.I.B.4
Flow (Del Tura Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02F	See Cond.I.B.4
Flow (Entrada Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02G	See Cond.I.B.4
Flow (Palermo Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02H	See Cond.I.B.4
Flow (Herons Glen Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02I	See Cond.I.B.4
Flow (Magnolia Landing Reuse)	MGD	Maximum	Report	Report	-	-	Continuous	Recording flow meters and totalizers	FLW-02J	See Cond.I.B.4
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	30.0	45.0	60.0	Weekly	24-hour flow proportioned composite	EFA-01	
Solids, Total Suspended	MG/L	Maximum	-	-	-	5.0	Daily	Grab	EFB-01	
pH	SU	Range	-	-	-	6.0 to 8.5	Continuous	Meter	EFA-01	See Cond.I.B.3
Coliform, Fecal, % less than detection	PERCENT	Minimum	See Permit Condition I.B.5.				Daily	Grab	EFA-01	
Coliform, Fecal	#/100ML	Maximum	See Permit Condition I.B.5.				Daily	Grab	EFA-01	
Total Residual Chlorine (For Disinfection)	MG/L	Minimum	-	-	-	1.0	Continuous	Meter	EFA-01	See Cond.I.B.6
Turbidity	NTU	Maximum	See Permit Condition I.B.7.				Continuous	Meter	EFB-01	

FACILITY: North Fort Myers Utility WWTF
PERMITTEE: North Fort Myers Utility, Inc.
P.O. Box 2547
Fort Myers, FL 33902

PERMIT NUMBER: FLA014548
PA FILE NUMBER: FLA014548-013-DW1P/RA

			Reclaimed Water Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Giardia	CYSTS/ 100 L	Maximum	-	-	-	Report	two years	Filtered	EFA-01	
Cryptosporidium	OOCYSTS/ 100 L	Maximum	-	-	-	Report	two years	Filtered	EFA-01	

2. Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I. B. 1. and as described below:

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	At the discharge outlet of the reuse chlorine contact chambers.
EFB-01	At the influent channel of the reuse chlorine contact chambers and prior to disinfection.
FLW-02	Flow meter that measures total reuse flows leaving the plant.
FLW-02a	Recording flow meter and totalizer that measures reuse flows to Six Lakes.
FLW-02b	Recording flow meter and totalizer that measures reuse flows to Riverbend.
FLW-02c	Recording flow meter and totalizer that measures flows to Sabal Springs.
FLW-02d	Flow meter and totalizer that measures flows to Oldbridge.
FLW-02e	Flow meter and totalizer that measures flows to Tree Farm.
FLW-02f	Recording flow meter and totalizer that measures reuse flow to Del Tura.
FLW-02g	Recording flow meter and totalizer that measures reuse flow to Entrada
FLW-02h	Recording flow meter and totalizer that measures reuse flow to Palermo.
FLW-02i	Recording flow meter and totalizer that measures reuse flow to Herons Glen.
FLW-02j	Recording flow meter and totalizer that measures reuse flow to Magnolia Landing.

3. Hourly measurement of pH during the period of required operator attendance may be substituted for continuous measurement. *[Chapter 62-601, Figure 2]*

4. Flow meters shall be utilized to measure flow and calibrated at least annually. *[62-601.200(17) and .500(6)]*

5. Over a 30-day period, at least 75 percent of the fecal coliform values shall be below the detection limits. No sample shall exceed 25 fecal coliforms per 100 mL. No sample shall exceed 5.0 mg/L of total suspended solids (TSS) at a point before the application of the disinfectant. Note: To report the "% less than detection," count the number of fecal coliform observations that were less than detection, divide by the total number of fecal coliform observations in the month, and multiply by 100% (round to the nearest integer). *[62-600.440(5)(j)]*

6. The minimum total chlorine residual shall be limited as described in the approved operating protocol, such that the permit limitation for fecal coliform bacteria will be achieved. In no case shall the total chlorine residual be less than 1.0 mg/L. *[62-600.440(5)(b); 62-610.460(2); and 62-610.463(2)]*

7. The maximum turbidity shall be limited as described in the approved operating protocol, such that the permit limitations for total suspended solids and fecal coliforms will be achieved. *[62-610.463(2)]*

C. Other Limitations and Monitoring and Reporting Requirements

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the treatment facility shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.C.10:

			Limitations				Monitoring Requirements			
Parameter	**Units**	**Max/Min**	**Annual Average**	**Monthly Average**	**Weekly Average**	**Single Sample**	**Monitoring Frequency**	**Sample Type**	**Monitoring Location Site Number**	**Notes**
Flow	MGD	Maximum	7.5	-	-	-	Continuous	Recording flow meters and totalizers	FLW-01	See Cond.I.C.4
Percent Capacity, (TMADF/Permitted Capacity) x 100	PERCENT	Maximum	-	Report	-	-	Monthly	Calculated	CAL-01	
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	-	Report	-	-	5 Days/Week	16-hour flow proportioned composite	INF-01	See Cond.I.C.3
Solids, Total Suspended	MG/L	Maximum	-	Report	-	-	5 Days/Week	16-hour flow proportioned composite	INF-01	See Cond.I.C.3
Percent Capacity, (TMADF/Permitted Capacity) x 100	PERCENT	Maximum	-	Report	-	-	Monthly	Calculated	-	

2. Samples shall be taken at the monitoring site locations listed in Permit Condition I. C. 1 and as described below:

Monitoring Location Site Number	Description of Monitoring Location
CAL-01	Calculated percent (%) of flow. Percent capacity (TMADF/Permitted Capacity) x 100.
FLW-01	Recording flow meter and totalizer that measures influent flow at the head works
INF-01	Influent sample taken at headworks prior to screening unit and before any plant recycle flows.

3. Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, or any other plant process recycled waters. *[62-601.500(4)]*

4. Recording flow meters and totalizers shall be utilized to measure flow and calibrated at least annually. *[62-601.200(17) and .500(6)]*

5. The treatment facilities shall be operated in accordance with all approved operating protocols. Only reclaimed water that meets the criteria established in the approved operating protocol(s) may be released to system storage or to the reuse system. Reclaimed water that fails to meet the criteria in the approved operating protocol(s) shall be directed to the following permitted alternate discharge system: Dual deep wells located at the plant. The operating protocol(s) shall be reviewed and updated periodically to ensure continuous compliance with the minimum treatment and disinfection requirements. Updated operating protocols shall be submitted to the Department for review and approval upon revision of the operating protocol(s) and with each permit application. *[62-610.320(6) and 62-610.463(2)]*

6. Instruments for continuous on-line monitoring of total residual chlorine and turbidity shall be equipped with an automated data logging or recording device. *[62-610.463(2) & .865(8)(d)]*

7. Intervals between sampling for Giardia and Cryptosporidium shall not exceed two years. Sampling results shall be reported on DEP Form 62-610.300(4)(a)4 which is attached to this permit. This form shall be submitted to the Department and to DEP's Reuse Coordinator in Tallahassee. *[62-610.463(4)]*

8. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method to assure compliance with applicable water quality standards and effluent limitations in accordance with 40 CFR (Code of Federal Regulations) Part 136. All monitoring shall be representative of the monitored activity. *[62-620.320(6)]*

9. The permittee shall provide safe access points for obtaining representative influent, reclaimed water, and effluent samples which are required by this permit. *[62-601.500(5)]*

10. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department's South District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type	Monitoring Period	Due Date
Monthly or Toxicity	First day of month – last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 – June 30	July 28

	July 1 – December 31	January 28
Annual	January 1 – December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department's South District Office at the address specified in Permit Condition I.C. 14 by the twenty-eighth (28th) of the month following the month of operation.

[62-620.610(18)][62-601.300(1), (2), and (3)]

11. During the period of operation authorized by this permit, reclaimed water or effluent shall be monitored annually for the primary and secondary drinking water standards contained in Chapter 62-550, F.A.C., (except for turbidity, color, and corrosivity). Twenty-four hour composite samples shall be used to analyze reclaimed water or effluent for the primary and secondary drinking water standards. These monitoring results shall be reported to the Department annually on the DMR. During years when a permit is not renewed, a certification stating that no new non-domestic wastewater dischargers have been added to the collection system since the last reclaimed water or effluent analysis was conducted may be submitted in lieu of the report. The annual reclaimed water or effluent analysis report or the certification shall be completed and submitted in a timely manner so as to be received by the South District Office by June 28 of each year. Approved analytical methods identified in Rule 62-620.100(3)(i), F.A.C., shall be used for the analysis. If no method is included for a parameter, methods specified in Chapter 62-550, F.A.C., shall be used. *[62-601.300(4)][62-601.500(3)][62-610.300(4)]*

12. The permittee shall submit an Annual Reuse Report using DEP Form 62-610.300(4)(a)2. on or before January 1 of each year. *[62-610.870(3)]*

13. The permittee shall maintain an inventory of storage systems. The inventory shall be submitted to the Department at least 30 days before reclaimed water will be introduced into any new storage system. The inventory of storage systems shall be attached to the annual submittal of the Annual Reuse Report. *[62-610.464(5)]*

14. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's South District Office at the address specified below:

    South District Office
    Department of Environmental Protection
    P. O. Box 2549
    Ft. Myers, Florida 33902-2549

    Phone Number - 239-332-6975
    FAX Number - 239-332-6969
    All FAX copies shall be followed by original copies. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. *[62-620.305]*

II. RESIDUALS MANAGEMENT REQUIREMENTS

1. The method of residuals use or disposal by this facility is land application or disposal in a Class I or II solid waste landfill. Prior to land application, the permittee shall conduct a residuals analysis and apply for a minor permit modification to add a land application site.

2. The permittee shall be responsible for proper treatment, management, use, and land application or disposal of its residuals. *[62-640.300(5)]*

3. The permittee will not be held responsible for violations resulting from land application of residuals if the permittee can demonstrate that it has delivered residuals that meet the parameter concentrations and appropriate treatment requirements of this rule and the applier (e.g. hauler, contractor, site manager, or site owner) has legally agreed in writing to accept responsibility for proper land application of the residuals. Such an agreement shall state that the applier agrees, upon delivery of residuals that have been treated as required by Chapter 62-640, F.A.C., that he will accept responsibility for

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

North River Village

Large Scale Plan Amendment
CPA2006-12

Attachment B

North Fort Myers Utility
Updated Capacity Analysis Report

1500 Royal Palm Square Blvd., Suite 101 • Fort Myers, FL 33919 • 239-418-0691 • 239-418-0692 fax

21023

UPDATED
CAPACITY ANALYSIS REPORT

For the
NORTH FORT MYERS UTILITY, INC.
DEL PRADO WASTEWATER TREATMENT PLANT

Lee County Florida
FDEP Permit Number - FLA014548
Current Permit Expiration Date: June 23, 2010

Prepared for:
North Fort Myers Utility, Inc.
5660 Bayshore Road, Ste 36
North Fort Myers, Florida 33917
Ph (239) 543-1005

Prepared by:
HDR Engineering, Inc.
315 E. Robinson St., Ste. 400
Orlando, Florida 32801
Ph. (407) 420-4200

October 2007

HDR ONE COMPANY *Many Solutions*

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SOUTH DISTRICT

CERTIFICATIONS

Facility Name and Address: Del Prado Wastewater Treatment Plant
4100 Del Prado Blvd., North
North Fort Myers, Florida 33903

Permittee Name and Address: North Fort Myers Utility, Inc.
5660 Bayshore Road, Ste. 36
North Fort Myers, Florida 33917

Permittee Contact Person: A.A. Reeves
Vice President and General Manager

The undersigned, as a representative of the Permittee, North Fort Myers Utility, Inc., certify that I have reviewed and I am fully aware of the recommendations and schedules included in the following report and that a complete construction permit application has been submitted to the Department.

By: _____ Date: 10-16-07
A. A. Reeves
Vice President and General Manager

Contract Operator: Mr. Steven R. Walter
Project Manager
FDEP Operator Certification No. A-12836 WW
Woodard & Curran
4100 Del Prado Blvd North
North Fort Myers, Florida 33903

The undersigned as a representative of Woodard & Curran, the contract operator of the Del Prado Wastewater Treatment Facility, certify that I am fully aware of the recommendations and schedules included in the following report.

By: _____ Date: 10/16/07
Steven R. Walter
Project Manager

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Engineer:

HDR Engineering, Inc.
315 E. Robinson Street, Suite 400
Orlando, FL 32801
Ph. (407) 420-4200

Engineer Contact Person:

J. Richard Voorhees, PE, BCEE.
Florida Registration Number 25385

This is to certify that the information contained in the report is true and correct to the best of my knowledge, the report was prepared in accordance with sound engineering principles, and I have discussed the recommendations and schedules with the permittee or the permittee's delegated representative and the Operating firm, and I agree that when properly operated and maintained, the NFMU Del Prado WWTP will comply with all applicable statutes of the State of Florida and the Rules of the Florida Department of Environmental Protection.

By: J. Richard Voorhees SEAL
J. Richard Voorhees, PE, BCEE

Date: 10/12/07

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SECTION 1
INTRODUCTION

1.1 Objective

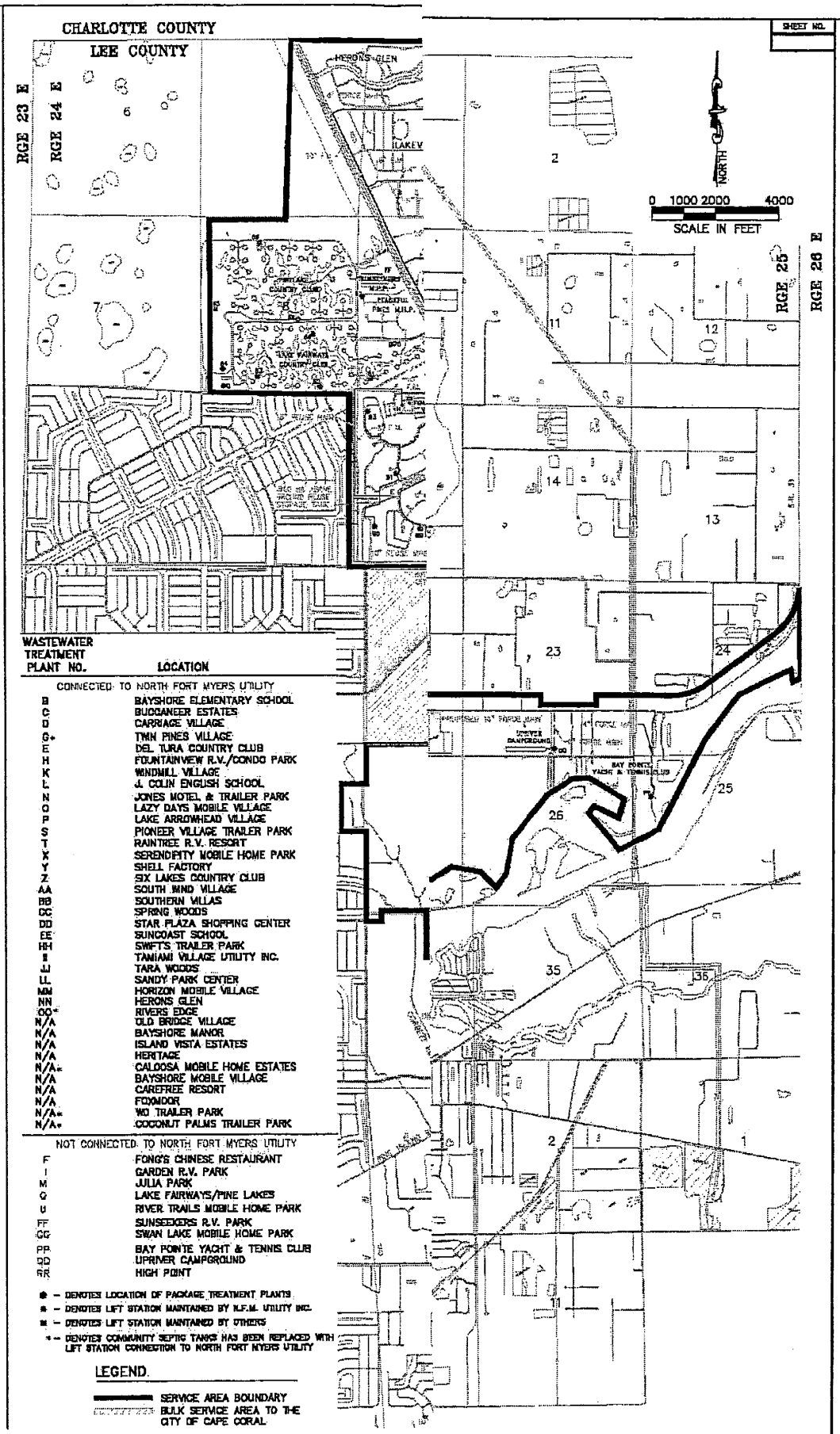
This capacity analysis report is provided in accordance with F.A.C. 62-600.405(5) to be utilized as a tool for future planning. The report is being provided, in accordance with the "Guidelines for Preparation of Capacity Analysis Reports" dated July 1992, provided by the Florida Department of Environmental Protection. The previous updated capacity analysis report for the North Fort Myers Utility, Inc. (NFMU) Del Prado Wastewater Treatment Plant (WWTP) was completed in June 10, 2004, by James A. Elder, Professional Engineer. At the time of this report, the three-month average daily flow has exceeded 50% of the permitted capacity of the treatment facility. Therefore, in accordance with 62-600.405 F.A.C, an updated capacity analysis report is being submitted.

The capacity analysis evaluates the capacity of the plant and contains data showing the permitted capacity; historical monthly average daily flows, three-month average daily flows, and annual average daily flows; seasonal variations in flow; flow projections based on local population growth and water usage rates for the next 10 years; an estimate of the time required for the three-month average flow to reach the permitted capacity; recommendations for expansions; and a detailed schedule showing dates for planning design, permit application submittal, start of construction, and placing new or expanded facilities into operation.

1.2 Background

The NFMU Del Prado WWTP is located in Northern Lee County and provides advanced secondary wastewater treatment for public access reuse. The original facility was constructed in 1987, permitted for a capacity of 2.0 MGD and included screening, extended aeration, clarification, filtration, disinfection and a deep injection well. In 1995, a new Class B sludge treatment system was installed and included: one (1) rotary drum thickener, two (2) aerated sludge lime stabilization tanks, a lime storage and feed facility, a polymer storage and feed system, and a sludge loading facility. The WWTP was re-permitted in 1999 to increase capacity to 3.5 million gallons per day (MGD) annual average daily flow (AADF) and included the addition of a new headworks facility including mechanical screening, grit removal and raw wastewater transfer pumping, two (2) 0.50 MG aerated equalization tanks with a total tank capacity of one million gallons, two (2) 90-ft. diameter secondary clarifiers and RAS/WAS pumping, one (1) traveling bridge filter, one (1) reject water chlorine contact chamber, a skid mounted sodium hypochlorite feed system with bulk 12% sodium hypochlorite storage, one (1), 1.0 MG ground storage tank for reuse water storage, a reuse high service pumping station and one (1), 0.40 MG aerobic sludge storage tank for sludge holding and partial stabilization.

Figure 1 presents a Location Map of the current NFMU Franchise Area as approved by the Florida Public Service Commission (FPSC). and **Figure 2** presents the Site Plan of the existing facilities. **Figures 3A** through **3C** show a Flow Diagram for the treatment process.



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SERVICE AREA MAP

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FIGURE

FIGURE 1

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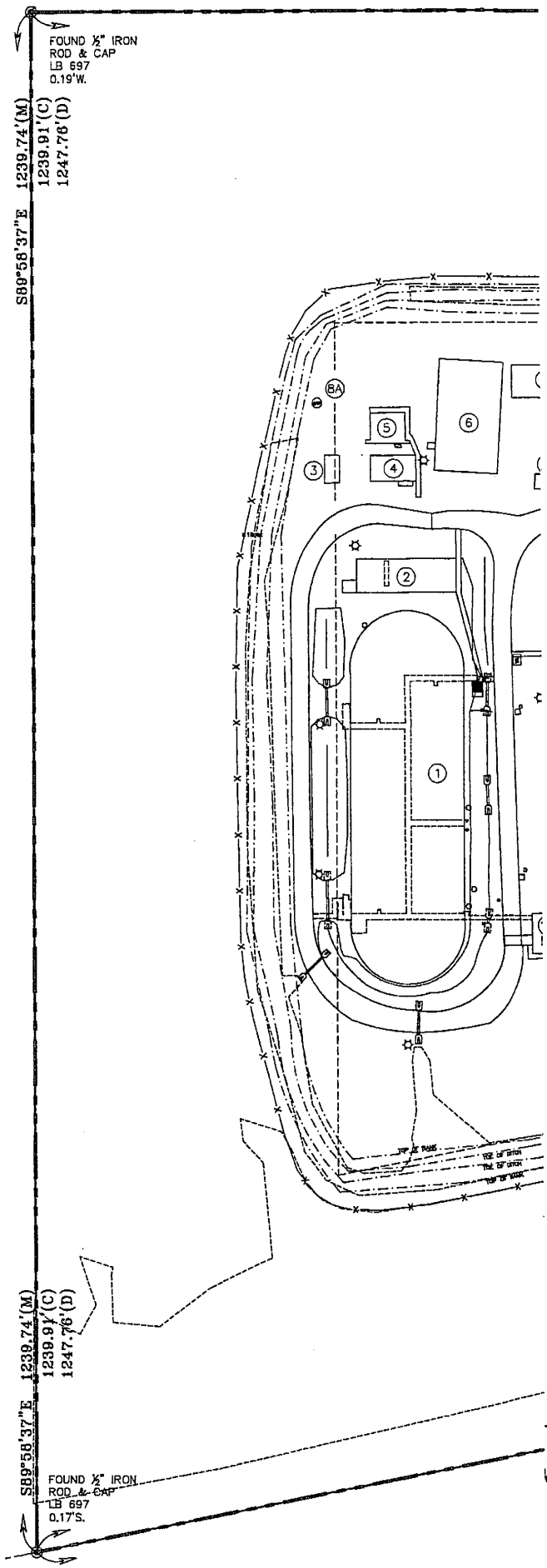

EXISTING STRUCTURES:

1. OXIDATION DITCH
2. TRAVELING BRIDGE FILTER NO.1
3. FUEL STORAGE
4. ELECTRICAL BUILDING NO.1
5. EXISTING STORAGE BUILDING
6. DEEP INJECTION WELL NO.1
7. CHLORINE CONTACT CHAMBER NO.2
8. MONITORING WELL NO. 1
8A. MONITORING WELL NO. 2
9. CHLORINE CONTACT CHAMBER NO.1
10. HIGH SERVICE PUMPING STATION NO.1
11. DEEP INJECTION WELL PUMPING STATION NO.1
12. CLARIFIER NO.2
13. TRAVELING BRIDGE FILTER NO.2
14. SLUDGE PUMPING AND EQ BLOWER BUILDING
15. CLARIFIER NO.1
16A. EQUALIZATION TANK NO.1
16B. EQUALIZATION TANK NO.2
17. PRE-TREATMENT HEADWORKS AND RAW WASTEWATER PUMPING BUILDING
18. HYPOCHLORITE STORAGE BUILDING
19. 1.0 MG REUSE STORAGE TANK
20. SLUDGE DIGESTER/STORAGE TANK
21. LIME FEED/SLUDGE STABILIZATION TANKS
22. SLUDGE DIGESTER BLOWER BUILDING
23. OPERATIONS BUILDING
24. LIME SILO

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PLAN

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FIGURE
FIGURE 2

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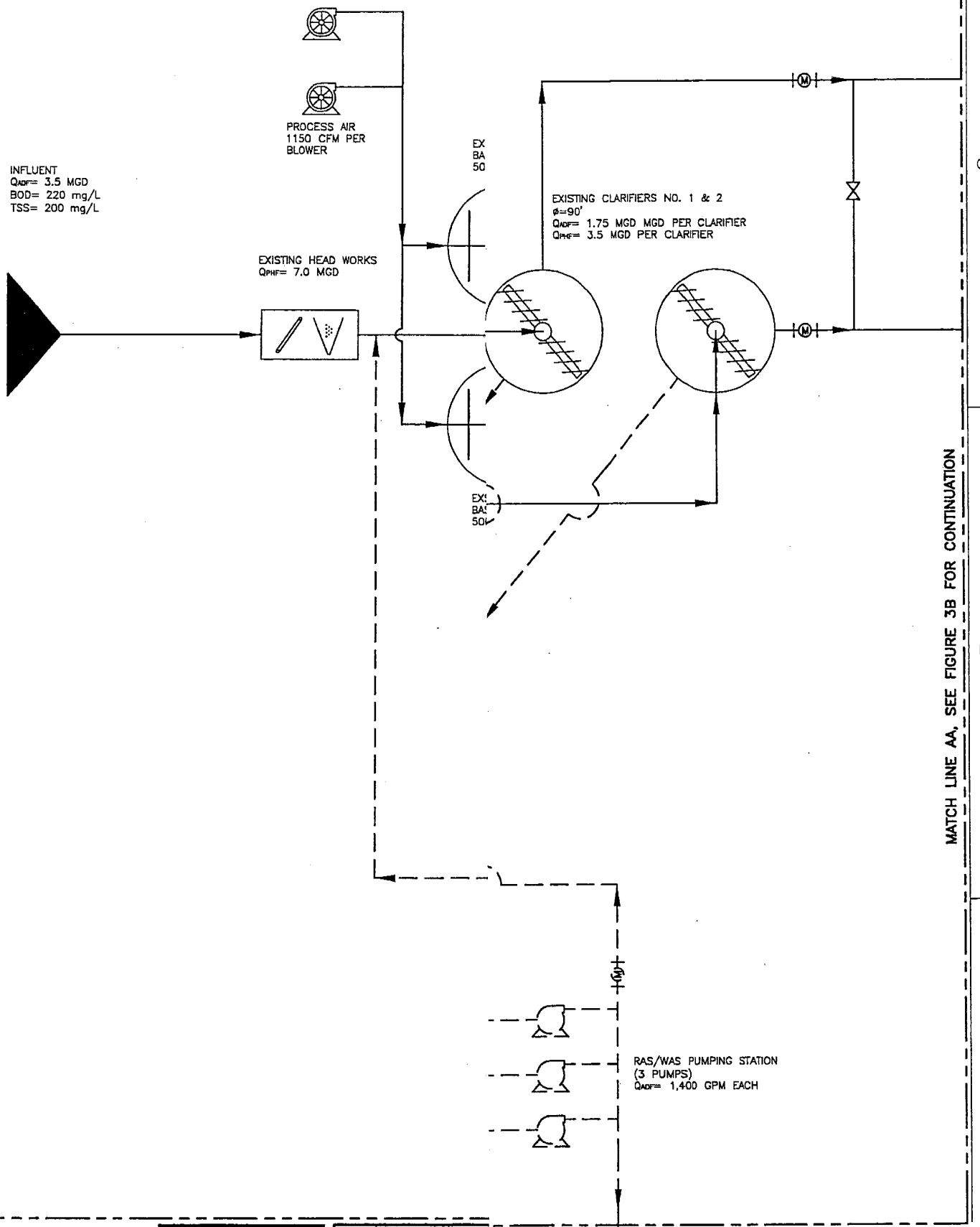

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Orlando, FL 32801-1948
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CA 4213

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EXISTING PROCESS FLOW DIAGRAM
PRIMARY TREATMENT

CAPACITY ANALYSIS REPORT

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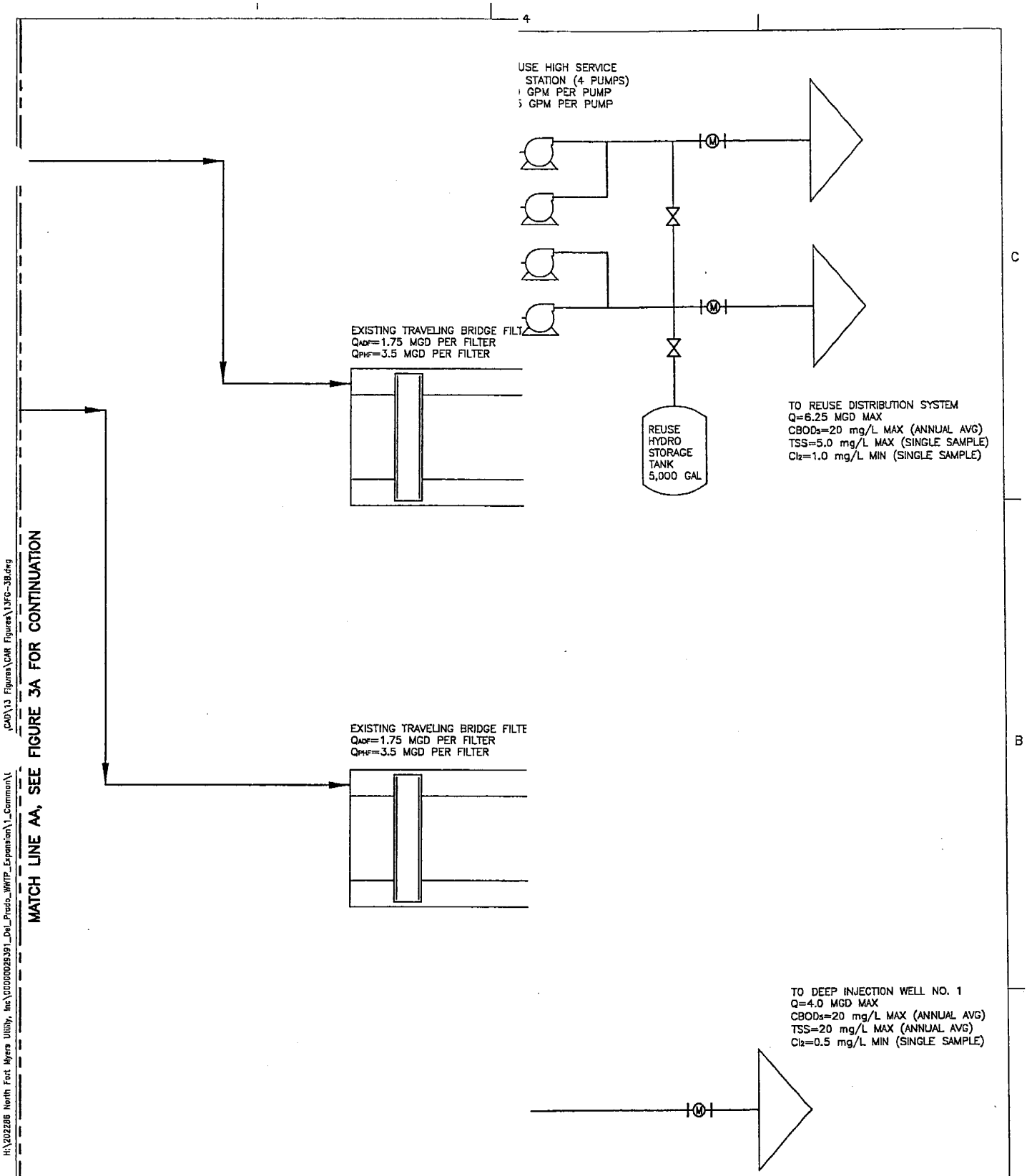
FIGURE 3-A



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EXISTING PROCESS FLOW DIAGRAM SECONDARY TREATMENT

CAPACITY ANALYSIS REPORT

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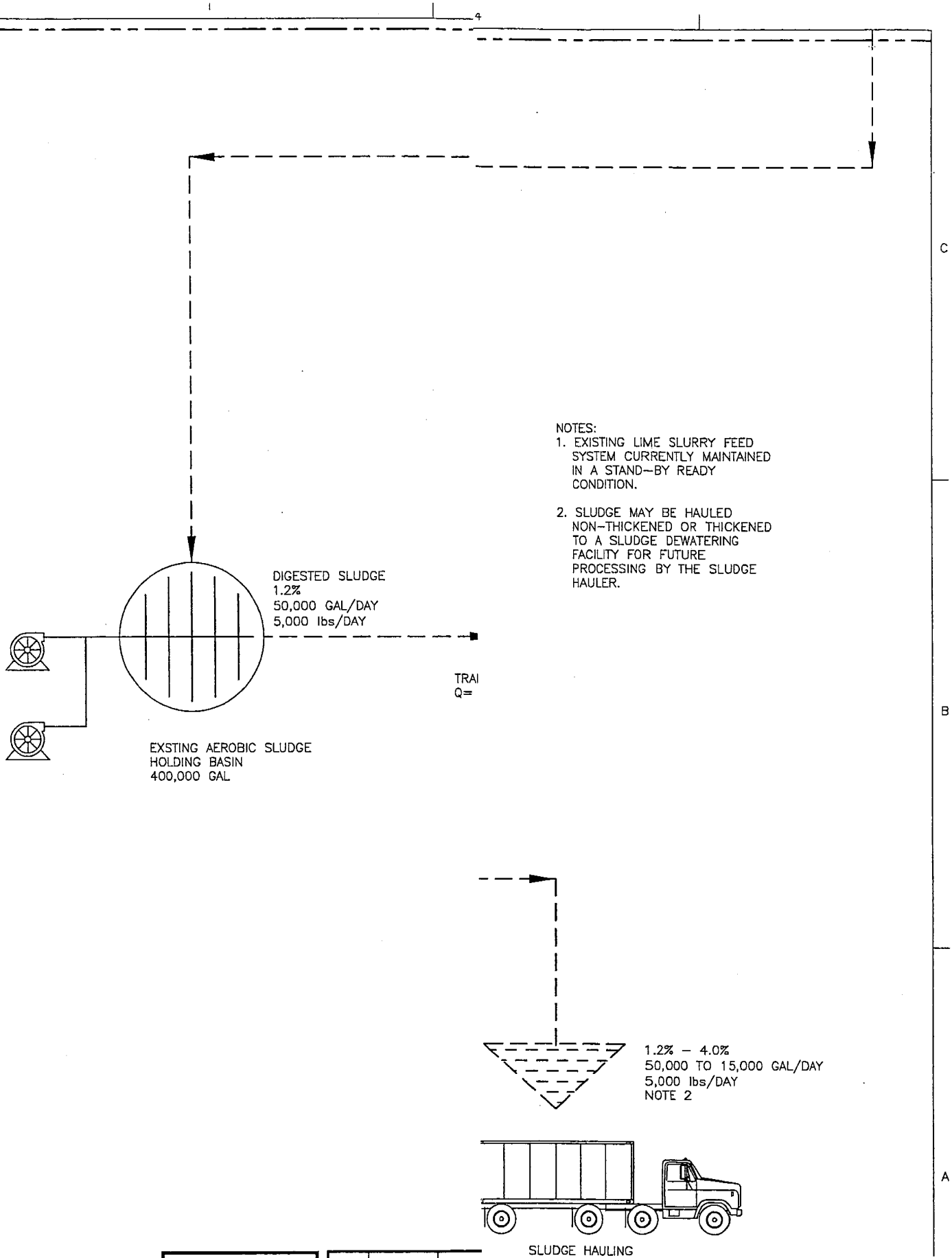
FIGURE 3-B



NOTES:
1. EXISTING LIME SLURRY FEED SYSTEM CURRENTLY MAINTAINED IN A STAND–BY READY CONDITION.
2. SLUDGE MAY BE HAULED NON–THICKENED OR THICKENED TO A SLUDGE DEWATERING FACILITY FOR FUTURE PROCESSING BY THE SLUDGE HAULER.

C
B
A

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EXISTING PROCESS FLOW DIAGRAM SLUDGE PROCESSING

CAPACITY ANALYSIS REPORT

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FIGURE-3C

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SECTION 2
EXISTING CONDITIONS

2.1 Permitted Capacities

The Del Prado Wastewater Treatment Plant is currently permitted for a flow of 3.5 MGD on an annual average daily flow (AADF) basis. The permit includes one (1) sludge holding tank with a capacity of 0.4 MGD and one (1) reclaimed storage tank with a capacity of 1.0 MG. The current domestic wastewater facility permit is permit number FLA014548.

The disposal by underground injection is currently permitted for a capacity of 2,810 gallons per minute (4.0 MGD) for a Class I underground injection well system discharging to Class G-IV groundwater. The underground injection well system U-001 is currently permitted under permit number UO36-301451. The Underground injection well system U-001 is located approximately at latitude 26° 43' 58" N, longitude 81° 52' 54" W.

The public access reuse system R-001 is currently permitted for 6.25 MGD AADF under FDEP permit FLA014548 and Permit Revision dated September 11, 2007. The reuse system is a Land Application system consisting of golf course turf irrigation at seven golf courses, irrigation of common areas, and irrigation of residential areas. Off-spec water / reject flows or flows during wet weather are discharged to the permitted Class I injection well located at the WWTP.

2.2 Flows

The discharge monitoring reports (DMR's) for the WWTP, submitted to FDEP from the years January 2002 through June 2007, were used to obtain flow data for analysis in this report. The daily flows reported in the DMR's were used to calculate the monthly average daily flows, the three-month average daily flows, and the annual average daily flows. The flow data reported in the monthly operating reports were measured by flow meters located at the plant's influent, reuse system effluent, and underground injection well system effluent. The collected data and the calculated flows are discussed in the following paragraphs; the MADFs, 3MADFs, and AADFs are shown in **Figure A-1** in Appendix A; and summary tables presenting flow data from the plant's DMR's are presented in Appendix B.

2.2.1 Monthly Average Daily Flows

Monthly average daily flows (MADF) occurring between January 2002 and June 2007 were tabulated and are presented in **Table 1** through **Table 3**. **Table 1** presents the MADF measured at the plant influent, Table 2 presents the MADFs entering the Reuse System, and Table 3 presents the MADFs entering the Deep Injection Well.

During the analyzed period, the MADFs entering the plant ranged from 34% to 68% of the plant's permitted capacity of 3.5 MGD. On average, the MADF between 2002 and 2006 was 45% of the permitted capacity. In 2002, the MADF was less than 50% of the plant's permitted capacity for the entire year. Between 2003 and 2006, the MADF exceeded 50% of the plant's permitted capacity at least once a year but no more than two times per year. **Table 1** presents a summary of the MADFs and their correspondent percentage of the plant's permitted capacity.

Table 1. Monthly Average Daily Flows at the Plant Influent

Year	2002		2003		2004		2005		2006		2007	
Month	MADF (MGD)	% of PC	MADF (MGD)	% of PC	MADF (MGD)	% of PC	MADF (MGD)	% of PC	MADF (MGD)	% of PC	MADF (MGD)	% of PC
January	1.280	37%	1.456	42%	1.510	43%	1.461	42%	1.514	43%	1.489	43%
February	1.199	34%	1.330	38%	1.705	49%	1.429	41%	1.699	49%	1.533	44%
March	1.341	38%	1.465	42%	1.547	44%	1.781	51%	1.540	44%	1.511	43%
April	1.225	35%	1.174	34%	1.285	37%	1.564	45%	1.579	45%	1.444	41%
May	1.224	35%	1.428	41%	1.182	34%	1.377	39%	1.577	45%	1.265	36%
June	1.357	39%	1.634	47%	1.272	36%	2.070	59%	1.641	47%	1.253	36%
July	1.482	42%	1.478	42%	1.535	44%	2.383	68%	2.352	67%		
August	1.555	44%	1.996	57%	1.941	55%	1.761	50%	1.708	49%		
September	1.598	46%	1.774	51%	1.608	46%	1.537	44%	2.329	67%		
October	1.429	41%	1.419	41%	1.309	37%	1.663	48%	1.386	40%		
November	1.616	46%	1.475	42%	1.451	41%	1.617	46%	1.480	42%		
December	1.638	47%	1.452	41%	-	-	1.526	44%	1.489	43%		
Minimum		34%		34%		34%		39%		40%		N/A
Maximum		47%		57%		55%		68%		67%		N/A
Max. Month		Dec		Aug		Aug		Jul		Jul		N/A

*% of PC: Percentage of Permitted Capacity. Plant's Permitted Capacity = 3.5 MGD

Table 2. Monthly Average Daily Flows Entering the Reuse System

Year	2002		2003		2004		2005		2006		2007	
Month	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC
January	0.648	10%	0.649	10%	0.609	10%	0.531	9%	0.847	14%	0.888	14%
February	0.654	10%	0.852	14%	0.555	9%	0.734	12%	0.756	12%	0.700	11%
March	0.925	15%	0.782	13%	0.716	11%	0.497	8%	0.960	15%	1.078	17%
April	1.024	16%	0.712	11%	0.847	14%	0.758	12%	1.343	21%	1.127	18%
May	1.014	16%	0.741	12%	0.658	11%	0.710	11%	1.384	22%	1.061	17%
June	0.659	11%	0.445	7%	0.659	11%	0.249	4%	0.637	10%	0.809	13%
July	0.298	5%	0.397	6%	0.395	6%	0.439	7%	0.622	10%		
August	0.489	8%	0.165	3%	0.157	3%	0.659	11%	0.388	6%		
September	0.232	4%	0.197	3%	0.278	4%	0.940	15%	0.136	2%		
October	1.154	18%	0.422	7%	0.689	11%	0.825	13%	0.831	13%		
November	0.700	11%	0.552	9%	0.857	14%	0.732	12%	1.037	17%		
December	0.763	12%	0.594	10%	-	-	0.936	15%	0.957	15%		
Minimum		4%		3%		3%		4%		2%		N/A
Maximum		18%		14%		14%		15%		22%		N/A
Max. Month		Oct		Feb		Apr,Nov		Sep,Dec		May		N/A

*% of PC: Percentage of Permitted Capacity. Reuse System's Permitted Capacity = 6.25 MGD

Table 3 Monthly Average Daily Flows Entering the Deep Injection Well

Year	2002		2003		2004		2005		2006		2007	
Month	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC	MADF MGD	% of PC
January	0.633	16%	0.808	20%	0.902	23%	0.851	21%	0.659	16%	0.601	15%
February	0.603	15%	0.563	14%	1.160	29%	0.684	17%	0.881	22%	0.833	21%
March	0.420	11%	0.818	20%	0.790	20%	1.247	31%	0.559	14%	0.433	11%
April	0.201	5%	0.610	15%	0.392	10%	0.805	20%	0.226	6%	0.317	8%
May	0.210	5%	0.468	12%	0.385	10%	0.667	17%	0.185	5%	0.204	5%
June	0.713	18%	1.164	29%	0.493	12%	1.808	45%	0.827	21%	0.444	11%
July	1.199	30%	0.972	24%	1.127	28%	1.598	40%	1.686	42%		
August	1.064	27%	1.807	45%	1.747	44%	0.913	23%	1.320	33%		
September	1.377	34%	1.577	39%	1.321	33%	0.594	15%	2.193	55%		
October	0.275	7%	0.912	23%	0.490	12%	0.788	20%	0.555	14%		
November	0.916	23%	0.784	20%	0.388	10%	0.867	22%	0.443	11%		
December	0.875	22%	0.858	21%	-	-	0.586	15%	0.532	13%		
Minimum		5%		12%		10%		15%		5%		N/A
Maximum		34%		45%		44%		45%		55%		N/A
Max. Month		Sep		Aug		Aug		Jun		Sep		N/A

*% of PC: Percentage of Permitted Capacity. Underground Injection Well System's Permitted Capacity = 4.0 MGD

The MADFs entering the Reuse System ranged from 2% to 22% of the reuse system's permitted capacity of 6.25 MGD AADF. As presented in **Table 2** the MADFs did not exceed 50% of the permitted during the analyzed period. As shown in **Table 3**, the MADFs entering the Deep Injection Well ranged from 5% to 55% of the underground injection well system's permitted capacity of 4.0 MGD, exceeding 50% of the permitted capacity only once during the analyzed period, in September 2006.

2.2.2 Three-Month Average Daily Flows

Three-month average daily flows (3MADF) from January 2002 to June 2007 were calculated from the monthly average daily flows (MADFs) from January 2002 to June 2007 and are presented in **Table 4** through **Table 6**.

The calculated plant's 3MADF ranged from 35% to 61% of the permitted capacity during the analyzed period. During the years 2002 through 2004 the plant's 3MADF did not exceed 50% of the plant's permitted capacity of 3.5 MGD. However, during 2005 and 2006 the 3MADFs calculated for the months of July through September exceeded 50% of the plant's permitted capacity, as shown in **Table 4**. Both of these years were very wet years due to very active hurricane and tropical storm seasons during these years.

The 3MADFs entering the Reuse System ranged from 4% to 20% of the reuse system's permitted capacity of 6.25 MGD AADF. As presented in **Table 5** the 3MADFs entering the Reuse System were a low percentage of the Reuse System permitted capacity during the analyzed period, with a maximum 3MADF equivalent to 20% of the permitted capacity in 2006. The 3MADFs computed for the analyzed period did not exceed 50% of the permitted capacity.

The 3MADFs entering the Deep Injection Well ranged from 7% to 43% of the underground injection well system's permitted capacity of 4.0 MGD, not exceeding 50% of the permitted capacity during the analyzed period. **Table 6** presents a summary of the deep injection well 3MADFs and their correspondent percentages of the system's permitted capacity.

Table 4. Three-Month Average Daily Flows

Year	2002		2003		2004		2005		2006		2007	
Month	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC
January	1.258	36%	1.570	45%	1.479	42%	-	-	1.553	44%	1.486	42%
February	1.241	35%	1.475	42%	1.556	44%	-	-	1.580	45%	1.504	43%
March	1.273	36%	1.417	40%	1.587	45%	1.557	44%	1.585	45%	1.511	43%
April	1.255	36%	1.323	38%	1.512	43%	1.591	45%	1.606	46%	1.496	43%
May	1.263	36%	1.356	39%	1.338	38%	1.574	45%	1.565	45%	1.407	40%
June	1.269	36%	1.412	40%	1.246	36%	1.670	48%	1.599	46%	1.321	38%
July	1.354	39%	1.513	43%	1.330	38%	1.943	56%	1.857	53%		
August	1.465	42%	1.703	49%	1.583	45%	2.071	59%	1.901	54%		
September	1.545	44%	1.749	50%	1.695	48%	1.894	54%	2.130	61%		
October	1.527	44%	1.730	49%	1.619	46%	1.654	47%	1.808	52%		
November	1.548	44%	1.556	44%	1.456	42%	1.606	46%	1.732	49%		
December	1.561	45%	1.449	41%	-	-	1.602	46%	1.452	41%		
Minimum		35%		38%		36%		44%		41%		N/A
Maximum		45%		50%		48%		59%		61%		N/A
Max. Month		Dec		Sep		Sep		Aug		Sep		N/A

*% of PC: Percentage of Permitted Capacity. Plant's Permitted Capacity = 3.5 MGD

Table 5 Three-Month Average Daily Flows to Reuse System

Year	2002		2003		2004		2005		2006		2007	
Month	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC
January	0.709	11%	0.704	11%	0.585	9%	-	-	0.838	13%	0.961	15%
February	0.701	11%	0.755	12%	0.586	9%	-	-	0.846	14%	0.848	14%
March	0.742	12%	0.761	12%	0.627	10%	0.587	9%	0.854	14%	0.889	14%
April	0.868	14%	0.782	13%	0.706	11%	0.663	11%	1.019	16%	0.968	15%
May	0.988	16%	0.745	12%	0.740	12%	0.655	10%	1.229	20%	1.089	17%
June	0.899	14%	0.633	10%	0.721	12%	0.572	9%	1.121	18%	0.999	16%
July	0.657	11%	0.528	8%	0.571	9%	0.466	7%	0.881	14%		
August	0.482	8%	0.336	5%	0.404	6%	0.449	7%	0.549	9%		
September	0.340	5%	0.253	4%	0.277	4%	0.679	11%	0.382	6%		
October	0.625	10%	0.261	4%	0.375	6%	0.808	13%	0.452	7%		
November	0.695	11%	0.390	6%	0.608	10%	0.832	13%	0.668	11%		
December	0.872	14%	0.523	8%	-	-	0.831	13%	0.942	15%		
Minimum		5%		4%		4%		7%		6%		N/A
Maximum		16%		13%		12%		13%		20%		N/A
Max. Month		May		Apr		May,Jun		Oct-Dec		May		N/A

*% of PC: Percentage of Permitted Capacity. Reuse System's Permitted Capacity = 6.25 MGD

Table 6 Three-Month Average Daily Flows to Underground Injection Well System

Year	2002		2003		2004		2005		2006		2007	
Month	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC	3MADF (MGD)	% of PC
January	0.482	12%	0.866	22%	0.848	21%	-	-	0.704	18%	0.525	13%
February	0.541	14%	0.749	19%	0.973	24%	-	-	0.709	18%	0.655	16%
March	0.552	14%	0.730	18%	0.951	24%	0.927	23%	0.700	17%	0.622	16%
April	0.408	10%	0.664	17%	0.781	20%	0.912	23%	0.555	14%	0.528	13%
May	0.277	7%	0.632	16%	0.522	13%	0.906	23%	0.323	8%	0.318	8%
June	0.375	9%	0.747	19%	0.423	11%	1.093	27%	0.413	10%	0.322	8%
July	0.707	18%	0.868	22%	0.668	17%	1.358	34%	0.899	22%		
August	0.992	25%	1.314	33%	1.122	28%	1.440	36%	1.278	32%		
September	1.213	30%	1.452	36%	1.398	35%	1.035	26%	1.733	43%		
October	0.905	23%	1.432	36%	1.186	30%	0.765	19%	1.356	34%		
November	0.856	21%	1.091	27%	0.733	18%	0.750	19%	1.064	27%		
December	0.689	17%	0.851	21%	-	-	0.747	19%	0.510	13%		
Minimum		7%		16%		11%		19%		8%		N/A
Maximum		30%		36%		35%		36%		43%		N/A
Max. Month		Sep		Sep,Oct		Sep		Aug		Sep		N/A

*% of PC: Percentage of Permitted Capacity. Underground Injection Well System's Permitted Capacity = 4.0 MGD

2.2.3 *Annual Average Daily Flows*

Annual average daily flows (AADF) were calculated for the years 2002 through 2006 and are presented in **Table 7**. The average AADF for the plant during the analyzed period was approximately 1.6 MGD with the year 2006 having the maximum AADF of 1.691 MGD, which corresponds to approximately 48% of the plant's permitted capacity of 3.5 MGD.

The AADFs entering the Reuse System averaged 0.668 MGD for the analyzed period. The maximum AADF occurred during year 2006 with an AADF of 0.825 entering the Reuse System, which corresponds to 13% of the reuse system's permitted capacity of 6.25 MGD.

The AADF entering the Underground Injection Well System (Deep Injection Well No. 1) from the year 2002 to 2006, averaged 0.856 MGD. The maximum AADF occurred during year 2005 with an AADF of 0.951 MGD which corresponds to only 24% of the underground injection well system's permitted capacity of 4.0 MGD.

Table 7 presents a summary of the yearly AADF raw wastewater influent to the plant and the effluent pumped to the reuse system or the underground injection well system during the period analyzed.

Table 7. Annual Average Daily Flows

	AADF (MGD)		
Year	Plant Influent	Reuse	Deep Injection Well
2002	1.412	0.713	0.707
2003	1.507	0.542	0.945
2004	1.486	0.579	0.836
2005	1.681	0.680	0.951
2006	1.691	0.825	0.839
Average	1.555	0.668	0.856
Maximum	1.691	0.825	0.951
Max. Year	2006	2006	2005
% of P.C	48%	13%	24%

2.3 Seasonal Variations in Flow

In accordance with the Guidelines for the Preparation of Capacity Analysis Reports issued by the FDEP in July 1992, the maximum 3MADF occurring each year was selected from the values presented previously in **Table 4** through Table 6. The selected yearly maximum 3MADFs were compared to their correspondent year's AADF, and the ratio of 3MADFs to AADF was calculated and tabulated. **Table 8** presents the selected yearly maximum 3MADF, AADFs, and yearly maximum 3MADF to AADF ratios.

Table 8. Seasonal Variations in Flow

Year	Month of Max 3MADF	Yearly Max. 3MADF	AADF	3MADF to AADF Ratio
2002	December	1.561	1.412	1.11
2003	September	1.749	1.507	1.16
2004	September	1.695	1.486	1.14
2005	August	2.071	1.681	1.23
2006	September	2.130	1.691	1.26
Average Ratio of Yearly Maximum 3MADF to AADF				1.18

As shown in **Table 8** above, the facility experienced yearly maximum three-month average daily flows typically during the month of September every year. Additionally, during the months of December 2002 and August 2005 high 3MADFs were experienced. The average 3MADF to AADF ratio was 1.18 for the period analyzed.

2.4 Updated Flow and Loading Information

The current loadings for the Del Prado WWTP were calculated as required by the Capacity Analysis Reports Guidelines issued by FDEP in July 1992. The Carbonaceous Biological Oxygen Demand ($CBDO_5$) and Total Suspended Solids (TSS) loadings calculated for the year 2006 were used as the plant's current loadings. The current loadings were calculated on an annual average basis.

The current loads were compared to the design loads reported in the Preliminary Design Report prepared by Ron Howse, P.A., April 1999. **Table 9** presents a summary of the design and current plant capacities and loadings.

Table 9. Current $CBOD_5$ and TSS Loadings (Year 2006)

Item	Design Capacity (1999)	Current Capacity (2006)
AADF (MGD)	3.5	1.691
Avg. $CBOD_5$ (mg/L)	220	144.4
Avg. TSS (mg/L)	200	229.0
Avg. $CBOD_5$ Load (lbs/day)	4,662	2,037
Avg. TSS Load (lbs/day)	5,838	3,230

As shown in **Table 9** the current average TSS concentration of 229 mg/L exceeds the design average concentration of 200 mg/L. However, the current TSS load and $CBOD_5$ load do not exceed the design loads of the plant.

SECTION 3
FUTURE CONDITIONS

The future conditions were determined by projecting the population and flows for each of the next ten years, including the AADF and the maximum 3MADF that will occur during each year.

3.1 Population Projections

The population projections for the next 10 years were based on NFMU projected wastewater connections. The population for the existing NFMU Service Area was estimated based on Equivalent Residential Connections (ERCs) currently under contract and future ERCs from proposed projects. NFMU estimated an annual average of 1,520 new ERCs per year for the next 5 years (2007 – 2012). These ERC projections will be used for the population projections in this report.

The projected ERCs through 2025 were calculated based on yearly increments of 1,520 ERC as discussed above. It was projected that in ten years (2017) approximately 25,176 ERCs will be connected to the system. **Table 10** presents a summary of the ERCs projected for each through 2025.

3.2 Flow Projections

3.2.1 Projected Plant Flows

The flow projections for the next 10 years were based on the number of gallons per ERC per day and the projected ERCs to be served by the plant during the same period of time. The number of gallons per ERC per day was estimated to be 200 gallons per ERC per day based on historical flows for existing ERCs.

The projected population to flow ratio of 200 gallons/ERC-day was multiplied by the yearly population projections (projected ERCs) in order to project annual average daily flows. It was estimated that in ten years (2017) the AADF will be approximately 5.0 MGD which corresponds to 144% of the plant's permitted capacity of 3.5 MGD. It was estimated that the AADF will reach the plant's permitted capacity of 3.5 MGD in the year 2012.

To project the yearly maximum 3MADF, the average ratio of the yearly maximum 3MADF to AADF, as determined previously and shown in **Table 8**, was multiplied by the projected AADF for each year through 2025. It was observed that the yearly maximum 3MADF has already exceeded 50% of the plant's permitted capacity of 3.5 MGD and that it will reach 100% of the permitted capacity of 3.5 MGD during 2011.

Table 10 presents a summary of the ERCs, AADFs and yearly maximum 3MADFs projected through the year 2025.

Table 10 Projected Equivalent Residential Connections and Plant Flows

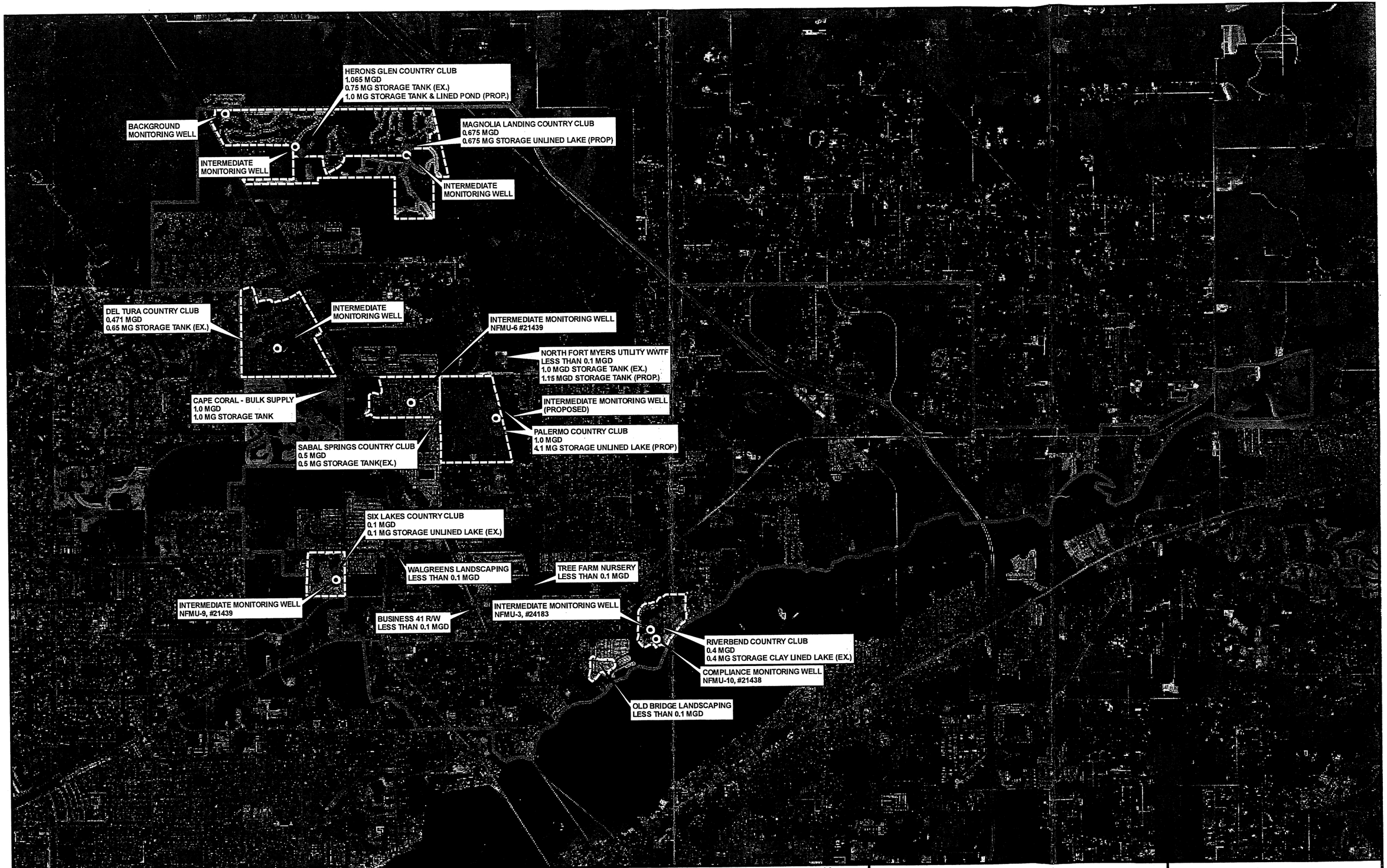
Year	ERCs	AADF (MGD)	Yearly Max. 3MADF (MGD)
2006	8,456	1.69	2.00
2007	9,976	2.00	2.35
2008	11,496	2.30	2.71
2009	13,016	2.60	3.07
2010	14,536	2.91	3.43
2011	16,056	3.21	3.79
2012	17,576	3.52	4.15
2013	19,096	3.82	4.51
2014	20,616	4.12	4.87
2015	22,136	4.43	5.22
2016	23,656	4.73	5.58
2017	25,176	5.04	5.94
2018	26,696	5.34	6.30
2019	28,216	5.64	6.66
2020	29,736	5.95	7.02
2021	31,256	6.25	7.38
2022	32,776	6.56	7.74
2023	34,296	6.86	8.09
2024	35,816	7.16	8.45
2025	37,336	7.47	8.81

3.2.2 Projected Capacity of the Reuse System

On September 11, 2007, NFMU received an FDEP "Notice of Permit Revision" for the NFMU reuse disposal system. This notice includes five (5) additional large reclaimed water users that have a future additional capacity of 4.55 MGD. Therefore the projected future capacity of the NFMU Reuse System is 6.25 MGD. The NFMU reuse system including the existing and proposed major users is identified in **Table 11**. **Insert Figure** 4 presents a Map of the Reuse Service Area for the existing and proposed major reuse customers.

Table 11 NFMU Current and Projected Reuse Customers

Major Reuse Customer Name	User Type	Capacity (MGD)	Acreage
Current Users			
Six Lakes Golf and Country Club (1)	Golf Course Irrigation	0.1	43
Riverbend (1)	Golf Course Irrigation	0.4	172
Old Bridge (1)	Landscape	-	-
Tree Farm (1)	Landscape	-	-
Sabal Springs (1)	Golf Course & Residential Irrigation	1.2	516
	Total Capacity of Current Users	**1.7**	**731**
Herons Glen (2)	Golf Course & Residential Irrigation	1.405	242
Magnolia Landing (2)	Golf Course	0.675	116
Del Tura (2)	Golf Course	0.471	81
Palermo (2)	Golf Course & Residential Irrigation	1.00	174
Cape Coral-Bulk Sale (2)	Residential Irrigation & R/W	1.00	-
	Total Capacity of Future Users	**4.55**	**613**
Total Projected Reuse System Capacity		**6.25**	**1,344**



HDR

Legend

- Service Area Boundary
- Subdivision Boundary
- WWTF Boundary
- Reuse Storage
- Monitoring Well

1 Inch = 1 Mile

0 1 2 3

Miles

N W E S

North Fort Myers Utility, Inc.

Reuse Service Area, Reuse Storage and Groundwater Monitoring Wells

Capacity Analysis Report

Figure 4

SECTION 4
SUMMARY AND CONCLUSIONS

4.1 Time Required for the Three-Month Average Daily Flow to Reach the Permitted Capacity

The projected yearly maximum 3MADF will exceed the plant's current permitted capacity of 3.5 MGD during the year 2011 as shown previously in **Table 10** and in **Figure A-2** in Appendix A.

4.2 Recommendations for Expansion

As discussed previously, the yearly maximum 3MADF will be exceeded within the next five years. Therefore, expansion of the Del Prado WWTP will be required in order to meet the flow demands of the projected population and to satisfy the projected demands of the future reuse users. Since the existing treatment units of the Del Prado WWTP have been designed for 3.5 MGD, the expansion of the plant will require construction of additional treatment units to provide sufficient capacity so that the projected yearly maximum 3MADFs do not exceed the new permitted capacity at least within the next five years.

Based on the projected population and reuse capacity, it has been recommended to NFMU that the Del Prado WWTP be expanded to treat an AADF of 7.5 MGD. It is proposed that the construction proceed in two phases, Phase 1 to an intermediate capacity of 5.0 MGD and Phase 2 to an ultimate capacity of 7.5 MGD. The plant additions and modifications will include a new proposed preliminary treatment facility with mechanical screening and grit removal; the addition of mechanical mixing to the existing equalization basins; a new biological nutrient removal process for partial nitrogen removal, with an ultimate capacity of least 5.0 MGD; two additional 100 foot diameter secondary clarifiers; new RAS/WAS pumping facilities with greater capacities; new disc filter units; an additional chlorine contact chamber; an additional 1.15 MG reuse ground storage tank; a new sodium hypochlorite feeding facility; a new high service reuse pumping station of greater capacity; a new deep injection well with a new injection pumping station; and a new residuals dewatering facility. The Preliminary Engineering Report and the final design drawings and technical specifications showing the proposed plant improvements and additions have been submitted to the FDEP for review with the Construction Permit Application.

4.3 Del Prado Wastewater Treatment Plant Expansion Schedule

Table 12 presents a summary of the proposed expansion schedule for the NFMU Del Prado WWTP. Note that at the time of this report several steps required for the expansion of the facility have already been completed.

Table 12 Del Prado Wastewater Treatment Plant Expansion Schedule

Implementation Steps	Schedule
Preliminary Planning and Schematic Design	01/01/05 – 08/31/05
Final Design	08/31/05 – 05/30/07
Submittal of FDEP Construction Permit Application	05/31/07
Start of Construction for Phase 1 (Intermediate Capacity of 5.0 MGD)	June 2008
Completion of Phase 1 Construction	June 2010
Begin Effluent Discharge to Reuse or Deep Injection Well for Phase 1 Facilities	July 2010
Phase 1 Facilities – Complete Operational Level Attained	October 2010
Start of Construction for Phase 2 (Ultimate Capacity of 7.5 MGD)	June 2011
Completion on Phase 2 Construction	June 2013
Begin Effluent Discharge to Reuse or Deep Injection Well for Phase 2 Facilities	July 2013
Phase 2 Facilities - Complete Operational Level Attained	October 2013

APPENDIX A

FIGURES

Figure A-1. Plant Flows from 2002 to 2007

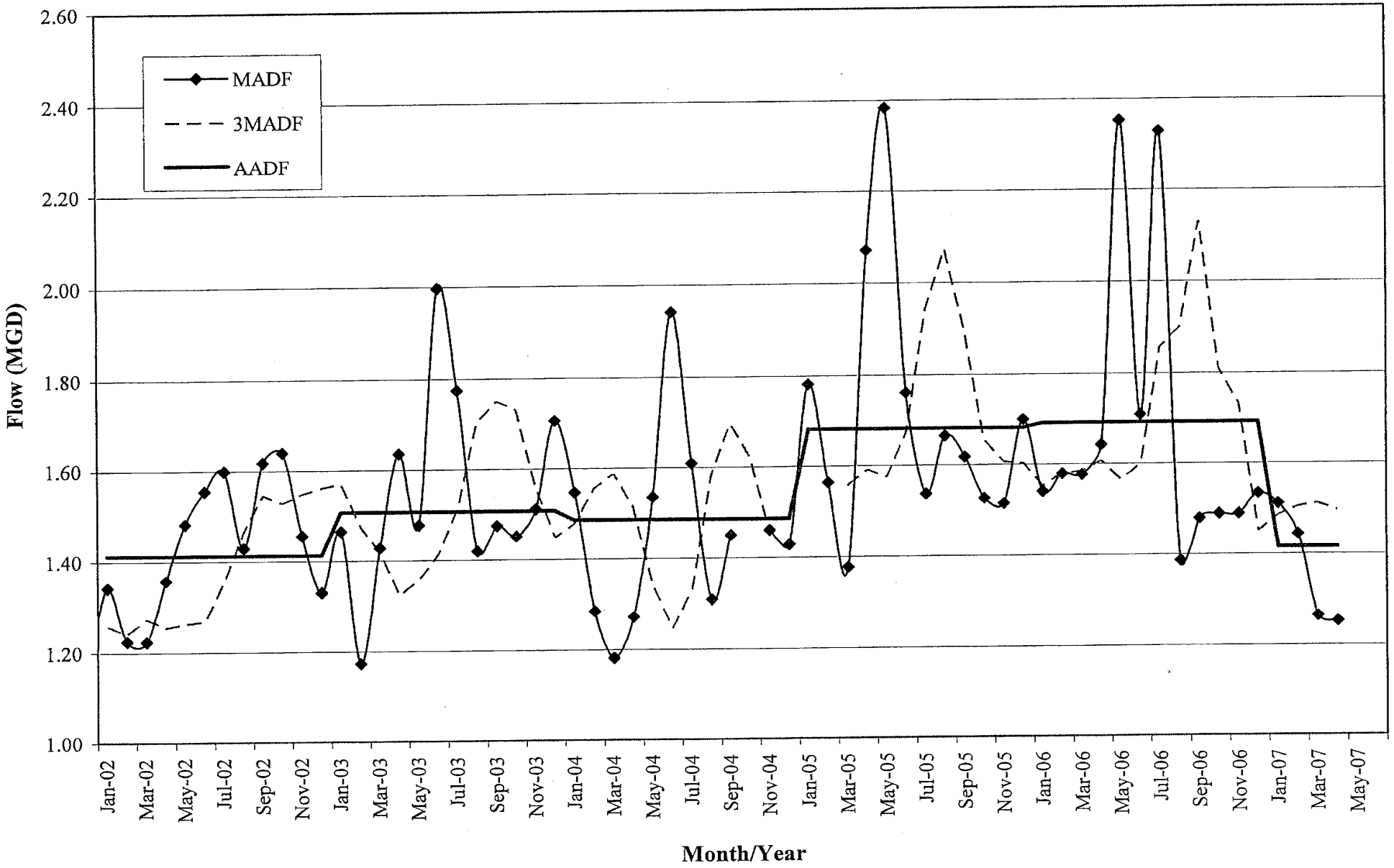
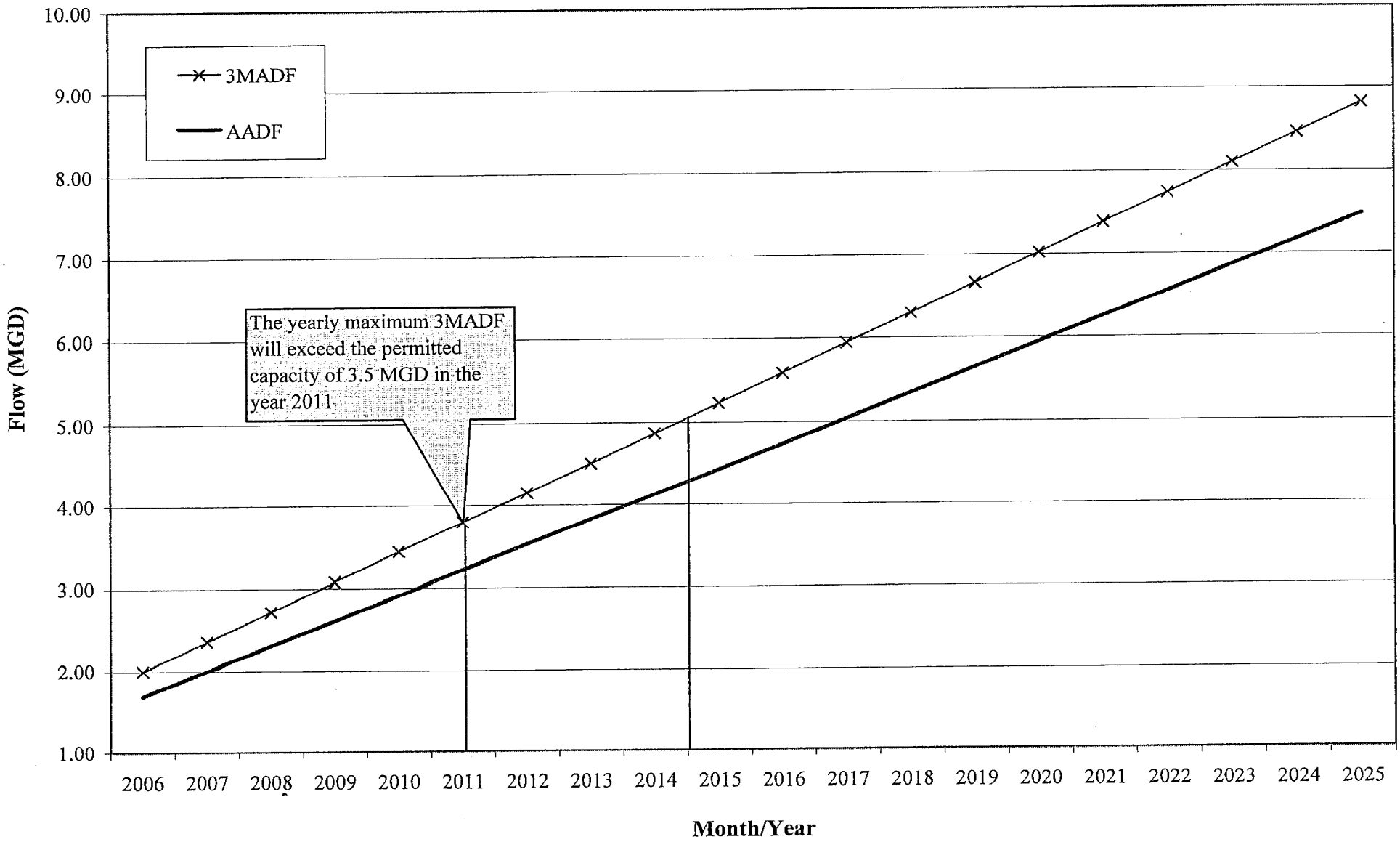


Figure A-2. Projected Flows from 2007 to 2025



APPENDIX B

FLOW DATA

TABLE B-1. 2002 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-02	1.280	1.258	1.140	1.630	1.273	217.8	254.0	166.0	101.8	155.0	48.0	
Feb-02	1.199	1.241	0.000	1.730	1.443	246.3	276.0	189.0	121.8	184.0	35.0	
Mar-02	1.341	1.273	1.210	1.630	1.216	252.0	330.0	188.0	96.3	191.0	29.0	
Apr-02	1.225	1.255	1.030	1.480	1.208	249.8	307.0	201.0	157.3	342.0	90.0	
May-02	1.224	1.263	0.730	1.760	1.438	217.6	283.0	169.0	165.6	210.0	136.0	
Jun-02	1.357	1.269	1.060	1.800	1.326	244.3	378.0	152.0	108.3	152.0	81.0	
Jul-02	1.482	1.354	1.100	2.360	1.592	116.0	156.0	60.0	135.7	302.0	45.5	
Aug-02	1.555	1.465	1.110	2.540	1.633	144.5	181.0	108.0	211.5	329.0	150.0	
Sep-02	1.598	1.545	1.210	2.250	1.408	131.5	232.0	32.0	374.8	633.0	66.0	
Oct-02	1.429	1.527	1.290	1.540	1.078	176.2	210.0	137.0	222.0	297.0	178.0	
Nov-02	1.616	1.548	0.180	3.094	1.915	160.8	192.0	100.0	131.3	151.0	97.1	
Dec-02	1.638	1.561	2.500	0.974	0.595	129.2	177.0	84.0	130.4	164.0	102.0	
2002 AADF	**1.412**	**MGD**										

TABLE B-2. 2003 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-03	1.456	1.570	1.130	2.130	1.463	170.0	210.0	99.0	166.3	194.0	117.0	
Feb-03	1.330	1.475	0.000	1.580	1.188	231.0	248.0	218.0	210.0	233.0	174.0	
Mar-03	1.465	1.417	0.520	1.760	1.201	234.3	253.0	210.0	186.1	250.0	148.0	
Apr-03	1.174	1.323	0.000	1.450	1.235	209.4	288.0	157.0	186.4	297.0	137.0	
May-03	1.428	1.356	1.130	2.250	1.576	195.3	255.0	140.0	370.8	464.0	302.0	
Jun-03	1.634	1.412	1.114	3.480	2.130	97.0	168.0	60.0	178.8	358.0	117.0	
Jul-03	1.478	1.513	1.180	1.880	1.272	90.4	127.0	60.0	82.3	117.0	54.0	
Aug-03	1.996	1.703	1.410	3.362	1.684	55.8	124.0	24.0	48.8	86.0	31.3	
Sep-03	1.774	1.749	1.320	3.188	1.797	71.0	126.0	50.0	88.3	140.0	57.0	
Oct-03	1.419	1.730	1.290	2.212	1.559	165.4	259.0	118.0	236.4	508.0	116.0	
Nov-03	1.475	1.556	1.320	1.990	1.349	183.5	210.0	150.0	174.3	267.0	122.0	
Dec-03	1.452	1.449	0.976	2.048	1.410	171.0	203.0	145.0	209.6	342.0	140.0	
2003 AADF	**1.507**	**MGD**										

TABLE B-3. 2004 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-04	1.510	1.479	0.000	3.080	2.040	218.3	247.0	186.0	163.0	182.0	137.0	
Feb-04	1.705	1.556	1.488	2.376	1.394	190.8	207.0	157.0	344.5	532.0	78.0	
Mar-04	1.547	1.587	1.326	1.866	1.206	232.6	289.0	180.0	284.0	504.0	184.0	
Apr-04	1.285	1.512	1.120	1.516	1.180	217.5	255.0	179.0	169.8	184.0	150.0	
May-04	1.182	1.338	0.288	1.510	1.277	223.0	246.0	186.0	158.0	182.0	128.0	
Jun-04	1.272	1.246	0.400	1.725	1.356	156.6	268.0	97.0	128.1	193.0	77.3	
Jul-04	1.535	1.330	1.095	2.397	1.562	116.0	247.0	63.0	98.3	132.0	61.3	7.85
Aug-04	1.941	1.583	0.000	3.426	1.765	105.0	138.0	51.0	58.0	71.0	24.0	14.25
Sep-04	1.6079	1.695	0.829	2.601	1.618	139.6	289.0	66.0	125.0	181.0	72.0	7.1
Oct-04	1.309	1.619	0.895	1.560	1.192	224.8	398.0	159.0	266.5	424.0	176.0	1
Nov-04	1.451	1.456	1.360	1.590	1.096	204.0	236.0	154.0	250.0	384.0	188.0	0.6
Dec-04					#DIV/0!							
2004 AADF	**1.486**	**MGD**										

TABLE B-4. 2005 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-05	1.461		1.260	2.106	1.441	210.8	243.0	168.0	290.5	404.0	194.0	0.75
Feb-05	1.429		1.220	2.550	1.784	199.0	214.0	184.0	284.0	432.0	174.0	0.00
Mar-05	1.781	1.557	1.070	2.761	1.550	196.8	267.0	139.0	245.6	320.0	192.0	6.50
Apr-05	1.564	1.591	1.310	1.800	1.151	140.3	164.0	93.0	197.7	256.0	98.7	4.50
May-05	1.377	1.574	1.060	1.640	1.191	133.5	165.0	97.0	169.5	248.0	130.0	6.35
Jun-05	2.070	1.670	1.220	3.000	1.449	72.8	150.0	32.0	161.7	560.0	38.7	20.10
Jul-05	2.383	1.943	1.473	3.395	1.425	67.8	118.0	31.0	72.2	120.0	32.0	9.60
Aug-05	1.761	2.071	1.390	2.697	1.532	71.6	93.0	33.0	77.2	124.0	47.2	10.50
Sep-05	1.537	1.894	1.360	2.051	1.334	107.3	136.0	56.0	98.5	124.0	62.0	4.80
Oct-05	1.663	1.654	0.420	2.575	1.548	89.5	125.0	42.0	133.0	158.0	80.0	9.10
Nov-05	1.617	1.606	1.490	2.000	1.237	109.8	142.0	66.0	173.4	223.0	82.0	2.85
Dec-05	1.526	1.602	1.078	1.910	1.252	170.0	204.0	148.0	249.5	468.0	172.0	0.25
2005 AADF	**1.681**	**MGD**										

TABLE B-5. 2006 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-06	1.514	1.553	1.305	1.600	1.057	186.8	196.0	177.0	256.0	316.0	178.0	0.35
Feb-06	1.699	1.580	1.440	2.229	1.312	169.5	275.0	125.0	244.5	328.0	160.0	3.50
Mar-06	1.540	1.585	1.330	1.944	1.262	194.2	275.0	138.0	263.2	336.0	196.0	1.00
Apr-06	1.579	1.606	1.312	1.830	1.159	222.5	295.0	169.0	503.0	636.0	268.0	0.00
May-06	1.577	1.565	1.100	2.180	1.383	198.0	212.0	179.0	199.6	236.0	166.0	2.60
Jun-06	1.641	1.599	1.116	3.028	1.845	130.0	168.0	80.0	196.2	296.0	70.7	16.00
Jul-06	2.352	1.857	1.347	4.525	1.924	62.3	108.0	24.0	85.7	108.0	36.0	9.10
Aug-06	1.708	1.901	1.070	2.892	1.693	74.0	138.0	41.0	82.2	170.0	37.8	11.55
Sep-06	2.329	2.130	1.230	3.961	1.701	55.3	83.0	22.0	97.0	137.0	56.0	12.70
Oct-06	1.386	1.808	0.480	2.300	1.659	129.0	188.0	62.0	292.5	382.0	208.0	0.60
Nov-06	1.480	1.732	1.190	1.850	1.250	173.6	243.0	110.0	242.4	340.0	172.0	0.95
Dec-06	1.489	1.452	0.875	2.650	1.780	137.8	190.0	112.0	286.0	584.0	174.0	1.70
2006 AADF	**1.691**	**MGD**										

TABLE B-6. 2007 PLANT FLOWS

	ADF (MGD)	3MADF (MGD)	Min.DF (MGD)	Max.DF (MGD)	MDF/ADF	Inf. $CBOD_5$ (mg/L)			Inf. TSS (mg/L)			Rainfall (Inches)
						Average	Max.	Min.	Average	Max.	Min.	
Jan-07	1.489	1.486	1.340	1.880	1.263	199.2	276.0	176.0	303.2	504.0	208.0	0.45
Feb-07	1.533	1.504	1.720	1.310	0.854	189.5	254.0	159.0	229.0	312.0	152.0	1.15
Mar-07	1.511	1.511	0.530	2.210	1.463	199.0	216.0	175.0	226.0	284.0	160.0	0.35
Apr-07	1.444	1.496	1.220	1.670	1.156	183.5	209.0	173.0	210.0	264.0	188.0	1.50
May-07	1.265	1.407	0.960	1.560	1.233	198.4	227.0	179.0	285.6	452.0	212.0	1.00
Jun-07	1.253	1.321	0.830	1.949	1.555	164.8	204.0	133.0	187.5	220.0	126.0	8.00
Jul-07												
Aug-07												
Sep-07												
Oct-07												
Nov-07												
Dec-07												
2007 AADF	**1.416**	**MGD**										

TABLE B-7. 2002 REUSE AND DEEP INJECTION WELL FLOWS

2002 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.648	0.648	0.000	1.119	1.73	217.8	2.0	0.6	0.9	0	1.6	7.7	7.5	
February	0.654	0.651	0.154	0.994	1.52	246.3	2.0	0.6	0.9	0	2.2	7.9	7.7	
March	0.925	0.742	0.000	1.331	1.44	252.0	2.0	0.5	0.8	0	2.4	8.0	7.7	
April	1.024	0.868	0.724	1.288	1.258	249.8	2.0	0.6	0.9	0	2.8	7.5	7.2	
May	1.014	0.988	0.435	1.610	1.588	217.6	2.0	0.5	1	0	1.9	7.5	7.2	
June	0.659	0.899	0.000	1.127	1.710	244.3	2.0	0.5	0.9	0	2.1	8.0	7.7	
July	0.298	0.657	0.000	0.751	2.520	116.0	2.0	0.6	0.9	0	2.1	7.4	7.2	
August	0.489	0.482	0.000	1.017	2.080	144.5	2.0	0.6	0.9	0	1.1	7.6	7.2	
September	0.232	0.340	0.000	0.850	3.664	131.5	2.0	0.7	0.9	0	1.0	7.6	7.3	
October	1.154	0.625	0.777	1.464	1.269	176.2	2.0	0.8	1.2	6	1.9	7.5	7.2	
November	0.700	0.695	0.000	1.579	2.256	160.8	2.8	0.7	1.4	0	1.7	7.3	6.8	
December	0.763	0.872	0.053	1.505	1.972	129.2	2.0	0.7	0.9	0	1.1	7.1	6.7	
Year Total	*8.560*	*8.467*					*24.8*	*7.4*	*11.6*					
Year Avg.	*0.713*	*0.706*					*2.1*	*0.6*	*1.0*					

2002 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.633	0.633	1.232	0.269	0.4	217.8	2.0	1.0	15.50	0	0.6	8.0	6.9	
February	0.603	0.618	1.328	0.266	0.4	246.3	2.0	0.6	10.10	0	0.7	8.1	7.1	
March	0.420	0.552	1.462	0.202	0.5	252.0	2.0	0.9	0.30	0	1.3	8.0	7.0	
April	0.201	0.408	0.613	0.071	0.4	249.8	2.0	1.1	11.00	0	1.4	8.1	6.7	
May	0.210	0.277	0.755	0.084	0.4	217.6	2.0	0.7	26.30	0	1.0	7.8	6.4	
June	0.713	0.375	1.831	0.103	0.1	244.3	2.0	1.2	0.80	0	0.8	8.1	6.8	
July	1.199	0.707	2.323	0.539	0.4	116.0	2.0	0.6	12.10	0	0.5	8.1	7.4	
August	1.064	0.992	2.334	0.433	0.4	144.5	2.0	1.1	0.10	0	0.5	8.4	7.4	
September	1.377	1.213	2.293	0.61	0.4	131.5	2.0	0.8	9.80	0	0.8	8.2	7.4	
October	0.275	0.905	0.637	0.046	0.2	176.2	2.0	1.2	16.00	0	0.9	8.5	7.0	
November	0.916	0.856	3.314	0.096	0.1	160.8	2.0	1.7	11.10	0	1.1	8.0	6.5	
December	0.875	0.689	2.069	0.094	0.1	129.2	2.0	0.8	2.50	0	1.1	8.0	6.5	
Year Total	*8.486*	*8.225*					*24.0*	*11.7*	*115.6*					
Year Avg.	*0.707*	*0.685*					*2.0*	*1.0*	*9.6*					
TOTAL	**17.046**	**16.692**												
AVG.	**1.420**	**1.391**												

TABLE B-8. 2003 REUSE AND DEEP INJECTION WELL FLOWS

2003 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.649	0.704	0.000	1.456	2.243	170.0	2.0	0.7	0.9	0	1.6	7.4	7.0	
February	0.852	0.755	0.238	1.381	1.621	231.0	2.2	0.6	0.9	0	1.7	7.4	7.1	
March	0.782	0.761	0.014	1.381	1.766	234.3	2.0	0.7	1.7	0	1.6	7.6	7.2	
April	0.712	0.782	0.036	1.166	1.638	209.4	2.0	0.7	1.3	0	1.9	7.4	7.1	
May	0.741	0.745	0.000	1.234	1.665	195.3	2.0	0.8	1.6	0	1.8	7.6	7.3	
June	0.445	0.633	0.000	1.228	2.760	97.0	2.0	0.7	1.1	0	2.1	7.9	7.6	
July	0.397	0.528	0.002	1.366	3.444	90.4	2.0	0.6	1	0	1.9	8.0	7.7	
August	0.165	0.336	0.000	0.605	3.667	55.8	2.0	0.6	0.8	0	1.3	7.3	7.1	
September	0.197	0.253	0.000	0.692	3.513	71.0	2.0	0.7	0.6	0	1.6	7.4	7.2	
October	0.422	0.261	0.000	1.054	2.498	165.4	2.0	0.6	0.4	0	1.3	7.3	7.1	
November	0.552	0.390	0.001	1.130	2.047	183.5	2.0	0.7	0.4	0	1.4	7.3	7.1	
December	0.594	0.523	0.001	1.304	2.195	171.0	2.0	0.7	0.4	0	1.4	7.4	7.1	
Year Total	*6.508*	*6.670*					*24.2*	*8.1*	*11.1*					
Year Avg.	*0.542*	*0.556*					*2.0*	*0.7*	*0.9*					

2003 INJ. WELL	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Nitrogen, Total NO_3-N	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.808	0.866	1.871	0.094	0.1	170.0	2.2	0.8	11.10	0	2.0	8.0	6.0	
February	0.563	0.749	1.152	0.098	0.2	231.0	2.0	1.2	1.17	0	1.6	8.0	6.7	
March	0.818	0.730	2.629	0.096	0.1	234.3	3.0	5.1	0.21	0	0.9	7.8	6.7	
April	0.610	0.664	1.666	0.070	0.1	209.4	2.0	1.0	0.01	0	1.0	7.7	6.4	
May	0.468	0.632	1.773	0.053	0.1	195.3	2.0	1.1	19.50	0	0.8	8.0	6.5	
June	1.164	0.747	3.360	0.095	0.1	97.0	2.0	0.9	1.95	1	1.6	7.8	6.8	
July	0.972	0.868	1.787	0.119	0.1	90.4	2.0	0.6	5.39	0	1.8	8.0	7.1	
August	1.807	1.314	3.362	0.735	0.4	55.8	2.0	2.3	2.31	0	1.3	7.5	7.1	
September	1.577	1.452	3.188	0.257	0.2	71.0	2.0	1.0	1.32	0	1.7	7.7	7.1	
October	0.912	1.432	2.119	0.12	0.1	165.4	2.0	0.6	6.66	0	1.3	7.5	6.8	
November	0.784	1.091	1.638	0.106	0.1	183.5	2.0	0.7	9.08	0	1.4	7.7	6.8	
December	0.858	0.851	2.047	0.129	0.2	171.0	2.0	0.7	8.19	0	1.8	7.6	6.7	
Year Total	*11.341*	*11.396*					*25.2*	*16.0*	*66.9*					
Year Avg.	*0.945*	*0.950*					*2.1*	*1.3*	*5.6*					
TOTAL	**17.849**	**18.066**												
AVG.	**1.487**	**1.505**												

TABLE B-9. 2004 REUSE AND DEEP INJECTION WELL FLOWS

2004 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.609	0.585	0.000	1.213	1.992	218.3	2	0.7	0.3	0	1.7	7.6	7.3	
February	0.555	0.586	0.001	1.275	2.297	190.8	2.3	0.7	0.3	0	1.4	7.7	7.5	
March	0.716	0.627	0.001	1.365	1.906	232.6	2	0.8	0.3	0	1.6	7.8	7.6	
April	0.847	0.706	0.082	1.364	1.610	217.5	2	0.8	0.4	7	1.6	7.3	7.0	
May	0.658	0.740	0.000	1.366	2.076	223.0	2.3	0.7	0.3	0	2.4	7.5	7.3	
June	0.659	0.721	0.039	1.009	1.532	156.6	2.2	0.7	0.4	0	1.9	7.7	7.5	
July	0.395	0.571	0.000	0.948	2.400	116.0	2	0.6	0.4	0	1.9	7.5	7.3	7.9
August	0.157	0.404	0.000	0.651	4.146	105.0	2	0.7	0.4	0	1.5	7.6	7.4	14.3
September	0.278	0.277	0.013	0.874	3.144	139.6	2.4	0.6	0.4	0	1.7	7.8	7.6	7.1
October	0.689	0.375	0.029	1.180	1.712	224.8	2	0.6	0.5	0	1.6	8.1	7.8	1.0
November	0.857	0.608	0.110	1.290	1.506	204.0	2	0.6	0.4	0	1.7	7.6	7.4	0.6
December														
Year Total	*6.420*	*6.199*					*23.2*	*7.5*	*4.1*					
Year Avg.	*0.584*	*0.564*					*2.1*	*0.7*	*0.4*					

2004 INJ. WELL	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Nitrogen, Total NO_3-N	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH
January	0.902	0.848	1.871	0.0	0.0	218.3	2.0	0.9	0.20	0	2.2	7.9	7.0
February	1.160	0.973	2.376	0.238	0.2	190.8	2.0	0.6	1.14	1	1.7	7.7	7.2
March	0.790	0.951	1.834	0.122	0.2	232.6	3.0	0.7	1.09	1	1.8	7.8	7.3
April	0.392	0.781	1.353	0.121	0.3	217.5	2.0	0.9	12.20	1	2.1	7.9	6.7
May	0.385	0.522	1.442	0.073	0.2	223.0	2.3	3.1	15.60	0	1.0	8.0	7.0
June	0.493	0.423	1.477	0.067	0.1	156.6	2.4	0.7	6.00	0	0.9	8.2	7.6
July	1.127	0.668	2.340	0.452	0.4	116.0	3.0	0.6	3.14	0	1.6	8.2	7.2
August	1.747	1.122	3.426	0.0	0.0	105.0	2.0	1.4	5.05	0	1.7	8.1	7.2
September	1.321	1.398	2.588	0.380	0.3	139.6	2.6	0.6	0.15	0	2.0	8.1	7.4
October	0.490	1.186	1.165	0.06	0.1	224.8	2.0	0.7	3.49	0	1.0	8.1	7.2
November	0.388	0.733	0.861	0.061	0.2	204.0	2.0	0.6	0.44	0	0.9	7.8	7.0
December													
Year Total	*9.195*	*9.606*					*25.3*	*10.8*	*48.5*				
Year Avg.	*0.836*	*0.873*					*2.3*	*1.0*	*4.4*				
TOTAL	**15.615**	**15.806**											
AVG.	**1.420**	**1.437**											

TABLE B-10. 2005 REUSE AND DEEP INJECTION WELL FLOWS

2005 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.531		0.014	0.983	1.850	210.8	2	0.6	0.5	0	2.5	7.6	7.2	0.8
February	0.734		1.323	0.111	0.151	199.0	2	0.7	0.5	0	1.8	7.5	7.2	0.0
March	0.497	0.587	0.014	0.946	1.903	196.8	2	0.6	0.4	0	1.9	7.5	7.2	6.5
April	0.758	0.663	1.285	0.050	0.066	140.3	2	0.7	0.4	7	1.5	7.6	7.3	4.5
May	0.710	0.655	0.071	1.286	1.811	133.5	2	0.8	0.4	0	2.1	7.9	7.7	6.4
June	0.249	0.572	0.000	0.996	4.000	72.8	2	0.8	0.5	0	2.2	7.8	7.5	20.1
July	0.439	0.466	0.000	1.576	3.590	67.8	2	0.6	0.4	0	2.1	7.9	7.7	9.6
August	0.659	0.449	0.107	1.399	2.124	71.6	2	0.6	1.3	0	1.5	7.6	7.3	10.5
September	0.940	0.679	0.130	1.487	1.583	107.3	2	0.6	1.2	0	1.3	7.8	7.4	4.8
October	0.825	0.808	0.088	1.580	1.915	89.5	2	0.6	1.1	0	1.2	7.8	7.4	9.1
November	0.732	0.832	0.004	1.560	2.131	109.8	2	0.6	1.7	0	1.5	8.0	7.4	2.9
December	0.936	0.831	0.150	1.442	1.541	170.0	2	0.7	1	0	1.7	8.0	7.5	0.3
Year Total	*8.010*	*6.543*					*24.0*	*7.9*	*9.4*					
Year Avg.	*0.667*	*0.654*					*2.0*	*0.7*	*0.8*					

2005 INJ. WELL	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Nitrogen, Total NO_3-N	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH
January	0.851		1.464	0.551	0.6	210.8	2.0	1.2	1.22	0	2.6	7.9	7.3
February	0.684		1.222	0.085	0.1	199.0	2.0	1.9	0.93	1	2.0	8.0	7.2
March	1.247	0.927	2.746	0.605	0.5	196.8	2.0	0.6	0.11	0	1.7	8.0	7.2
April	0.805	0.912	1.590	0.148	0.2	140.3	2.0	3.0	0.75	0	1.0	8.4	7.7
May	0.667	0.906	1.438	0.094	0.1	133.5	2.0	1.3	8.44	0	2.4	8.4	7.6
June	1.808	1.093	2.892	0.614	0.3	72.8	2.0	2.3	0.10	0	3.9	8.3	7.4
July	1.598	1.358	3.096	0.403	0.3	67.8	2.0	0.6		0	3.0	8.6	7.8
August	0.913	1.440	2.571	0.0	0.0	71.6	2.0	0.7	12.60	0	1.8	8.4	7.7
September	0.594	1.035	1.820	0.0	0.0	107.3	2.0	0.6	14.10	0	2.0	8.4	7.3
October	0.788	0.765	1.732	0.0	0.0	89.5	2.0	0.7	0.68	0	2.4	8.4	7.5
November	0.867	0.750	1.746	0.0	0.0	109.8	2.0	0.7	1.62	0	2.3	8.5	7.5
December	0.586	0.747	1.400	0.160	0.3	170.0	2.0	0.6	0.28	0	3.1	8.5	7.0
Year Total	*11.408*	*9.933*					*24.0*	*14.2*	*40.83*				
Year Avg.	*0.951*	*0.993*					*2.0*	*1.2*	*3.7*				
TOTAL	**19.418**	**16.476**											
AVG.	**1.618**	**1.648**											

TABLE B-11. 2006 REUSE AND DEEP INJECTION WELL FLOWS

2006 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.847	0.838	0.392	1.476	1.744	186.8	2	0.6	1.2	0	1.3	8.3	7.6	0.4
February	0.756	0.846	0.123	1.819	2.407	169.5	2	0.6	1.3	0	1.8	8.2	7.6	3.5
March	0.960	0.854	0.000	1.590	1.656	194.2	2	0.6	1.1	0	1.5	8.0	7.2	1.0
April	1.343	1.019	0.802	1.799	1.340	222.5	2	0.6	1.3	0	1.6	7.5	6.8	0.0
May	1.384	1.229	1.808	0.789	0.570	198.0	2	0.6	1.6	0	1.9	7.6	7.0	2.6
June	0.637	1.121	0.000	1.374	2.157	130.0	2	0.7	1.2	0	1.9	8.1	7.4	16.0
July	0.622	0.881	0.307	1.087	1.749	62.3	2	0.6	1.1	7	1.7	8.1	7.6	9.1
August	0.388	0.549	0.000	1.387	3.575	74.0	2	0.6	1	0	1.1	8.2	7.9	11.6
September	0.136	0.382	0.000	1.230	9.044	55.3	2	0.6	1.4	1	1.1	8.2	7.9	12.7
October	0.831	0.452	0.000	2.114	2.544	129.0	2	0.6	1.4	0	2.3	8.1	7.3	0.6
November	1.037	0.668	0.000	1.590	1.533	173.6	2	0.6	1.1	0	2.2	7.7	7.2	1.0
December	0.957	0.942	0.000	2.290	2.393	137.8	2	0.6	1.3	0	3.3	7.5	7.2	1.7
Year Total	*9.896*	*9.781*					*24.0*	*7.3*	*15.0*					
Year Avg.	*0.825*	*0.815*					*2.0*	*0.6*	*1.3*					

2006 INJ. WELL	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Nitrogen, Total NO_3-N	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH
January	0.659	0.704	1.044	0.014	0.02	186.8	2.0	0.6	0.49	0	2.0	8.5	7.4
February	0.881	0.709	1.647	0.020	0.02	169.5	2.0	0.6	0.43	0	2.7	8.4	7.4
March	0.559	0.700	1.490	0.030	0.1	194.2	2.0	0.6	0.43	0	2.9	8.5	6.9
April	0.226	0.555	0.798	0.0	0.0	222.5	2.0	0.9	0.90	0	7.2	8.0	6.8
May	0.185	0.323	0.701	0.012	0.1	198.0	2.0	0.7	8.15	0	7.6	8.5	6.9
June	0.827	0.413	2.510	0.045	0.1	130.0	2.0	0.6	16.10	0	5.1	8.5	7.5
July	1.686	0.899	3.947	0.260	0.2	62.3	2.0	0.6	11.10	50	1.7	8.5	7.3
August	1.320	1.278	2.270	0.495	0.4	74.0	2.0	0.7	3.54	0	3.2	8.5	7.9
September	2.193	1.733	3.961	0.606	0.3	55.3	2.0	0.6	10.30	0	2.7	8.6	7.4
October	0.555	1.356	1.399	0.015	0.0	129.0	2.0	0.7	2.24	0	1.8	8.1	7.2
November	0.443	1.064	1.511	0.0	0.0	173.6	2.0	0.6		0	7.4	8.5	6.9
December	0.532	0.510	1.403	0.003	0.01	137.8	2.0	0.6	1.12	0	3.0	8.3	7.0
Year Total	*10.066*	*10.243*					*24.0*	*7.8*	*54.8*				
Year Avg.	*0.839*	*0.854*					*2.0*	*0.7*	*5.0*				
TOTAL	**19.962**	**20.024**											
AVG.	**1.664**	**1.669**											

TABLE B-12. 2007 REUSE AND DEEP INJECTION WELL FLOWS

2007 REUSE	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Turbidity NTU	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH	Rainfall (Inches)
January	0.888	0.961	0.260	1.560	1.757	199.2	2	0.6	1.3	0	2.6	7.8	7.1	0.5
February	0.700	0.848	0.000	1.439	2.056	189.5	2	0.6	1.3	0	2.9	7.8	7.0	1.2
March	1.078	0.889	0.000	1.935	1.795	199.0	2	0.7	1.7	0	3.7	7.7	7.1	0.4
April	1.127	0.968	0.485	1.576	1.399	183.5	2	1	2.3	0	5.1	8.2	7.2	1.5
May	1.061	1.089	0.385	1.525	1.437	198.4	2	0.9	2.6	1	2.5	7.9	7.1	1.0
June	0.809	0.999	0.000	1.327	1.640	164.8	2	0.6	1.9	0	4.9	7.5	7.3	8.0
July														
August														
September														
October														
November														
December														
Year Total	*5.663*	*5.754*					*12.0*	*4.4*	*11.1*					
Year Avg.	*0.944*	*0.959*					*2.0*	*0.7*	*1.9*					

2007 INJ. WELL	ADF (MGD)	3-Mo. ADF (MGD)	Min. Day Q (MGD)	Max. Day Q (MGD)	MDF/ ADF	Inf. $CBOD_5$ (mg/L)	Eff. CBOD (mg/L)	Eff. TSS (mg/L)	Nitrogen, Total NO_3-N	Fecal Coliform #COL/100mL	Min. Cl_2 Res. (mg/L)	Min pH	Max pH
January	0.601	0.525	1.260	0.0	0.0	199.2	2.0	0.6	0.74	0	3.5	7.7	7.1
February	0.833	0.655	1.442	0.156	0.2	189.5	2.0	0.8	1.58	0	1.9	7.5	7.1
March	0.433	0.622	1.227	0.000	0.0	199.0	2.0	0.6	0.27	0	4.0	7.7	6.9
April	0.317	0.528	0.885	0.014	0.04	183.5	2.0	0.6	0.11	0	4.4	8.5	7.1
May	0.204	0.318	0.895	0.015	0.1	198.4	2.0	0.7		5	6.4	7.7	7.0
June	0.444	0.322	1.949	0.015	0.03	164.8	2.0	0.6		0	5.2	8.2	6.3
July													
August													
September													
October													
November													
December													
Year Total	*2.832*	*2.970*					*12.0*	*3.9*	*2.7*				
Year Avg.	*0.472*	*0.495*					*2.0*	*0.7*	*0.7*				
TOTAL	**8.495**	**8.724**											
AVG.	**1.416**	**1.454**											

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

North River Village

Large Scale Plan Amendment
CPA2006-12

Attachment C

Lee County Utilities
SFWMD Water Use Permit

1500 Royal Palm Square Blvd., Suite 101 • Fort Myers, FL 33919 • 239-418-0691 • 239-418-0692 fax

NRV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

August 1, 2008

Lee County Utilities
1500 Monroe Street, 3rd Floor
Fort Myers, FL 33902

Subject: Application No. 071228-9, **Lee County Utilities North System**
Lee County, S3-5,8-11,14-16,22-29,33-36/T43S/R24E
S1-4,9-11,15,16,21/T44S/R24E, S15,16,19-22,25-33/T43S/R25E

Enclosed is a copy of the South Florida Water Management District's staff report covering the permit application referenced therein. It is requested that you read this staff report thoroughly and understand its contents. The recommendations as stated in the staff report will be presented to our Governing Board for consideration on **Thursday, August 14, 2008.**

Should you wish to object to the staff recommendation or file a petition, please provide written objections, petitions and/or waivers (refer to the attached "Notice of Rights") to:

Elizabeth Veguilla, Deputy Clerk
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

The "Notice of Rights" addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. You are advised, however, to be prepared to defend your position regarding the permit application when it is considered by the Governing Board for final agency action, even if you agree with the staff recommendation, as the Governing Board may take final agency action which differs materially from the proposed agency action.

Please contact the District if you have any questions concerning this matter.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the addressee this 1st day of August, 2008 in accordance with Section 120.60 (3), Florida Statutes.

Sincerely,

Keith R. Smith, P.G., Deputy Director
Water Supply Department

KRS/ja

CERTIFIED #7003 2260 0007 1914 1247
RETURN RECEIPT REQUESTED

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose to the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District's Governing Board takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

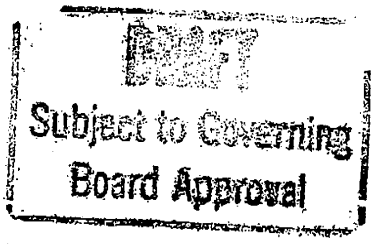
The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

Last Date for Governing Board Action:
August 14, 2008

Water Use Staff Review Summary



Application Number: 071228-9

Permit Number: 36-00152-W

Project Name: LEE COUNTY UTILITIES NORTH SYSTEM

Water Use Permit Status: MODIFICATION/RENEWAL

Environmental Resource Permit Status: NOT APPLICABLE.

Right Of Way Permit Status: NOT APPLICABLE

Location: LEE COUNTY, S3-5, 8-11, 14-16, 22-29, 33-36/T43S/R24E
S1-4, 9-11, 15, 16, 21/T44S/R24E
S15, 16, 19-22, 25-33/T43S/R25E

Applicant's Name and Address: LEE COUNTY UTILITIES
1500 MONROE ST 3RD FLOOR
FORT MYERS, FL 33902

Purpose:
The purpose of this application is to modify a Water Use Permit for public water supply for the Lee County Utilities/North Lee County System service area comprised of the Waterway Estates, with a population of 10,887 persons by 2028 with an average per capita use rate of 74 gallons per day (GPD) and a maximum monthly to average monthly pumping ratio of 1.14 and the North Lee County Water Treatment Plant (NLCWTP) with a population of 62,413 persons by 2028 with an average per capita use rate of 160 GPD and a maximum monthly to average monthly pumping ratio of 1.12. Withdrawals are from the Surficial aquifer system (SAS) via 5 existing withdrawal facilities, from the Mid Hawthorn aquifer (MHA) via 10 existing withdrawal facilities and from the Lower Hawthorn aquifer (LHA) via 9 existing and 10 proposed withdrawal facilities. The total combined demands for the permit are a maximum monthly and annual allocation of 371 million gallons (MG) and 3,939 MG, respectively.

Staff Recommendations

Date Of Issuance:	August 14, 2008	
Expiration Date:	August 14, 2028	
Water Use Classification:	Public Water Supply	
Sources:	**Ground Water from:**	Lower Hawthorn Aquifer Mid-Hawthorn Aquifer Surficial Aquifer System

Recommended Allocation:

Annual Allocation:	3,939	Million Gallons (MG)
Maximum Monthly Allocation:	371	Million Gallons (MG)

Specific Source Limitations:	**Annual**(MG)	**Monthly**(MG)
Surficial Aquifer System	91	14.4
Mid-Hawthorn Aquifer	202.88	32.1
Lower Hawthorn Aquifer	3641	324.5

Existing Withdrawal Facilities - Ground Water

Source: Lower Hawthorn Aquifer
2 - 17" X 700' X 580 GPM Wells Cased to 475 Feet
1 - 12" X 600' X 175 GPM Well Cased to 300 Feet
1 - 17" X 592' X 580 GPM Well Cased to 441 Feet
1 - 17" X 637' X 580 GPM Well Cased to 500 Feet
1 - 17" X 700' X 580 GPM Well Cased to 493 Feet
1 - 17" X 670' X 580 GPM Well Cased to 500 Feet
1 - 4" X 600' X 100 GPM Well Cased to 300 Feet
1 - 17" X 600' X 580 GPM Well Cased to 470 Feet
Source: Mid-Hawthorn Aquifer
1 - 8" X 205' X 45 GPM Well Cased to 124 Feet
1 - 6" X 130' X 30 GPM Well Cased to 130 Feet
1 - 8" X 230' X 50 GPM Well Cased to 125 Feet
1 - 10" X 230' X 85 GPM Well Cased to 130 Feet
1 - 8" X 208' X 65 GPM Well Cased to 160 Feet
1 - 8" X 225' X 110 GPM Well Cased to 164 Feet
1 - 10" X 230' X 85 GPM Well Cased to 136 Feet
1 - 8" X 235' X 30 GPM Well Cased to 134 Feet
1 - 8" X 240' X 85 GPM Well Cased to 140 Feet
1 - 8" X 240' X 70 GPM Well Cased to 140 Feet
Source: Surficial Aquifer System
1 - 8" X 48' X 40 GPM Well Cased to 30 Feet
1 - 8" X 48' X 50 GPM Well Cased to 14 Feet
1 - 10" X 80' X 30 GPM Well Cased to 50 Feet
1 - 8" X 57' X 75 GPM Well Cased to 42 Feet
1 - 10" X 60' X 60 GPM Well Cased to 40 Feet

Proposed Withdrawal Facilities - Ground Water

Source: Lower Hawthorn Aquifer
10 - 17" X 700' X 725 GPM Wells Cased to 500 Feet

Rated Capacity

Source	Status Code	GPM	MGM	MGY
Lower Hawthorn Aquifer	E	4,335	189.8	2,278
Mid-Hawthorn Aquifer	E	655	28.7	344
Surficial Aquifer System	E	255	11.2	134
Lower Hawthorn Aquifer	P	7,250	317.4	3,811
Totals:		**12,495**	**547.1**	**6,567**

Project Description

BACKGROUND

The purpose of this application is to modify a water use permit for public water supply. The Lee County Utilities Public Water Supply (LCUPWS) service area for the portion of North Lee County is located north of the Caloosahatchee River and is supplied by the Waterway Estates lime softening water treatment plant (WTP) and the newly constructed North Lee County Reverse Osmosis (RO) WTP (Exhibits 1 and 2). The raw water supply for the Waterway Estates WTP is from 16 production wells completed in the SAS, the MHA and the LHA with no proposed changes. The NLCWTP is supplied saline water from the LHA via seven existing and 10 proposed wells. A map that includes the service area is shown on Exhibit 3. Exhibit 4 shows a location map for all project facilities (existing and proposed). Well information is shown on Exhibit 5.

Waterway Estates and North Cape Coral Wellfields

The existing wellfields are located in North Fort Myers in sections 6, 9 and 16 of Township 44S, Range 24E, north and south of Bayshore Road (SR 78) as shown on Exhibit 4. These facilities were previously owned by Florida Cities Water Services and purchased by Lee County Utilities in 2000. The Waterway Estates wellfield has been in existence since the late 1950's, and has 13 wells located near the WTP and four wells to the north; three of which are referred as the North Cape Coral wellfield. Five of the 16 existing wells withdraw water from the SAS, ten wells produce water from the MHA and one well produces water from the LHA. The current permitted allocation for the Waterway Estates treatment plant has a peak capacity of 1.5 million gallons per day (MGD).

NLCWTP Wellfield

NLCWTP and the existing LHA wellfield is located in section 14 of Township 43S, Range 25E off SR 78 and Durrance Road (Exhibit 4A). The WTP has RO membranes with a capacity to produce 5 MGD of finished water during phase 1 of operation (since the beginning of 2006) and will expand to a finished water capacity of 10 MGD during phase 2 (through 2028). The WTP has an assumed 80 percent treatment efficiency. The existing wellfield consists of 7 LHA production wells with a total capacity of 6.68 MGD, and an Avon Park injection well with the capacity of 2.5 MGD all located inside the NLCWTP property. Production from these facilities was planned to replace the water currently being supplied by Waterway Estates, as well as Olga and Corkscrew WTP (WUP 36-00003-W). However, during the first year of the NLCWTP operation (September 2006 through September 2007) the water quality data (Exhibit 7) indicated a rapid water quality deterioration in the PW-6 LHA well [an increase of the chloride ion concentration from 975 milligrams per liter (mg/l) to 3,530 mg/l]. A similar pattern of the chloride concentration increase was observed in other wells proximal to PW-6 (PW-2, PW-5 and PW-8). Therefore, PW-6 well was plugged and abandoned (November 29, 2007) while wells PW-2, PW-5 and PW-8 were converted in emergency back-up facilities. Existing LHA wells PW-1, PW-3, PW-4 and PW-7 are still utilized as primary facilities. Since the permitted allocation was not sustainable from the existing wellfield and a projected allocation increase is anticipated through 2028, the Permittee is requesting the above mentioned maximum per month and annual allocations be provided by adding 10 more LHA wells that are planned to be installed in 2008 through 2009.

DEMAND PROJECTIONS

Waterway Estates

The applicant indicates a population of 10,153 persons in 2007 for the Waterway Estates service area. The projected increase in population through 2028 is 734 persons for a total of 10,887 persons for that service area (Exhibit 6). The average per capita use rate of the last 5 years is 74 gallons with a maximum monthly to average monthly withdrawal ratio of 1.14:1.

Project Description
NLCWTP

The population for the NLCWTP service area in 2007 was 35,101 persons. The projected increase in population through 2028 for this service area is 27,312 persons, for a total of 62,413 persons in the North Lee County RO WTP service area (Exhibit 6). The average per capita use rate of the last 2 years (the NLCROWTP was on line on August 2006) is 160 gallons with a maximum monthly to average monthly withdrawal ratio of 1.13:1.

REQUESTED ALLOCATION

The applicant is requesting an increase to the annual allocation from 2,276 MGY (previous permit) to 3,215 MGY with a total maximum monthly allocation of 389 MGM (the maximum per month of 253.6 MG was permitted in the previous permit until 2014). The applicant will utilize alternative sources from the LHA (10 proposed wells) in addition to the seven existing LHA production wells with no increase in allocation from groundwater withdrawals from the Waterway Estates wellfields. Raw water annual allocation from SAS and MHA for this permit will be 91.0 MG and 202.9 MG respectively through entire life of the permit (until 2028) and maximum monthly allocations of 14.4 MG and 32.1 MG from the SAS and MHA respectively. The annual and monthly allocations from the LHA will be 3,641 MG and 324.5 MG respectively.

RECOMMENDED ALLOCATION

Calculated demands for both service areas equate to an annual allocation of 3,939 MG and a maximum monthly allocation of 371 MG (Exhibit 6). However, pursuant to Limiting Condition 5 of the previous permit, the maximum monthly withdrawals from the SAS and MHA shall not exceed a combined allocation of 46.5 MG. Limiting Condition 5 of this permit also includes limitations for each wellfield with the annual allocations of 91.0 MG and 202.88 MG for the SAS and MHA Waterway Estates wellfields respectively and 3,641 MG for the LHA.

CONCENTRATE DISPOSAL

The on-site Class I deep injection well will be utilized for disposal of RO concentrate generated by the requested 324.5 MG maximum per month for this permit. This well has a design rated capacity of 5.0 MGD with a currently permitted [by Florida Department of Environmental Protection (FDEP)] capacity of 3.0 MGD. The permit's daily raw water allocation of about 12.5 MG will generate a concentrate volume of about 2.5 MGD (assuming 80% RO finished water recovery).

Hydrologic Modeling

Hantush-Jacob Method

In order to compare the projected demands for the project with the water availability in the region, withdrawals of the recommended maximum monthly allocation (in fact, 380 MGM, which is about 3% higher than recommended demand in this permit) was evaluated by utilizing the transient module of the Hantush and Jacob (1955) equation for leaky aquifers encapsulated in the WinFlow analytical model (Environmental Solutions Inc., 1995). The modeling data (derived from a NLCWTP on-site LHA well) is consistent with the criteria for basic analytic impact assessments set forth in Section 1.7.5.2 of the Basis of Review (BOR) for Water Use Permits within the South Florida Water Management District (District). The results of the modeling simulation for the proposed LHA withdrawals at the maximum monthly allocation during a 1-in-10 year drought scenario for 90 days with no recharge indicate a maximum drawdown of 27.9 feet (Exhibit 8). In addition, a simulation that includes cumulative withdrawals from all permits that utilize the LHA within the area of influence (one foot drawdown contour-line caused as a result of the NLCWTP proposed withdrawals) indicates a maximum drawdown of about 29.3 feet (Exhibit 9). Water Use Permits included within the area of influence of the

NLCWTP are:
1. Chief Mason Orange Grove (Permit 36-00838-W)
2. Assembly of God (Permit 36-03726-W)
3. The Verandah (Permit 36-04340-W)
4. Stoney Brook North (Permit 36-06887-W, under review)

Modeling data are appended in Exhibit 10. In addition, the applicant has developed a seven layer solute transport model utilizing a modular three-dimensional, multi-species transport model code, MT3DMS (Zheng and Wang, 1998) which use the flow results obtained by a three-dimensional finite difference groundwater flow model [MODFLOW, developed by the United States Geological Survey (USGS)]. A little more than the proposed NLCWTP annual allocation (or a daily average of about 9.54 MG) and the annual permitted allocations from the nearest LHA users were included in the 20-year solute transport model simulation. The maximum modeled dissolved chloride concentration after the 20-year period is predicted at approximately 1,520 mg/l for the entire wellfield (initial chloride concentration for the LHA in the NLCWTP area was set at about 1,000 mg/l). The solute transport modeling results for the chloride concentrations through time are shown on Exhibit 11.

Impact Assessments

Water Resource Availability

Lower Hawthorn Aquifer

NLCWTP RO wellfield

The elevation of the top of the LHA is between -425 and -485 feet, National Geodetic Vertical Datum (NGVD) according to Montgomery, Watson and Harza (2003). The closest LHA monitor well is USGS well L-652 located 5 miles southeast from the NLCWTP, and has a record low potentiometric level of 36.80 feet, NGVD (measured in May 22, 2000), or about 23 feet above land surface. As discussed in the Hydrologic Modeling section, the maximum predicted drawdown after 90 days of pumping the proposed withdrawals of 12.5 MGD is 27.9 feet for the project alone (Exhibit 8) and about 29.3 feet with permitted and pending users (Exhibit 9) located within the area of influence.

Waterway Estates and North Cape Coral wellfields

Existing wells N-1D and N-2D are located near the treatment plant and have been used as peaking facilities for many years. The nearest monitor well is L-2528 located about 4.5 miles due west from the plant and has a period of record low potentiometric level of 31.8 feet, NGVD. This record low level, which is 20 feet above land surface, incorporates effects from the use of these wells. No changes to the wellfield operation or allocation are proposed with this permit modification.

The potential for harm to occur to the water resource availability of the LHA as a result of the withdrawal of the recommended allocation is considered minimal.

Mid-Hawthorn Aquifer

The elevation of the top of the MHA is approximately -120 feet, NGVD (J.M. Montgomery; 1988). The closest MHA monitor well is USGS well L-1111 located 2.55 miles from the treatment plant, and has a record low of -42.89 feet, NGVD (measured on June 10, 1985). This water level incorporates the drawdown effects from peak withdrawals of the Waterway Estates and North Cape Coral wellfields and indicates that there is about 77 feet of available water in the MHA. No changes in withdrawal rates or location are proposed in the MHA in this permit modification. The potential for harm to occur to the water resource availability of the MHA as a result of the withdrawal of the recommended allocation is considered minimal.

Surficial Aquifer System

The elevation of the bottom of the SAS is approximately -40 feet NGVD according J.M. Montgomery

1988. The closest SAS monitoring well is the USGS well L-954 located 0.1 mile southwest of the intersection of Hancock Bridge Parkway and Orange Grove Boulevard (middle of the wellfield), and has measured a record low of -1.5 feet NGVD in June 1994. This water level indicates that there is about 38 feet of available water in the SAS at the site. The maximum estimated drawdown in the wellfield as a result of the withdrawal of 0.42 MGD (rated capacity of the SAS wells) is 3.0 feet, based on the analysis in the previous permit evaluation (application 990419-7). No changes in withdrawal rates or location are proposed for the SAS wells in this permit modification. The potential for harm to occur to the water resource availability of the SAS as a result of the withdrawal of the recommended allocation is considered minimal.

Existing Legal Users

Lower Hawthorn Aquifer

The nearest existing legal user of the LHA is Chief Mason Orange Grove (36-00838-W) that has a well about 3,900 feet southwest of the NLCWTP wellfield expansion and is permitted for a maximum daily allocation of 0.075 MGD. The estimated drawdown at the Chief Mason Orange Grove well from pumping 12.5 MGD for 90 days from the NLCWTP wellfield is approximately 25 feet (Exhibit 8). Pursuant to Section 3.7 of the BOR for Water Use Applications, this amount of drawdown is not expected to cause harm to the existing legal user.

The potential for harm to occur to existing legal users as a result of the withdrawal of the recommended allocation is considered minimal.

Mid-Hawthorn Aquifer

The nearest existing legal user of the MHA is the Lochmoor Country Club, Water Use Permit 36-00025-W. Lochmoor is permitted for withdrawals from the SAS via on-site lakes, the MHA and the LHA. Lochmoor Country Club receives as much as 0.3 MGD of reclaimed water from Lee County Utilities, however may use their permitted facilities during the peak irrigation season. The previous application (990419-7) indicated that the potential for harm to Lochmoor from maximum withdrawals by the wellfields will be minimal. The current application requests no change in operation of these facilities. The potential for harm to occur to existing legal users as a result of the withdrawal of the recommended allocation is considered minimal.

Surficial Aquifer System

The current application requests no change in operation or allocation from the SAS facilities. The potential for harm to occur to existing legal users as a result of the withdrawal of the recommended allocation is considered minimal.

Saline Water Intrusion

Lower Hawthorn Aquifer

Water quality data collected from 33 LHA wells located in North Fort Myers, Fort Myers and Cape Coral indicate a range in chloride concentrations of 850 mg/l to 1,750 mg/l, sulfate concentrations between 200 to 450 mg/l, sodium between 450 and 750 mg/l, and total dissolved solids (TDS) between 1,850 and 2,500 mg/l (Montgomery, Watson and Harza; 2003). From the water samples collected from the on-site test production wells during first six months of operation, the range in water quality was at acceptable concentrations for the planned design of the water treatment facility (chloride concentrations ranged from 920 mg/l to about 2,000 mg/l). After this period, as was previously discussed, the water quality data (Exhibit 7) indicated a rapid water quality deterioration especially in the LHA well PW-6 which was later plugged and abandoned, and consequently the current NLCWTP wellfield expansion was proposed. The deterioration in water quality was a result of upconing of poorer quality water from

a deeper portion of the aquifer, in part due to the close proximity of the existing wells (PW-1 through PW-8) to each other. The proposed wellfield configuration (PW-9 through PW-18) will lessen the potential for upconing by having a greater distance between wells. To ascertain the potential change in water quality over time, a series of aquifer performance tests were used to estimate the transmissivity, storativity and leakance of the production zone and a solute-transport model was developed and simulated the effects of withdrawing 9.54 MGD (daily average) for a duration of 20 years. The model results shown in Exhibit 11, project that chloride concentrations will increase over time gradually but will remain below 1,600 mg/l after 20 years. Limiting Condition 27 requires that the production wells are sampled for chloride concentration monthly and data results submitted to the District quarterly. The potential for saline water intrusion or upconing to occur as a result of the withdrawal of the recommended allocation is considered minimal.

Mid-Hawthorn Aquifer

A review of water quality data collected from the monitor well and individual production wells indicate that chloride concentrations in the MHA have remained stable over time. Based upon these data and the fact that no changes in operation of the Waterway Estates and North Cape Coral wellfields are proposed, the potential for saline water intrusion or upconing resulting from the withdrawal of the recommended allocation is considered minimal. However, continued monitoring is required pursuant to Limiting Condition 27.

Surficial Aquifer System

Water quality data collected from the monitor wells and individual production wells indicate that chloride concentrations in the SAS have remained stable over time and even have slightly decreased in the SAS. In addition, the current application requests no change in operation and allocation of the SAS facilities. Therefore, the potential for saline water intrusion or upconing to occur as a result of the withdrawal of the recommended allocation is considered minimal.

Wetlands

Lower Hawthorn Aquifer

The SAS, where wetland areas reside, is hydrologically separated from the LHA by several confining beds. Therefore, the potential for harm to occur to wetlands as a result of the withdrawal of the recommended allocation from the LHA is considered minimal.

Mid-Hawthorn Aquifer

There are no protected wetland areas in the vicinity of either the North Cape or Waterway Estates wellfields. In addition, MHA is hydraulically isolated from the surface water features by a thick confining layer (Mid Hawthorn Confining Unit). The potential for harm to occur to wetlands as a result of the withdrawal of the recommended allocation is considered minimal.

Surficial Aquifer System

There are no protected wetland areas in the vicinity of either the North Cape Coral or Waterway Estates wellfields. In addition, the current application requests no change in operations of SAS facilities. The potential for harm to occur to wetlands as a result of the withdrawal of the recommended allocation is considered minimal.

Source Of Pollution

Lower Hawthorn Aquifer

The SAS, where the pollution sources may occur, is hydrologically separated from the LHA by several

confining beds. Therefore, the potential for movement of contaminants, if present, from known pollution sources as a result of the withdrawal of the recommended allocation is considered minimal.

Mid-Hawthorn Aquifer

The MHA is hydraulically isolated from the surface water features by a thick confining layer (Mid Hawthorn Confining Unit). Therefore, the potential for movement of contaminants, if present, from known pollution sources as a result of the withdrawal of the recommended allocation is considered minimal.

Surficial Aquifer System

The Florida Department of Environmental Protection (FDEP) has no records of known contamination sites in the vicinity of the wellfields. The potential for the induced movement of contaminants from known sources of pollution to occur as a result of the withdrawal of the recommended allocation is considered minimal.

Other Impacts

Surficial Aquifer System

Pursuant to Section 3.6.2, of the BOR, the use is not expected to result in significant reduction in water levels on the property of an existing offsite land use to the extent that the design function of a water body and related surface water management improvements are damaged (not including aesthetic values), damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or land collapse or subsidence caused by reduction in water levels associated with consumptive use.

Additional Information

EXISTING AND PROPOSED SERVICE AREAS AND INTERCONNECTS:

Lee County's service areas consist of the North Zone (north of the Caloosahatchee River) serviced by the NLCWTP and Waterway Estates WTP (this permit), and the South Zone serviced by the Olga, Corkscrew, Green Meadows and Cypress Lakes (all in WUP 36-00003-W) water treatment plants. The zones are interconnected, but generally are operated as separate systems with a net transfer from the South Zone to the North Zone.

Lee County Utilities has a total of five interconnections with the City of Ft. Myers that are located at: Armeda Avenue and Prospect Street, Collins Avenue and Evans Avenue, Colonial Boulevard and Metro Parkway Boulevard, Evans Avenue and Martin Luther King Boulevard, and at Ortiz Avenue and Martin Luther King Boulevard. There are also two interconnections with the City of Cape Coral, one at Hancock Bridge Parkway and Orange Grove Boulevard and another one at Pondella Road and Betmar Boulevard. An interconnection with the City of Bonita Springs is located at Williams Road and US 41. A location map for the interconnections is shown on Exhibit 13.

EXISTING FACILITIES:

NLCWTP

The existing rated capacity of the water treatment plant, as approved by FDEP, is 5 MGD, which is planned to expand to 10 MGD of finished water. The water treatment consists of reverse osmosis membranes. The storage facilities will consist of a proposed five-million gallon storage tank and an existing two-million gallon reservoir at the North Reservoir. This facility will replace the supply delivered

Additional Information

from the Olga Treatment Plant, which currently sends approximately 34 percent of its water to the North County service area.

Waterway Estates Treatment Plant

The existing rated capacity of the water treatment plant, as approved by FDEP, is 1.5 MGD. The water treatment consists of aeration, lime softening, rapid anthracite and sand filtration, and chloramine disinfection. The storage facilities consist of a 0.3 MG storage tank in Tice and a 2.0 MG storage tank at the North Reservoir.

WATER USE ACCOUNTING:

The applicant has provided calibration documentation for all existing facilities and indicates that flow meters will be installed on all proposed facilities as the facilities are brought on-line. Pursuant to Limiting Condition Number 17, the applicant is required to submit recalibration data for each water facility (existing and proposed) at every five years from the date of last calibration. Monthly withdrawals for each well will be submitted to the District on a quarterly basis pursuant to Limiting Condition Number 18.

RECLAIMED WATER USE:

The County has an advanced wastewater treatment facility at Waterway Estates with an annual daily flow of 0.942 MGD. The current annual-average daily capacity is 1.3 MGD with a 1.0 MGD surface discharge to the Caloosahatchee River and 0.3 MGD to Lockmoor Country Club. Most recently (during 2007) approximately 55% of the treated wastewater was used for irrigation purposes. The County has negotiated and entered into a reuse agreement with the City of Cape Coral that would allow the County to provide the City with essentially all the reclaimed water produced at their plant. A reclaimed water interconnect with the City of Cape Coral has been completed and a new ground storage tank located at Birkdale Avenue near the Paradise Preserve Country Club was constructed. The NLCWTP RO will produce no reclaimed water during the duration of this permit. However, the applicant indicates that delivery reuse water from Waterway Estates WWTP to the City of Cape Coral was increased for the last several months to approximately 90%.

LONG TERM WATER SUPPLY PLAN:

The applicant has indicated that the long term water supply plan (through 2028) is to continue to withdraw water from the Waterway Estates wellfields until the SAS and the MHA wells are phased-out and with no increase to the combined base condition from these sources (46.5 MGM). The withdrawals from the LHA will be used to meet all future demands, including the supplemental allocation to substitute withdrawals from the SAS and the MHA wells when they are phased-out after a permit modification is approved.

Pursuant to Limiting Condition 22, prior to any application to renew or modify this permit, the Permittee shall evaluate long term water supply alternatives and submit a long term water supply plan to the District. Within one year of permit issuance, the Permittee shall submit to the District an outline of the proposed plan. The assessment should include consideration of saline intrusion, wellfield protection, plans for compliance with applicable wellfield protection ordinances, expected frequencies and plans to cope with water shortages or wellfield failures, and conservation measures to reduce overall stresses on the aquifer.

Pursuant to Limiting Condition 19, the Permittee shall notify the District within 30 days of any change in service area boundary. If the Permittee will not serve a new demand within the service area for which the annual allocation was calculated, the annual allocation may then be subject to modification and reduction. In addition, the Permittee shall notify the District within 30 days for each SAS and MHA well that is phased-out and the LHA well(s) that will compensate the phased-out well(s) allocation.

Additional Information

WATER CONSERVATION PLAN:

The water conservation plan contains all the elements originally developed in water supply plans and includes ordinances on irrigation, xeriscape, plumbing fixtures and rain sensors. The plan includes a conservation rate structure on potable water use, leak detection program, conservation education program, and reclaimed water use program.

Xeriscape principles are incorporated into the County's land development code to promote native drought-tolerant plants and reduce turf grass planting.

Ordinance 92-36 requires ultra-low fixtures on all new construction in the service area.

County Resolution 94-03-114 provides for an increasing block rate structure and a surcharge during District-declared water shortage conditions.

A recently approved rate increase, Resolution 02-07-44 effective October 1, 2002, provides for a water conservation item that charges $0.50 per ERU to all users that exceed 6,000 gallons per month. The funds generated will be earmarked for well site purchases and combined with Lee County's "Conservation 2000" program for land purchases. This resolution also provides for fines for anyone tampering or using water without measurement or permission. The resolution also increased reclaimed water rates to $0.25 per thousand gallons which has motivated conservation and reassignment of reuse allocations.

A leak detection program evaluates unaccounted for water in the production and distribution system and the latest results indicate an annual average of 7.12 percent loss. Pursuant to Limiting Condition No. 21, annual assessments of unaccounted for losses are required.

The Land Development Code includes a rain sensor device on new irrigation systems.

The County maintains a web site that provides water conservation and restriction information, and distributes conservation tips periodically in bill mail-outs.

The County staff regularly evaluates ways to reduce water demand through customer education, leak detection and accounting methods and coordinating with other agencies.

A new District rule, Chapter 40E-24, effective in April 2003, requires irrigation to occur on a three day per week schedule for odd-even addresses, and to occur during hours between 4:00 PM and 10:00 AM. This rule conflicts with the existing County ordinance that only specifies non-daylight hours for irrigation. Within one year of permit issuance, LCU shall seek the assistance of the County Commission to develop a new County ordinance in agreement with Chapter 40E-24.

SALINE WATER MONITORING PLAN:

The monitoring plan (Limiting Condition 27) comprises monthly monitoring of chloride concentrations (mg/l) and water elevations (in feet, NGVD) from the following wells that shall submitted to the District quarterly:

North Cape Coral NC-1 (FCNCPWUH1, WMD 30820), North Cape Coral NC-2 (FCNCPWUH2, WMD 30821), North Cape Coral NC-9 (FCNCPWUH9, WMD 30822), Waterway Estates N-1D (FCWCLWH 1-D, WMD30823), Waterway Estates N-3 (FCWEPWUH03, WMD 30814), Waterway Estates N-9 (FCWEPWUH09, WMD 30816), Waterway Estates N-10 (FCWEPWUH10, WMD 30826), Waterway Estates N-6 (FCWEPWUT06, WMD 30815), Waterway Estates N-2 (FCWEPWWT02, WMD 30809), Waterway Estates N-4 (FCWEPWWT04, WMD 30825), Waterway Estates N-8 (FCWEPWWT08, WMD 30811), Waterway Estates N-1 (FCWEPWWT1, WMD 30810), Waterway Estates N-11

Additional Information

(FCWEPWWT11, WMD 30817), Waterway Estates N-12 (FCWEPWWT12, WMD 30812), Waterway Estates N-13 (FCWEPWWT13, WMD 30813), Waterway Estates N-14 (FCWEPWWT14, WMD 30818), Waterway Estates N-15 (FCWEPWWT15, WMD 30819).

In addition, the Permittee shall monitor the following existing and proposed wells for chloride (mg/l) and water elevation (in feet NGVD) on a monthly basis and submit the results to the District on a quarterly basis:

NLCWTP RO LHA wells PW-1 through PW-18 and MW-1.

WELLFIELD OPERATION:

Waterway Estates and North Cape Coral Wellfields
The current well operation schedule will continue as shown on Exhibit 12A.

North Lee County Wellfield
The operation schedule for the wells of North Lee County Wellfield is shown on Exhibit 12B (for average demands) and Exhibit 12C (for peak demands).

COMPLIANCE REPORT:

Pursuant to Limiting Condition 23, every five years from the date of permit issuance, the Permittee shall submit a water use compliance report for review and approval by District Staff, which addresses the following:

1. The results of a water conservation audit that documents the efficiency of water use on the project site using data produced from an on-site evaluation conducted. In the event that the audit indicates additional water conservation is appropriate or the per capita use rate authorized in the permit is exceeded, the Permittee shall propose and implement specific actions to reduce the water use to acceptable levels within timeframes proposed by the Permittee and approved by the District.

2. A comparison of the permitted allocation and the allocation that would apply to the project based on current District allocation rules and updated population and per capita use rates. In the event the permit allocation is greater than the allocation provided for under District rule, the Permittee shall apply for a letter modification to reduce the allocation consistent with District rules and the updated population and per capita use rates to the extent they are considered by the District to be indicative of long term trends in the population and per capita use rates over the permit duration. In the event that the permit allocation is less than allowable under District rule, the Permittee shall apply for a modification of the permit to increase the allocation if the Permittee intends to utilize an additional allocation, or modify its operation to comply with the existing conditions of the permit.

PERMIT DURATION:

Staff recommends a duration of 20 years. Some withdrawals are made from both the Water Table aquifer and MHA, which are sources of limited availability (BOR Section 1.7.2.2.B.3). However, pursuant to Section 1.7.2.2.C(3)(b) of the BOR, the quantity allocated from these sources does not exceed the previously permitted allocation which is no more than the amount needed to meet the demands of the population existing at the time of this renewal.

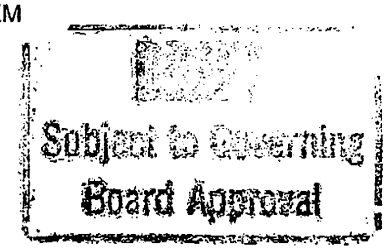
Recommendations

Project Name: LEE COUNTY UTILITIES NORTH SYSTEM

Application Number: 071228-9

Permit Number: 36-00152-W

Date Of Issuance: August 14, 2008



Recommendations:

Staff recommends modification and renewal of the Water Use Permit for public water supply for the North Lee County RO service area serving 62,413 persons in the year 2028 with an average per capita use rate of 160 GPD and a maximum monthly to average monthly pumping ratio of 1.12 and for the Waterway Estates service area serving 10,887 persons in the year 2028 with an average per capita use rate of 74 GPD and a maximum monthly to average monthly pumping ratio of 1.14. Withdrawals are from LHA via nine existing withdrawal facilities and 10 proposed withdrawal facilities, from the MHA via 10 existing withdrawal facilities and from the SAS via five existing withdrawal facilities. The use is reasonable-beneficial, will not interfere with any presently existing legal use of water and is consistent with the public interest. The use is further subject to 29 limiting conditions.

Application Reviewer: _____ **Date:** 07/09/2008
Nexhip Maska, P.G.

Supervisor: _____ **Date:** 7/30/08
Thomas Colios

Water Use Division: _____ **Date:** 7/31/08
James Harmon, P.G.

Limiting Conditions

1. This permit shall expire on August 14, 2028.
2. Application for a permit modification may be made at any time.
3. Water use classification:

   Public water supply

4. Source classification is:

   Ground Water from:
   Lower Hawthorn Aquifer
   Mid-Hawthorn Aquifer
   Surficial Aquifer System

5. Annual allocation shall not exceed 3939 MG.

   Maximum monthly allocation shall not exceed 370.96 MG.

   The following limitations to annual withdrawals from specific sources are stipulated:
   Surficial Aquifer System-: 91 MG.
   Mid-Hawthorn Aquifer-: 203 MG.
   Lower Hawthorn Aquifer-: 3,641 MG.

   The following limitations to maximum monthly withdrawals from specific sources are stipulated:
   Surficial Aquifer System-: 14.40 MG.
   Mid-Hawthorn Aquifer-: 32.10 MG.
   Lower Hawthorn Aquifer-: 324.50 MG.

6. Pursuant to Rule 40E-1.6105, F.A.C., Notification of Transfer of Interest in Real Property, within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer, as set forth in Rule 40E-1.6107, F.A.C.

   Pursuant to Rule 40E-1.6107 (4), until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for all actions that are required as well as all violations of the permit which occurred prior to the transfer of the permit.

   Failure to comply with this or any other condition of this permit constitutes a violation and pursuant to Rule 40E-1.609, Suspension, Revocation and Modification of Permits, the District may suspend or revoke the permit.

   This Permit is issued to:

   Lee County Utilities

7. Withdrawal Facilities:

   Ground Water - Existing:

   1 - 8" X 48' X 40 GPM Well Cased To 30 Feet
   1 - 17" X 592' X 580 GPM Well Cased To 441 Feet

1 - 8" X 235' X 30 GPM Well Cased To 134 Feet
1 - 8" X 230' X 50 GPM Well Cased To 125 Feet
1 - 10" X 230' X 85 GPM Well Cased To 136 Feet
1 - 17" X 637' X 580 GPM Well Cased To 500 Feet
1 - 10" X 60' X 60 GPM Well Cased To 40 Feet
1 - 8" X 225' X 110 GPM Well Cased To 164 Feet
1 - 4" X 600' X 100 GPM Well Cased To 300 Feet
1 - 8" X 57' X 75 GPM Well Cased To 42 Feet
1 - 8" X 208' X 65 GPM Well Cased To 160 Feet
1 - 8" X 205' X 45 GPM Well Cased To 124 Feet
1 - 8" X 240' X 85 GPM Well Cased To 140 Feet
1 - 10" X 230' X 85 GPM Well Cased To 130 Feet
1 - 17" X 600' X 580 GPM Well Cased To 470 Feet
2 - 17" X 700' X 580 GPM Wells Cased To 475 Feet
1 - 17" X 670' X 580 GPM Well Cased To 500 Feet
1 - 17" X 700' X 580 GPM Well Cased To 493 Feet
1 - 12" X 600' X 175 GPM Well Cased To 300 Feet
1 - 6" X 130' X 30 GPM Well Cased To 130 Feet
1 - 10" X 80' X 30 GPM Well Cased To 50 Feet
1 - 8" X 48' X 50 GPM Well Cased To 14 Feet
1 - 8" X 240' X 70 GPM Well Cased To 140 Feet

Ground Water - Proposed:

10 - 17" X 700' X 725 GPM Wells Cased To 500 Feet

8. Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

   Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

   (1) Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

   (2) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

9. Permittee shall mitigate harm to existing off-site land uses caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm caused by withdrawals, as determined through reference to the conditions for permit issuance, includes:

   (1) Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

(2) Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or

(3) Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

10. Permittee shall mitigate harm to the natural resources caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

    (1) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

    (2) Reduction in water levels that harm the hydroperiod of wetlands,

    (3) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

    (4) Harmful movement of contaminants in violation of state water quality standards, or

    (5) Harm to the natural system including damage to habitat for rare or endangered species.

11. If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

12. Authorized representatives of the District shall be permitted to enter, inspect, and observe the permitted system to determine compliance with special conditions.

13. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

14. The permit does not convey any property right to the Permittee, nor any rights and privileges other than those specified in the Permit and Chapter 40E-2, Florida Administrative Code.

15. Permittee shall submit all data as required by the implementation schedule for each of the limiting conditions to: SFWMD, Environmental Resource Compliance, P.O. Box 24680, West Palm Beach, FL 33416-4680.

16. In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C. The Permittee is advised that during a water shortage, pumpage reports shall be submitted as required by Chapter 40E-21, F.A.C.

17. Prior to the use of any proposed water withdrawal facility authorized under this permit, unless otherwise specified, the Permittee shall equip each facility with a District-approved operating water use accounting system and submit a report of calibration to the District, pursuant to Section 4.1, Basis of Review for Water Use Permit Applications.

    In addition, the Permittee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility (existing and proposed) authorized under this permit every five years from each previous calibration, continuing at five-year increments.

18. Monthly withdrawals for each withdrawal facility shall be submitted to the District quarterly. The water accounting method and means of calibration shall be stated on each report.

19. The Permittee shall notify the District within 30 days of any change in service area boundary. If the Permittee will not serve a new demand within the service area for which the annual allocation was

calculated, the annual allocation may then be subject to modification and reduction.
In addition, the Permittee shall notify the District within 30 days for each SAS and MHA well that is phased-out and the LHA well(s) that will compensate this allocation.

20. Permittee shall determine unaccounted-for distribution system losses. Losses shall be determined for the entire distribution system on a monthly basis. Permittee shall define the manner in which unaccounted-for losses are calculated. Data collection shall begin within six months of Permit issuance. Loss reporting shall be submitted to the District on a yearly basis from the date of Permit issuance.

21. Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.

22. Prior to any application to renew or modify this permit, the Permittee shall evaluate long term water supply alternatives and submit a long term water supply plan to the District. Within one year of permit issuance, the Permittee shall submit to the District an outline of the proposed plan. The assessment should include consideration of saline intrusion, wellfield protection, plans for compliance with applicable wellfield protection ordinances, expected frequencies and plans to cope with water shortages or well field failures, and conservation measures to reduce overall stresses on the aquifer.

23. Every five years from the date of permit issuance, the permittee shall submit a water use compliance report for review and approval by District Staff, which addresses the following:

    1. The results of a water conservation audit that documents the efficiency of water use on the project site using data produced from an onsite evaluation conducted. In the event that the audit indicates additional water conservation is appropriate or the per capita use rate authorized in the permit is exceeded, the permittee shall propose and implement specific actions to reduce the water use to acceptable levels within timeframes proposed by the permittee and approved by the District.

    2. A comparison of the permitted allocation and the allocation that would apply to the project based on current District allocation rules and updated population and per capita use rates. In the event the permit allocation is greater than the allocation provided for under District rule, the permittee shall apply for a letter modification to reduce the allocation consistent with District rules and the updated population and per capita use rates to the extent they are considered by the District to be indicative of long term trends in the population and per capita use rates over the permit duration. In the event that the permit allocation is less than allowable under District rule, the permittee shall apply for a modification of the permit to increase the allocation if the permittee intends to utilize an additional allocation, or modify its operation to comply with the existing conditions of the permit.

24. The Water Conservation Plan required by Section 2.6.1 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District, must be implemented in accordance with the approved implementation schedule.

25. If a proposed well location is different from a location specified in the application, the Permittee shall submit to the District an evaluation of the impact of pumpage from the proposed well location on adjacent existing legal uses, pollution sources, environmental features, the saline water interface, and water bodies one month prior to all new well construction. The Permittee is advised that the proposal must be in compliance with all permitting criteria and performance standards in effect at the time of submittal, and that a formal modification of the permit shall be required if the withdrawals from the well location will result in an environmental or resource impact significantly greater than that anticipated in the permit review process.

26. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapters 40E-3 and 40E-30, Florida Administrative Code.

27. The Permittee shall continue to submit monitoring data in accordance with the approved saline water intrusion monitoring program for this project.
The monitoring plan comprises monthly monitoring of chloride concentration and water elevation (in feet NGVD) from the following wells, submitted to the District quarterly:

    North Cape Coral NC-1 (FCNCPWUH1, WMD 30820), North Cape Coral NC-2 (FCNCPWUH2, WMD 30821), North Cape Coral NC-9 (FCNCPWUH9, WMD 30822), Waterway Estates N-1D (FCWCLWH 1-D, WMD30823), Waterway Estates N-3 (FCWEPWUH03, WMD 30814), Waterway Estates N-9 (FCWEPWUH09, WMD 30816), Waterway Estates N-10 (FCWEPWUH10, WMD 30826), Waterway Estates N-6 (FCWEPWUT06, WMD 30815), Waterway Estates N-2 (FCWEPWWT02, WMD 30809), Waterway Estates N-4 (FCWEPWWT04, WMD 30825), Waterway Estates N-8 (FCWEPWWT08, WMD 30811), Waterway Estates N-1 (FCWEPWWT1, WMD 30810), Waterway Estates N-11 (FCWEPWWT11, WMD 30817), Waterway Estates N-12 (FCWEPWWT12, WMD 30812), Waterway Estates N-13 (FCWEPWWT13, WMD 30813), Waterway Estates N-14 (FCWEPWWT14, WMD 30818), Waterway Estates N-15 (FCWEPWWT15, WMD 30819).

    In addition, the Permittee shall monitor the following existing and proposed wells for chloride and water elevation (in feet NGVD) on a monthly basis and submit the results to the District on a quarterly basis:

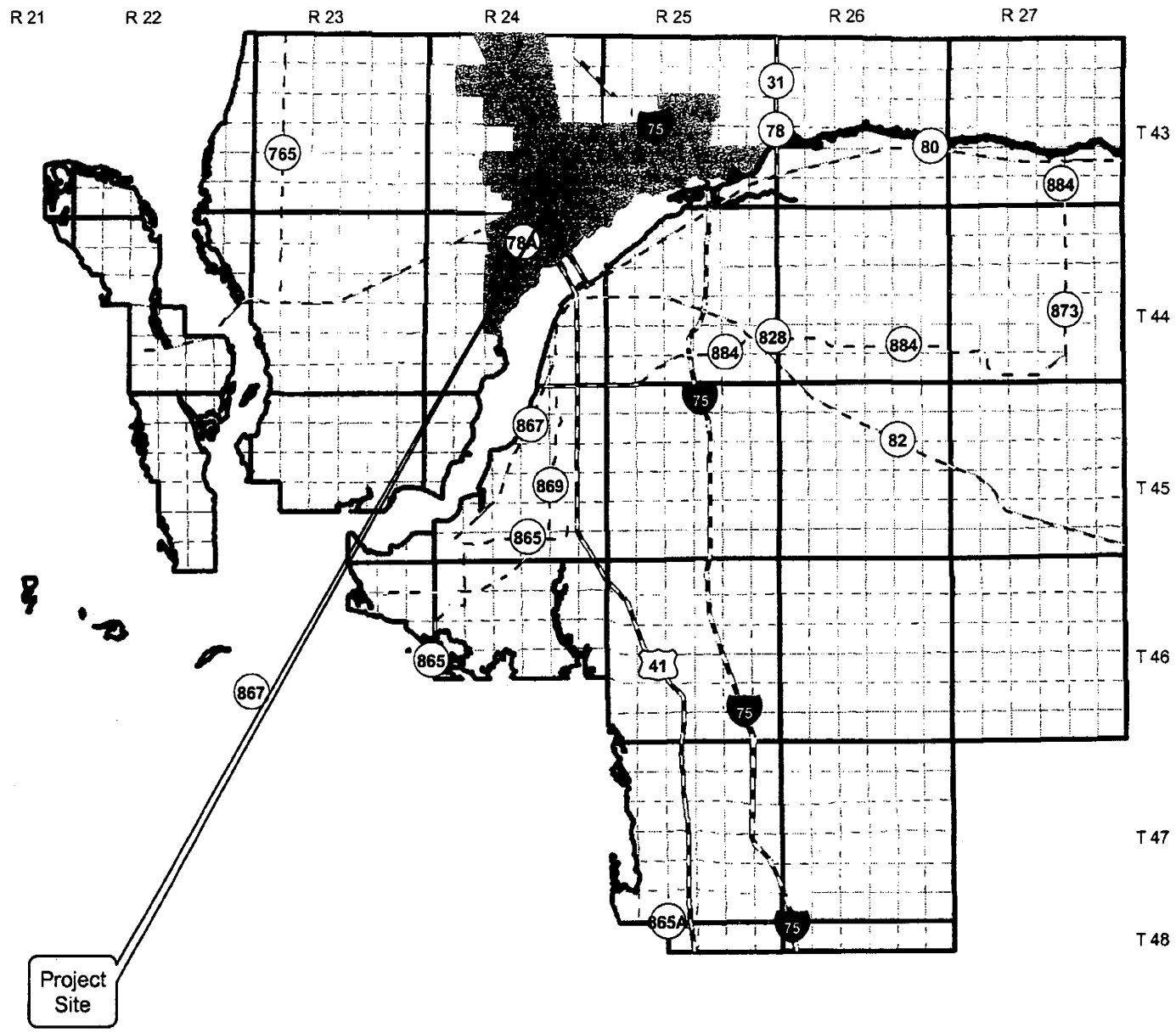
    NLCWTP RO LHA wells PW-1 through PW-18 and MW-1.

28. The Permittee shall submit to the District an updated Well Description Table (Table A) within one month of completion of the proposed wells identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters.

29. Permittee shall implement the wellfield operating plan described in District staff report prepared in support of recommendation for permit issuance.

    Waterway Estates and North Cape Coral Wellfields
    The current well operation schedule will continue as shown in Exhibit 12A.

    North Lee County Wellfield
    The operation schedule of wells will need to be developed accordingly for the average demand as shown on Exhibit 12B and for the peak demand as shown on Exhibit 12C. The yield and water quality of each well will need to be considered to optimize the wellfield's production.



LEE COUNTY, FLORIDA

Legend

Application

Application Sections

Application Number: 071228-9

Permit Number: 36-00152-W

Project Name: LEE COUNTY UTILITIES NORTH LEE COUNTY SYSTEM

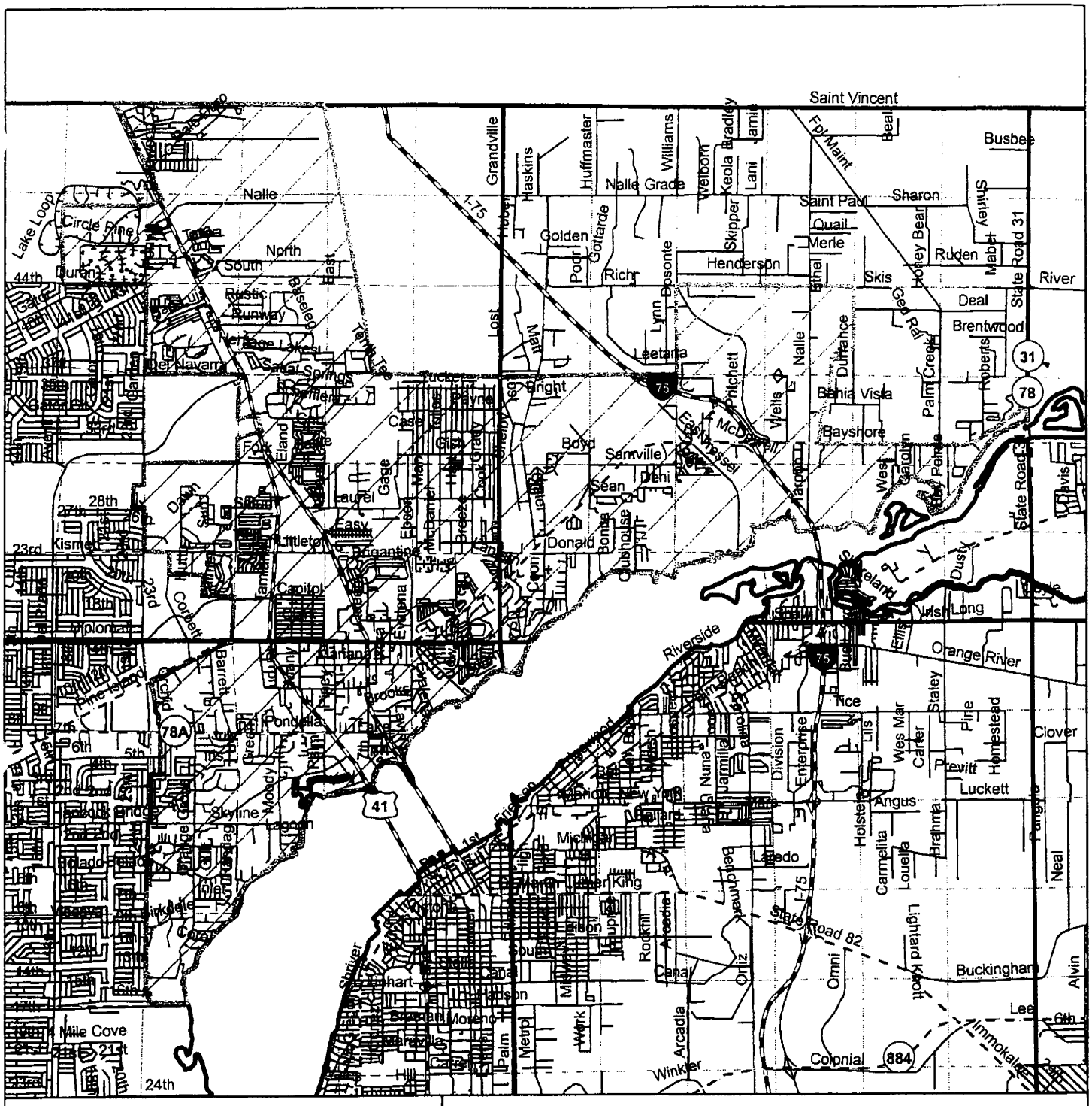
N

Map Date: 7/7/2008

0 5 10

Miles

Exhibit : 1


Saint Vincent
Busbee
Nalle
Circle Pine
North
South
East
Durrance
Golden
Richi
Henderson
Saint Paul
Sharon
Quail
Merle
Skis
Deal
Brentwood
River
Leetana
Bright
Boyd
Samville
Dehi
Sean
Donald
Bonita
Clubhouse
Bayshore
Bahia Vista
Palm Creek
Roberts
Pritchett
Wells
Nalle
Lost
Grandville
Haskins
Huffmaster
Nalle Grade
Williams
Welborn
Keola
Bradley
Lani
Skipper
Bosonte
Lynn
Pool
Golden Gate
Fork
Eland
Laurel
Gage
Case
Gish
Payne
Kismet
Littleton
Capitol
Corbett
Orange River
Tice
Staley
Pine
Homestead
Clover
Prewitt
Luckett
Angus
Carter
Wes Mar
Lis
Division
Enterprise
Riverside
Irish
Long
Dusty
Shoreland
Ellis
Pondella
Brooks
Skyline
Lagoon
Moody
Barrett
Orange Grove
Fairview
Lake
Trail
Fruitville
Laredo
Carmelita
Louella
Bratina
Holstein
Neal
Pangola
Rockhill
Arcadia
Canal
Orliz
Omni
Lighthard
Buckingham
Alvin
Lee
Colonial
Winkler
Mile Cove
Palm
Metro
Work
Carrell
Hill
Morena
Harlem
Hilson
Stuart
Shriver
Lamar
Nuna
Jamilla
Ida
Fowler
Evelyn
Ferris
Tamiami
Trail
Lee Road
State Road 82
State Road 31
State Road 78
Alico Road
Daniels
Parkway
Treeline
Gateway
Ben Hill Griffin
Veterans
Airport
Interstate 75
Interstate 75
Interstate 75

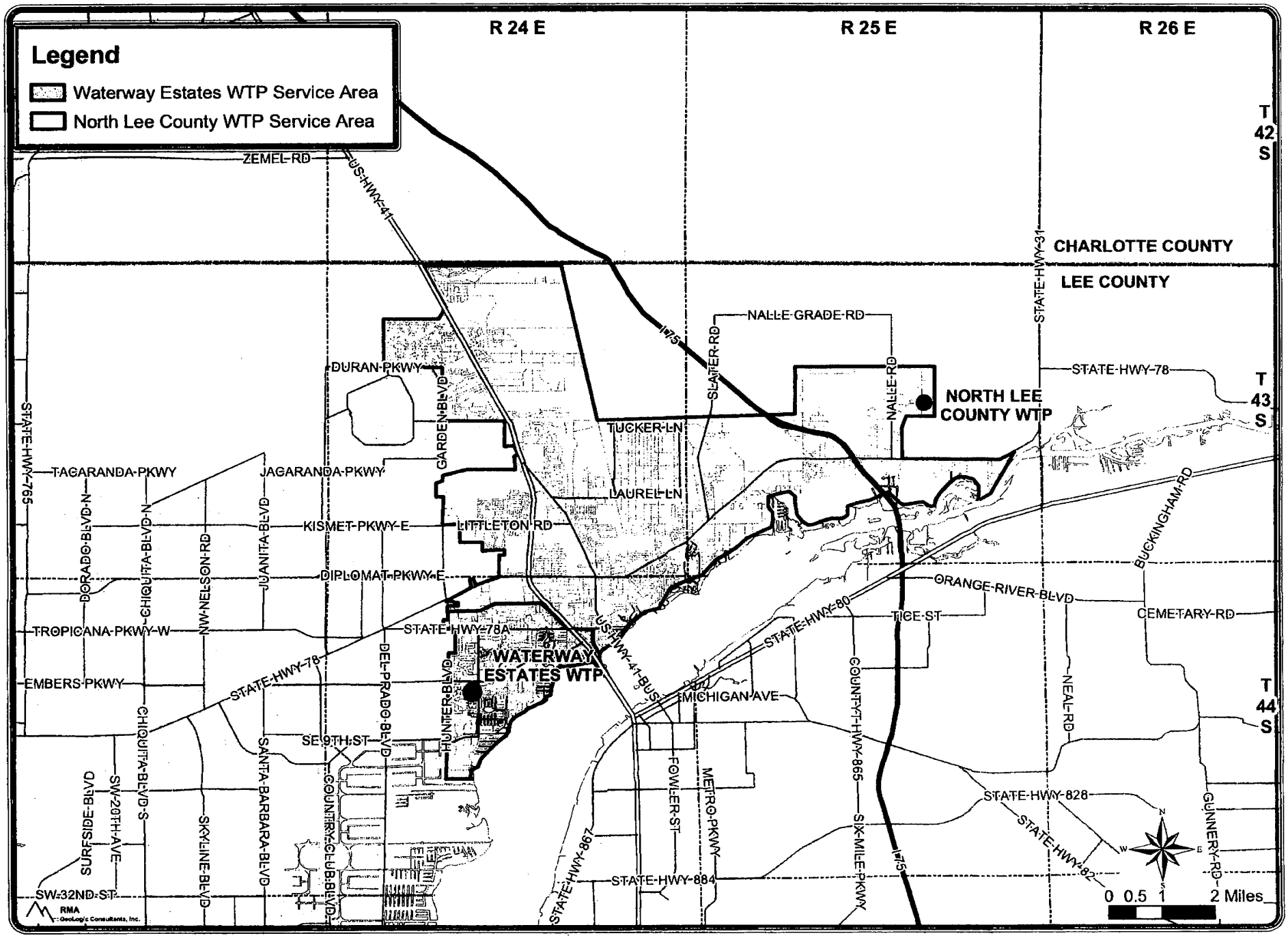


FIGURE 2- MAP SHOWING LOCATION OF AREAS PRIMARILY SERVED BY THE WATERWAY ESTATES AND NORTH LEE COUNTY WATER TREATMENT PLANTS.

EXHIBIT 3

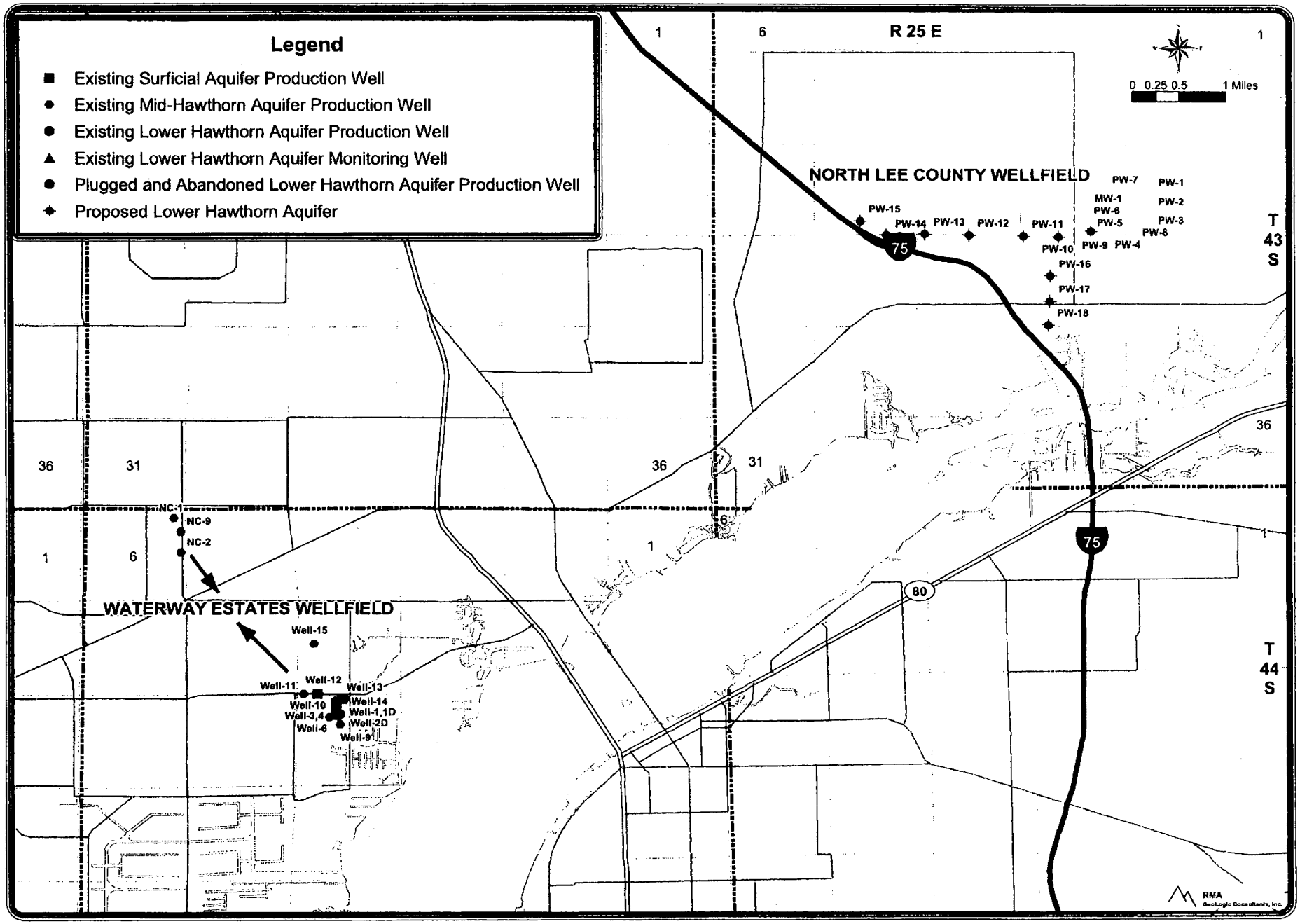


EXHIBIT 4

FIGURE 1- MAP SHOWING EXISTING AND PROPOSED FACILITIES FOR NORTH LEE COUNTY AND WATERWAY ESTATES WELLFIELDS.

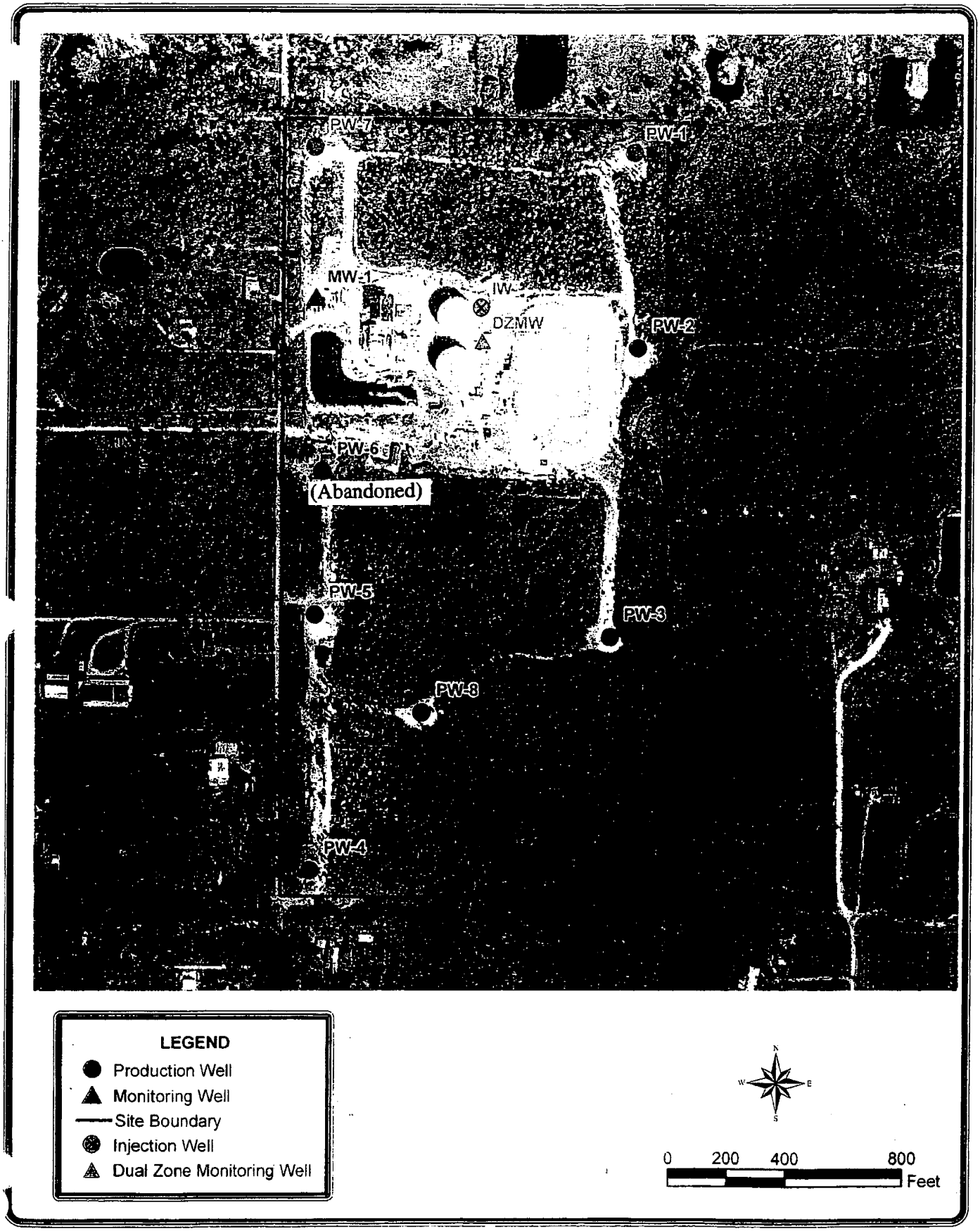


FIGURE 1-3. AERIAL PHOTO SHOWING LOCATION OF NORTH LEE COUNTY WTP WELLS

EXHIBIT 4A

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	142438	142439	142440	142450	142441	142449
Name	PW-1	PW-2	PW-3	PW-4	PW-5	PW-7
Map Designator	PW-1	PW-2	PW-3	PW-4	PW-5	PW-7
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(inches)	17	17	17	17	17	17
Total Depth(feet)	637	700	592	700	670	700
Cased Depth(feet)	500	493	441	475	500	475
Facility Elev. (ft. NGVD)	25	25	25	25	25	25
Screened Interval						
From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	turbine	turbine	turbine	turbine	turbine	turbine
Pump Int. Elev.						
Feet (NGVD)	-125	-125	-125	-125	-125	-125
Feet (BLS)	150	150	150	150	150	150
Pump Capacity(GPM)	580	580	580	580	580	580
Year Drilled	2002	2002	2002	2002	2002	2002
Planar Location Source						
Feet East	398500	398500	398500	398050	397350	398050
Feet North	872900	872200	871400	872900	871440	872900
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Standby	Primary	Primary	Standby	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

Exhibit No 5

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	142443	142545	142546	142547	142548	142637
Name	PW-8	PW-9	PW-10	PW-11	PW-12	PW-13
Map Designator	PW-8	PW-9	PW-10	PW-11	PW-12	PW-13
FLUWID Number						
Well Field						
Existing/Proposed	E	P	P	P	P	P
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	600	700	700	700	700	700
Cased Depth(feet)	470	500	500	500	500	500
Facility Elev. (ft. NGVD)	25	25	25	25	25	25
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	turbine	submersible	submersible	submersible	submersible	submersible
Pump Int. Elev.						
Feet (NGVD)	-125	-95	-95	-95	-95	-95
Feet (BLS)	150	120	120	120	120	120
Pump Capacity(GPM)	580	725	725	725	725	725
Year Drilled	2002					
Planar Location						
Source		DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED
Feet East	397920	395888	393496	391911	389130	386933
Feet North	871240	870613	870223	870307	870251	870390
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Standby	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

Exhibit No 5

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	142638	142639	142640	220604	220605	30810
Name	PW-14	PW-15	PW-16	PW-17	PW-18	N-1
Map Designator	PW-14	PW-15	PW-16	PW-17	PW-18	N-1
FLUWID Number						
Well Field						
Existing/Proposed	P	P	P	P	P	E
Well Diameter(inches)	17	17	17	17	17	8
Total Depth(feet)	700	700	700	700	700	48
Cased Depth(feet)	500	500	500	500	500	30
Facility Elev. (ft. NGVD)	25	25	25	25	25	
Screened Interval						
From						0
To						0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	submersible	submersible	submersible	submersible	submersible	submersible
Pump Int. Elev.						
Feet (NGVD)	-95	-95	-95	-95	-95	
Feet (BLS)	120	120	120	120	120	-30
Pump Capacity(GPM)	725	725	725	725	725	40
Year Drilled						1957
Planar Location						
Source	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	Migrate
Feet East	384899	383576	393257	393161	393097	356500
Feet North	870387	871217	868330	866751	865267	842722
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Surficial Aquifer System

Exhibit No 5

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	30809	30814	30825	30815	30816	30826
Name	N-2	N-3	N-4	N-6	N-9	N-10
Map Designator	N-2	N-3	N-4	N-6	N-9	N-10
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	8	6	8	8	8	8
Total Depth(feet)	57	130	48	205	230	235
Cased Depth(feet)	42	130	14	124	125	134
Facility Elev. (ft. NGVD)						
Screened Interval From	0	0	0	0	0	0
To	0	0	0	0	0	0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	submersible	submersible	submersible	submersible	submersible	submersible
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	-32	-116	-20	-105	-105	-116
Pump Capacity(GPM)	75	30	50	45	50	30
Year Drilled	1957	1966	1966	1971	1971	1972
Planar Location Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	356488	356489	356226	356145	356349	356481
Feet North	843070	842936	843229	842591	841984	843536
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Surficial Aquifer System	Mid-Hawthorn Aquifer	Surficial Aquifer System	Mid-Hawthorn Aquifer	Mid-Hawthorn Aquifer	Mid-Hawthorn Aquifer

Exhibit No 5

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	30817	30812	30813	30818	30819	30820
Name	N-11	N-12	N-13	N-14	N-15	NC-1
Map Designator	N-11	N-12	N-13	N-14	N-15	NC-1
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	10	10	10	10	8	8
Total Depth(feet)	230	60	80	230	208	240
Cased Depth(feet)	130	40	50	136	160	140
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0	0	0	0
To	0	0	0	0	0	0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	submersible	submersible	submersible	submersible	submersible	submersible
Pump Int. Elev.						
Feet (NGVD)						
Feet (BLS)	-116	-20	-40	-95	-140	-130
Pump Capacity(GPM)	85	60	30	85	65	70
Year Drilled	1983	1983	1983	1982	1988	1970
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	355084	355517	356635	357031	355370	348273
Feet North	843715	843944	843673	843596	846872	854228
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Mid-Hawthorn Aquifer	Surficial Aquifer System	Surficial Aquifer System	Mid-Hawthorn Aquifer	Mid-Hawthorn Aquifer	Mid-Hawthorn Aquifer

Exhibit No 5

TABLE - A
Description Of Wells.

Application Number: 071228-9

Well ID	30821	30822	142805	30823	30824
Name	NC-2	NC-9	MW-1	N-1D	N-2D
Map Designator	NC-2	NC-9	MW-1	N-1D	N-2D
FLUWID Number					
Well Field					
Existing/Proposed	E	E	E	E	E
Well Diameter(Inches)	8	8	8	4	12
Total Depth(feet)	240	225	700	600	600
Cased Depth(feet)	140	164	487	300	300
Facility Elev. (ft. NGVD)			10		
Screened Interval					
From	0	0		0	0
To	0	0		0	0
Pumped Or Flowing	P	P	F	P	F
Pump Type	submersible	submersible	none	submersible	submersible
Pump Int. Elev.					
Feet (NGVD)					
Feet (BLS)	-120	-116		-20	-20
Pump Capacity(GPM)	85	110	0	100	175
Year Drilled	1975	1975	2003	1989	9999
Planar Location					
Source	Migrate	Migrate	REVIEWER	Migrate	Migrate
Feet East	348638	348590	398050	356497	356683
Feet North	852865	853459	872650	842755	842763
Accounting Method	flow meter	flow meter	none	flow meter	flow meter
Use Status	Primary	Primary	Monitor	Primary	Standby
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Monitor	Public Water Supply Monitor	Public Water Supply
Aquifer	Mid-Hawthorn Aquifer	Mid-Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

Exhibit No 5

Public Water Supply Demands

Application Number: 071228-9

Service Area: NORTH LEE COUNTY RO
Treatment Name:
Standard PCUR: 160
Standard Max Monthly Ratio: 1.12
System Efficiency:
Standard Max Day Ratio:

Past Water Use (Table-F)

Year	Population	PCUR	Average Use (MGD)	Max Day Use (MGD)	Ratio	Average Monthly Use(MG)	Max Monthly Use (MG)	Ratio	Basis For Demand	Basis For Ratio
2006	34,345	170	5.83			177.23	186.88	1.05	Y	Y
2007	35,101	149	5.25			159.45	191.37	1.20	Y	Y

Projected Water Use(Table-G):

Year	Population	PCUR	Recommended Average (MGD)	Recommended Max Day (MGD)	Ratio	Average Monthly Use(MG)	Rec Max Monthly (MG)	Ratio	Basis for Allocation
2009	37,007	160	5.92			180.00	203.4016	1.13	
2010	37,976	160	6.08			184.72	208.7282	1.13	
2011	39,042	160	6.25			189.90	214.5873	1.13	
2012	40,133	160	6.42			195.21	220.5838	1.13	
2013	41,249	160	6.60			200.64	226.7177	1.13	
2014	42,393	160	6.78			206.20	233.0055	1.13	
2015	43,563	160	6.97			211.89	239.4362	1.13	
2016	44,761	160	7.16			217.72	246.0208	1.13	
2017	45,987	160	7.36			223.68	252.7593	1.13	
2018	47,319	160	7.57			230.16	260.0804	1.13	
2019	48,681	160	7.79			236.79	267.5664	1.13	
2020	50,074	160	8.01			243.56	275.2227	1.13	
2021	51,498	160	8.24			250.49	283.0495	1.13	
2022	52,955	160	8.47			257.57	291.0576	1.13	
2023	54,445	160	8.71			264.82	299.2471	1.13	
2024	55,968	160	8.95			272.23	307.618	1.13	

Exhibit No:6

Public Water Supply Demands

Application Number: 071228-9

Service Area: NORTH LEE COUNTY RO
Treatment Name:
Standard PCUR: 160
Standard Max Monthly Ratio: 1.12
System Efficiency:
Standard Max Day Ratio:

Year	Population	PCUR	Recommended Average (MGD)	Recommended Max Day (MGD)	Ratio	Average Monthly Use(MG)	Rec Max Monthly (MG)	Ratio	Basis for Allocation
2025	57,526	160	9.20			279.81	316.1813	1.13	
2026	59,119	160	9.46			287.55	324.9369	1.13	
2027	60,748	160	9.72			295.48	333.8904	1.13	
2028	62,413	160	9.99			303.58	343.0418	1.13	Y

Exhibit No:6

Public Water Supply Demands

Application Number: 071228-9

Service Area: WATERWAY ESTATES
Treatment Name:
Standard PCUR: 74

Standard Max Monthly Ratio: 1.14

System Efficiency:

Standard Max Day Ratio:

Past Water Use (Table-F)

Year	Population	PCUR	Average Use (MGD)	Max Day Use (MGD)	Ratio	Average Monthly Use(MG)	Max Monthly Use (MG)	Ratio	Basis For Demand	Basis For Ratio
2003	8,888	93	0.82			25.05	27.90	1.11	Y	
2004	9,204	76	0.70			21.31	25.80	1.21	Y	
2005	9,521	68	0.64			19.55	22.40	1.15	Y	Y
2006	9,837	66	0.65			19.67	21.70	1.10	Y	Y
2007	10,153	68	0.69			21.07	24.90	1.18	Y	Y

Projected Water Use(Table-G):

Year	Population	PCUR	Recommended Average (MGD)	Recommended Max Day (MGD)	Ratio	Average Monthly Use(MG)	Rec Max Monthly (MG)	Ratio	Basis for Allocation
2009	10,246	74	0.76			23.05	26.2763	1.14	
2010	10,368	74	0.77			23.32	26.5892	1.14	
2011	10,440	74	0.77			23.49	26.7738	1.14	
2012	10,513	74	0.78			23.65	26.9611	1.14	
2013	10,587	74	0.78			23.82	27.1508	1.14	
2014	10,661	74	0.79			23.98	27.3401	1.14	
2015	10,736	74	0.79			24.15	27.5342	1.14	
2016	10,811	74	0.80			24.32	27.7248	1.14	
2017	10,887	74	0.81			24.49	27.9189	1.14	
2018	10,887	74	0.81			24.49	27.9189	1.14	
2019	10,887	74	0.81			24.49	27.9189	1.14	
2020	10,887	74	0.81			24.49	27.9189	1.14	
2021	10,887	74	0.81			24.49	27.9189	1.14	
2022	10,887	74	0.81			24.49	27.9189	1.14	

Exhibit No:6

Public Water Supply Demands

Application Number: 071228-9

Service Area: WATERWAY ESTATES
Treatment Name:
Standard PCUR: 74

Standard Max Monthly Ratio: 1.14

System Efficiency:

Standard Max Day Ratio:

Year	Population	PCUR	Recommended Average (MGD)	Recommended Max Day (MGD)	Ratio	Average Monthly Use(MG)	Rec Max Monthly (MG)	Ratio	Basis for Allocation
2023	10,887	74	0.81			24.49	27.9189	1.14	
2024	10,887	74	0.81			24.49	27.9189	1.14	
2025	10,887	74	0.81			24.49	27.9189	1.14	
2026	10,887	74	0.81			24.49	27.9189	1.14	
2027	10,887	74	0.81			24.49	27.9189	1.14	
2028	10,887	74	0.81			24.49	27.9189	1.14	Y

Exhibit No:6

FIGURE 4-1. PLOT OF DISSOLVED CHLORIDES CONCENTRATION IN NORTH LEE COUNTY WTP PRODUCTION WELLS

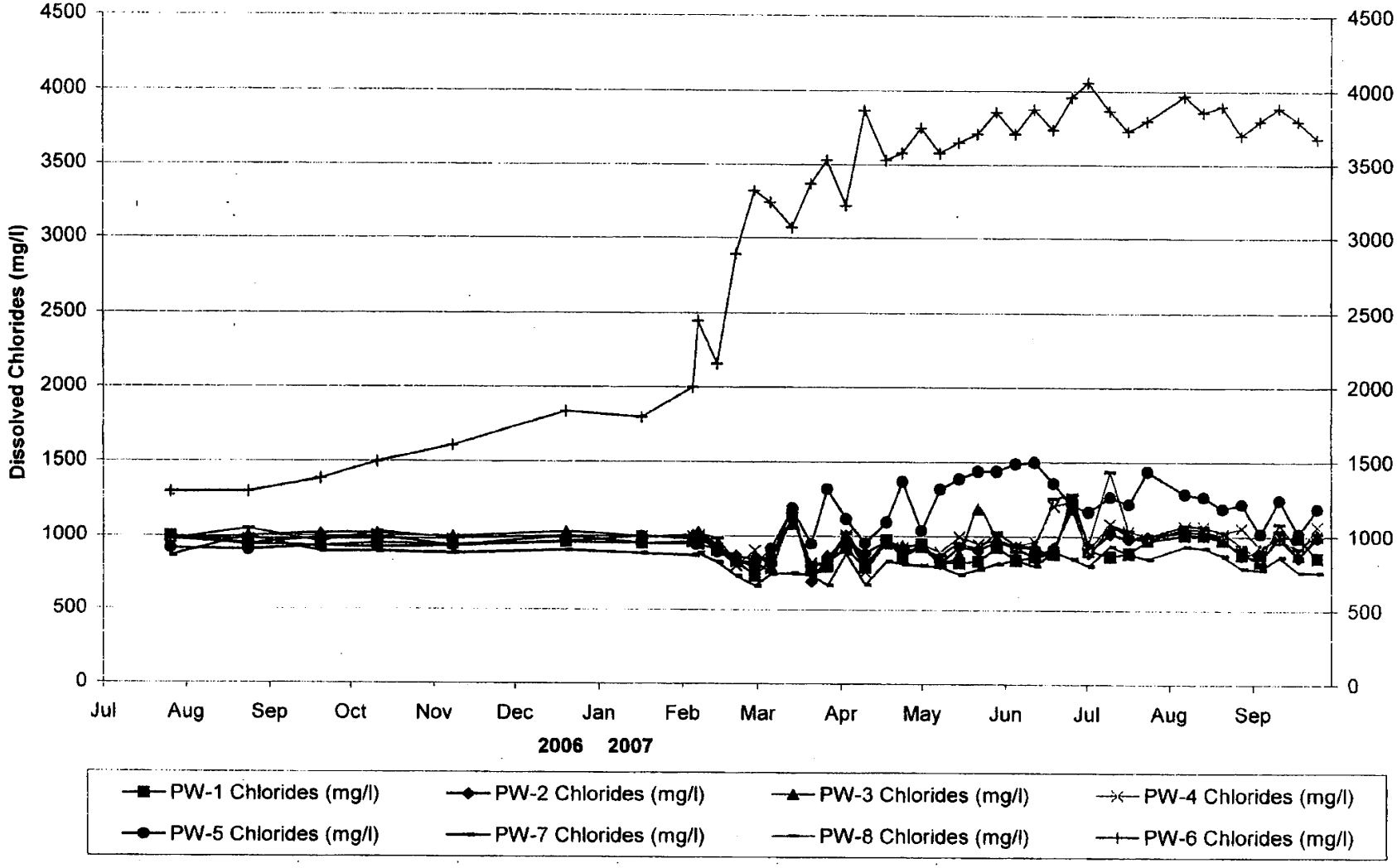


EXHIBIT 7

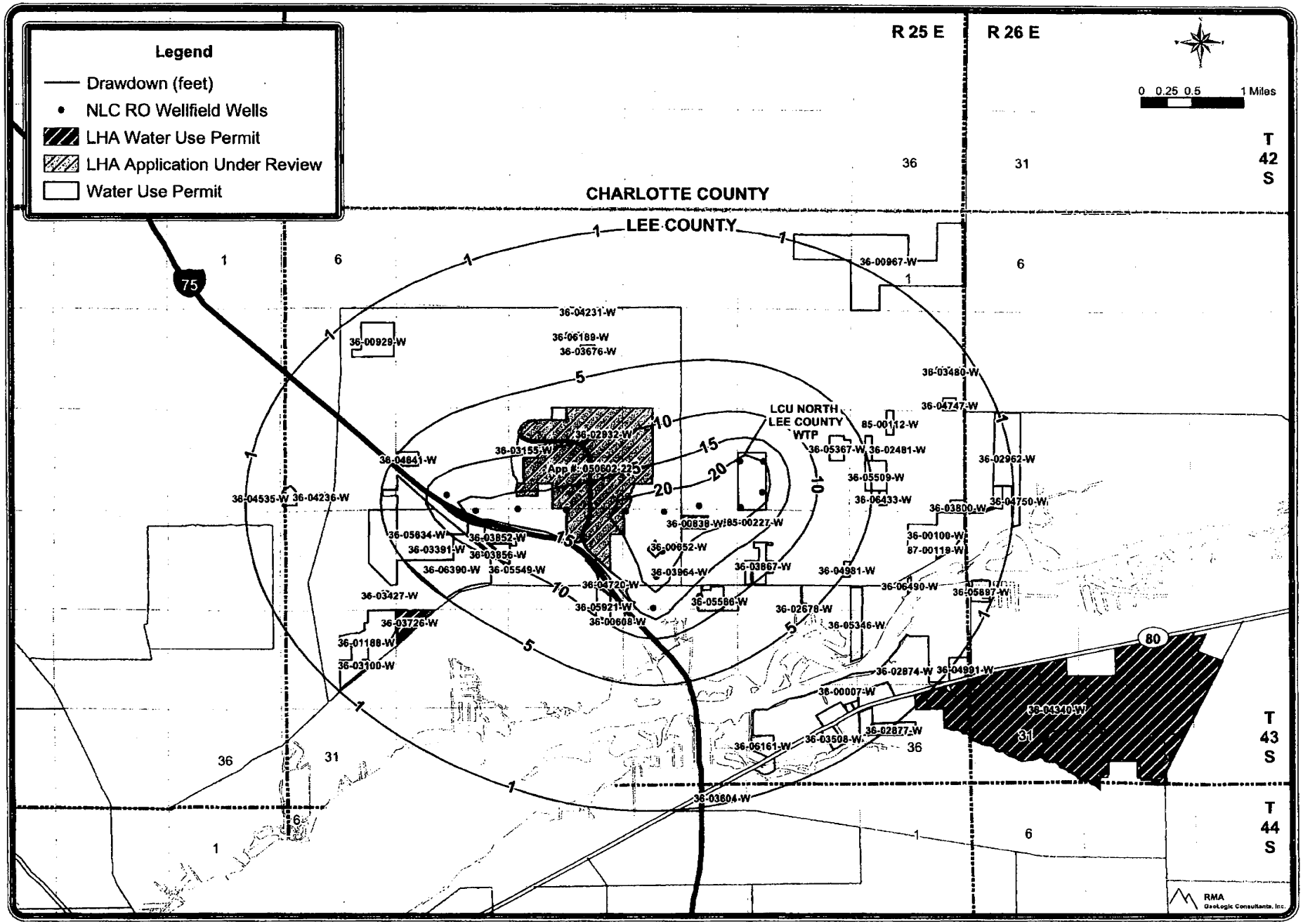


EXHIBIT 8

FIGURE 2-2B. MAP SHOWING WATER USE PERMITS WITHIN THE AREA OF INFLUENCE OF THE NORTH LEE COUNTY RO WELLFIELD RESULTING FROM THE A MAXIMUM WITHDRAWAL DAILY QUANTITY (12.5 MGD) FROM THE LOWER HAWTHORN AQUIFER.

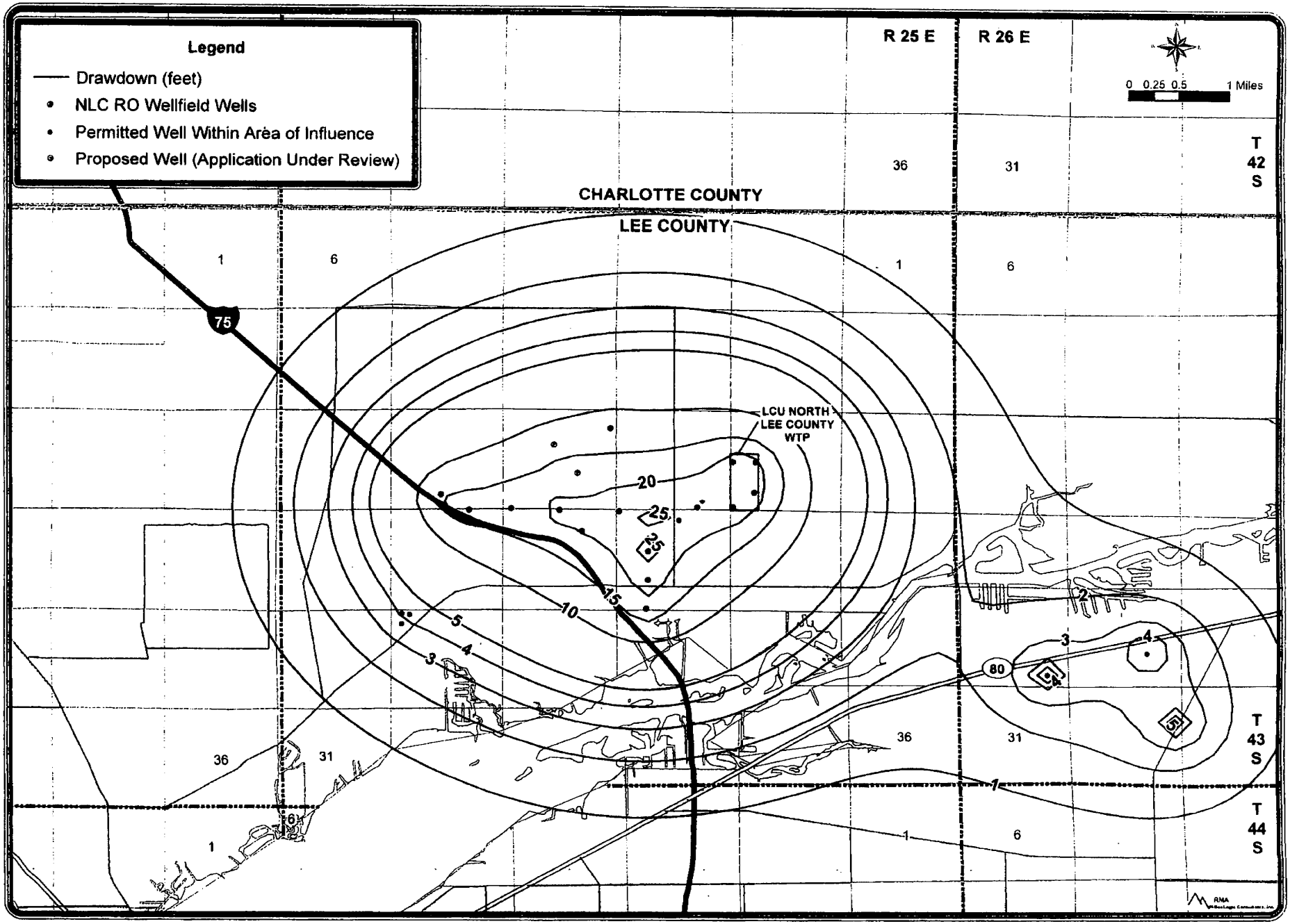


FIGURE 2-3. CUMULATIVE POTENTIOMETRIC WATER LEVEL DRAWDOWN CONTOUR MAP FOR THE LOWER HAWTHORN AQUIFER DUE TO THE PROPOSED MAXIMUM DAILY WITHDRAWAL QUANTITY (12.5 MGD) FROM THE NLC RO WELLFIELD AND PERMITED USERS IN AREA OF INFLUENCE FOR NINETY DAYS WITH NO RECHARGE TO THE SYSTEM.

EXHIBIT 9

Modeling Scenario Description

Project Name: LEE COUNTY UTILITIES NORTH
LEE COUNTY SYSTEM

Application Number: 071228-9

Model Name: Hantush-Jacob Method **Model Type:** Analytical **Version:** 2.0 **Scenario:** 2

Comments:

Input Parameters

Dataset Name	Value	Unit	Comments
Transmissivity	60000	GPD/Ft	
Storage coefficient	0.00018	Dimensionless	
Leakance	0.0037	GPD/cu ft	
Duration of pumping	90	Days	
Number of Columns	166	Number	
Number of Rows	178	Number	
Row & Column Spacing	200	Feet	
Map Scale		Feet per Inch	
Lower-left Origin X Coordinate	306035	Feet	
Lower-left Origin Y Coordinate	788202	Feet	

Withdrawals

Source	Type	Facility ID	Name	Type	<----- Planar Location -- East (feet)	North (feet	Withdrawn (gpd)	Comments
Lower Hawthorn Aquifer	GW	30823	N-1D	Well	356497	842755	144000	
Lower Hawthorn Aquifer	GW	142438	PW-1	Well	398500	872900	641025	Wells withdrawal rate: gallons/day
Lower Hawthorn Aquifer	GW	142439	PW-2	Well	398500	872200	641025	
Lower Hawthorn Aquifer	GW	142440	PW-3	Well	398500	871400	641025	
Lower Hawthorn Aquifer	GW	142441	PW-5	Well	397350	871440	641025	
Lower Hawthorn Aquifer	GW	142443	PW-8	Well	397920	871240	641025	
Lower Hawthorn Aquifer	GW	142449	PW-7	Well	398050	872900	641025	
Lower Hawthorn Aquifer	GW	142450	PW-4	Well	398050	872900	641025	
Lower Hawthorn Aquifer	GW	142545	PW-9	Well	395888	870613	801281	
Lower Hawthorn Aquifer	GW	142546	PW-10	Well	393496	870223	801281	
Lower Hawthorn Aquifer	GW	142547	PW-11	Well	391911	870307	801281	
Lower Hawthorn Aquifer	GW	142548	PW-12	Well	389130	870251	801281	
Lower Hawthorn Aquifer	GW	142637	PW-13	Well	386933	870390	801281	
Lower Hawthorn Aquifer	GW	142638	PW-14	Well	384899	870387	801281	
Lower Hawthorn Aquifer	GW	142639	PW-15	Well	383576	871217	801281	
Lower Hawthorn Aquifer	GW	142640	PW-16	Well	393257	868330	801281	
Lower Hawthorn Aquifer	GW	220604	PW-17	Well	393161	866751	801281	

Exhibit No: 10

Modeling Scenario Description

Project Name: LEE COUNTY UTILITIES NORTH
LEE COUNTY SYSTEM

Application Number: 071228-9

Model Name: Hantush-Jacob Method

Model Type: Analytical

Version: 2.0 **Scenario:** 2

Comments:

Withdrawals

Source	Type	Facility ID	Name	<----- Planar Location -- Type	East (feet)	North (feet	Withdrawn (gpd)	Comments
Lower Hawthorn Aquifer	GW	220605	PW-18	Well	393097	865267	801281	

Exhibit No: 10

FIGURE 5-22. PLOT OF SIMULATED COMPOSITE DISSOLVED CHLORIDE CONCENTRATION FOR THE NORTH LEE COUNTY RO WELLFIELD (WITHDRAWAL RATE OF DAILY AVERAGE OF 9.54 MG).

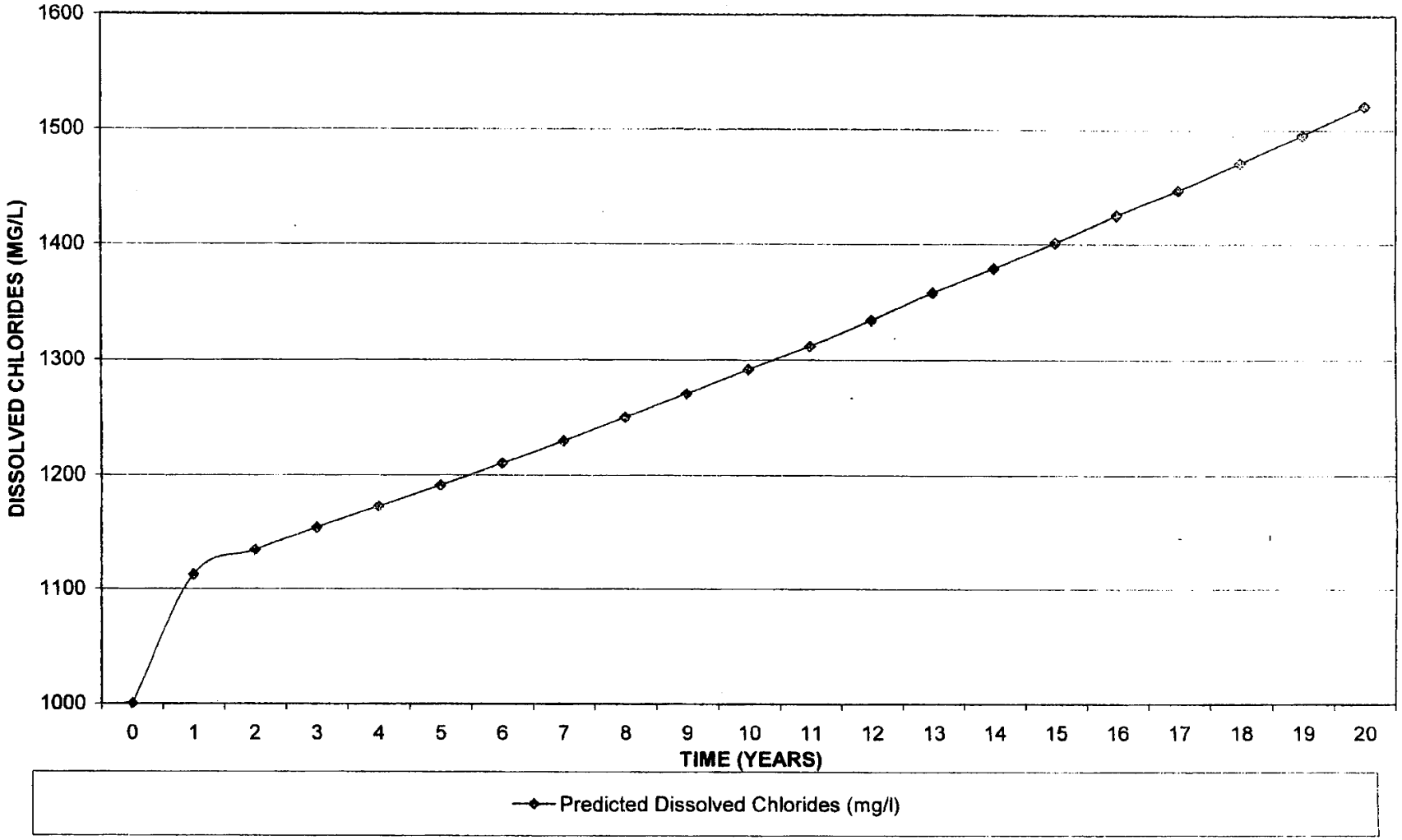


EXHIBIT 11

1.d. Fire flow and stand-by capacity.

The on site 1.0 MGD ground storage tank will provide 0.67 MG of standby capacity. A fire flow of 750 gallons per minute (gpm) for 6 hours was utilized to determine 0.27 MG of fire storage.

1.e. Existing wellfield operations schedule. Schedule should include those wells that are primary, secondary, standby, and any well rotation schedule.

WELLFIELD OPERATION PLAN

WELL PREFERENCE FROM FIRST TO LAST:

NC-9	Mid Hawthorn
NC-2	Mid Hawthorn
NC-1	Mid Hawthorn
WE-11	Mid Hawthorn
WE-15	Mid Hawthorn
WE-14	Mid Hawthorn
WE-6	Mid Hawthorn
WE-2	Surficial
WE-1	Surficial
WE-9	Mid Hawthorn
WE-13	Surficial
WE-12	Surficial
WE-3	Mid Hawthorn
WE-8	Surficial
WE-4	Surficial
WE-10	Mid Hawthorn
WE-1 D	Lower Hawthorn

All wells are generally on during winter demand season (tourist season).
Wells #13, 12. 4, 1, 2, 14 are operated valved back.

These wells are used according to demand or the gallons per minute needed at or during particular demand period.

Figure 2-1A
North Lee County
Average Demand Period Wellfield Rotation Plan

Well #	Production Rate (gpm)	Status	Week 1	2	3	4	5	6	7	8	9	10	11	12
1	500	Primary	■		■	■		■	■		■	■		■
2	400	Backup												
3	700	Primary	■	■		■	■		■	■		■	■	
4	700	Primary	■	■		■	■		■	■		■	■	
5	300	Backup												
7	500	Primary		■			■			■			■	
8	400	Backup												
9	700	Primary	■		■	■		■	■		■	■		■
10	700	Primary	■		■	■		■	■		■	■		■
11	700	Primary	■		■	■		■	■		■	■		■
12	700	Primary	■		■	■		■	■		■	■		■
13	700	Primary	■	■		■	■		■	■		■	■	
14	700	Primary	■	■		■	■		■	■		■	■	
15	700	Primary		■	■		■	■		■	■		■	■
16	700	Primary		■	■		■	■		■	■		■	■
17	700	Primary		■	■		■	■		■	■		■	■
18	700	Primary		■	■		■	■		■	■		■	■

Maximum Day: 12.5 MGD (8,681 gpm)
Average Day: 8.8 MGD (6,117 gpm)

■ On
gpm = gallons per minute

EXHIBIT 12B

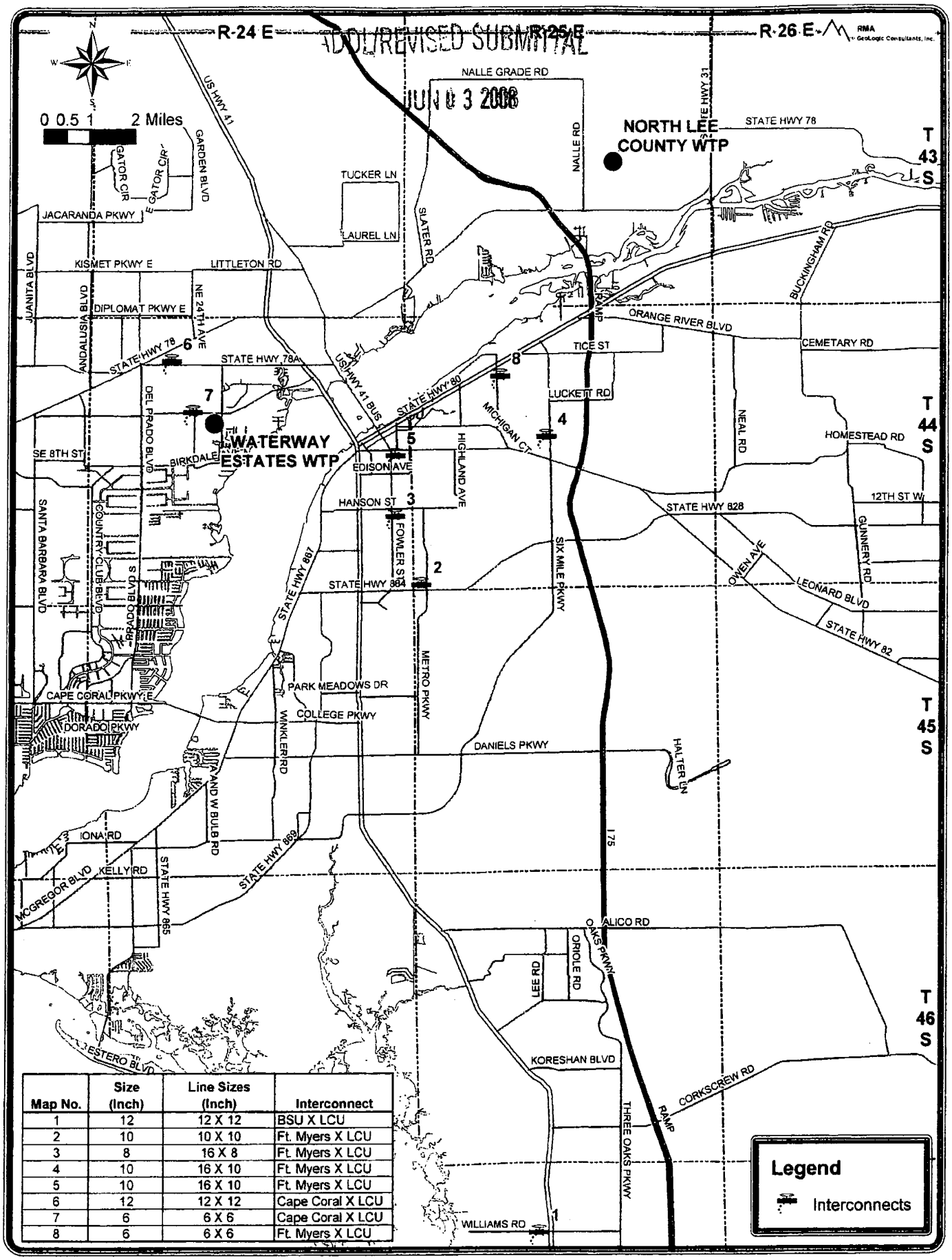
Figure 2-2A
North Lee County
Peak Demand Period Wellfield Rotation Plan

Well #	Production Rate (gpm)	Status	Week 1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	500	Primary	■	■	■	■	■	■	■	■	■	■		■	■	■
2	400	Backup														
3	700	Primary	■	■	■	■	■	■	■	■	■	■	■	■		■
4	700	Primary	■	■	■	■	■	■	■	■	■	■	■	■	■	
5	300	Backup														
7	500	Primary	■	■	■	■	■	■	■	■	■	■	■		■	■
8	400	Backup														
9	700	Primary										■				
10	700	Primary									■					
11	700	Primary								■						
12	700	Primary					■									
13	700	Primary				■										
14	700	Primary			■											
15	700	Primary		■												
16	700	Primary							■							
17	700	Primary						■								
18	700	Primary	■													

Maximum Day: 12.5 MGD (8,681 gpm)
Average Day: 8.8 MGD (6,117 gpm)

■ On
gpm = gallons per minute
MGD = million gallons per day

EXHIBIT 12C



Map No.	Size (Inch)	Line Sizes (Inch)	Interconnect
1	12	12 X 12	BSU X LCU
2	10	10 X 10	Ft. Myers X LCU
3	8	16 X 8	Ft. Myers X LCU
4	10	16 X 10	Ft. Myers X LCU
5	10	16 X 10	Ft. Myers X LCU
6	12	12 X 12	Cape Coral X LCU
7	6	6 X 6	Cape Coral X LCU
8	6	6 X 6	Ft. Myers X LCU

FIGURE 1- MAP SHOWING LOCATION OF LCU INTERCONNECTS (MODIFIED FROM CH2MHILL, 2008).

EXHIBIT 13

Requirement by Limiting Condition Report

App No: 071228-9 **Expiration Date:** 14-AUG-28

Permit No: 36-00152-W

Project Name: LEE COUNTY UTILITIES NORTH LEE COUNTY SYSTEM **Issued Date:**

Limiting Condition No: 17 **Limiting Condition Code:** WUSTD021-8

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - N-2	Calibration report for WELL N-2	19-APR-12	19-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-1	Calibration report for WELL N-1	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-12	Calibration report for WELL N-12	20-APR-12	20-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-13	Calibration report for WELL N-13	20-APR-12	20-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-3	Calibration report for WELL N-3	04-APR-12	04-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-6	Calibration report for WELL N-6	04-APR-12	04-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-9	Calibration report for WELL N-9	04-APR-12	04-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-11	Calibration report for WELL N-11	20-APR-12	20-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-14	Calibration report for WELL N-14	16-APR-12	16-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-15	Calibration report for WELL N-15	18-JUN-12	18-JUN-07	31-JUL-28	Every Five Years	Every Five Years
WELL - NC-1	Calibration report for WELL NC-1	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - NC-2	Calibration report for WELL NC-2	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - NC-9	Calibration report for WELL NC-9	19-APR-12	19-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-1D	Calibration report for WELL N-1D	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-4	Calibration report for WELL N-4	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - N-10	Calibration report for WELL N-10	06-APR-12	06-APR-07	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-1	Calibration report for WELL PW-1	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-2	Calibration report for WELL PW-2	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-3	Calibration report for WELL PW-3	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-5	Calibration report for WELL PW-5	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-8	Calibration report for WELL PW-8	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-7	Calibration report for WELL PW-7	28-MAY-13	28-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-4	Calibration report for WELL PW-4	27-MAY-13	27-MAY-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-9	Calibration report for WELL PW-9	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-10	Calibration report for WELL PW-10	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-11	Calibration report for WELL PW-11	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-12	Calibration report for WELL PW-12	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years

Exhibit No 14

Requirement by Limiting Condition Report

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - PW-12	Updated Table A for WELL PW-12	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-13	Updated Table A for WELL PW-13	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-14	Updated Table A for WELL PW-14	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-15	Updated Table A for WELL PW-15	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-16	Updated Table A for WELL PW-16	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-17	Updated Table A for WELL PW-17	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-18	Updated Table A for WELL PW-18	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only

Exhibit No 14

Requirement by Limiting Condition Report

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - N-1D	Chloride for Well N-1D	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - NC-2	Chloride for Well NC-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-15	Chloride for Well N-15	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-9	Chloride for Well N-9	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-4	Chloride for Well PW-4	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-4	Chloride for Well N-4	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-11	Chloride for Well N-11	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-9	Chloride for Well PW-9	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-14	Chloride for Well PW-14	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-17	Chloride for Well PW-17	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-1	Chloride for Well N-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-14	Chloride for Well N-14	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-12	Chloride for Well PW-12	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-13	Chloride for Well PW-13	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-15	Chloride for Well PW-15	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - MW-1	Chloride for Well MW-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-10	Chloride for Well PW-10	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-2	Chloride for Well N-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-13	Chloride for Well N-13	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-5	Chloride for Well PW-5	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-7	Chloride for Well PW-7	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-11	Chloride for Well PW-11	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-16	Chloride for Well PW-16	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-18	Chloride for Well PW-18	30-JUN-09	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-12	Chloride for Well N-12	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-3	Chloride for Well N-3	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-10	Chloride for Well N-10	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-1	Chloride for Well PW-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-3	Chloride for Well PW-3	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-9	Updated Table A for WELL PW-9	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-10	Updated Table A for WELL PW-10	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only
WELL - PW-11	Updated Table A for WELL PW-11	01-APR-09	01-OCT-08	31-JUL-28	One time Only	One time Only

Exhibit No 14

Requirement by Limiting Condition Report

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - PW-9	Monthly withdrawal for WELL PW-9	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-10	Monthly withdrawal for WELL PW-10	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-11	Monthly withdrawal for WELL PW-11	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-12	Monthly withdrawal for WELL PW-12	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-13	Monthly withdrawal for WELL PW-13	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-14	Monthly withdrawal for WELL PW-14	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-15	Monthly withdrawal for WELL PW-15	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-16	Monthly withdrawal for WELL PW-16	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-17	Monthly withdrawal for WELL PW-17	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-18	Monthly withdrawal for WELL PW-18	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly

Limiting Condition No: 20 **Limiting Condition Code:** WUPWS003-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Unaccounted for Distribution Losses for PERMIT	30-SEP-09	01-OCT-08	31-JUL-28	Yearly	Yearly

Limiting Condition No: 22 **Limiting Condition Code:** WUPWS005-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Long Term Water Supply Plan for PERMIT	01-OCT-09	01-OCT-08	31-JUL-28	One time Only	One time Only

Limiting Condition No: 23 **Limiting Condition Code:** WUPWS008-2

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Five-Year Compliance Report for PERMIT	30-SEP-13	01-OCT-08	31-JUL-28	Every Five Years	Every Five Years

Limiting Condition No: 27 **Limiting Condition Code:** WUSAT001-4

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - NC-9	Chloride for Well NC-9	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-2D	Chloride for Well N-2D	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-2	Chloride for Well PW-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - NC-1	Chloride for Well NC-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-6	Chloride for Well N-6	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-8	Chloride for Well PW-8	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly

Exhibit No 14

Requirement by Limiting Condition Report

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - PW-13	Calibration report for WELL PW-13	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-14	Calibration report for WELL PW-14	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-15	Calibration report for WELL PW-15	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-16	Calibration report for WELL PW-16	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-17	Calibration report for WELL PW-17	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years
WELL - PW-18	Calibration report for WELL PW-18	14-DEC-08	14-AUG-08	31-JUL-28	Every Five Years	Every Five Years

Limiting Condition No: 18 **Limiting Condition Code:** WUSTD022-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - N-2	Monthly withdrawal for WELL N-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-1	Monthly withdrawal for WELL N-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-12	Monthly withdrawal for WELL N-12	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-13	Monthly withdrawal for WELL N-13	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-3	Monthly withdrawal for WELL N-3	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-6	Monthly withdrawal for WELL N-6	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-9	Monthly withdrawal for WELL N-9	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-11	Monthly withdrawal for WELL N-11	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-14	Monthly withdrawal for WELL N-14	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-15	Monthly withdrawal for WELL N-15	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - NC-1	Monthly withdrawal for WELL NC-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - NC-2	Monthly withdrawal for WELL NC-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - NC-9	Monthly withdrawal for WELL NC-9	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-1D	Monthly withdrawal for WELL N-1D	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-4	Monthly withdrawal for WELL N-4	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - N-10	Monthly withdrawal for WELL N-10	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-1	Monthly withdrawal for WELL PW-1	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-2	Monthly withdrawal for WELL PW-2	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-3	Monthly withdrawal for WELL PW-3	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-5	Monthly withdrawal for WELL PW-5	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-8	Monthly withdrawal for WELL PW-8	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-7	Monthly withdrawal for WELL PW-7	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly
WELL - PW-4	Monthly withdrawal for WELL PW-4	31-DEC-08	01-OCT-08	31-JUL-28	Monthly	Quarterly

Exhibit No 14

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Application No: 071228-9

Permit No: 36-00152-W

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X Brian Kenedy
X FAITH ASSEMBLY OF GOD
X Florida Fish & Wildlife Conservation Commission - Imperiled Species Mgmt Section
X JOHN MASON
X JOHN MASON
X S.W.F.R.P.C. Jim Beever
X VERANDAH DEVELOPMENT LLC
X Water Management Institute - Michael N. Vanatta

Exhibit No:15

PUBLIC FACILITIES IMPACT ANALYSES

for

NORTH RIVER VILLAGE CPA

c. Drainage/Surface Water Management Analysis:

Location – Lee County

North River Village encompasses approximately 1,253 acres in Northeast Lee County. The northern boundary of the community is North River Road (CR 78) and then the boundary moves southeast and south along the west side of the North River Oaks subdivision. It reaches eastward almost to North Olga Road. The southern boundary turns west and follows a stairstep fashion along Duke Highway and the north side of the Caloosahatchee until it reaches the southwest corner of the property just south of the Trout Creek connection to the river. The boundary then goes north along an irregular path including along SR 31 for a portion of the west boundary until it reaches North River Road. The Water Management Map shows these features.

Topography

The general topography of this area ranges from a high of approximately 19-ft. NGVD north of Duke's Highway to about elevation 2 ft. NGVD along Trout Creek. The Topographic Map illustrates this well. The drop in elevation from high to low is not constant. The highest areas of this site are the result of dredge spoil from excavation of the river. The lowest elevations on the property are in the western portion around Trout Creek. This area has a higher percentage of wetland creeks, ponds and sloughs whereas the steeper areas and those filled by dredge spoil have little to no wetlands.

The downstream ends of the both Owl Creek and Trout Creek pass through this property. The headwater area for these creeks is in Charlotte County. The creeks are well defined as they pass through the property. Owl Creek is fresh all the way through the property. This is aided by a weir that is downstream of this property, which restricts the upstream flow of brackish water from the Caloosahatchee. On the other hand, Trout Creek is tidally influenced along the entire reach through this property. It is wide enough for use by small power boats, canoes, kayaks and other similar water craft.

Land Use

A substantial portion of the property has been used for groves or pasture for grazing cattle. These uses can be seen on the aerial of the site. About 70% of the community is in some type of agricultural operation. Some of this requires tilling and/or the application of fertilizer to the land. There are well-defined fields or groves that are in different states of operation over this area. None of these fields have been developed recently and have

modern stormwater detention facilities. The majority of the fields operate without an operations permit issued by South Florida Water Management District. These fields can be farmed in a multitude of ways so long as a discharge pump is not used to remove stormwater during the wet season, or any other time of the year. Irrigation pumps and wells are allowed in this area. The only prohibition on the management of water is to remove the water by pumps. Gravity discharge from the area is the only means available to the farmers and growers. Even with this restriction, there are many fields that are well drained by the natural and man-made watercourses so these fields are used continually.

Hydrology

Discharges from this property have been modeled in the Lee County Surface Water Master Plan. The allowable peak rate of runoff from this property from the LCSWMP is 32 cubic feet per second per square mile (csm) for the Owl Creek portion of the site. The Trout Creek Watershed has an allowable peak discharge rate of 39 csm. All of the future permitting work that will be done for design of stormwater management systems will be based on the respective peak rates for the watersheds. There are some areas of the site that convey water directly to the Caloosahatchee. These areas will be using the peak rate of 30 csm. The eastern portion of the site is a part of the Otter Creek Watershed, which also has a peak allowable discharge rate of 39 csm as does its neighbor Trout Creek.

Much of the North River Community is below the mapped Federal Emergency Management Agency (FEMA) 100-year floodplain as currently mapped. Large areas along the Owl Creek and Trout Creek streams are in the floodplain. The remainder of the community is in Zone D or X. This information is included on the Floodplain Map (see Map 14). There is an effort being conducted that will update the FEMA maps for Lee County. The draft maps just became available. Comments to these maps will be made after these are studied and reviewed as they affect this site.

A review of the NOAA SLOSH model maps shows a portion of the site to be inundated in a Tropical Storm. The inundated area shown on the maps has been reviewed with recent ground elevations shown on the Topographic Map. The area is larger than what would be inundated based on the recent work done in the field. Areas that should no longer be considered in the Coastal High Hazard Zone are shown also. Some of the areas shown to be inundated are currently wetlands. Most of these will remain as wetlands and not be recommended for a land use change. The upland areas will receive fill to meet minimum elevations for roads and buildings. The elevation to meet the Category 1 level in this area is elevation 5.5 feet NGVD. Minimum road elevation is 5.5 feet MSL based on Lee County regulation with minimum finish floor elevations are 8.0 feet NGVD based on FEMA regulation.

Existing Facilities

There are few existing manmade facilities on the property including the streams that cross the property. There are a few and they are outlined below and shown on the Water Management Map. Owl Creek has a small weir at the downstream end. The weir crest elevation is at 2.0 feet NGVD. This is located off the site to the south at the Owl Creek Marina. This weir keeps the water upstream fresh and allows for control of the water upstream of the weir. Boats are lifted across the weir and thereby controlling any pollutants that might exist on either side of it. Upstream from this location, there are no known structures although there may be an unknown private crossing before the creek reaches the box culvert at North River Road.

Trout Creek has two private bridges between the Caloosahatchee and North River Road. The downstream bridge is the extension of Boatworks Road that services Owl Creek Marina before reaching the bridge, which provides access to the south side of Trout Creek near its mouth. This road and bridge allow access for offsite property to the west of this property. It is a one-lane-timber bridge. Near the upstream end of the creek before it goes off this property, there is another one-lane-timber bridge. It provides access across the creek within the Cary property that has been made a portion of this property. Before reaching North River Road, Trout Creek splits with two branches plus the main thread. The western branch crosses North River Road from this site. The main thread and the eastern branch cross to the east of this property. All three of the channels cross North River Road through box culverts of various sizes. These are shown on the Water Management Map.

Proposed Facilities

The total area within the North River Community in Lee County is 1,253 acres. The allowable discharge has been established at a rates between 30 csm and 39 csm as discussed above. The total-peak runoff rate from the site will not exceed the summation of the allowable rates times the respective area from each watershed. The density, intensity and type of development will alter the amount of detention required to meet this allowable discharge limitation, but will not change the allowable discharge. It is estimated on a preliminary basis that about 850 acre-feet of volume would be required to provide the attenuation to meet the above peak rate. This would translate into a combination of lakes and wetlands totaling between 280 acres and 330 acres. The range of area needed is affected by configuration and depth of storage. The depth of storage is affected by wetland health maintenance, land slope, depth to the wet season water table, fill depths, etc. The land slopes will require intermediate control structures within the water management systems so that the downstream areas do not receive a disproportionate share of the runoff.

The final outfall structures will be placed to deliver water to similar locations as it is delivered to under the existing conditions to maintain flow patterns. The modification to the community to incorporate a modern water management system in place of the

uncontrolled gravity release from many of the farm fields and groves should decrease the peak rate of runoff delivered to the Caloosahatchee.

A discussion with a SFWMD staff member confirmed that the allowable discharge would follow the LCSWMP. There would be the need for an overall permit for the land use change even whether or not there are previous permits. The water quality requirements would include the additional 50 percent of detention volume in either case. The new rules for the lower west coast area are anticipated to be complete within the next year and would be applied to any portion of this CPA not yet permitted. The new rule would require additional best management practices to be incorporated into the system. All other rules of design would be the same for this community as any other permit for similar types of land uses. Since this site has only limited existing storage ponds there is very little water quality treatment being provided. The treatment proposed will make an improvement in the quality of the runoff and decrease the peak rate of runoff as stated above.

It is not anticipated that pumps will be used for this CPA to discharge storm water from within the developed areas to a detention area. Although not planned at this time, a pumped system might be considered for wetland restoration if a gravity source of water is deemed not practical.

Level of Service

The proposed permit will provide water quality for the 2.5"-one hour storm, attenuation for the 25 year-3 day storm and flood protection from the 100 year-3 day event. All proposed works will follow the current SFWMD requirements as a minimum. These are 1.5" of detention or 3.75" times the impervious area for water quality, the five year-1 day event for minimum road centerline elevations, the 25 year-3 day event for allowable discharge control and the 100 year-3 day event for finish floor elevation determination and historical basin storage.

JOHNSON
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TO: **Margaret Emblidge** | DATE: **March 28, 2008**

FROM: **Andy Tilton** | RE: **North River Village**

This is a follow up to our update meeting of March 26, 2008 about Lee County Natural Resource comments on the site plan. Roland Ottolini and Sam Lee met with me yesterday afternoon following a brief telephone conversation. Roland said that Sam's memo represented the sum of their comments. There were two basic issues. One was that the site needed to plan on the new FEMA maps being in place and that there were impacts due to the floodway delineations. The second was the flowway(s) from or in the vicinity of North River Oaks.

I said that the applicant understood the FEMA maps were changing and that my understanding was that most likely a LOMR would be sought. I said that this was especially true since the study of the property to the north had been released and had flows even smaller than the Lee County Surface Water Master Plan (LCSWMP) yet the FEMA flows were almost double those of the LCSWMP. They smiled and said that they were just finishing their review of the report from upstream. They did not give specifics, but we can get them as soon as they are delivered to the SFWMD.

We discussed the flowway from the south end of North River Oaks that goes west-south-west and connects to Trout Creek. They were not concerned with the exact location as long as the hydraulics worked. Roland did mention that Matt Noble thought that the ponds that exist today should be in the flowway. I pointed out that the ponds are south of the flowway as shown on the geo-referenced historic aerials. He said the exact location was more a planning issue and did not have much concern to the Natural Resources. He was concerned about it having adequate capacity. I assured him that would be done with the design.

Roland went on to discuss connection to the east and exiting through Otter Creek. I pointed out to him that there was a slight ridge in the pasture to the north that at least at low flows separated the paths between discharge to Trout Creek and Otter Creek. I also pointed out that with the exception of the very northeast corner that there was nothing that this property could do about the flowway. The historic aerials showed it starting on the Povia (formerly owned by Charlie Flint) property, traveling across the far corner of the BBG property and then across Cary's property before getting to a defined stream thread. The runoff from this area is now conveyed in a ditch near the east boundary of the site and through a ditch directly to the river without ever going through Otter Creek. There was no resolution as to whether Lee County would require that the corner of the property be set aside or not. The only way there will be full restoration is to require Povia or future developer to restore upstream and Cary or future developer

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downstream to restore before the land in the northeast corner will be anything but a hole in the ground. The Cary property even directs water west to the ditch on the site so that it does not flow south into Otter Creek.

FEMA Discussion

The site will have floodways for Owl Creek and Trout Creek when the new Federal Insurance Rate Maps (FIRMs) become effective on August 28, 2008. The floodway is a special portion of the floodplain where there are more constraints on construction. Prior to these new maps, construction anywhere in the floodplain required that the minimum finish floor elevation be above the elevation provided on the FIRM. Now any modifications in the floodway will require a backwater profile analysis that will be reviewed by FEMA to verify that the water level in the floodway will not exceed one foot above the floodplain elevation.

The floodplain and floodway mapped by FEMA on this site has been based on flows that are significantly more than three locally developed hydrologic models. The first was done for the Lee County Surface Water Master Plan (LCSWMP) in 1992. The flows in this analysis are about half of the FEMA flows. A little more than a year ago, Dick Tomasello developed a calibrated model for both hydrology and hydraulics to appeal the new FIRMs. The flows in that model are well less than the FEMA numbers and larger than the LCSWMP flows. A more recent study is being undertaken by a consultant for the Babcock Ranch that is upstream from the site. The version of the analysis submitted to date with SFWMD has even lower flows than shown in the LCSWMP.

The site plan has been developed to have minimal encroachments into the floodway as remapped by Tomasello. The Tomasello report will be used to file for a LOMR in order to reduce the floodplain widths on the property. Changes to the land plan can be made with addition of one or more linear ponds for improved flow capacity to offset floodplain encroachments. If a pond or ponds are needed, these would be constructed between the creek and the development to that the ponds will be available for contributing to the flow in the creek.

The site plan for North River Village has been developed in such a way as to make minimal changes in the floodway. The primary encroachments will be bridge crossings for vehicles and pedestrians. The bridges are being analyzed as part of the project design and ERP process.

Low Impact Development Techniques Discussion

Over the years the applicant has been pursuing new techniques for green technologies, community design, and water management to incorporate into their communities. Examples of these include: A partnership with the Florida Department of Environmental Protection on an eco-roof at Shadow Wood Preserve, and the Florida Green Building Coalition designation as Florida's first Green Land Development at Verandah along with a few other environmental stewardship achievements.

To take environmental stewardship a step further, Bonita Bay Group conducted an integrated ecological design/hydrology planning charette on October 3 and 4, 2007. The SFWMD and Lee County, along with other community and outside expert participants, evaluated opportunities to implement low impact development techniques, state of the art surface water management system designs, and operational scenarios to create ecologically and fiscally sustainable surface water management strategies for the Project. As a result, a range of green infrastructure strategies were discussed to address runoff from roofs, roadways, and yard areas. The goal is to move rainwater that falls on the site to the groundwater table as a conduit to the river and ambient wetlands.

The surface water management system will be designed using a treatment train that implements some of the best management practices associated with low impact development. The treatment train will include:

- The main roads throughout the Project will not include curb and gutter like typical residential developments. Runoff from the main roadways will be allowed to sheet flow across grassed slopes into treatment swales. The swales will be graded flat with raised inlets. The raised inlets will retain the first flush of rainfall and allow it to percolate into the ground.

- Where residences are adjacent to preserves, the rear lots will also be graded flat with raised inlets. This will catch the first flush of runoff. The berm will be constructed of clean sand to facilitate recover of the swale and reduce standing water.

- Open space within the residential tracts will be used for surface water management. Runoff from the roadways and residential lots will be conveyed into these open spaces where the first flush of runoff will be detained by raised inlets.

- In larger parking fields, pervious concrete pavers will be used to reduce and in some cases eliminate runoff. The normal asphalt parking spaces will be replaced by pervious concrete pavers. These pavers allow runoff to percolate into the bedding course and base where it is stored until it percolates into the adjacent soil.

- Alleyways will be constructed using pervious concrete pavers. Portions of adjacent lots will be graded to drain into these alleyways. The runoff from the lots and alleyways will be stored in the base until it percolates into the adjacent soil. Excess water will be directed to the surface water management system.

The Project will utilize alternative water supply sources and innovative solutions for irrigation water supply. The plans include minimizing irrigation

demand and maximizing alternative irrigation sources to meet the demand. Drought tolerant and native landscaping will be used to minimize the irrigation demand.

Reclaimed water will be the primary irrigation water supply source. An agreement with North Fort Myers Utilities is being sought to extend the reclaimed water distribution line and provide one gallon of reclaimed water to the Project site for every gallon of wastewater that leaves the Project site. Reclaimed water will not meet 100 percent of the irrigation water demand at North River Village.

The remaining demand will be met with a combination of stormwater and groundwater from the Sandstone and/or Lower Hawthorn aquifer. Stormwater capture and recycling is also included in the irrigation supply plan, and ponds will be situated to maximize stormwater capture and retain runoff. This stormwater capturing is an innovative approach towards recycling on-site water which would otherwise be lost to tide.

The Project is considering various other low impact development techniques. The existing natural landscapes were identified and incorporated into the overall site plan by further clustering development in a compact configuration, avoiding areas of environmental sensitivity, and further minimizing wetland impacts. The Project was designed to be the benchmark for sustainable development in Southwest Florida.

In addition, as part of the design process for the Project, coordination meetings were conducted with the various permitting agencies including: the SFWMD on September 5 and December 5, 2007 and April 3, 2008; the U.S. Fish and Wildlife Service (USFWS) on September 13, 2007; additional meetings with Lee County staff on September 19, October 5, and November 2, 2007; a joint meeting with the Florida Fish and Wildlife Conservation Commission (FWCC) and Lee County on January 15, 2008; and the COE on April 3, 2008 to review and discuss site plans for the Project. As a result of these meetings, revisions to the site plan were made to further reduce wetland impacts and limit impacts to necessary creek crossings and low quality COE isolated wetlands.

Based on comments from the integrated planning workshop, coordination meetings with permitting agencies, and the team of wetland scientists and environmental engineers working on the Project, the final site plan was prepared and is included in this submittal. The internal roadways were realigned to minimize disturbance; the golf course was removed; and additional preserves, buffers, and flow-ways were provided. The site plan was designed to preserve the larger, higher quality wetlands on-site by establishing large, contiguous preserve areas adjacent to Owl and Trout Creeks and to provide connectivity between the additional preserve areas. A historic flow-way will be re-created in the northeastern portion of the property and a wetland will be

created in the southwest portion of the property to maintain sheet flow across the site. The site plan establishes preserve areas throughout the property. These preserve areas provide natural flow-ways and allow water to drain into the adjacent wetland and creek systems. Wetland preserves are buffered by high quality upland habitat and the development areas are located within the lower quality wetlands and previously disturbed uplands, where feasible. This final site plan includes approximately 32.40 acres of wetland impacts resulting in a 10.6± acre and 33.6± acre reduction of wetland impacts from the September 2007 site plan and original May 2007 site plan, respectively. Approximately 16.47 acres of those impacts are to COE isolated wetlands within the historic spoil cell. In addition, a 300 foot ROW for SR 31 is being provided, which results in impacts to 5.81± acres of COE jurisdictional wetlands.

NORTH RIVER VILLAGE
ENVIRONMENTAL ASSESSMENT

September 2006
Revised August 2008

Prepared For:

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INTRODUCTION

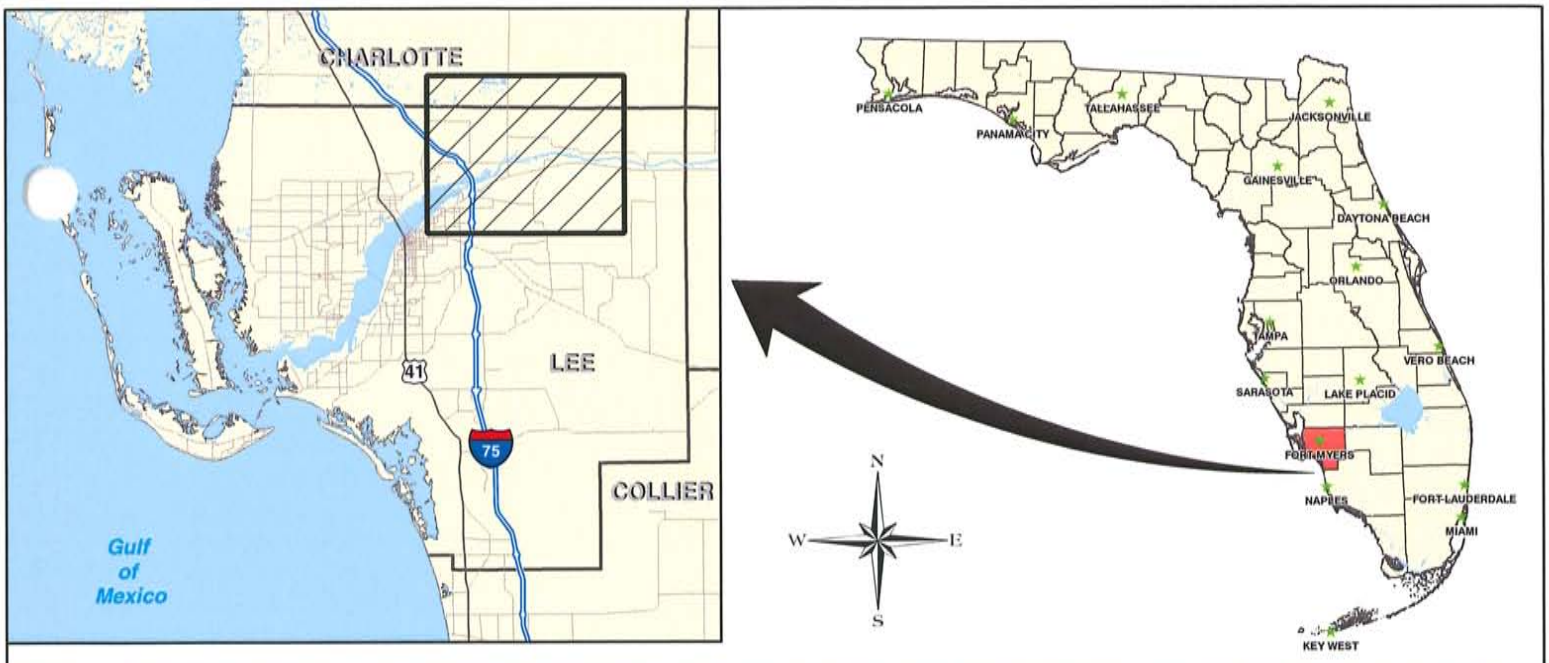
An environmental assessment was conducted on North River Village (Project) to document existing land uses and vegetative cover, determine the presence of state jurisdictional wetlands, and research potential utilization by wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWCC) and U.S. Fish and Wildlife Service (USFWS) as Threatened, Endangered, or Species of Special Concern and for plant species listed by the Florida Department of Agriculture and Consumer Services (FDACS) and the USFWS as Threatened, Endangered, or Commercially Exploited. The assessment included field surveys to map vegetation communities, as well as, a review of potential or documented occurrences of listed species on the property. This report summarizes the results of the environmental assessment.

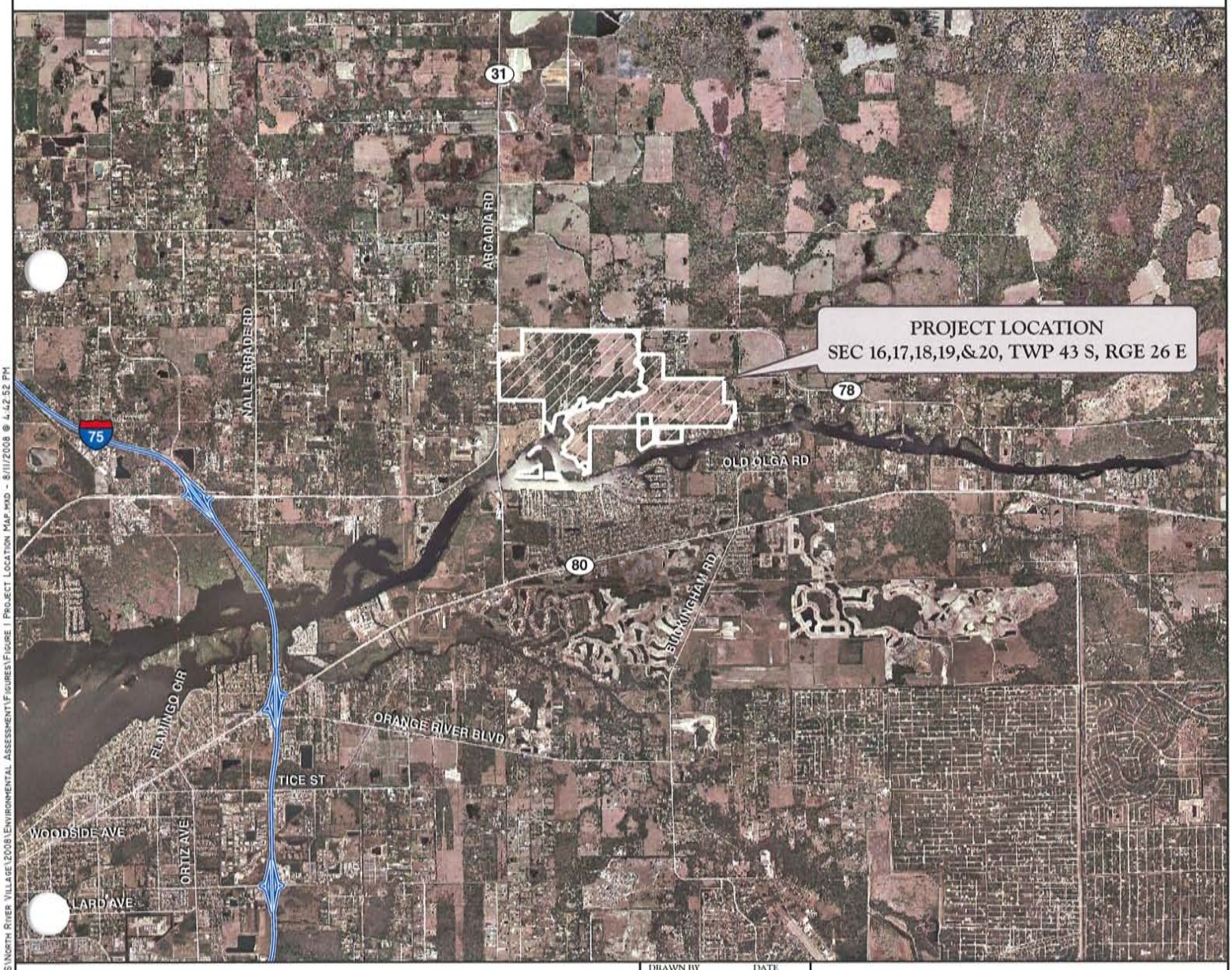
The North River Village property totals 1,232.77± acres and is located in Sections 16, 17, 18, 19, and 20; Township 43 South; Range 26 East; Lee County (Figure 1). The property is predominantly a mix of improved pasture, citrus groves, and forested areas. Trout Creek runs northeast to southwest through the central portion of the property. Owl Creek runs north to south through the western portion of the property. The Project includes a portion of Williams Island located within the Caloosahatchee River. The surrounding land uses include State Road (SR) 78 to the north; single-family residential and improved pasture to the east; the Caloosahatchee River, single-family residential, and undeveloped land to the south; and SR 31 to the west (Figure 2).

The southeastern portion of the property was historically a spoil cell for the dredging of the Caloosahatchee River. This area is now mostly improved pasture. Based on historical aerials from 1944 to 1966, the southeast portion of the property was diked and spoil from the dredging of the Caloosahatchee River was deposited into this area. The elevation of the existing spoil containment area is artificially high and generally ranges from 6 to 21 feet North American Vertical Datum (NAVD). Historic ground elevations in this area appear to have been between 4 to 7 feet NAVD.

LAND USES AND VEGETATION ASSOCIATIONS

The vegetation mapping for the Project was conducted using 2005 Lee County rectified aerials. Groundtruthing to map the vegetative communities was conducted on February 15, 21, and 22, 2006; March 3 and 9, 2006; April 5, 2006; May 2, 2006; June 13, 3006; August 18 and 23, 2006; and September 12, 2006, utilizing the Florida Land Use, Cover and Forms Classification System (FLUCFCS), Levels III and IV (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote hydrological conditions and disturbance. "E" codes were used to identify levels of exotic infestation (i.e., Brazilian pepper (*Schinus terebinthifolius*)). The wetland lines were flagged in the field by Passarella & Associates, Inc. (PAI) and subsequently survey located by Brett Bishop Land Surveying, Inc. Autodesk Map 3D 2008 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map (Exhibit A). An aerial photograph of the property with an overlay of the FLUCFCS is provided as Exhibit B.



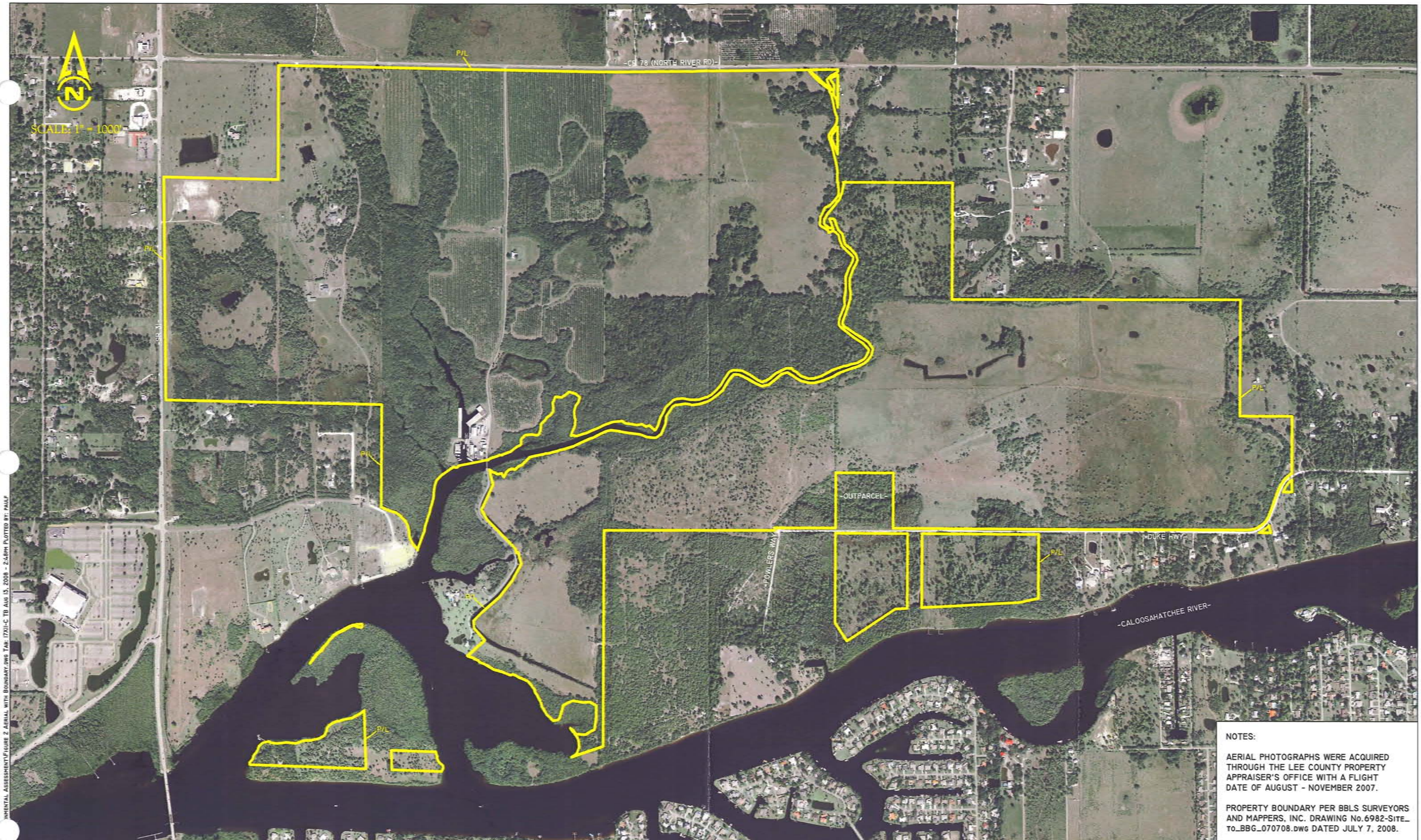


J:\2005\05888\1393\GIS\North River Village\2008\Environmental Assessment\Figures\Figure 1 Project Location Map.mxd - 8/11/2008 @ 4:42:52 PM

FIGURE 1. PROJECT LOCATION MAP
NORTH RIVER VILLAGE

DRAWN BY	DATE
J.I.	8/8/08
REVIEWED BY	DATE
A.K.	8/8/08
REVISED	DATE

Passarella & Associates, Inc. Consulting Ecologists



NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF AUGUST - NOVEMBER 2007.

PROPERTY BOUNDARY PER BBLS SURVEYORS AND MAPPERS, INC. DRAWING No.6982-SITE_TO_BBG_070708.DWG DATED JULY 7, 2008.

REVISIONS	DATE

		DATE
DRAWN BY	J.I.	8/6/08
DESIGNED BY	A.K.	8/6/08
REVIEWED BY	K.C.P.	8/6/08

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Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

NORTH RIVER VILLAGE

AERIAL WITH BOUNDARY

DRAWING No. 05BBG1393

SHEET No. FIGURE 2

J:\2005\05bbg1393\20[illegible]NMENTAL ASSESSMENT\FIGURE 2 AERIAL WITH BOUNDARY.DWG Tab: IFXII-C TD Aug 13, 2008 - 2:44PM PLOTTED BY: PAULF

A total of 71 vegetative associations and land uses (i.e., FLUCFCS codes) were identified on the property. Table 1 summarizes the FLUCFCS codes and provides an acreage breakdown. A description of each FLUCFCS code follows.

Table 1. FLUCFCS Codes and Acreages for North River Village

FLUCFCS Code	Habitat	Acreage	Percent of Total
110	Residential, Low Density	2.79	0.2
184	Marina	3.59	0.3
200	Agriculture	3.03	0.2
211	Improved Pasture	482.47	39.1
213	Woodland Pasture	47.68	3.9
221	Citrus Grove	129.12	10.5
262	Low Pasture	28.95	2.3
3219 E2	Palmetto Prairie, Disturbed (25-49% Exotics)	0.09	<0.1
3219 E3	Palmetto Prairie, Disturbed (50-75% Exotics)	0.13	<0.1
4119 E1	Pine Flatwoods, Disturbed (0-24% Exotics)	17.00	1.4
4119 E2	Pine Flatwoods, Disturbed (25-49% Exotics)	0.48	<0.1
4119 E3	Pine Flatwoods, Disturbed (50-75% Exotics)	0.08	<0.1
4119 E4	Pine Flatwoods, Disturbed (76-100% Exotics)	0.41	<0.1
4219 E1	Xeric Oak, Disturbed (0-24% Exotics)	2.98	0.2
422	Brazilian Pepper	4.29	0.3
4221	Brazilian Pepper, Hydric	24.82	2.0
4279 E1	Live Oak, Disturbed (0-24% Exotics)	36.46	3.0
4279 E2	Live Oak, Disturbed (25-49% Exotics)	52.23	4.2
4279 E3	Live Oak, Disturbed (50-75% Exotics)	16.67	1.4
4279 E4	Live Oak, Disturbed (76-100% Exotics)	11.88	1.0
4281 E1	Cabbage Palm, Hydric (0-24% Exotics)	4.20	0.3
4281 E2	Cabbage Palm, Hydric (25-49% Exotics)	0.79	0.1
4281 E4	Cabbage Palm, Hydric (76-100% Exotics)	6.92	0.6
4289 E1	Cabbage Palm, Disturbed (0-24% Exotics)	2.14	0.2
4289 E2	Cabbage Palm, Disturbed (25-49% Exotics)	0.32	<0.1
4289 E3	Cabbage Palm, Disturbed (50-75% Exotics)	2.44	0.2
4289 E4	Cabbage Palm, Disturbed (76-100% Exotics)	0.39	<0.1
4291 E1	Wax Myrtle, Hydric (0-24% Exotics)	0.33	<0.1
4291 E3	Wax Myrtle, Hydric (50-75% Exotics)	1.42	0.1
4291 E4	Wax Myrtle, Hydric (76-100% Exotics)	0.14	<0.1
4349 E1	Hardwood/Conifer Mixed, Disturbed (0-24% Exotics)	13.52	1.1
4349 E2	Hardwood/Conifer Mixed, Disturbed (25-49% Exotics)	15.01	1.2
4349 E3	Hardwood/Conifer Mixed, Disturbed (50-75% Exotics)	4.60	0.4
4349 E4	Hardwood/Conifer Mixed, Disturbed (76-100% Exotics)	8.96	0.7
510	Streams and Waterways	11.55	0.9
514	Ditch	9.40	0.8
520	Pond	0.13	<0.1

Table 1. (Continued)

FLUCFCS Code	Habitat	Acreage	Percent of Total
525	Cattle Pond	3.07	0.2
530	Reservoirs	0.73	0.1
6129 E1	Mangrove Swamp, Disturbed (0-24% Exotics)	0.35	<0.1
6129 E2	Mangrove Swamp, Disturbed (25-49% Exotics)	0.19	<0.1
6169 E1	Hardwood Wetland-Pop Ash, Disturbed (0-24% Exotics)	1.10	0.1
6189 E1	Willow, Disturbed (0-24% Exotics)	2.71	0.2
6189 E2	Willow, Disturbed (25-49% Exotics)	1.11	0.1
6189 E3	Willow, Disturbed (50-75% Exotics)	3.09	0.3
6189 E4	Willow, Disturbed (76-100% Exotics)	8.75	0.7
6215 E3	Cypress, Drained (50-75% Exotics)	0.96	0.1
6219 E1	Cypress, Disturbed (0-24% Exotics)	2.78	0.2
6219 E2	Cypress, Disturbed (25-49% Exotics)	1.62	0.1
6219 E3	Cypress, Disturbed (50-75% Exotics)	0.66	0.1
6249 E3	Pine/Cypress, Disturbed (50-75% Exotics)	0.36	<0.1
6259 E2	Hydric Pine, Disturbed (25-49% Exotics)	2.25	0.2
6259 E3	Hydric Pine, Disturbed (50-75% Exotics)	0.12	<0.1
6309 E1	Wetland Forested Mixed, Disturbed (0-24% Exotics)	9.92	0.8
6309 E2	Wetland Forested Mixed, Disturbed (25-49% Exotics)	16.22	1.3
6309 E3	Wetland Forested Mixed, Disturbed (50-75% Exotics)	15.52	1.3
6309 E4	Wetland Forested Mixed, Disturbed (76-100% Exotics)	68.50	5.6
6319 E2	Wetland Shrub, Disturbed (25-49% Exotics)	2.18	0.2
6319 E3	Wetland Shrub, Disturbed (50-75% Exotics)	0.12	<0.1
6319 E4	Wetland Shrub, Disturbed (76-100% Exotics)	0.39	<0.1
6419 E1	Freshwater Marsh, Disturbed (0-24% Exotics)	7.64	0.6
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	6.37	0.5
6419 E3	Freshwater Marsh, Disturbed (50-75% Exotics)	5.17	0.4
6419 E4	Freshwater Marsh, Disturbed (76-100% Exotics)	2.39	0.2
6439 E1	Wet Prairie, Disturbed (0-24% Exotics)	1.31	0.1
740	Disturbed Land	105.39	8.6
7401	Disturbed Land, Hydric	3.60	0.3
742	Borrow Area	1.21	0.1
743	Spoil Areas	0.75	0.1
747	Berm	3.27	0.3
814	Road	5.56	0.5
Total		**1,232.77**	**100.0**

Residential, Low Density (FLUCFCS Code 110)
This upland area occupies 2.79± acres or 0.2 percent of the property. It consists of single-family homes. A single abandoned home with pole barn is located on the Williams Island portion of the property.

Marina (FLUCFCS Code 184)
This area occupies 3.59± acres or 0.3 percent of the property. It consists of the Owl Creek Marina.

Agriculture (FLUCFCS Code 200)
This area occupies 3.03± acres or 0.2 percent of the property. It consists of two barns and a cattle pen used for the Greenwell Farm cattle operation.

Improved Pasture (FLUCFCS Code 211)
This upland area occupies 482.47± acres or 39.1 percent of the property. The canopy is open and includes widely scattered slash pine (*Pinus elliottii*), cabbage palm (*Sabal palmetto*), and live oak (*Quercus virginiana*). The sub-canopy is open and includes widely scattered cabbage palm, wax myrtle (*Myrica cerifera*), and Brazilian pepper. The ground cover includes bahiagrass (*Paspalum notatum*), tropical soda apple (*Solanum viarum*), smutgrass (*Sporabolis indicus*), broomsedge bluestem (*Andropogon virginicus*), blackberry (*Rubus* sp.), flatsedge (*Cyperis* sp.), torpedograss (*Panicum repens*), frog fruit (*Phyla nodiflora*), caesarweed (*Urena lobata*), and Asiatic pennywort (*Centella asiatica*). The improved pasture in the southeastern portion of the site was historically a spoil cell for the dredging of the Caloosahatchee River.

Woodland Pasture (FLUCFCS Code 213)
This upland area occupies 47.68± acres or 3.9 percent of the property. The canopy has scattered slash pine, live oak, laurel oak (*Quercus laurifolia*), and cabbage palm. The sub-canopy includes widely scattered slash pine, Brazilian pepper, persimmon (*Diospyros virginiana*), wax myrtle, live oak, laurel oak, and cabbage palm. The ground cover contains bahiagrass, smutgrass, broomsedge bluestem, muscadine grape (*Vitis rotundifolia*), saw palmetto (*Serenoa repens*), cabbage palm, caesarweed, earleaf greenbriar (*Smilax auriculata*), and blackberry.

Citrus Grove (FLUCFCS Code 221)
This upland area occupies 129.12± acres or 10.5 percent of the property.

Low Pasture (FLUCFCS Code 262)
This wetland area occupies 28.95± acres or 2.3 percent of the property. The canopy is open. The sub-canopy contains widely scattered cabbage palm, Brazilian pepper, wax myrtle, and willow (*Salix caroliniana*). The ground cover includes inundated beaksedge (*Rhynchospora inundata*), beaksedge (*Rhynchospora microcarpa*), Asiatic pennywort, creeping primrose willow (*Ludwigia repens*), dayflower (*Commelina diffusa*), pickerelweed (*Pontedaria cordata*), bushy bluestem (*Andropogon glomeratus*), sawgrass (*Cladium jamaicense*), white-top sedge (*Rhynchospora colorata*), torpedograss, marsh pennywort (*Hydrocotyle umbellata*), blue flag (*Iris virginica*), frog fruit, southern umbrellasedge (*Fuirena scirpoidea*), smartweed (*Polygonum* sp.), arrowhead (*Sagittaria lancifolia*), bighead rush (*Juncus megacephalus*), aster (*Aster* sp.),

sesbania (*Sesbania* sp.), spikerush (*Eleocharis cellulosa*), marsh-mallow (*Kosteletzkya* sp.), and rosy camphorweed (*Pluchea rosea*).

The low pasture in the southeastern portion of the site was created as a result of spoil deposition from dredging of the Caloosahatchee River. Based on historical aerials from 1944 to 1966, the southeast portion of the property was diked and spoil from the dredging of the Caloosahatchee River was deposited into this area. The elevation of the existing spoil containment area is artificially high and generally ranges from 6 to 21 feet NAVD. Historic ground elevations in this area appear to have been between 4 and 7 feet NAVD.

Palmetto Prairie, Disturbed (25-49% Exotics) (FLUCFCS Code 3219 E2)
This upland community type occupies 0.09± acre or less than 0.1 percent of the property. The canopy contains scattered live oak and cabbage palm. The sub-canopy contains Brazilian pepper. The ground cover contains saw palmetto, caesarweed, beautyberry (*Callicarpa americana*), Brazilian pepper, and greenbrier (*Smilax* sp.).

Palmetto Prairie, Disturbed (50-75% Exotics) (FLUCFCS Code 3219 E3)
This upland community type occupies 0.13± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 3219 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)
This upland community type occupies 17.00± acres or 1.4 percent of the property. The canopy contains slash pine with scattered cabbage palm and live oak. The sub-canopy contains slash pine with scattered cabbage palm, live oak, and Brazilian pepper. The ground cover contains broomsedge bluestem, Brazilian pepper, bahiagrass, wax myrtle, saw palmetto, caesarweed, and blackberry.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)
This upland community type occupies 0.48± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4119 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)
This upland community type occupies 0.08± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4119 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)
This upland community type occupies 0.41± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4119 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Xeric Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4219 E1)
This upland community type occupies 2.98± acres or 0.2 percent of the property. The canopy contains live oak, myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), and

sand live oak (*Quercus geminata*). The sub-canopy contains staggerbush (*Lyonia* sp.), gallberry (*Ilex glabra*), wax myrtle, and saw palmetto. The ground cover contains shortleaf wild coffee (*Psychotria sulzneri*), bracken fern (*Pteridium aquilinum*), poison ivy (*Toxicodendron radicans*), saw palmetto, earleaf greenbrier, and beautyberry. The extent of xeric oak habitat on the property historically appears to have been larger, but due to a lack of fire these areas have transitioned to live oak habitat.

Brazilian Pepper (FLUCFCS Code 422)
This upland area occupies 4.29± acres or 0.3 percent of the property. The canopy is open. The sub-canopy is dominated by Brazilian pepper with scattered wax myrtle and cabbage palm. The ground cover includes Brazilian pepper.

Brazilian Pepper, Hydric (FLUCFCS Code 4221)
This wetland area occupies 24.82± acres or 2.0 percent of the property. The canopy is dominated by Brazilian pepper with scattered live oak, cabbage palm, swamp bay (*Persea palustrus*), and willow. The sub-canopy is dominated by Brazilian pepper with scattered cabbage palm, live oak, swamp bay, myrsine (*Rapanea punctata*), wax myrtle, saltbush (*Baccharis halimifolia*), willow, pond apple (*Annona glabra*), red mangrove (*Rhizophora mangle*), and swamp dogwood (*Cornus foemina*). The ground cover contains Brazilian pepper, cabbage palm, leather fern (*Acrostichum danaeifolium*), swamp fern (*Blechnum serrulatum*), creeping primrose willow, smartweed, cattail (*Typha* sp.), shield fern (*Thelypteris* sp.), muscadine grape, greenbriar, beaksedge, flatsedge, and marsh pennywort.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)
This upland community type occupies 36.46± acres or 3.0 percent of the property. The canopy contains live oak with scattered laurel oak, pop ash (*Fraxinus caroliniana*), Brazilian pepper, and cabbage palm. The sub-canopy contains live oak, cabbage palm, laurel oak, wax myrtle, myrsine, wild coffee, swamp bay, caesarweed, saltbush, and Brazilian pepper. The ground cover includes saw palmetto, poison ivy, beautyberry, wild coffee, Virginia creeper (*Parthenocissus quinquefolia*) Brazilian pepper, tropical soda apple, beggar-ticks (*Bidens alba*), St. Augustine grass (*Stenotaphrum secundatum*), caesarweed, Boston fern (*Nephrolepsis* sp.) cabbage palm, broomsedge bluestem, stopper (*Eugenia axillaries*), and carpetgrass (*Axonopus fissifolius*).

Live Oak, Disturbed (25-49% Exotics) (FLUCFCS Code 4279 E2)
This upland community type occupies 52.23± acres or 4.2 percent of the property. The vegetation associations are similar to FLUCFCS Code 4279 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Live Oak, Disturbed (50-75% Exotics) (FLUCFCS Code 4279 E3)
This upland community type occupies 16.67± acres or 1.4 percent of the property. The vegetation associations are similar to FLUCFCS Code 4279 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Live Oak, Disturbed (76-100% Exotics) (FLUCFCS Code 4279 E4)
This upland community type occupies 11.88± acres or 1.0 percent of the property. The vegetation associations are similar to FLUCFCS Code 4279 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Cabbage Palm, Hydric (0-24% Exotics) (FLUCFCS Code 4281 E1)
This wetland community type occupies 4.20± acres or 0.3 percent of the property. The canopy contains cabbage palm with scattered laurel oak and swamp bay. The sub-canopy contains cabbage palm, Brazilian pepper, myrsine, laurel oak, wax myrtle, willow, swamp dogwood, and buckthorn (*Bumelia* sp.). The ground cover contains leather fern, swamp fern, cabbage palm, Brazilian pepper, Asiatic pennywort, marsh pennywort, smartweed, sand cordgrass (*Spartina bakeri*), laurel oak, dayflower, primrose willow, pickerelweed, and buttonbush (*Cephalanthus occidentalis*).

Cabbage Palm, Hydric (25-49% Exotics) (FLUCFCS Code 4281 E2)
This wetland community type occupies 0.79± acre or 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4281 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Cabbage Palm, Hydric (76-100% Exotics) (FLUCFCS Code 4281 E4)
This wetland community type occupies 6.92± acres or 0.6 percent of the property. The vegetation associations are similar to FLUCFCS Code 4281 E2, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Cabbage Palm, Disturbed (0-24% Exotics) (FLUCFCS Code 4289 E1)
This upland community type occupies 2.14± acres or 0.2 percent of the property. The canopy contains cabbage palm with scattered live oak. The sub-canopy contains Brazilian pepper, wax myrtle, and cabbage palm. The ground cover includes smutgrass, bahiagrass, wild coffee, dog fennel (*Eupatorium capillifolium*), beggar-ticks, foxtail (*Setaria parviflora*), scattered broomsedge, and guineagrass (*Panicum maximum*).

Cabbage Palm, Disturbed (25-49% Exotics) (FLUCFCS Code 4289 E2)
This upland community type occupies 0.32± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4289 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Cabbage Palm, Disturbed (50-75% Exotics) (FLUCFCS Code 4289 E3)
This upland community type occupies 2.44± acres or 0.2 percent of the property. The vegetation associations are similar to FLUCFCS Code 4289 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Cabbage Palm, Disturbed (76-100% Exotics) (FLUCFCS Code 4289 E4)
This upland community type occupies 0.39± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4289 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Wax Myrtle, Hydric (0-24% Exotics) (FLUCFCS Code 4291 E1)
This wetland community type occupies 0.33± acre or less than 0.1 percent of the property. The canopy is open. The sub-canopy contains wax myrtle, Brazilian pepper, saltbush, and cabbage palm. The ground cover contains shield fern, Brazilian pepper, laurel oak, marsh pennywort, swamp fern, and Asiatic pennywort.

Wax Myrtle, Hydric (50-75% Exotics) (FLUCFCS Code 4291 E3)
This wetland community type occupies 1.42± acres or 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4291 E1, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Wax Myrtle, Hydric (76-100% Exotics) (FLUCFCS Code 4291 E4)
This wetland community type occupies 0.14± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 4291 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)
This upland community type occupies 13.52± acres or 1.1 percent of the property. The canopy contains live oak, slash pine, and cabbage palm. The sub-canopy contains live oak, Brazilian pepper, cabbage palm, wax myrtle, saltbush, beautyberry, and scattered saw palmetto. The ground cover contains bahiagrass, broomsedge bluestem, smutgrass, beautyberry, Brazilian pepper, marsh pennywort, caesarweed, live oak, cabbage palm, greenbrier, dayflower, and saw palmetto.

Hardwood/Conifer Mixed, Disturbed (25-49% Exotics) (FLUCFCS Code 4349 E2)
This upland community type occupies 15.01± acres or 1.2 percent of the property. The vegetation associations are similar to FLUCFCS Code 4349 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Hardwood/Conifer Mixed, Disturbed (50-75% Exotics) (FLUCFCS Code 4349 E3)
This upland community type occupies 4.60± acres or 0.4 percent of the property. The vegetation associations are similar to FLUCFCS Code 4349 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Hardwood/Conifer Mixed, Disturbed (76-100% Exotics) (FLUCFCS Code 4349 E4)
This upland community type occupies 8.96± acres or 0.7 percent of the property. The vegetation associations are similar to FLUCFCS Code 4349 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Streams and Waterways (FLUCFCS Code 510)
This open water area occupies 11.55± acres or 0.9 percent of the property.

Ditch (FLUCFCS Code 514)
This open water area occupies 9.40± acres or 0.8 percent of the property. Ground cover vegetation includes cattail.

Pond (FLUCFCS Code 520)
This open water area occupies 0.13± acre or less than 0.1 percent of the property. The canopy is open. The sub-canopy is open with scattered cattail. Ground cover includes water pennywort (*Hydrocotyle umbellata*) and torpedograss.

Cattle Pond (FLUCFCS Code 525)
This open water area occupies 3.07± acres or 0.2 percent of the property.

Reservoir (FLUCFCS Code 530)
This open water area occupies 0.73± acre or 0.1 percent of the property.

Mangrove Swamp, Disturbed (0-24% Exotics) (FLUCFCS Code 6129 E1)
This wetland community type occupies 0.35± acre or less than 0.1 percent of the property. The canopy is open and the sub-canopy consists of red mangrove, Brazilian pepper, and pond apple. Ground cover consists of leather fern.

Mangrove Swamp, Disturbed (25-49% Exotics) (FLUCFCS Code 6129 E2)
This wetland community type occupies 0.19± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6129 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Hardwood Wetland-Pop Ash, Disturbed (0-24% Exotics) (FLUCFCS Code 6169 E1)
This community type occupies 1.10± acres or 0.1 percent of the property. The canopy is dominated by pop ash with scattered cabbage palm, red maple (*Acer rubrum*), and willow. The sub-canopy contains cabbage palm and Brazilian pepper. Ground cover includes swamp fern and chain fern (*Woodwardia areolata*).

Willow, Disturbed (0-24% Exotics) (FLUCFCS Code 6189 E1)
This wetland community type occupies 2.71± acres or 0.2 percent of the property. The canopy contains willow with scattered cabbage palm and Brazilian pepper. The sub-canopy contains willow, cabbage palm, Brazilian pepper, wax myrtle, swamp dogwood, and buckthorn. The ground cover includes smartweed, swamp fern, shield fern, sawgrass, cattail, willow, cabbage palm, dayflower, white-top sedge, and Brazilian pepper.

Willow, Disturbed (25-49% Exotics) (FLUCFCS Code 6189 E2)
This wetland community type occupies 1.11± acres or 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6189 E1, except with 25 to 49 percent Brazilian pepper in the sub-canopy.

Willow, Disturbed (50-75% Exotics) (FLUCFCS Code 6189 E3)
This wetland community type occupies 3.09± acres or 0.3 percent of the property. The vegetation associations are similar to FLUCFCS Code 6189 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Willow, Disturbed (76-100% Exotics) (FLUCFCS Code 6189 E4)
This wetland community type occupies 8.75± acres or 0.7 percent of the property. The vegetation associations are similar to FLUCFCS Code 6189 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Cypress, Drained (50-75% Exotics) (FLUCFCS Code 6215 E3)
This historically hydric community no longer exhibits signs of hydrology and therefore was mapped as an upland community; it occupies 0.96± acre or 0.1 percent of the property. The canopy contains cypress (*Taxodium distichum*). The sub-canopy contains Brazilian pepper, pop ash, and cabbage palm. The ground cover contains caesarweed and swamp fern.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)
This wetland community type occupies 2.78± acres or 0.2 percent of the property. The canopy contains cypress. The sub-canopy contains cypress, cabbage palm, Brazilian pepper, and wax myrtle. The ground cover contains swamp fern and sawgrass.

Cypress, Disturbed (25-49% Exotics) (FLUCFCS Code 6219 E2)
This wetland community type occupies 1.62± acres or 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6219 E1, except with 25 to 49 percent melaleuca (*Melaleuca quinquenervia*) and/or Brazilian pepper in the sub-canopy.

Cypress, Disturbed (50-75% Exotics) (FLUCFCS Code 6219 E3)
This wetland community type occupies 0.66± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6219 E2, except with 50 to 75 percent melaleuca and/or Brazilian pepper in the sub-canopy.

Pine/Cypress, Disturbed (50-75% Exotics) (FLUCFCS Code 6249 E3)
This wetland community type occupies 0.36± acre or less than 0.1 percent of the property. The canopy contains cypress and slash pine. The sub-canopy contains cypress, slash pine, cabbage palm, Brazilian pepper, and wax myrtle. The ground cover contains sawgrass, sand cordgrass, iris (*Iris* sp.), swamp fern, and gulfdune paspalum (*Paspalum monostachyum*).

Hydric Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 6259 E2)
This wetland community type occupies 2.25± acres or 0.2 percent of the property. The canopy contains slash pine and melaleuca. The sub-canopy contains slash pine, melaleuca, cabbage palm, Brazilian pepper, and wax myrtle. The ground cover contains gulfdune paspalum, sawgrass, sand cordgrass, and marsh pennywort.

Hydric Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 6259 E3)
This wetland community type occupies 0.12± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6259 E2, except with 50 to 75 percent melaleuca and/or Brazilian pepper in the canopy and sub-canopy.

Wetland Forested Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 6309 E1)
This wetland community type occupies 9.92± acres or 0.8 percent of the property. The canopy contains live oak, laurel oak, slash pine, cabbage palm, swamp bay, and willow. The sub-canopy

contains Brazilian pepper, cabbage palm, myrsine, wild coffee, primrose willow, willow, swamp dogwood, laurel oak, swamp bay, wax myrtle, persimmon, saltbush, live oak, stoppers, and buckthorn. The ground cover includes swamp fern, leather fern, cabbage palm, marsh pennywort, Brazilian pepper, wild coffee, primrose willow, royal fern (*Osmunda regalis* var. *spectabilis*), arrowhead, water hyssop (*Bacopa* sp.), Asiatic pennywort, southern beaksedge (*Rhynchospora microcarpa*), smartweed, torpedograss, rosy camphorweed, shield fern, lily (*Lilium iridollae*), dogfennel, bulrush (*Scirpus* sp.), peppervine (*Ampelopsis arborea*), white-top sedge, and cattail.

Wetland Forested Mixed, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)
This wetland community type occupies 16.22± acres or 1.3 percent of the property. The vegetation associations are similar to FLUCFCS Code 6309 E1, except with 25 to 49 percent melaleuca and/or Brazilian pepper in the canopy and sub-canopy.

Wetland Forested Mixed, Disturbed (50-75% Exotics) (FLUCFCS Code 6309 E3)
This wetland community type occupies 15.52± acres or 1.3 percent of the property. The vegetation associations are similar to FLUCFCS Code 6309 E2, except with 50 to 75 percent melaleuca and/or Brazilian pepper in the canopy and sub-canopy.

Wetland Forested Mixed, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
This wetland community type occupies 68.50± acres or 5.6 percent of the property. The vegetation associations are similar to FLUCFCS Code 6309 E3, except with 76 to 100 percent melaleuca and/or Brazilian pepper in the canopy and sub-canopy.

Wetland Shrub, Disturbed (25-49% Exotics) (FLUCFCS Code 6319 E2)
This wetland community type occupies 2.18± acres or 0.2 percent of the property. The canopy is open. The sub-canopy contains saltbush, leather fern, wax myrtle, Brazilian pepper, scattered willow, and swamp bay. The ground cover contains leather fern, marsh pennywort, Brazilian pepper, saltbush, sawgrass, shield fern, and creeping primrose willow.

Wetland Shrub, Disturbed (50-75% Exotics) (FLUCFCS Code 6319 E3)
This wetland community type occupies 0.12± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6319 E2, except with 50 to 75 percent Brazilian pepper in the sub-canopy.

Wetland Shrub, Disturbed (76-100% Exotics) (FLUCFCS Code 6319 E4)
This wetland community type occupies 0.39± acre or less than 0.1 percent of the property. The vegetation associations are similar to FLUCFCS Code 6319 E3, except with 76 to 100 percent Brazilian pepper in the sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)
This wetland community type occupies 7.64± acres or 0.6 percent of the property. The canopy is open. The sub-canopy contains wax myrtle, Brazilian pepper, and scattered cabbage palm. The ground cover contains sawgrass, leather fern, marsh pennywort, cattail, pickerelweed, torpedograss, sesbania, creeping primrose willow, and swamp fern.

Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)
This wetland community type occupies 6.37± acres or 0.5 percent of the property. The vegetation associations are similar to FLUCFCS Code 6419 E1, except with 25 to 49 percent melaleuca and/or Brazilian pepper in the sub-canopy.

Freshwater Marsh, Disturbed (50-75% Exotics) (FLUCFCS Code 6419 E3)
This wetland community type occupies 5.17± acres or 0.4 percent of the property. The vegetation associations are similar to FLUCFCS Code 6419 E2, except with 50 to 75 percent melaleuca and/or Brazilian pepper in the sub-canopy.

Freshwater Marsh, Disturbed (76-100% Exotics) (FLUCFCS Code 6419 E4)
This wetland community type occupies 2.39± acres or 0.2 percent of the property. The vegetation associations are similar to FLUCFCS Code 6419 E3, except with 76 to 100 percent melaleuca and/or Brazilian pepper in the sub-canopy.

Wet Prairie, Disturbed (0-24% Exotics) (FLUCFCS Code 6439 E1)
This wetland community type occupies 1.31± acres or 0.1 percent of the property. The canopy is open. The sub-canopy is open with scattered cypress, melaleuca, and wax myrtle. The ground cover contains sand cordgrass, gulfdune paspalum, beaksedge, broomsedge bluestem, little blue maidencane (*Amphicarpum muhlenbergianum*), and yellow-eyed grass (*Xyris* sp.).

Disturbed Land (FLUCFCS Code 740)
This upland area occupies 105.39± acres or 8.6 percent of the property. The canopy is open with cabbage palm, live oak, slash pine, white ceder (*Thuja occidentalis*), Florida strangler fig (*Ficus aurea*), Washington fan palm (*Washingtonia robusta*), laurel oak, and other unknown landscape trees. The sub-canopy contains scattered cabbage palm, citrus (*Citrus* sp.), wax myrtle, and Brazilian pepper. The ground cover contains bahiagrass, smutgrass, broomsedge, wax myrtle, frog fruit, caesarweed, Brazilian pepper, and Asiatic pennywort.

Disturbed Land, Hydric (FLUCFCS Code 7401)
This wetland area occupies 3.60± acres or 0.3 percent of the property. The canopy is open with scattered cabbage palm. The sub-canopy contains scattered cabbage palm, Brazilian pepper, wax myrtle, and willow. The ground cover includes swamp fern, rosy camphorweed, sand cordgrass, pickerelweed, arrowhead, Asiatic pennywort, bushy bluestem, torpedograss, frog fruit, southern umbrellasedge, smartweed, marsh pennywort, bighead rush, aster, and white-top sedge.

Borrow Area (FLUCFCS Code 742)
This area occupies 1.21± acres or 0.1 percent of the property. It consists of three ponds located on the Greenwell property.

Spoil Areas (FLUCFCS Code 743)
This upland area occupies 0.75± acre or 0.1 percent of the property. It consists of spoil material that was deposited from excavation activities.

Berm (FLUCFCS Code 747)
This upland area occupies 3.27± acres or 0.3 percent of the property. It consists of spoil material that was excavated from ditches on the property and then deposited adjacent to the ditches.

Road (FLUCFCS Code 814)
This upland area occupies 5.56± acres or 0.5 percent of the property. It consists of the access roads leading to Owl Creek Marina and the Greenwell property.

RARE AND UNIQUE UPLAND HABITATS

The site contains potential rare and unique upland habitats as defined in the Lee Plan. The potential rare and unique upland habitats consist of the Xeric Oak (FLUCFCS Code 4219 E1) areas of the site (Figure 3). These areas are located within the central portion of the property, just north of Trout Creek.

SOILS

The soils for the property, per the Natural Resource Conservation Service (formerly the Soil Conservation Service), are shown on Figure 4 and listed in Table 2. The Hydric Soils of Florida Handbook (Florida Association of Environmental Soil Scientists 2001) lists Felda Fine Sand (#12); Wulfert Muck (#23); Boca Fine Sand (#26); Isles Fine Sand (#39); Anclote Sand (#40); Copeland Sandy Loam, Depressional (#45); Felda Fine Sand, Depressional (#49); and Floridana Fine Sand, Depressional (#51) as hydric soils. A brief description for each soils type per the Soil Survey of Lee County, Florida (Soil Conservation Service 1998) follows.

Table 2. Soils Listed by the NRCS for North River Village

Mapping Unit	Description	Hydric/Non-Hydric*
6	Hallandale Fine Sand	Non-hydric
11	Myakka Fine Sand	Non-hydric
12	Felda Fine Sand	Hydric
13	Boca Fine Sand	Non-hydric
23	Wulfert Muck	Hydric
26	Pineda Fine Sand	Hydric
28	Immokalee Sand	Non-hydric
33	Oldsmar Sand	Non-hydric
35	Wabasso Sand	Non-hydric
39	Isles Fine Sand, Depressional	Hydric
40	Anclote Sand, Depressional	Hydric
45	Copeland Sandy Loam, Depressional	Hydric
49	Felda Fine Sand, Depressional	Hydric
51	Floridana Fine Sand, Depressional	Hydric
55	Cocoa Fine Sand	Non-hydric

SCALE: 1" = 1000'

-CR 78 (NORTH RIVER RD)-

-SR 31-

-OUTPARCEL-

-FOWLERS WAY-

-DUKE HWY-

-CALOOSAHATCHEE RIVER-

P/L

LEGEND:

POTENTIAL RARE AND UNIQUE UPLAND HABITATS (2.98 Ac.±)

SURVEYED WETLAND LINE

FLUCFCS CODE	DESCRIPTION	ACREAGE	% OF TOTAL
110	RESIDENTIAL, LOW DENSITY	2.79 Ac.±	0.2%
184	MARINA	3.59 Ac.±	0.3%
200	AGRICULTURE	3.03 Ac.±	0.2%
211	IMPROVED PASTURE	482.47 Ac.±	39.1%
213	WOODLAND PASTURE	47.68 Ac.±	3.9%
221	CITRUS GROVE	129.12 Ac.±	10.5%
262	LOW PASTURE	28.95 Ac.±	2.3%
3219 E2	PALMETTO PRAIRIE, DISTURBED (25-49% EXOTICS)	0.09 Ac.±	0.0%
3219 E3	PALMETTO PRAIRIE, DISTURBED (50-75% EXOTICS)	0.13 Ac.±	0.0%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	17.00 Ac.±	1.4%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	0.48 Ac.±	0.0%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	0.09 Ac.±	0.0%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	0.41 Ac.±	0.0%
4219 E1	XERIC OAK, DISTURBED (0-24% EXOTICS)	2.98 Ac.±	0.2%
422	BRAZILIAN PEPPER	4.29 Ac.±	0.3%
4221	BRAZILIAN PEPPER, HYDRIC	24.82 Ac.±	2.0%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	36.46 Ac.±	3.0%
4279 E2	LIVE OAK, DISTURBED (25-49% EXOTICS)	52.23 Ac.±	4.2%
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	16.67 Ac.±	1.4%
4279 E4	LIVE OAK, DISTURBED (76-100% EXOTICS)	11.88 Ac.±	1.0%
4281 E1	CABBAGE PALM, HYDRIC (0-24% EXOTICS)	4.20 Ac.±	0.3%
4281 E2	CABBAGE PALM, HYDRIC (25-49% EXOTICS)	0.79 Ac.±	0.1%
4281 E4	CABBAGE PALM, HYDRIC (76-100% EXOTICS)	6.92 Ac.±	0.6%
4289 E1	CABBAGE PALM, DISTURBED (0-24% EXOTICS)	2.14 Ac.±	0.2%
4289 E2	CABBAGE PALM, DISTURBED (25-49% EXOTICS)	0.32 Ac.±	0.0%
4289 E3	CABBAGE PALM, DISTURBED (50-75% EXOTICS)	2.44 Ac.±	0.2%
4289 E4	CABBAGE PALM, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
4291 E1	WAX MYRTLE, HYDRIC (0-24% EXOTICS)	0.33 Ac.±	0.0%
4291 E3	WAX MYRTLE, HYDRIC (50-75% EXOTICS)	1.42 Ac.±	0.1%
4291 E4	WAX MYRTLE, HYDRIC (76-100% EXOTICS)	0.14 Ac.±	0.0%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	13.52 Ac.±	1.1%
4349 E2	HARDWOOD/CONIFER MIXED, DISTURBED (25-49% EXOTICS)	15.01 Ac.±	1.2%
4349 E3	HARDWOOD/CONIFER MIXED, DISTURBED (50-75% EXOTICS)	4.60 Ac.±	0.4%
4349 E4	HARDWOOD/CONIFER MIXED, DISTURBED (76-100% EXOTICS)	8.96 Ac.±	0.7%
510	STREAMS AND WATERWAYS	11.55 Ac.±	0.9%
514	DITCH	9.40 Ac.±	0.8%
520	POND	0.13 Ac.±	0.0%
525	CATTLE POND	3.07 Ac.±	0.2%
530	RESERVOIRS	0.73 Ac.±	0.1%
6129 E1	MANGROVE SWAMP, DISTURBED (0-24% EXOTICS)	0.35 Ac.±	0.0%
6129 E2	MANGROVE SWAMP, DISTURBED (25-49% EXOTICS)	0.19 Ac.±	0.0%
6169 E1	HARDWOOD WETLAND-POP ASH, DISTURBED (0-24% EXOTICS)	1.10 Ac.±	0.1%
6189 E1	WILLOW, DISTURBED (0-24% EXOTICS)	2.71 Ac.±	0.2%
6189 E2	WILLOW, DISTURBED (25-49% EXOTICS)	1.11 Ac.±	0.1%
6189 E3	WILLOW, DISTURBED (50-75% EXOTICS)	3.09 Ac.±	0.3%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	8.75 Ac.±	0.7%
6215 E3	CYPRESS, DRAINED (50-75% EXOTICS)	0.96 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	2.78 Ac.±	0.2%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	1.62 Ac.±	0.1%
6219 E3	CYPRESS, DISTURBED (50-75% EXOTICS)	0.66 Ac.±	0.1%
6249 E3	PINE/CYPRESS, DISTURBED (50-75% EXOTICS)	0.36 Ac.±	0.0%
6259 E2	HYDRIC PINE, DISTURBED (25-49% EXOTICS)	2.25 Ac.±	0.2%
6259 E3	HYDRIC PINE, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6309 E1	WETLAND FORESTED MIXED, DISTURBED (0-24% EXOTICS)	9.92 Ac.±	0.8%
6309 E2	WETLAND FORESTED MIXED, DISTURBED (25-49% EXOTICS)	16.22 Ac.±	1.3%
6309 E3	WETLAND FORESTED MIXED, DISTURBED (50-75% EXOTICS)	15.52 Ac.±	1.3%
6309 E4	WETLAND FORESTED MIXED, DISTURBED (76-100% EXOTICS)	68.50 Ac.±	5.6%
6319 E2	WETLAND SHRUB, DISTURBED (25-49% EXOTICS)	2.18 Ac.±	0.2%
6319 E3	WETLAND SHRUB, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6319 E4	WETLAND SHRUB, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	7.64 Ac.±	0.6%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	6.37 Ac.±	0.5%
6419 E3	FRESHWATER MARSH, DISTURBED (50-75% EXOTICS)	5.17 Ac.±	0.4%
6419 E4	FRESHWATER MARSH, DISTURBED (76-100% EXOTICS)	2.39 Ac.±	0.2%
6439 E1	WET PRAIRIE, DISTURBED (0-24% EXOTICS)	1.31 Ac.±	0.1%
740	DISTURBED LAND	105.39 Ac.±	8.5%
7401	DISTURBED LAND, HYDRIC	3.60 Ac.±	0.3%
742	BORROW AREA	1.21 Ac.±	0.1%
743	SPOIL AREAS	0.75 Ac.±	0.1%
747	BERM	3.27 Ac.±	0.3%
814	ROAD	5.56 Ac.±	0.5%
	TOTAL	1232.77 Ac.±	100.0%

NOTES:

PROPERTY BOUNDARY PER BBLS SURVEYORS AND MAPPERS, INC. DRAWING No.6982-SITE_TO_BBG_070708.DWG DATED JULY 7, 2008.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

J:\2005\05bbg1393\200-ENVIRONMENTAL ASSESSMENT\FIGURE 3 POTENTIAL RARE AND UNIQUE UPLAND HABITATS.DWG TAB: 17X11-M AUG 13, 2008 - 2:48PM PLOTT

REVISIONS	DATE

DRAWN BY	J.I.	DATE	8/8/08
DESIGNED BY	A.K.	DATE	8/8/08
REVIEWED BY	K.C.P.	DATE	8/8/08

13620 Metropolis Avenue
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PASSARELLA & ASSOCIATES INC
Consulting Ecologists

NORTH RIVER VILLAGE

POTENTIAL RARE AND UNIQUE UPLAND HABITATS

DRAWING No. 05BBG1393

SHEET No. FIGURE 3

Legend:

- North River Village
- Hydric
- Non-Hydric

Soil Unit	Description	Hydric
6	HALLANDALE FINE SAND	NO
11	MYAKKA FINE SAND	NO
12	FELDA FINE SAND	YES
13	BOCA FINE SAND	NO
23	WULFERT MUCK	YES
26	PINEDA FINE SAND	YES
28	IMMOKALEE SAND	NO
33	OLDSMAR SAND	NO
35	WABASSO SAND	NO
39	ISLES FINE SAND, DEPRESSIONAL	YES
40	ANCLOTE SAND, DEPRESSIONAL	YES
45	COPELAND SANDY LOAM, DEPRESSIONAL	YES
49	FELDA FINE SAND, DEPRESSIONAL	YES
51	FLORIDANA SAND, DEPRESSIONAL	YES
55	COCOA FINE SAND	NO
66	CALOOSA FINE SAND	NO
72	BRADENTON FINE SAND	NO
99	WATER	UNRANKED

N

W E

S

0 1,000 2,000 3,000

Feet

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF AUGUST - NOVEMBER 2007.

ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

SOILS MAPPING WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE OCTOBER 2007 AND CREATED BY THE NATURAL RESOURCES CONSERVATION SERVICE 1990.

REVISIONS	DATE

		DATE
DRAWN BY	J.I.	8/6/08
DESIGNED BY	A.K.	8/6/08
REVIEWED BY	K.C.P.	8/6/08

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Consulting Ecologists
PASSARELLA & ASSOCIATES INC

NORTH RIVER VILLAGE
SOILS MAP

DRAWING No. 05BBG1393

SHEET No. FIGURE 4

J:\2005\05bbg1393\GIS\North River Village\2008\Environmental Assessment\Figures\Figure 4 Soils Map.mxd - 8/11/2008 @ 4:54:42 PM

Table 2. (Continued)

Mapping Unit	Description	Hydric/Non-Hydric*
66	Caloosa Fine Sand	Non-hydric
72	Bradenton Fine Sand	Non-hydric
99	Water	Hydric

*Per the "Hydric Soils of Florida Handbook" (Florida Association of Environmental Soil Scientists 2001)

6 – Hallandale Fine Sand

This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth and range from zero to two percent. Typically, the surface layer is gray fine sand about two inches thick. The subsurface layer is light gray fine sand about five inches thick. The substratum is very pale brown fine sand about five inches thick. At a depth of 12 inches is fractured limestone bedrock that has solution holes extending to a depth of 25 inches. These solution holes contain mildly alkaline, loamy material. In most years, under natural conditions, the water table is less than ten inches below the surface for one to three months. It recedes below the limestone for about seven months.

11 – Myakka Fine Sand

This is a nearly level, poorly drained soil on broad flatwoods areas. Slopes are smooth to slightly concave and range from zero to two percent. Typically, the surface layer is very dark gray fine sand about three inches thick. The subsurface layer is fine sand about 23 inches thick. In the upper three inches it is gray, and in the lower 20 inches it is light gray. The subsoil is fine sand to a depth of 80 inches or more. The upper four inches is black and firm, the next five inches is dark reddish brown and friable, the nest 17 inches is black and firm, the next 11 inches is dark reddish brown and friable, and the lower 17 inches is mixed black and dark reddish brown and friable. In most years, under natural conditions, the water table is within ten inches of the surface for one to three months and ten to 40 inches below the surface for two to six months. It is more than 40 inches below the surface during extended dry periods.

12 – Felda Fine Sand

This is a nearly level, poorly drained soil on broad, nearly level sloughs. Slopes are smooth to concave and range from zero to two percent. Typically, the surface layer is dark gray fine sand about eight inches thick. The subsurface layer is light gray and light brownish gray fine sand about 14 inches thick. The subsoil is light gray loamy fine sand about 16 inches thick and is underlain by gray and light gray fine sand that extends to a depth of 80 inches of more. In most years, under natural conditions, this soil has a water table within ten inches of the surface for two to four months. The water table is ten to 40 inches below the surface for about 6 months. It is more than 40 inches below the surface for about two months. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about seven to 30 or more.

13 – Boca Fine Sand

This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth and range from zero to two percent. Typically, the surface layer is gray fine sand about three inches thick. The

subsurface layer is fine sand about 22 inches thick. The upper 11 inches is light gray and the lower 11 inches is very pale brown. The subsoil, about five inches thick, is gray fine sandy loam with brownish yellow mottles and calcareous nodules. At a depth of 30 inches is a layer of fractured limestone. In most years, under natural conditions, the water table is within ten inches of the surface for two to four months. It recedes below the limestone for about 6 months.

23 – Wulfert Muck

This is a nearly level, very poorly drained soil on broad tidal swamps. Slopes are smooth and range from 0 to 1 percent. Typically, the surface layer is muck that is dark reddish brown to a depth of 12 inches and dark brown to a depth of 36 inches. Beneath the muck is gray fine sand with light gray streaks and about 10 percent shell fragments. The water table fluctuates with the tide. Areas are subject to tidal flooding.

26 – Pineda Fine Sand

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to slightly concave and range from zero to one percent. Typically, the surface layer is black fine sand about one inch thick. The subsurface layer is very pale brown fine sand about four inches thick. The upper part of the subsoil is brownish yellow fine sand about 8 inches thick. The next ten inches is strong brown fine sand. The next six inches is yellowish brown fine sand. The next seven inches is light gray fine sand with brownish yellow mottles. The lower part of the subsoil is light brownish gray fine sandy loam with light gray sandy intrusions that is about 18 inches thick. The substratum is light gray fine sand to a depth of 80 inches or more. In most years, under natural conditions, the water table is within ten inches of the surface for two to four months. It is ten to 40 inches below the surface for more than 6 months, and it recedes to more than 40 inches below the surface during extended dry periods. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about seven to 30 days or more.

28 – Immokalee Sand

This is a nearly level, poorly drained soil in flatwoods areas. Slopes are smooth to convex and range from zero to two percent. Typically, the surface layer is black sand about four inches thick. The subsurface layer is dark gray sand in the upper five inches and light gray sand in the lower 27 inches. The subsoil is sand to a depth of 69 inches. The upper 14 inches is black and firm, the next five inches is dark reddish brown, and the lower 14 inches is dark yellowish brown. The substratum is very pale brown sand to a depth of 80 inches or more. In most years, under natural conditions, the water table is within ten inches of the surface for one to three months and ten to 40 inches below the surface for two to six months. It recedes to a depth of more than 40 inches during extended dry periods.

33 – Oldsmar Sand

This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth to slightly convex and range from zero to two percent. Typically, the surface layer is black sand about three inches thick. The subsurface layer is gray and light gray sand about 39 inches thick. The upper part of the subsoil is very dark gray sand about five inches thick. The lower part of the subsoil is yellowish brown and mixed light brownish gray and brown fine sandy loam about 11 inches thick. Pale brown sand extends to a depth of 80 inches or more. In most years, under natural conditions, the water table is at a depth of less than ten inches for one to three months. It

is at a depth of ten to 40 inches for more than six months, and it recedes to a depth of more than 40 inches during extended dry periods.

35 – Wabasso Sand

This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth to slightly convex and range from zero to two percent. Typically, the surface layer is dark gray sand about six inches thick. The subsurface layer is sand to a depth of 24 inches. The upper 11 inches is light brownish gray with dark grayish brown stains along root channels, and the lower seven inches is light gray with dark grayish brown stains. The subsoil is about 38 inches thick. The upper four inches is dark brown sand with few iron concretions. The next eight inches is brownish yellow sandy clay loam with light brownish gray, light gray, and reddish brown mottles. The lower 26 inches is light gray sandy clay loam with pale olive and olive mottles and stains along root channels. Below is light gray fine sandy loam with olive mottles extending to a depth of 80 inches or more. In most years, under natural conditions, the water table is less than ten inches below the surface for two to four months. It is ten to 40 inches below the surface for more than six months. It recedes to a depth of more than 40 inches during extended dry periods.

39 – Isles Fine Sand, Depressional

This is a nearly level, very poorly drained soil in depressions. Slopes are smooth to concave and less than one percent. Typically, the surface layer is very dark gray fine sand about five inches thick. The subsurface layer is about five inches of light gray fine sand. Next is 11 inches of very pale brown fine sand with yellowish brown mottles. The subsoil is 26 inches of gray fine sandy loam with brownish yellow mottles and pockets of light brownish gray loamy sand. Limestone bedrock is at a depth of 47 inches. In most years, under natural conditions, the water table is above the surface for three to six months. It is within a depth of ten to 40 inches for two to four months. The water table recedes to depth of more than 40 inches during extended dry periods.

40 – Anclote Sand, Depressional

This is a nearly level, poorly drained soil in isolated depressions. Slopes are smooth to concave and less than one percent. Typically, the surface layer is about 22 inches thick. The upper eight inches is black sand, and the lower 14 inches is black sand with common light gray pockets and streaks throughout. The substratum is sand to a depth of 80 inches or more. The upper 18 inches is light brownish gray and the lower 40 inches is light gray. In most years, under natural conditions, the soil is ponded for more than six months.

45 – Copeland Sandy Loam, Depressional

This is a low, nearly level, very poorly drained soil in depressions. Slopes are concave and less than one percent. Typically, the surface layer is about eight inches of very dark gray sandy loam. The subsoil is very dark gray sandy loam about 12 inches thick. It is underlain by eight inches of light brownish gray sandy clay loam with soft calcium carbonate throughout. Fractured limestone bedrock is at a depth of 28 inches. Under natural conditions, the water table is above the surface for three to six months. It is ten to 40 inches below the surface for about three to six months.

49 – Felda Fine Sand, Depressional

This is a nearly level, poorly drained soil in depressions. Slopes are concave and less than one percent. Typically, the surface layer is gray fine sand about four inches thick. The subsurface layers extend to a depth of 35 inches. The upper 13 inches is grayish brown fine sand and the lower 18 inches is light gray fine sand with yellowish brown mottles. The subsoil is about 17 inches thick. The upper six inches is gray sandy loam and the lower 11 inches is sandy clay loam with many yellowish brown and strong brown mottles. Below this is light gray fine sand to a depth of 80 inches or more. In most years, under natural conditions, the soil is ponded for about three to six months or more. The water table is within a depth of ten to 40 inches for four to six months.

51 – Floridana Sand, Depressional

This is nearly level, very poorly drained soil in depressions. Slopes are concave and less than one percent. Typically, the surface layer is black sand about 22 inches thick. The subsurface layer is light brownish gray sand about 17 inches thick. The subsoil is olive gray fine sandy loam to a depth of 54 inches. Below the subsoil there is light brownish gray sand with pockets of olive gray loamy sand. In most years, under natural conditions, the water table is above the surface for three to six months.

55 – Cocoa Fine Sand

This is a nearly level to gently sloping, moderately well drained soil on ridges. Slopes are smooth to slightly convex and range form zero to two percent. Typically, the surface layer is brown fine sand about three inches thick. The subsurface layer is reddish yellow fine sand about ten inches thick. The next layer is yellowish red fine a sand about four inches thick. The next ten inches is reddish yellow fine sand, and below this is four inches of strong brown fine sand. Fractured limestone bedrock is at a depth of 31 inches. In most years, under natural conditions, the water table is within 24 inches of the surface for one to two months and 24 to 40 inches below the surface for one to two months. It recedes to more than 40 inches below the surface during extended dry periods.

66 – Caloosa Fine Sand

This is a nearly level, somewhat poorly drained soil formed by dredging and filling by earthmoving operations. Slopes are smooth to slightly convex and range from zero to two percent. Typically, the surface layer is about ten inches of light brownish gray, mixed mineral material of fine sand and lenses of silt loam with about ten percent shell fragments. The next 17 inches is pale brown and gray, mixed mineral material of fine sand and lenses of silty clay loam. The next 11 inches is light gray silty clay with brownish yellow mottles. Below this to a depth of 80 inches or more is gray silty clay with dark gray streaks and brownish yellow mottles. The depth to the water table varies with the amount of fill material and the extent of artificial drainage within any mapped area. However, in most years, the water table is 30 to 42 inches below the surface of the fill material for two to four months.

72 – Bradenton Fine Sand

This is a nearly level, poorly drained soil in hammock areas along rivers, creeks, and swamps. Slopes range from zero to two percent. Typically, the surface layer is very dark gray fine sand about five inches thick. The subsurface layer is light brownish gray fine sand about five inches

thick. The subsoil is about 18 inches thick. The upper eight inches is dark gray sandy clay loam. The lower ten inches is gray loamy fine sand. The substratum extends to a depth of 80 inches. The upper five inches is white, soft calcium carbonate. The next 12 inches is gray loamy fine sand. The next 12 inches is yellowish brown fine sand. The next four inches is light gray fine sand, and the next ten inches is yellow sand. Common to many mottles in shades of yellow, brown, and red occur throughout these horizons. The lower part of the substratum is nine inches of light gray sand. In most years, under natural conditions, the water table is less than 10 inches below the surface for two to four months. The water table is ten to 40 inches below the surface for more than six months, and it recedes to more than 40 inches below during extended dry periods. Many areas have been altered by artificial drainage.

JURISDICTIONAL WETLANDS

The South Florida Water Management District (SFWMD) jurisdictional wetlands were identified using the "Delineation of the Landward Extent of Wetlands and Surface Waters" (Chapter 62-340, Florida Administrative Code). Confirmation of the wetland lines with the SFWMD was not included within the scope of this assessment.

The estimated SFWMD jurisdictional wetlands for the property are shown on Exhibit A. The jurisdictional wetlands by FLUCFCS code are summarized in Table 3. SFWMD jurisdictional wetlands constitute a total of 231.99± acres or approximately 18.8 percent of the site. SFWMD "other surface waters" (OSWs) constitute a total of 26.09± acres or approximately 2.1 percent of the site.

Table 3. SFWMD Wetland and OSW Acreages by FLUCFCS for North River Village

FLUCFCS Code	Description	SFWMD Jurisdictional Wetlands and OSW (acres)
262	Low Pasture	28.95
4221	Brazilian Pepper, Hydric	24.82
4281 E1	Cabbage Palm, Hydric (0-24% Exotics)	4.20
4281 E2	Cabbage Palm, Hydric (25-49% Exotics)	0.79
4281 E4	Cabbage Palm, Hydric (76-100% Exotics)	6.92
4291 E1	Wax Myrtle, Hydric (0-24% Exotics)	0.33
4291 E3	Wax Myrtle, Hydric (50-75% Exotics)	1.42
4291 E4	Wax Myrtle, Hydric (76-100% Exotics)	0.14
510	Streams and Waterways	11.55*
514	Ditch	9.40*
520	Pond	0.13*
525	Cattle Pond	3.07*
530	Reservoirs	0.73*
6129 E1	Mangrove Swamp, Disturbed (0-24% Exotics)	0.35
6129 E2	Mangrove Swamp, Disturbed (25-49% Exotics)	0.19

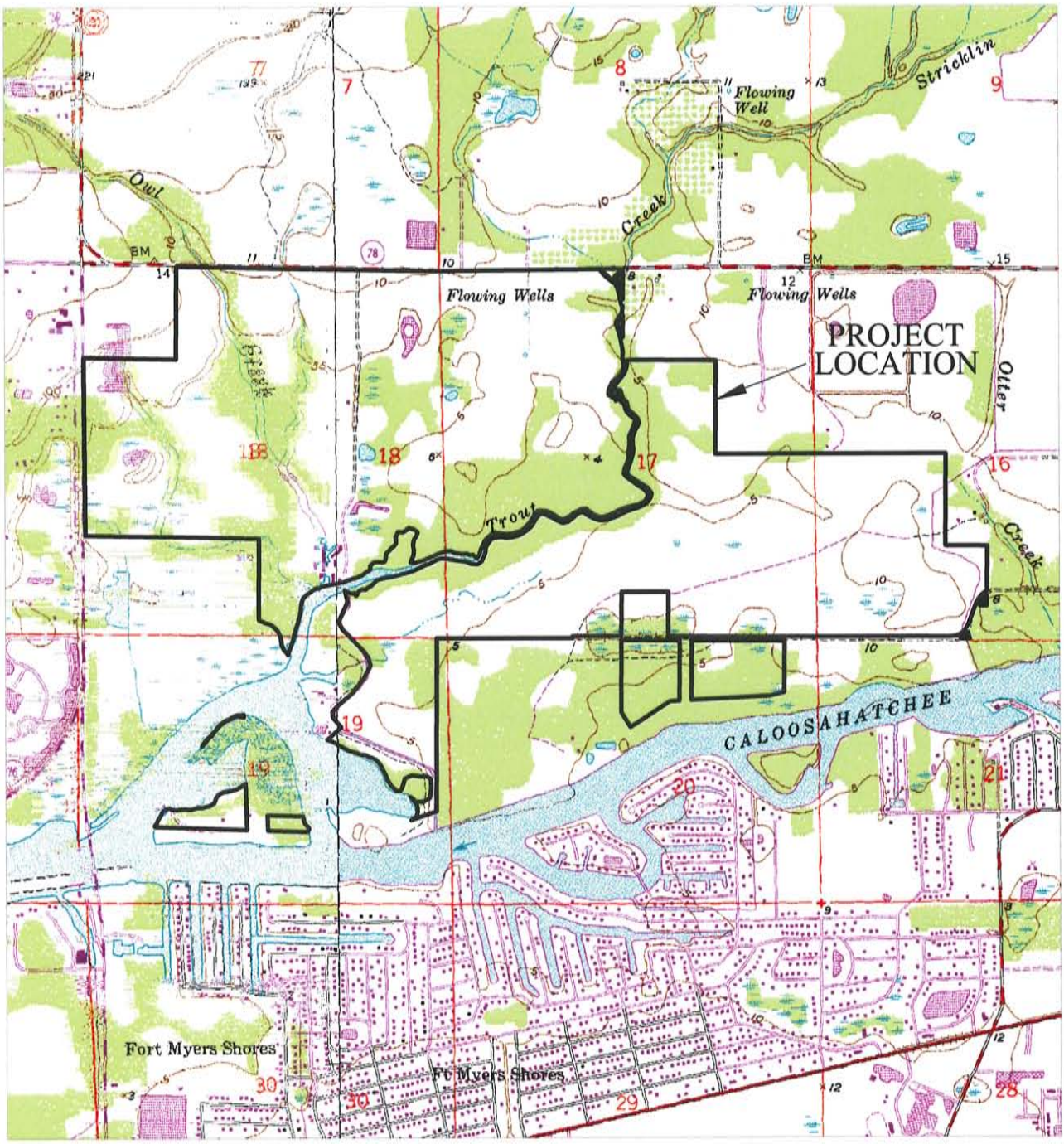
Table 3. (Continued)

FLUCFCS Code	Description	SFWMD Jurisdictional Wetlands and OSW (acres)
6169 E1	Hardwood Wetland-Pop Ash, Disturbed (0-24% Exotics)	1.10
6189 E1	Willow, Disturbed (0-24% Exotics)	2.71
6189 E2	Willow, Disturbed (25-49% Exotics)	1.11
6189 E3	Willow, Disturbed (50-75% Exotics)	3.09
6189 E4	Willow, Disturbed (76-100% Exotics)	8.75
6219 E1	Cypress, Disturbed (0-24% Exotics)	2.78
6219 E2	Cypress, Disturbed (25-49% Exotics)	1.62
6219 E3	Cypress, Disturbed (50-75% Exotics)	0.66
6249 E3	Pine/Cypress, Disturbed (50-75% Exotics)	0.36
6259 E2	Hydric Pine, Disturbed (25-49% Exotics)	2.25
6259 E3	Hydric Pine, Disturbed (50-75% Exotics)	0.12
6309 E1	Wetland Forested Mixed, Disturbed (0-24% Exotics)	9.92
6309 E2	Wetland Forested Mixed, Disturbed (25-49% Exotics)	16.22
6309 E3	Wetland Forested Mixed, Disturbed (50-75% Exotics)	15.52
6309 E4	Wetland Forested Mixed, Disturbed (76-100% Exotics)	68.50
6319 E2	Wetland Shrub, Disturbed (25-49% Exotics)	2.18
6319 E3	Wetland Shrub, Disturbed (50-75% Exotics)	0.12
6319 E4	Wetland Shrub, Disturbed (76-100% Exotics)	0.39
6419 E1	Freshwater Marsh, Disturbed (0-24% Exotics)	7.64
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	6.37
6419 E3	Freshwater Marsh, Disturbed (50-75% Exotics)	5.17
6419 E4	Freshwater Marsh, Disturbed (76-100% Exotics)	2.39
6439 E1	Wet Prairie, Disturbed (0-24% Exotics)	1.31
7401	Disturbed Land, Hydric	3.60
742	Borrow Area	1.21*
Total		**258.08**

*SFWMD OSWs

The prominent wetland and open water features on the Project are Trout Creek and Owl Creek and their associated wetlands and tributaries that cross the central and western portions of the property, as well as, the Caloosahatchee River along the southern portion of the Project site. A U.S. Geological Survey Quadrangle Map is provided as Figure 5. This map shows the location of Trout Creek and Owl Creek and the approximate topographic elevations across the property.

N.T.S.



NOTE:

QUAD SHEET SCANNED FROM FORT MYERS AND OLGA USGS QUAD SHEETS PHOTOREVISED 1987.

FIGURE 5. QUAD SHEET
NORTH RIVER VILLAGE

DRAWN BY	DATE
J.I.	8/6/08
REVIEWED BY	DATE
A.K.	8/6/08
REVISED	DATE

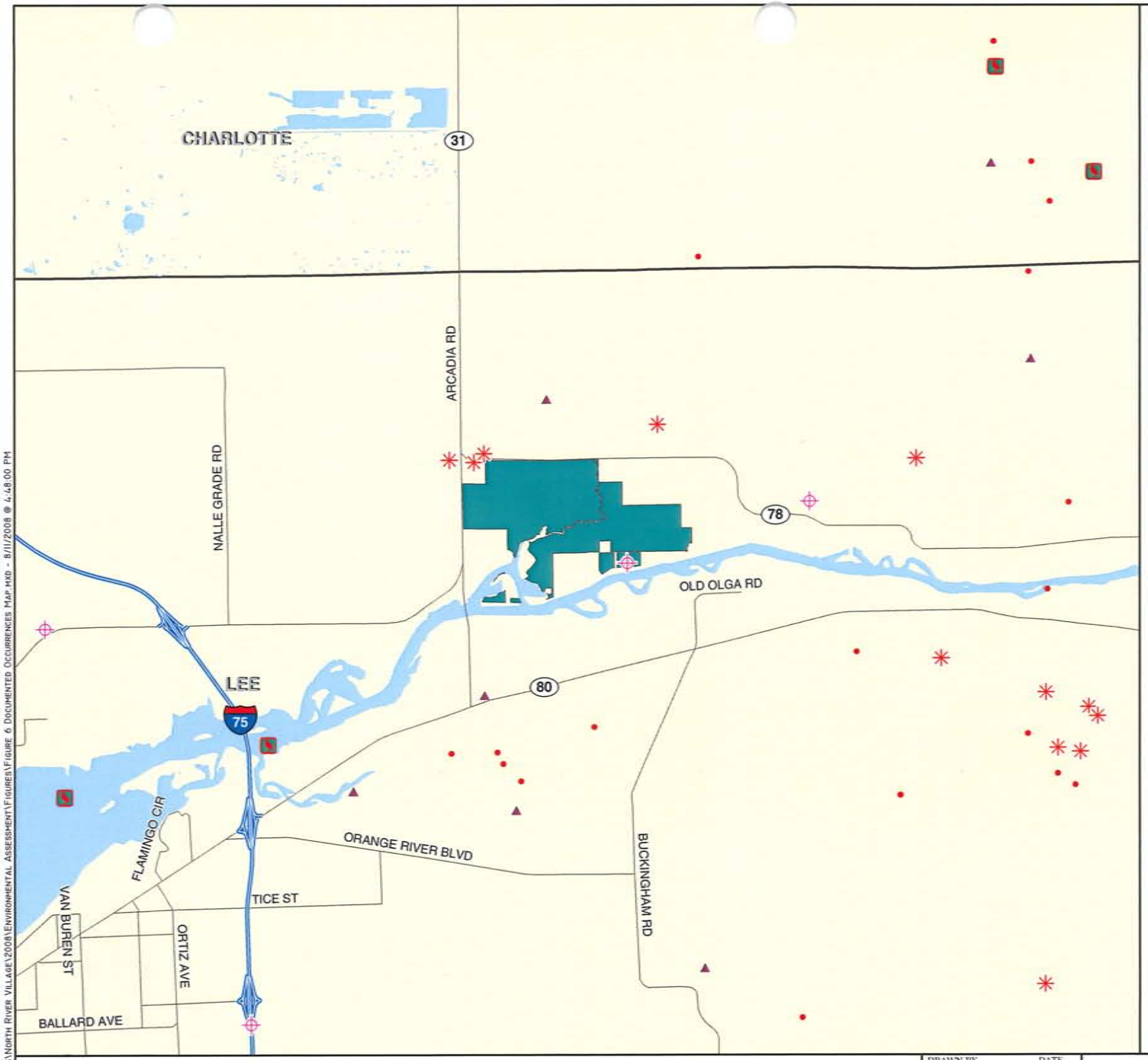
PASSARELLA & ASSOCIATES INC
Consulting Ecologists

LISTED SPECIES

Listed wildlife species as listed by the FWCC and USFWS (FWCC 2007) that occur or have the potential to occur on the Project are listed in Table 4. Listed plant species as listed by the FDACS and USFWS (FDACS Chapter 5B-40) that have the potential to occur on the Project are listed in Table 5. Information used in assessing the potential occurrence of these species included the Lee County Land Development Code, Field Guide to the Rare Plants of Florida (Chafin 2000), Atlas of Florida Vascular Plants (Wunderlin 2004), and professional experience and knowledge of the geographic region. In addition, the FWCC records for documented listed species were reviewed for listed species records on or adjacent to the property (Figure 6). Numerous gopher tortoise burrows and three bald eagle nest sites have been documented on the property; however, the bald eagle is not a listed species. See gopher tortoise and bald eagle descriptions below.

Table 4. Listed Wildlife Species That Occur or Could Potentially Occur on North River Village

Common Name	Scientific Name	Designated Status	
		FWCC	USFWS
Amphibians and Reptiles			
American Alligator	*Alligator mississipiensis*	SSC	T(S/A)
Eastern Indigo Snake	*Drymarchon corais couperi*	T	T
Gopher Tortoise	*Gopherus polyphemus*	T	-
Gopher Frog	*Rana capito*	SSC	-
Birds			
Least Tern	*Sterna antillarum*	SSC	-
Wood Stork	*Mycteria americana*	E	E
Florida Sandhill Crane	*Grus Canadensis pratensis*	T	-
Little Blue Heron	*Egretta caerulea*	SSC	-
Limpkin	*Aramus guarauna*	SSC	-
Snowy Egret	*Egretta thula*	SSC	-
Reddish Egret	*Egretta rufescens*	SSC	-
Tri-Colored Heron	*Egretta tricolor*	SSC	-
White Ibis	*Eudocimus albus*	SSC	-
Roseate Spoonbill	*Ajaia ajaja*	SSC	-
Brown Pelican	*Pelecanus occidentalis*	SSC	-
Snail Kite	*Rostrhamus sociabilis*	E	E
Florida Scrub Jay	*Alphelocoma coerulescens*	T	T
Red-Cockaded woodpecker	*Picoides borealis*	SSC	E
Bald Eagle*	*Haliaeetus leucocephalus*	-	-
Southeastern American Kestrel	*Falco sparverius paulus*	T	-
Crested Caracara	*Caracara cheriway*	T	T
Florida Burrowing Owl	*Athene cunicularia floridana*	SSC	-



Legend:

- North River Village
- Bald Eagle Nest
- Florida Panther Telemetry
- FWCC Black Bear Locations
- FWCC Wading Bird Locations
- Scrub Jay Locations

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NOTES:

COUNTY INFORMATION AND ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

EAGLE NEST LOCATIONS WERE ACQUIRED FROM THE FWCC SEPTEMBER 2007.

BLACK BEAR TELEMETRY WAS ACQUIRED FROM THE FWCC AND IS CURRENT TO 1999.

PANTHER TELEMETRY WAS ACQUIRED FROM THE FWCC SEPTEMBER 2007 AND IS CURRENT TO JUNE 2007.

SCRUB JAY LOCATIONS WERE ACQUIRED FROM THE USFWS FTP SITE SEPTEMBER 2006.

WADING BIRD ROOKERIES WERE ACQUIRED FROM THE FWCC AND ARE CURRENT TO 1999.

J:\2005\05nrg1393\GIS\North River Village\2008\Environmental Assessment\Figures\Figure 6 Documented Occurrences Map.mxd - 8/11/2008 @ 4:48:00 PM

FIGURE 6. DOCUMENTED OCCURRENCES OF LISTED SPECIES NORTH RIVER VILLAGE

DRAWN BY	DATE
J.I.	8/8/08
REVIEWED BY	DATE
A.K.	8/8/08
REVISED	DATE

Passarella & Associates, Inc. — Consulting Ecologists

Table 4. (Continued)

Common Name	Scientific Name	Designated Status	
		FWCC	USFWS
Mammals			
Big Cypress Fox Squirrel	*Sciurus niger avicennia*	SSC	-
Florida Black Bear	*Ursus americanus floridanus*	T	-
Florida Panther	*Puma concolor coryi*	E	E

FWCC – Florida Fish and Wildlife Conservation Commission
USFWS – U.S. Fish and Wildlife Service
E – Endangered
T – Threatened
T(S/A) – Threatened due to similarity of appearance
SSC – Species of Special Concern
Non-listed species; however, documented nests are located on the property

Eastern Indigo Snake (*Drymarchon corais couperi*)
The Eastern indigo snake could potentially occur within the native upland and wetland habitats on the Project site. The Eastern indigo snake is typically found in association with populations of gopher tortoise.

Gopher Tortoise (*Gopherus polyphemus*)
Habitat for gopher tortoises exists on the Project site in Improved Pasture (FLUCFCS Code 211), Woodland Pasture (FLUCFCS Code 213), Pine Flatwoods (FLUCFCS Code 411), Xeric Oak (FLUCFCS Code 421), Live Oak (FLUCFCS Code 427), Cabbage Palm (FLUCFCS Code 428), Hardwood/Conifer Mixed (FLUCFCS Code 434), Disturbed Land (FLUCFCS Code 740), Spoil Area (FLUCFCS Code 743), and Berm (FLUCFCS Code 747) on the Project site.

A Lee County Protected Species Survey was conducted on the site and 298 active and inactive gopher tortoise burrows were identified. The new FWCC Gopher Tortoise Permitting Guidelines (Guidelines) published in April 2008 reference a standardized conversion factor of 0.5; therefore, approximately 149 gopher tortoises exist on-site (298 x 0.5 = 149).

The majority (approximately 48 percent) of the gopher tortoise burrows are located in two general areas: the old spoil berm in the southeast corner of the site along Duke Highway and remnant scrub oak habitat in the central portion of the site along the north side of Trout Creek. The first area (the spoil berm) contains approximately 33 percent of tortoise burrows observed and the second area (scrub oak area) contains approximately 15 percent of the burrows observed. The remaining burrows are scattered throughout the eastern two-thirds of the property.

The spoil berm in the southeast corner of the site was created as a result of historic dredging of the Caloosahatchee. The property was used in the early 1960's as a spoil disposal site for dredging activities in the river. The spoil berm is the remnant perimeter berm from the spoil cell that was constructed to contain the spoil material.

The remnant scrub oak habitat exists in the central portion of the property. The scrub habitat is currently degraded as a result of fire suppression and has an overgrown sub-canopy and canopy. With appropriate management activities, this scrub habitat and the adjacent habitats can be restored and the carrying capacity for gopher tortoises increased.

Per the FWCC Guidelines, the maximum density for a gopher tortoise preserve area is four gopher tortoises per acre; therefore, approximately 37 acres of preserve is needed to accommodate all the gopher tortoises on-site (149/4 = 37.25). It is proposed to establish a gopher tortoise preserve located within and around the existing scrub oak habitat. This preserve area will provide approximately 42 acres of habitat which can accommodate the entire gopher tortoise population on-site. Management activities will be conducted to restore the proposed gopher tortoise relocation area to desirable gopher tortoise habitat. In addition, it is proposed to preserve the spoil berm where numerous gopher tortoise burrows are currently located contingent upon the FWCC concurrence of this gopher tortoise preserve area.

The calculations referenced above are consistent with the current FWCC Guidelines. However, the developer shall comply with the guidelines that are currently in effect concerning the protection and management of gopher tortoises at the time of gopher tortoise relocation permitting.

Gopher Frog (*Rana areolata*)
The gopher frog is typically found in association with populations of gopher tortoise. Preferred breeding habitat includes seasonally flooded grassy ponds and cypress ponds that lack fish populations (Moler 1992).

Least Tern (*Sterna antillarum*)
Potential nesting habitat for least terns occurs within Disturbed Land (FLUCFCS Code 740) on the project site. Lest terns routinely select a nesting site with a substrate of sand or gravel (Rodgers *et al.* 1996). They are usually found near the coastal environment.

Wood Stork (*Mycteria americana*)
Potential foraging habitat for wood stork includes ditches (FLUCFCS Code 514) and small isolated wetland areas. Almost any wetland depression where fish tend to become concentrated, either through local reproduction by fishes or as a consequence of area drying, may be good for feeding habitat (Rodgers *et al.* 1996).

Florida Sandhill Crane (*Grus canadensis pratensis*)
Potential foraging habitat for Florida sandhill crane may exist within the Citrus Groves (FLUCFCS Code 221), Low Pasture (FLUCFCS Code 262), Palmetto Prairie (FLUCFCS Code 3219), Ditch (FLUCFCS Code 514), Marsh (FLUCFCS Code 6419), and Disturbed Land (FLUCFCS Code 740) on the Project site. Preferred sandhill crane habitat includes prairies and shallow marshes dominated by pickerelweed and maidencane.

Roseate Spoonbill (*Ajaia ajaja*)
Potential foraging habitat for roseate spoonbill includes Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds

(FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), and Mangrove Swamps (FLUCFCS Code 6129) on the Project site. The Florida Atlas of Breeding Sites for Herons and Their Allies (Runde *et al.* 1991) list no bird rookeries on the subject parcel. The nearest recorded site is No. 619040 located approximately 3.5± miles southwest of the subject property. This colony was last reported active on April 20, 1999 and was occupied by great blue herons and great egrets.

Little Blue Heron (*Egretta caerulea*)
Potential foraging habitat for little blue heron may exist in Low Pasture (FLUCFCS Code 262), Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), Mangrove Swamps (FLUCFCS Code 6129), Willow (FLUCFCS Code 6189), Cypress (FLUCFCS Code 6219), Hydric Pine (FLUCFCS Code 6259), Wetland Forested Mix (FLUCFCS Code 6309), Wetland Shrub (FLUCFCS Code 6319), Marsh (FLUCFCS Code 6419), and Wet Prairie (FLUCFCS Code 6439) areas on the Project site.

Limpkin (*Aramus guarauna*)
Potential habitat for limpkin may exist in Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), Cypress (FLUCFCS Code 6219), Wetland Forested Mix (FLUCFCS Code 6309), Marsh (FLUCFCS Code 6419), and Wet Prairie (FLUCFCS Code 6439) areas on the Project site.

White Ibis (*Eudocimus albus*)
Potential habitat for snowy egret may exist in Low Pasture (FLUCFCS Code 262), Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), Mangrove Swamps (FLUCFCS Code 6129), Willow (FLUCFCS Code 6189), Cypress (FLUCFCS Code 6219), Hydric Pine (FLUCFCS Code 6259), Wetland Forested Mix (FLUCFCS Code 6309), Wetland Shrub (FLUCFCS Code 6319), Marsh (FLUCFCS Code 6419), and Wet Prairie (FLUCFCS Code 6439) areas on the Project site.

Snowy Egret (*Egretta thula*)
Potential habitat for snowy egret may exist in Low Pasture (FLUCFCS Code 262), Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), Mangrove Swamps (FLUCFCS Code 6129), Willow (FLUCFCS Code 6189), Cypress (FLUCFCS Code 6219), Hydric Pine (FLUCFCS Code 6259), Wetland Forested Mix (FLUCFCS Code 6309), Wetland Shrub (FLUCFCS Code 6319), Marsh (FLUCFCS Code 6419), and Wet Prairie (FLUCFCS Code 6439) areas on the Project site.

Reddish Egret (*Egretta rufescens*)
Potential habitat for reddish egret may exist in Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), and Reservoirs (FLUCFCS Code 530) areas of the Project site.

Tri-Colored Heron (*Egretta tricolor*)
Potential habitat for tri-colored heron may exist in Low Pasture (FLUCFCS Code 262), Streams and Waterways (FLUCFCS Code 510), Ditches (FLUCFCS Code 514), Ponds (FLUCFCS Code 520), Cattle Ponds (FLUCFCS Code 525), Reservoirs (FLUCFCS Code 530), Mangrove Swamps (FLUCFCS Code 6129), Willow (FLUCFCS Code 6189), Cypress (FLUCFCS Code 6219), Hydric Pine (FLUCFCS Code 6259), Wetland Forested Mix (FLUCFCS Code 6309), Wetland Shrub (FLUCFCS Code 6319), Marsh (FLUCFCS Code 6419), and Wet Prairie (FLUCFCS Code 6439) areas on the Project site.

Brown Pelican (*Pelecanus occidentalis*)
Potential habitat for brown pelican may exist in Mangrove Swamp (FLUCFCS Code 6129) areas on the Project site.

Snail Kite (*Rostrhamus sociabilis*)
Potential foraging habitat for snail kite includes Ditches (FLUCFCS Code 514), Ponds/Cattle Ponds (FLUCFCS Code 520/525), and Marsh (FLUCFCS Code 641) on the Project site.

Florida Scrub Jay (*Alphecoma coerulescens*)
Potential habitat for the scrub jay may exist in Palmetto Prairie (FLUCFCS Code 4219), Xeric Oak (FLUCFCS Code 4219), and Citrus Grove (FLUCFCS Code 221) areas of the Project site. The FWCC records show no documented occurrences of the Florida scrub jay on the property. However, several documented occurrences of scrub jays occur within one half mile to the northwest and north of the property. The property supports Type I (>15% cover of scrub oak) scrub habitat in the central portion of the property along the north side of Trout Creek that may be utilized by scrub jays.

Red-Cockaded woodpecker (*Picoides borealis*)
Potential habitat for the red-cockaded woodpecker may exist in the Pine Flatwoods (FLUCFCS Code 4119) areas of the Project site. The nearest recorded red-cockaded woodpecker colonies are located approximately seven miles south and eight miles northwest of the property.

Bald Eagle (*Haliaeetus leucocephalus*)
Habitat for the bald eagle exists in Pine Flatwoods (FLUCFCS Code 4119), Hydric Pine (FLUCFCS Code 4159), and Hardwood/Conifer Mixed (FLUCFCS code 4349) habitats on the Project site. Three bald eagle nest sites within Territory LE-039 have been documented on the property.

Bald Eagle Territory LE-039 includes a total of four nest sites: LE-039, LE-039A, LE-039B, and an unrecorded nest. Nest site LE-039 is located approximately 650 feet west of the property boundary along Fowler's Way and nest sites LE-039A, LE-039B, and an unrecorded nest site are located on the southern portion of the property along the south side of Duke Highway. Nest LE-039 was lost and not observed in several years. In a letter dated April 18, 2007, the USFWS declared Nest LE-039 lost and stated that the protection recommendations no longer apply to that nest tree. Nest LE-039A is severely damaged, almost to non-existence, due to great horned owl (*Bubo virginianus*) use. In a letter dated August 24, 2007, the USFWS declared Nest LE-039A abandoned and stated that the protection recommendations no longer apply to that nest tree.

However, under the Bald and Golden Eagle Protection Act (BGEPA), the tree supporting the nest is still protected and cannot be destroyed. Nest LE-039B was utilized by great horned owls during the 2007-2008 nesting season. An unrecorded bald eagle nest was documented by PAI on December 11, 2008. Bald Eagles were documented nesting in the unrecorded bald eagle nest during the 2007-2008 nesting season; however, this nest was blown from the nest tree in March 2008.

Nest LE-039

The approximate location of Nest LE-039 was provided by the FWCC. This nest was originally located in a slash pine tree approximately 150 feet east of Fowler's Way and 850 feet south of Duke Highway; and approximately 650 feet west of the property boundary.

Nesting history information was obtained on April 27, 2006 from Tom Logan through his communication with the FWCC. Nest LE-039 was first entered in the FWCC database during the 1990-1991 nesting season. The FWCC records on the FWCC website indicate that Nest LE-039 was active from the 1990-1991 nesting season through the 2002-2003 nesting season with the exception of the 1995-1996 nesting season. The FWCC does not differentiate between alternate nest sites and they can label a territory as active. The FWCC did not record any nest success information. The FWCC documented Nest LE-039 as inactive for the 2003-2004 nesting season.

Nest LE-039 was first documented in Lee County records in the 1997-1998 nesting season. Lee County Eagle Technical Advisory Committee (ETAC) records show that no eagles were observed after December 8, 1997 and the nest was deteriorating at the end of the nesting season. Lee County records show no nest success for LE-039 since 1997 and no longer list the nest after the 2002-2003 nesting season.

During the 2005-2006 and 2006-2007 nesting seasons, site visits were conducted to locate and assess the status of nest LE-039; however, a nest could not be located. The site visits confirmed that Nest LE-039 was lost. In a letter dated March 21, 2007 a request for technical assistance was made to the USFWS to declare Nest LE-039 as "lost" under provisions of the *Habitat Management Guidelines For The Bald Eagle In The Southeast Region* (USFWS 1987) since the nest did not exist during the 2005-2006 and 2006-2007 nesting seasons. In a letter dated April 18, 2007, the USFWS declared Nest LE-039 lost and stated that the protection recommendations no longer apply to that nest tree.

Nest LE-039A

Nest LE-039A is located in a slash pine tree approximately 600 feet south of Duke Highway, 1,300 feet east of Nest LE-039, and on the southern portion of the property. This nest was first recorded by Lee County as an alternative nest to LE-039 in the 1997-1998 nesting season based on a flyover conducted by the Florida Game and Fresh Water Fish Commission (FGFWFC).

Activity and success of this nest is unknown for the 1998-1999 nesting season and for the 1999-2000 nesting season. For the 2000-2001 nesting season, an ETAC observer documented activity

at the nest with two fledglings. For the 2002-2003 nesting season, no activity or fledglings were reported by Lee County or the FGFWFC.

Great horned owls were documented nesting in LE-039A during the 2005-2006 and 2006-2007 nesting seasons during the months of February, November, and December 2006. Nest LE-039A is severely damaged, almost to non-existence, due to great horned owl use. In a letter dated August 24, 2007, the USFWS declared Nest LE-039A abandoned and stated that the protection recommendations no longer apply to that nest tree; however, under BGEPA, the tree supporting the nest is still protected and cannot be destroyed.

Nest LE-039B

Nest LE-039B is located in a slash pine tree approximately 575 feet south of Duke Highway, 900 feet east of Nest LE-039A, and on the southern portion of the property. This nest was first documented on February 2, 2006 as an unrecorded eagle nest.

Bald eagles were documented using Nest LE-039B during the 2005-2006 nesting season. Monitoring of the nest confirmed eggs were laid, incubation began, one chick had hatched before February 2, 2006, and the second chick hatched before February 22, 2006. One juvenile bald eagle fledged on or before April 27, 2006. The second juvenile bald eagle is presumed to have successfully fledged on or before May 3, 2006.

Bald eagles were documented using Nest LE-039B during the 2006-2007 nesting season. Monitoring of the nest confirmed eggs were laid, incubation began, one chick, possibly two, had hatched on or before March 6, 2007. During the following monitoring events on March 29, 2007 and April 5, 2007, no chicks were observed in or around the nest. Nest LE-039B was unsuccessful during the 2006-2007 nesting season.

Bald eagles were documented repairing and displaying courtship activities in and around Nest LE-039B during the months of October and November 2007. However, PAI documented great horned owls nesting in LE-039B during the during the 2007-2008 nesting season during the months of January and February 2008.

Unrecorded Bald Eagle Nest

An unrecorded bald eagle nest was located in a slash pine tree approximately 600 feet south of Duke Highway and 300 feet east of Nest LE-039B. This nest was first documented by PAI on December 11, 2008.

Bald eagles were documented using the unrecorded bald eagle nest during the 2007-2008 nesting season. PAI monitored the nest tree from December 11, 2007 through April 2, 2008. Monitoring of the nest confirmed eggs were laid, incubation began, one chick had hatched before February 22, 2008, and the second chick hatched before March 7, 2008. During the following monitoring events the second chick was not observed in the nest. The nest was not observed in the nest tree during a site visit on March 25, 2008. The weather conditions prior to the site visit included unusually high winds. These winds were associated with a frontal boundary that moved through

the area the week of March 17, 2008. Wind speeds recorded in Lee County ranged from 8 to 17 miles per hour (mph) with gusts up to 20 mph. The unrecorded bald eagle nest is presumed to have blown from the nest tree during the frontal boundary that moved through the area. The unrecorded bald eagle nest was not reconstructed during the 2007-2008 nesting season.

It is proposed to prepare a bald eagle management plan for Nest LE-039B that will include the establishment of a 661 foot buffer around nest LE-039B per current state and federal guidelines. The bald eagle management plan will be subject to review and approval of the FWCC and USFWS prior to proposed development activities occurring on the property.

Southeastern American Kestrel (*Falco sparverius paulus*)
Potential habitat for Southeastern American kestrel may exist within the power line poles located in Improved Pasture (FLUCFCS Code 211) areas on the Project site. Since 1980, observations of Southeastern American kestrel in Florida have occurred primarily in sandhill or sandpine scrub areas of north and central Florida (Rodgers *et al.* 1996).

Crested Caracara (*Caracara cheriway*)
Potential habitat for crested caracara may exist within Cabbage Palm (FLUCFCS Code 4289) and Live Oak (FLUCFCS Code 4279) areas on the Project site. Its primary habitat in Florida is the native prairie with associated marshes and cabbage palm and cabbage palm-live oak hammocks (Rodgers *et al.* 1996).

Burrowing Owl (*Athene cunicularia floridana*)
Potential burrowing owl habitat exists along the Improved Pasture (FLUCFCS Code 211), Berms (FLUCFCS Code 747), and Disturbed Land (FLUCFCS Code 740) habitats on the Project site.

Big Cypress Fox Squirrel (*Sciurus niger avicennia*)
Potential habitat for the Big Cypress fox squirrel exists on the Project site in Pine Flatwoods (FLUCFCS Code 4119) and Hardwood/Conifer Mixed (FLUCFCS code 4349) habitats on the Project site. Dense interiors of mixed cypress-hardwood strands seem to be avoided by fox squirrels (Moler 1992).

Florida Black Bear (*Ursus americanus floridanus*)
Potential habitat for the Florida black bear may exist in the Pine Flatwoods (FLUCFCS Code 4119), Live Oak (FLUCFCS Code 4279), Cabbage Palm (FLUCFCS Code 4289), and Wetland Forested Mix (FLUCFCS Code 6309) habitats on the Project site. The nearest recorded telemetry point from a radio-collared bear is approximately 0.5 miles north of the property.

Florida Panther (*Puma concolor coryi*)
The project site is not within Priority 1 or Priority 2 panther habitat according to a review of the Florida Panther Habitat Preservation Plan (Logan *et al.* 1993). The property is not located within a panther primary or secondary zone (Kautz *et al.* 2006). No telemetry points from radio-collared panthers have been recorded on the property.

Table 5. Listed Plant Species That Could Potentially Occur on North River Village

Common Name	Scientific Name	Designated Status		Potential Location (FLUCFCS Code)
		FDACS	USFWS	
Curtis Milkweed	*Asclepias curtisii*	E	-	3219 E2/3219 E3
Beautiful Paw-Paw	*Deeringothamus pulchellus*	E	E	3219 E2/3219 E3/ 411/4119 E1/ 4119 E2/4119 E3/ 4119 E4
Satinleaf	*Chrysophyllum olivaeforme*	T	-	411/4119 E1/ 4119 E2/4119 E3/ 4119 E4
Fakahatchee Burmannia	*Burmannia flava*	E	-	3219/411/4119 E1/ 4119 E2/4119 E3/ 4119 E4
Simpson's Stopper	*Myrcianthes fragrans* var. *simpsonii*	T	-	427/4279 E1/ 4279 E2/4279 E3/ 4279 E4/428/ 4289 E1/4289 E2/ 4289 E3/4289 E4
Hand Adder's Tongue Fern	*Ophioglossum palmatum*	E	-	427/4279 E1/ 4279 E2/4279 E3/ 4279 E4

FDACS – Florida Department of Agriculture and Consumer Services
USFWS – U.S. Fish and Wildlife Service
E – Endangered
T – Threatened

SUMMARY

A total of 71 vegetative associations and land uses (i.e., FLUCFCS types) have been identified on the 1,232.77± acre Project. The dominant land uses on the site are improved pasture, citrus groves, and forested areas including cabbage palm, live oak, and wetland forested mixed habitats. Approximately 18.8 percent (231.99± acres) of the site is SFWMD jurisdictional wetlands and 2.1 percent (26.09± acres) is SFWMD OSWs. The prominent wetland and open water features are Trout Creek and Owl Creek and their associated wetlands and tributaries that cross the western and central portions of the property, as well as, the Caloosahatchee River along the southern portion of the Project site.

Approximately 298 active and inactive gopher tortoise burrows were identified on the property. Using the new FWCC standardized conversion factor of 0.5, approximately 149 gopher tortoises exist on-site (298 x 0.5 = 149). Per the FWCC Guidelines, the maximum density for a gopher tortoise preserve area is four gopher tortoises per acre; therefore, approximately 37 acres of preserve is needed to accommodate all the gopher tortoises on-site (149/4 = 37.25). It is proposed to establish a gopher tortoise preserve located within and around the existing scrub oak

habitat. This preserve area will provide approximately 42 acres of habitat which can accommodate the entire gopher tortoise population on-site. Management activities will be conducted to restore the proposed gopher tortoise relocation area to desirable gopher tortoise habitat. In addition, it is proposed to preserve the spoil berm where numerous gopher tortoise burrows are currently located contingent upon the FWCC concurrence of this gopher tortoise preserve area.

Three bald eagle nest sites within Territory LE-039 have been documented on the property. Bald Eagle Territory LE-039 includes a total of four nest sites: LE-039, LE-039A, LE-039B, and an unrecorded nest. Nest site LE-039 is located approximately 650 feet west of the property boundary along Fowler's Way and nest sites LE-039A, LE-039B, and an unrecorded nest site are located on the southern portion of the property along the south side of Duke Highway. Nest LE-039 was lost and not observed in several years. In a letter dated April 18, 2007, the USFWS declared Nest LE-039 lost and stated that the protection recommendations no longer apply to that nest tree. Nest LE-039A is severely damaged, almost to non-existence, due to great horned owl use. In a letter dated August 24, 2007, the USFWS declared Nest LE-039A abandoned and stated that the protection recommendations no longer apply to that nest tree. However, under the BGEPA, the tree supporting the nest is still protected and cannot be destroyed. Nest LE-039B was utilized by great horned owls during the 2007-2008 nesting season. An unrecorded bald eagle nest was documented by PAI on December 11, 2008. Bald Eagles were documented nesting in the unrecorded bald eagle nest during the 2007-2008 nesting season; however, this nest was blown from the nest tree in March 2008.

In addition, there is the potential for a variety of other listed species to be present on the Project. On-going surveys will provide further information regarding the use of this property by listed wildlife and plant species. These surveys and the appropriate management activities will be coordinated with Lee County staff during the zoning and development order review processes.

REFERENCES

Chafin, Linda G. 2000. Field Guide to the Rare Plants of Florida. Florida Natural Areas Inventory. Tallahassee, Florida.

Florida Association of Environmental Soil Scientists. 2001. Hydric Soils of Florida Handbook. Third Edition. Victor W. Carlisle Ed.

Florida Department of Agriculture and Consumer Services (DOACS). Florida's Federally Listed Plant Species. Chapter 5B-40, F.A.C.

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.

Florida Fish and Wildlife Conservation Commission. 2007. Florida's Endangered Species, Threatened Species and Species of Special Concern. Official Lists. Florida Fish and Wildlife Conservation Commission. Tallahassee, Florida.

Kautz, R., R. Kawula, T. Hoctor, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, F. Mazzotti, R. McBride, L. Richardson, K. Root. 2006. How much is enough? Landscape-scale conservation for the Florida panther. Biological Conservation, Volume 130, Issue 1, Pages 118-133.

Logan, Todd, Andrew C. Eller, Jr., Ross Morrell, Donna Ruffner, and Jim Sewell. 1993. Florida Panther Habitat Preservation Plan South Florida Population. U.S. Fish and Wildlife Service; Gainesville, Florida.

Moler, P.E. 1992. Rare and Endangered Biota of Florida. Volume III. Amphibians and Reptiles. University Press of Florida, Gainesville, Florida.

Rodgers, J.A, H.W. Kale, and H.T. Smith. 1996. Rare and Endangered Biota of Florida. Volume V. Birds. University Press of Florida, Gainesville, Florida.

References (Continued)

Runde, D.E., J.A. Gore, J.A. Hovis, M.S. Robson, and P.D. Southall. 1991. Florida Atlas of Breeding Sites for Herons and Their Allies, Update 1986 - 1989. Nongame Wildlife Program Technical Report No. 10. Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.

Soils Conservation Service. 1998. Soil Survey of Lee County, Florida.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeast Region.

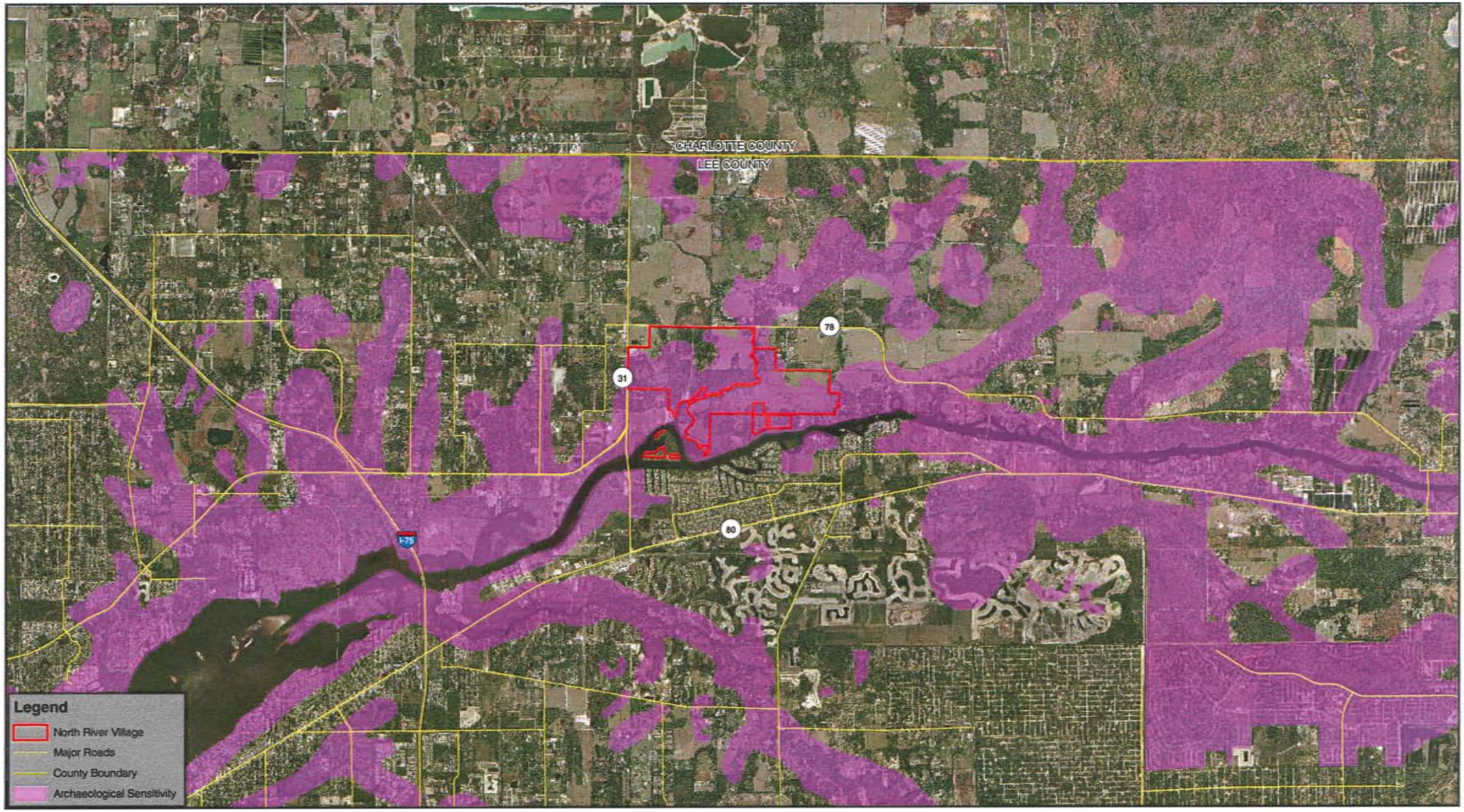
Wunderlin, R. P., and B. F. Hansen. 2004. *Atlas of Florida Vascular Plants.* http://www.plantatlas.usf.edu/) Institute for Systematic Botany, University of South Florida, Tampa.

EXHIBIT A

FLUCFCS AND WETLANDS MAP

EXHIBIT B

AERIAL WITH FLUCFCS MAP



ARCHEOLOGICAL SENSIVITY MAP

NORTH RIVER VILLAGE

GENERAL NOTE

THIS MAP IS FOR REFERENCE ONLY. DATA PROVIDED ARE DERIVED FROM MULTIPLE SOURCES WITH VARYING LEVELS OF ACCURACY

0 0.5 1 2 Miles

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S

DeLisi Fitzgerald, Inc.
Planning · Engineering · Project Management

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FLORIDA DEPARTMENT OF STATE
Sue M. Cobb
Secretary of State
DIVISION OF HISTORICAL RESOURCES

RECEIVED
OCT 12 2006
PASSARELLA AND ASSOCIATES, INC.

Ms. Laura Wells
Passarella and Associates, Inc.
9110 College Pointe Court
For Myers, Florida 33919

October 6, 2006

Re: Proposed Comprehensive Plan Amendment for the North River Village Property
Lee County / DHR Project File No. 2006-9068

Dear Ms. Wells:

According to this agency's responsibilities under Sections 163.3177 and 163.3178, *Florida Statutes,* Chapter 9J-5, *Florida Administrative Code*, and any appropriate local ordinances, we reviewed the proposed comprehensive plan amendment consisting of 1, 262+ acres.

A review of our records indicates that while most of this large tract falls within a high archaeological site probability zone, a systematic, professional survey to locate and evaluate cultural resources has never been conducted. It is the opinion of this office that there is a reasonable probability of proposed project activities impacting archaeological and historic sites and properties potentially eligible for listing in the National Register of Historic Places, or otherwise of historical or archaeological significance.

Since potentially significant archaeological and historic sites may be present, it is our recommendation that, prior to initiating any project related land clearing or ground disturbing activities within the project area, it should be subjected to a systematic, professional archaeological and historical survey. The purpose of this survey will be to locate and assess the significance of any historic properties present. The resultant survey report must conform to the specifications set forth in Chapter 1A-46, *Florida Administrative Code,* and be forwarded to this agency for comment in order to complete the process of reviewing the impact of this proposed project on historic properties.

If you have any questions concerning our comments, please do not hesitate to contact Susan Harp at (850) 245-6333. Thank you for your interest in protecting Florida's historic resources.

Sincerely,

Frederick P. Gaske

Frederick P. Gaske, Director

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

☐ Director's Office (850) 245-6300 • FAX: 245-6436
☐ Archaeological Research (850) 245-6444 • FAX: 245-6452
✓ Historic Preservation (850) 245-6333 • FAX: 245-6437
☐ Historical Museums (850) 245-6400 • FAX: 245-6433
☐ Southeast Regional Office (954) 467-4990 • FAX: 467-4991
☐ Northeast Regional Office (904) 825-5045 • FAX: 825-5044
☐ Central Florida Regional Office (813) 272-3843 • FAX: 272-2340

PASSARELLA AND ASSOCIATES, INC. *Consulting Ecologists*

9110 College Pointe Court
Fort Myers, FL 33919
Phone (239) 274-0067
Fax (239) 274-0069

September 25, 2006

Ms. Laura Kammerer
ATTN: Compliance Review Section
Florida Department of State
Division of Historical Resources
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

RE: Review of Project for Cultural Resources
North River Village
Project No. 05BBG1393

Dear Ms. Kammerer:

Please accept this letter as a request for information regarding historical, archaeological, and cultural resources that may be present within the 1,262.69± acre North River Village Property (Project). The following information is provided in accordance with the Division of Historical Resources (DHR) checklist titled "Minimum Documentation for State and Local Reviews":

DHR Involvement
The DHR's review is required as part of the Comprehensive Plan Amendment application process.

Project Description
The proposed Project site is composed of improved pasture, citrus groves and forested areas. The upland forested areas consist primarily of live oak (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and hardwood/conifer habitats, and the wetland forested areas consist primarily of wetland forested mix habitats, marshes, willow (*Salix caroliniana*) areas, and hydric Brazilian Pepper (*Schinus terebinthifolius*). Adjacent land uses include State Road (S.R.) 78 to the north, low density residential to the east, the Caloosahatchee River to the south and S.R. 31 to the west.

Project Location
The 1,262.69± acre parcel is located in Sections 16, 17, 18, 19, and 20; Township 43 South; Range 26 East; Lee County (Figure 1). More specifically, the property is located south of S.R. 78 and east of S.R. 31.

Location Map
A Project location map and USGS quadrangle map are attached as Figures 1 and 2, respectively.

Photographs
No photographs of the property are available; however, an aerial photograph with the Project boundary is attached as Figure 3.

Description of Project Study Area
A FLUCFCS and wetlands map showing the Project boundary, vegetation classifications, and acreage is attached as Figure 4. A soils map is attached as Figure 5.

Description of Buildings or Structures
There are several single family residences with associated barn/storage facilities located on the property.

Recorded Archaeological Sites or Historic Buildings/Structures
The applicant is not aware of any recorded properties in or adjacent to the Project study area or properties listed on the National Register of Historic Places.

Should you have any questions; please do not hesitate to contact me. Thank you for your assistance in this matter.

Sincerely,

PASSARELLA AND ASSOCIATES, INC.

Laura Walls

Laura Walls
Ecologist

LW/rp

Enclosures

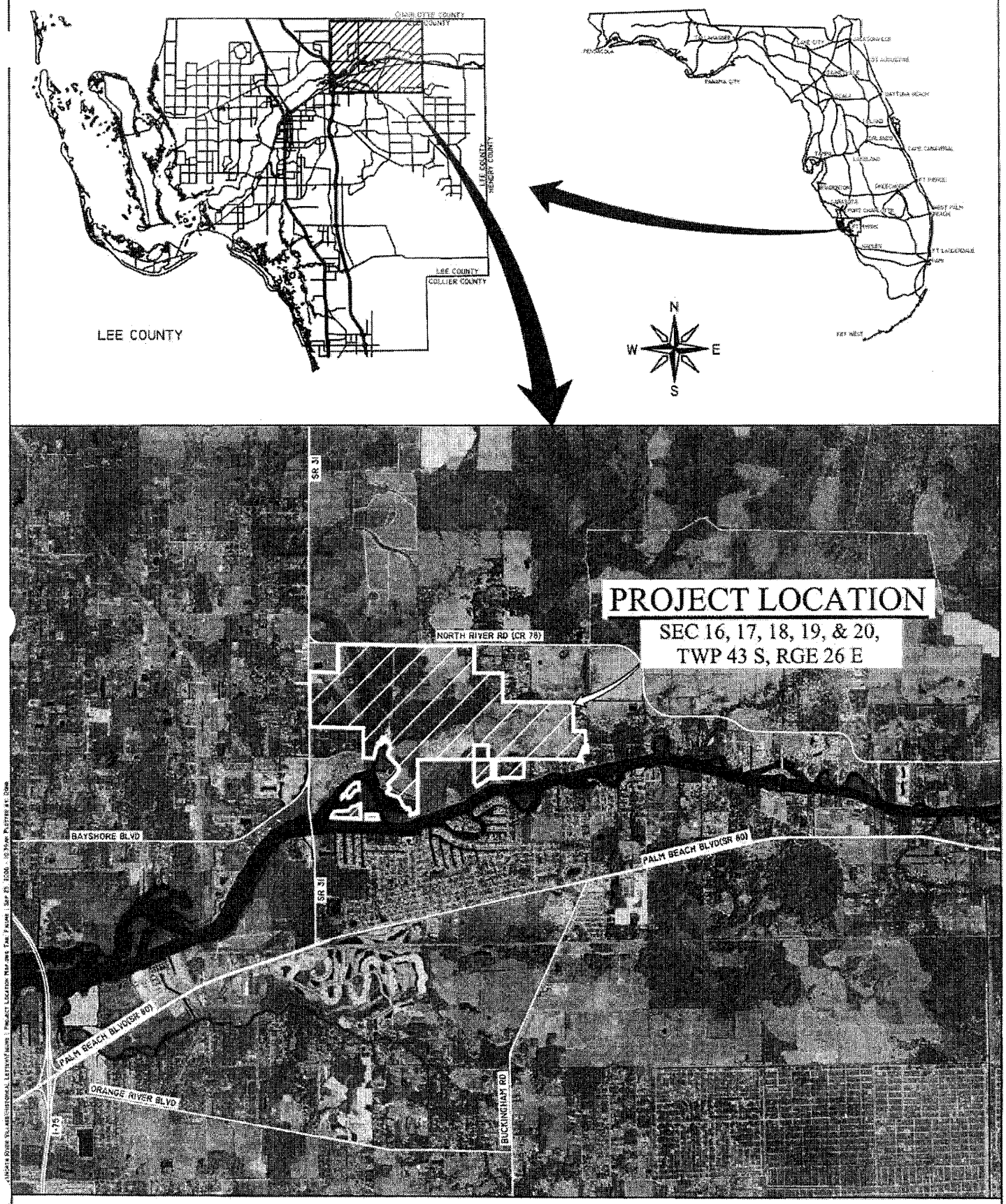
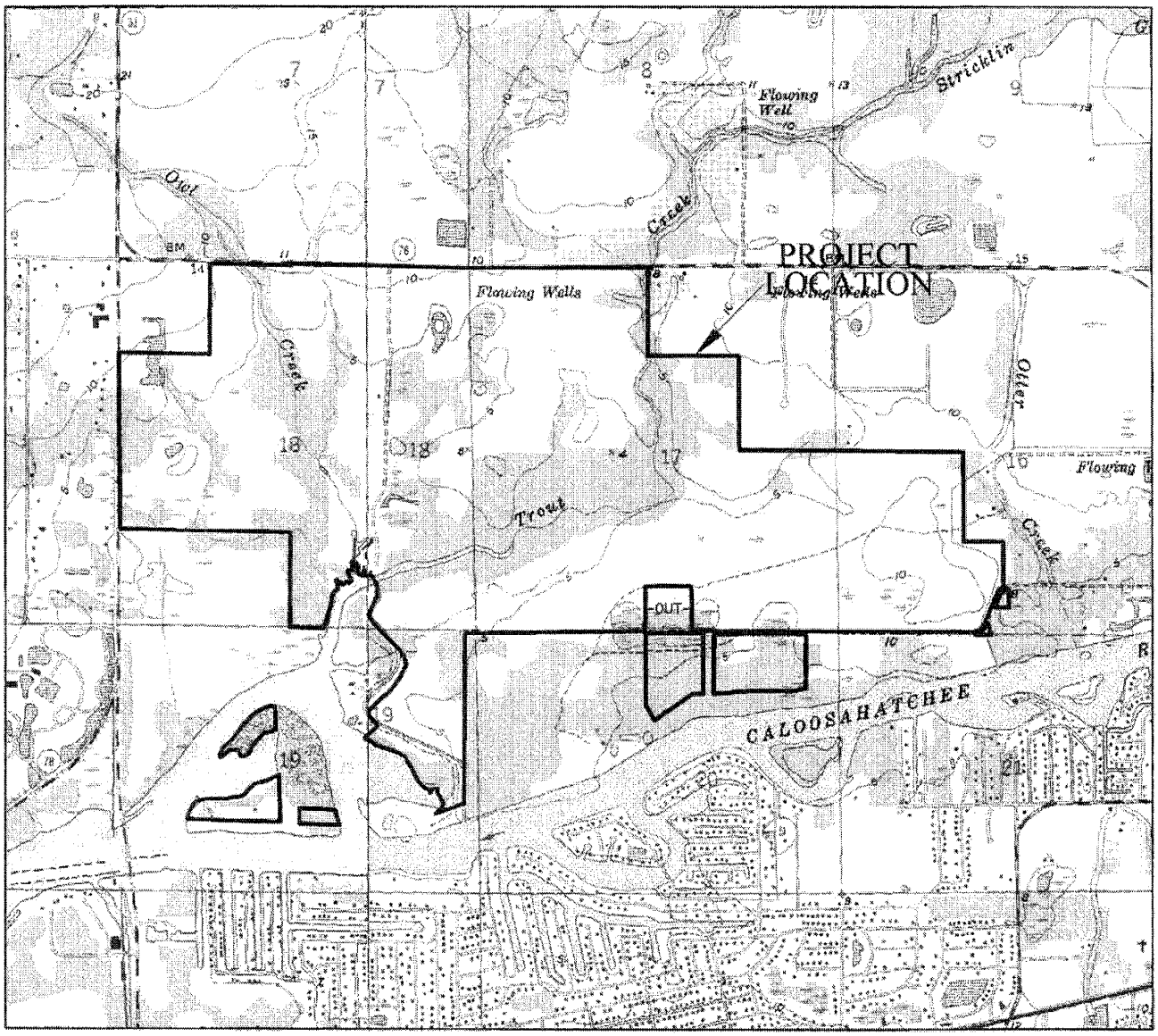


FIGURE 1. PROJECT LOCATION MAP
NORTH RIVER VILLAGE

PASSARELLA and ASSOCIATES, INC.
Consulting Ecologists
DRAWN BY: P.F. DATE: 9/13/06

SCALE: N.T.S.



NOTE:

QUAD SHEET SCANNED FROM FORT MYERS, OLGA, TELEGRAPH SWAMP AND TUCKERS GRADE USGS QUAD SHEET PHOTOREVISED 1987.

FIGURE 2. QUAD SHEET
NORTH RIVER VILLAGE

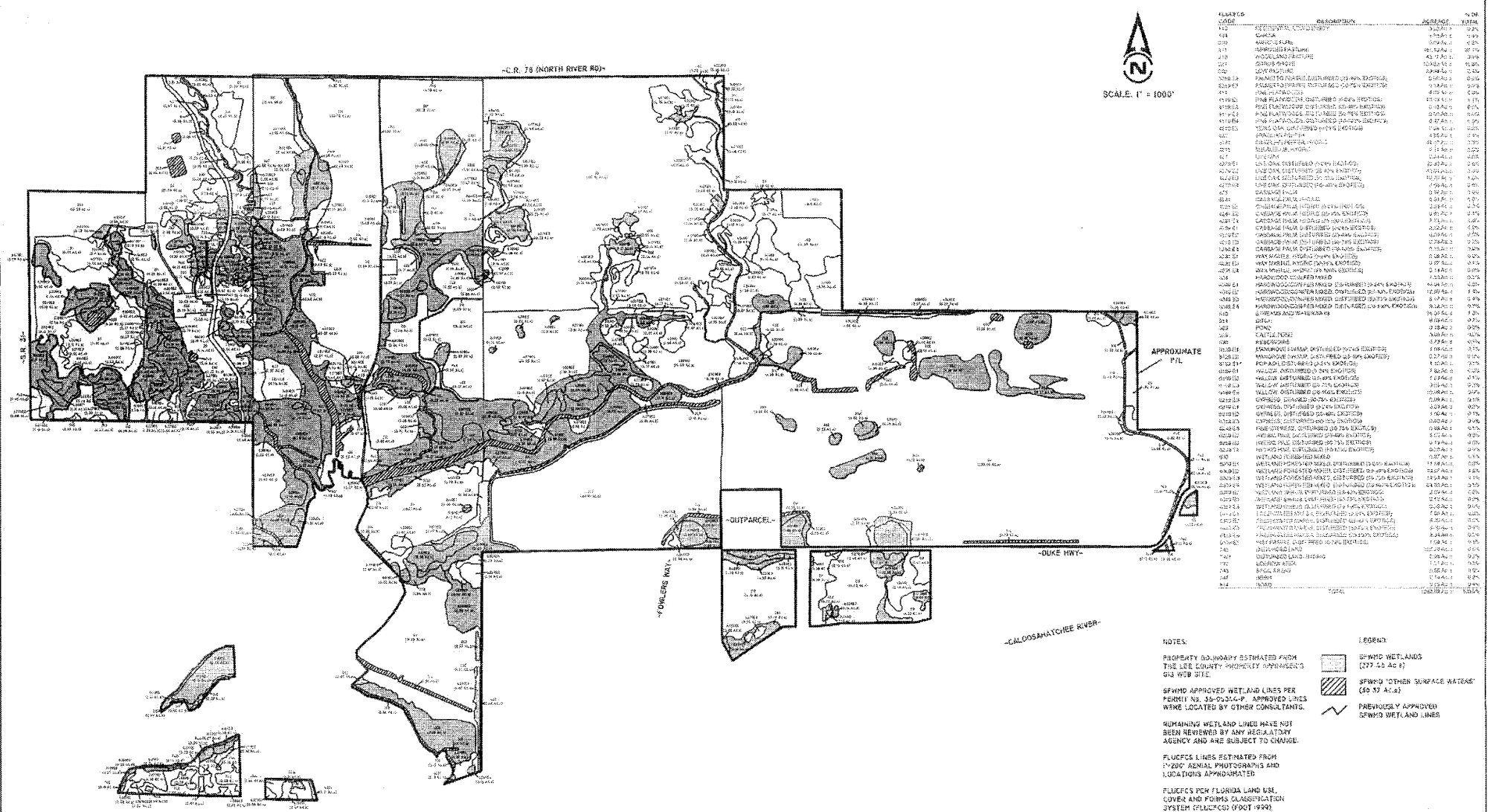
PASSARELLA and ASSOCIATES, INC.
Consulting Ecologists
DRAWN BY: P.F. DATE: 9/13/06

REVISIONS		DESIGNED BY	DATE	HORIZONTAL SCALE
		L.W.	9/13/06	1"=1000'
		CHECKED BY	DATE	VERTICAL SCALE
		K.C.P.	9/13/06	N/A
		DRAWN BY	DATE	SEC./TWP./RNG.
		P.F.	9/13/06	16,17,18,19,20/43/26

PASSARELLA and ASSOCIATES, INC.
Consulting Ecologists
9110 College Pointe Court, Fort Myers, Florida 33919

NORTH RIVER VILLAGE
AERIAL WITH BOUNDARY

DRAWING No.: 05BBG1393
SHEET No.: FIGURE 3



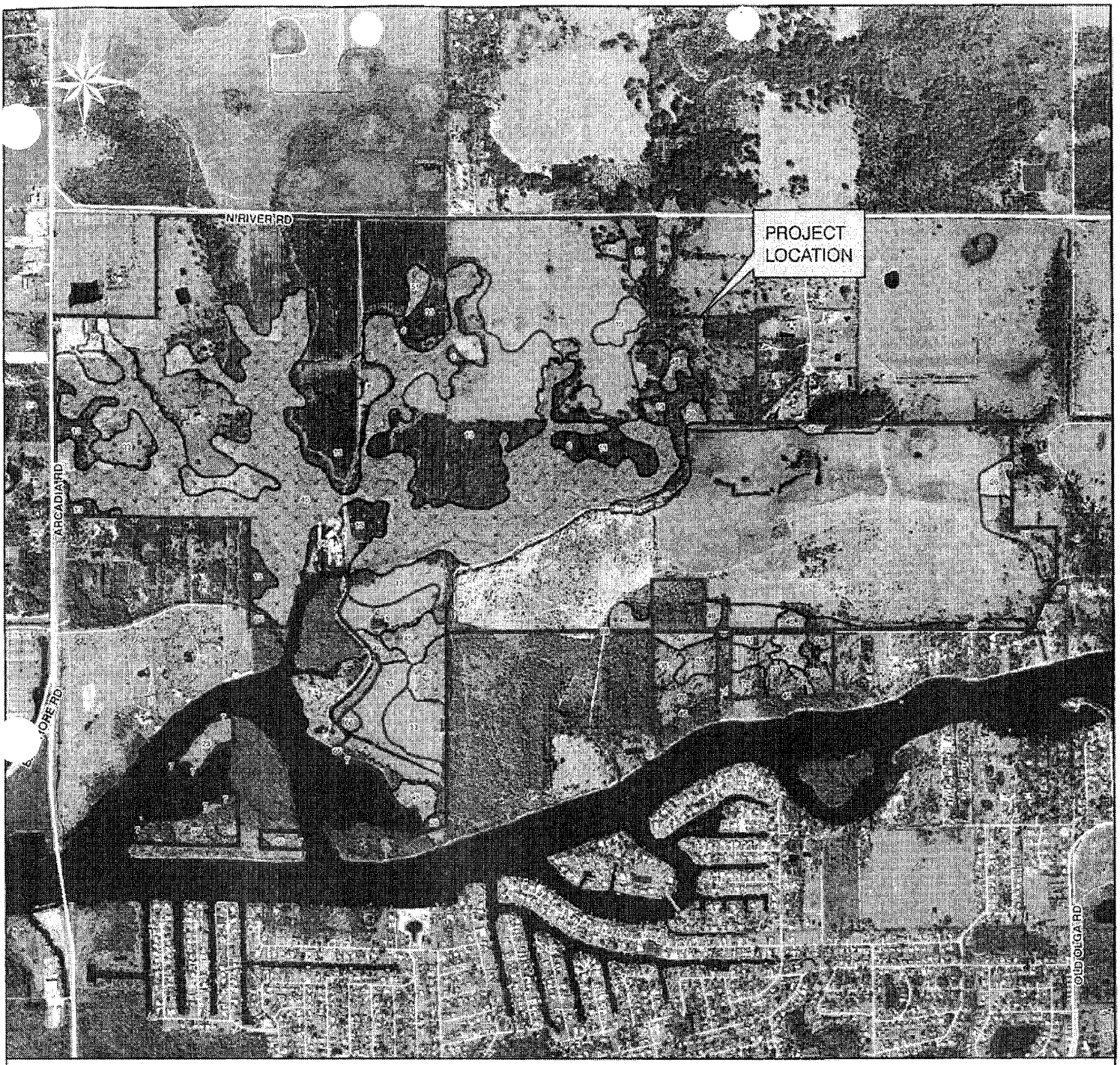
FLUCFCS CODE	DESCRIPTION	ACREAGE	% OF TOTAL
110	RESIDENTIAL, LOW DENSITY	5.2 Ac ±	0.3%
124	CANOE	1.1 Ac ±	0.1%
210	AGRICULTURE	1,074.8 Ac ±	47.8%
211	IMPROVED PASTURE	451.1 Ac ±	20.1%
212	WOODLAND PASTURE	43.7 Ac ±	1.9%
214	ORANGE GROVE	1,048.8 Ac ±	46.6%
260	IMPROVED PASTURE	29.9 Ac ±	1.3%
3210	PALMETTO PRAIRIE (DISTURBED (25-49% EXOTICS))	0.2 Ac ±	0.0%
3211	PALMETTO PRAIRIE (DISTURBED (50-79% EXOTICS))	1.1 Ac ±	0.0%
411	PINE FLATWOODS	8.1 Ac ±	0.3%
4119	PINE FLATWOODS (DISTURBED (25-49% EXOTICS))	83.0 Ac ±	3.7%
41191	PINE FLATWOODS (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
41192	PINE FLATWOODS (DISTURBED (80-100% EXOTICS))	0.5 Ac ±	0.0%
41194	PINE FLATWOODS (SPOILED (25-49% EXOTICS))	0.7 Ac ±	0.0%
4120	YOUNG PINE (DISTURBED (25-49% EXOTICS))	1.1 Ac ±	0.0%
422	BRAZILIAN PEPPER	4.8 Ac ±	0.2%
427	LAUREL OAK (DISTURBED (25-49% EXOTICS))	25.7 Ac ±	1.1%
4270	LAUREL OAK (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
428	LIVE OAK	0.1 Ac ±	0.0%
4289	LIVE OAK (DISTURBED (25-49% EXOTICS))	20.2 Ac ±	0.9%
42891	LIVE OAK (DISTURBED (50-79% EXOTICS))	11.0 Ac ±	0.5%
42892	LIVE OAK (DISTURBED (80-100% EXOTICS))	10.2 Ac ±	0.4%
42894	LIVE OAK (SPOILED (25-49% EXOTICS))	1.0 Ac ±	0.0%
431	CABBAGE PALM	0.1 Ac ±	0.0%
4319	CABBAGE PALM (DISTURBED (25-49% EXOTICS))	2.3 Ac ±	0.1%
43191	CABBAGE PALM (DISTURBED (50-79% EXOTICS))	0.8 Ac ±	0.0%
43192	CABBAGE PALM (DISTURBED (80-100% EXOTICS))	3.4 Ac ±	0.2%
4321	CABBAGE PALM (DISTURBED (25-49% EXOTICS))	0.2 Ac ±	0.0%
4322	CABBAGE PALM (DISTURBED (50-79% EXOTICS))	0.7 Ac ±	0.0%
4323	CABBAGE PALM (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
434	OAK-CABBAGE PALM	0.1 Ac ±	0.0%
4340	OAK-CABBAGE PALM (DISTURBED (25-49% EXOTICS))	0.2 Ac ±	0.0%
4341	OAK-CABBAGE PALM (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
4342	OAK-CABBAGE PALM (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
4343	OAK-CABBAGE PALM (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
439	MIXED HARDWOODS	0.1 Ac ±	0.0%
4391	MIXED HARDWOODS (DISTURBED (25-49% EXOTICS))	0.1 Ac ±	0.0%
4392	MIXED HARDWOODS (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
4393	MIXED HARDWOODS (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
4394	MIXED HARDWOODS (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
4396	MIXED HARDWOODS (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
4397	MIXED HARDWOODS (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
4399	MIXED HARDWOODS (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
510	STREAMS AND WATERWAYS	16.0 Ac ±	0.7%
511	DITCH	9.1 Ac ±	0.4%
514	POND	2.3 Ac ±	0.1%
534	CASTILLA TREE	3.4 Ac ±	0.2%
536	PEPPER TREE	0.2 Ac ±	0.0%
5361	MELALEUCA (DISTURBED (25-49% EXOTICS))	1.0 Ac ±	0.0%
5362	MELALEUCA (DISTURBED (50-79% EXOTICS))	0.2 Ac ±	0.0%
5363	MELALEUCA (DISTURBED (80-100% EXOTICS))	1.1 Ac ±	0.1%
5364	MELALEUCA (SPOILED (25-49% EXOTICS))	1.0 Ac ±	0.0%
5365	MELALEUCA (SPOILED (50-79% EXOTICS))	2.1 Ac ±	0.1%
5366	MELALEUCA (SPOILED (80-100% EXOTICS))	10.0 Ac ±	0.4%
5367	MELALEUCA (SPOILED (100% EXOTICS))	0.2 Ac ±	0.0%
5371	EXPOSED, DISTURBED (25-49% EXOTICS)	0.3 Ac ±	0.0%
5372	EXPOSED, DISTURBED (50-79% EXOTICS)	0.2 Ac ±	0.0%
5373	EXPOSED, DISTURBED (80-100% EXOTICS)	1.7 Ac ±	0.1%
5374	EXPOSED, DISTURBED (SPOILED (25-49% EXOTICS))	0.2 Ac ±	0.0%
5375	EXPOSED, DISTURBED (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
5376	EXPOSED, DISTURBED (SPOILED (80-100% EXOTICS))	0.8 Ac ±	0.0%
6110	WETLAND FORESTED MIXED	0.3 Ac ±	0.0%
61101	WETLAND FORESTED MIXED (DISTURBED (25-49% EXOTICS))	1.1 Ac ±	0.0%
61102	WETLAND FORESTED MIXED (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
61103	WETLAND FORESTED MIXED (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6120	WETLAND FORESTED MIXED (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6121	WETLAND FORESTED MIXED (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6122	WETLAND FORESTED MIXED (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6123	WETLAND FORESTED MIXED (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
6170	WETLAND HARDWOOD HAMMOCK (DISTURBED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6171	WETLAND HARDWOOD HAMMOCK (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6172	WETLAND HARDWOOD HAMMOCK (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6173	WETLAND HARDWOOD HAMMOCK (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6174	WETLAND HARDWOOD HAMMOCK (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6175	WETLAND HARDWOOD HAMMOCK (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6176	WETLAND HARDWOOD HAMMOCK (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
6210	WETLAND SHRUB	0.1 Ac ±	0.0%
6219	WETLAND SHRUB (DISTURBED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6220	WETLAND SHRUB (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6221	WETLAND SHRUB (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6222	WETLAND SHRUB (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6240	WETLAND SHRUB (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
6410	FRESHWATER MARSH (DISTURBED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6411	FRESHWATER MARSH (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6412	FRESHWATER MARSH (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6413	FRESHWATER MARSH (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6414	FRESHWATER MARSH (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6415	FRESHWATER MARSH (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6416	FRESHWATER MARSH (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
6420	WET PRAIRIE (DISTURBED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6421	WET PRAIRIE (DISTURBED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6422	WET PRAIRIE (DISTURBED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6423	WET PRAIRIE (SPOILED (25-49% EXOTICS))	0.1 Ac ±	0.0%
6424	WET PRAIRIE (SPOILED (50-79% EXOTICS))	0.1 Ac ±	0.0%
6425	WET PRAIRIE (SPOILED (80-100% EXOTICS))	0.1 Ac ±	0.0%
6426	WET PRAIRIE (SPOILED (100% EXOTICS))	0.1 Ac ±	0.0%
7400	DISTURBED LAND	0.1 Ac ±	0.0%
7410	DISTURBED LAND (RIDING)	0.1 Ac ±	0.0%
7420	EXCAVATION	0.1 Ac ±	0.0%
7430	BERM	0.1 Ac ±	0.0%
7440	ROAD	0.1 Ac ±	0.0%
814	ROAD	0.1 Ac ±	0.0%
	TOTAL	0.1 Ac ±	0.0%

REVISIONS		DESIGNED BY	DATE	HORIZONTAL SCALE
		L.W.	9/15/06	1"=1000'
		CHECKED BY	DATE	VERTICAL SCALE
		E.M.H.	9/15/06	N/A
		DRAWN BY	DATE	SEC./TWP./RNG.
		J.I.	9/15/06	16,17,18,19,20/43/25

PASSARELLA and ASSOCIATES, INC.
Consulting Ecologists
9110 College Pointe Court, Fort Myers, Florida 33919

NORTH RIVER ASSEMBLAGE
FLUCFCS AND WETLANDS MAP

DRAWING No.: 05BBG1393
SHEET No.: FIGURE 4



Soil Unit	Description	Hydric
6	HALLANDALE FINE SAND	NO
7	MATLACHA-URBAN LAND COMPLEX	NO
11	MYAKKA FINE SAND	NO
12	FELDA FINE SAND	YES
13	BOCA FINE SAND	NO
23	WULFERT MUCK	YES
26	PINEDA FINE SAND	YES
28	IMMOKALEE SAND	NO
33	OLDSMAR SAND	NO
35	WABASSO SAND	NO
39	IGLES FINE SAND; DEPRESSIONAL	YES
40	ANCLOTE SAND; DEPRESSIONAL	YES
45	COPELAND SANDY LOAM; DEPRESSIONAL	YES
49	FELDA FINE SAND; DEPRESSIONAL	YES
51	FLORIDANA SAND; DEPRESSIONAL	YES
55	COCOA FINE SAND	NO
60	CALOOSA FINE SAND	NO
72	BRADENTON FINE SAND	NO
99	WATER	YES

Legend:
- NORTH RIVER VILLAGE
- HYDRIC
- NON-HYDRIC

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY 2005

ROADWAY NETWORKS AND SOILS WERE ACQUIRED FROM THE FGDL.

0 0.2 0.4 0.6 0.8 1

Miles

		Designed by: LW	Date: 9/13/06	Scale: SEE SCALE	*Passarella and Associates, Inc.* Consulting Ecologists 9110 College Pointe Court Fort Myers, FL 33919 Phone: (239)274-0067 Fax: (239)274-0069	**NORTH RIVER VILLAGE** **SOILS MAP**	Drawing Number: 05BBG1093
		Drawn by: K.D.P.	Date: 9/13/06	Category: SOILS			Sheet Number: FIGURE 6
		Checked by: P.F.	Date: 9/13/06	Datum: SOUTH FLORIDA			

A PHASE I CULTRUAL RESOURCE ASSESSMENT OF THE WILLIAMS ISLAND PARCELS, LEE COUNTY, FLORIDA

By:
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JOHN G. BERIAULT, B.A.
JOSEPH F. MANKOWSKI, M.A.
SCOTT FAULKNER
MATTHEW BETZ, B.A.

ARCHAEOLOGICAL AND HISTORICAL CONSERVANCY, INC.

For:
BONITA BAY PROPERTIES, INC.

NOVEMBER 2007
AHC PROJECT NO. 2007.77
AHC TECHNICAL REPORT NO. 824

A Phase I Cultural Resource Assessment of the Williams Island Parcels, Lee County, Florida

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November 2007
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Consultant Summary

In September 2007, the Archaeological and Historical Conservancy, Inc. (AHC) conducted a Phase I cultural resource assessment for Bonita Bay Properties, Inc. of the Williams (Havens) Island Parcels located in western Lee County. The combined (three) ±7 hectare (±20 acre) subject parcels on a 58-acre island were surveyed to locate sites of archaeological and/or historical significance.

This assessment was conducted to fulfill historic resource requirements in response to Florida's Chapters 267 and 373. This assessment was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties. The work and the report conform to the specifications set forth in Chapter IA-46, Florida Administrative Code.

The parcels are within Section 19 in Township 43S, Range 26E (Figure 1). The island encompasses areas that have been cleared and filled, woodlands, and wetlands. Much of the parcel has been previously cleared and covered with fill (Figure 3). Prior to development the parcel area was hydric and mesic woodlands vegetated in slash pine/saw palmetto flatwoods and riverine mangrove swamp. The parcel area prior to the turn of the 20th century and the dredging of the Caloosahatchee River was a point or promontory of the south bank of the Caloosahatchee River opposite the confluence of Trout and Owl Creeks.

The subject parcel was investigated with a pedestrian survey and subsurface testing. It was determined that the areas closest to the historic bank of the Caloosahatchee River were Moderate to High Probability Zones (MPZ/HPZ) for archaeological sites. Many of the higher probability zones on the parcel were covered with 1 to 5 meters of fill making shovel testing impossible. However an effort was made to test all three parcels on the island. Overall, 17 shovel tests (50 cm^2) were dug systematically and judgmentally across the parcel. No archaeological or historical artifacts, features, or sites were observed but two prehistoric sites were documented outside the project parcels. No historic structures occur on the parcel. A modern house and out building constructed in the 1980's are the only structures on the parcel. If future development uncovers archaeological or historic resources than an archaeologist should document those discoveries.

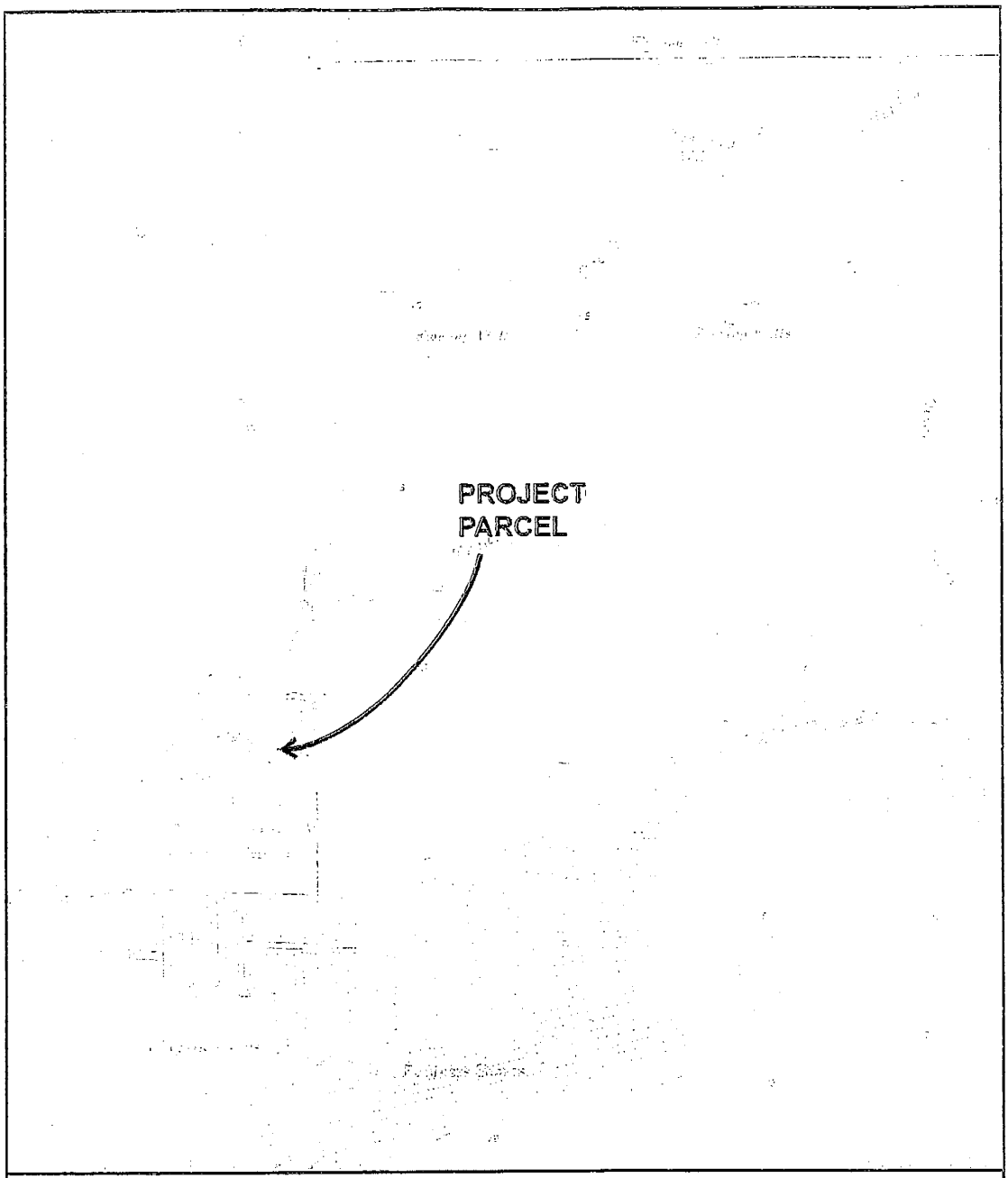


Figure 1. Map of the Williams Island Parcel area.

N

USGS MAP: FORT MYERS, REV. 1991

TOWNSHIP 43S, RANGE 26E, SECTION 19

0 1/4 1/2 1 Mile approx.
0 .4 .8 1.6 Kilometer approx.

Project Setting

The three Williams Island parcels encompass a total of approximately 8 hectares (20 acres) of a 23-hectare (59 acre) island created 70+ years ago from a promontory point on the south bank of the Caloosahatchee River. The subject parcel is located in Section 19 in Township 43S, Range 26E in north central Lee County (Figure 1). The ±8-hectare (±20-acre) project area are three irregular polygons. The subject parcel is surrounded by the Caloosahatchee River/Waterway on all sides and is located south of its confluence with Trout and Owl Creeks. The relevant USGS map is Fort Myers, Fla.

Williams Island was historically a promontory point of the southern bank of the Caloosahatchee River, and was created by the channelization of the Caloosahatchee. The island contains oak hammocks, naturally elevated berms paralleling the original course of the river on its north side, brackish/mangrove marshes, and extensively filled areas. Modern dredging created an east-west channel along the south side leaving the promontory as an island.

Systematic shovel testing of the Williams Island subparcels revealed that the two southern parcels are covered by fill. This fill originated from the channelization of the Caloosahatchee River and had been spread across the parcel areas adjacent to the river. These areas contain from one to five meters of fill overburden, and conventional shovel testing was impossible there.

The immediate region is low-lying to moderately elevated (5-10 feet, NGVD) vegetated in slash pine/saw palmetto flatwoods with grassy marshes. Slash pine flatwoods communities are usually situated on high ground in much of western Lee County. Historically, floral communities which contain a dense, often head-high understory of saw palmetto, were subject to and maintained by periodic forest fires. Fires either began naturally through lightning strikes or were started by prehistoric Indians or by early settlers to aid hunting or cattle grazing. Among the plants typically found in the slash pine/saw palmetto flatland/prairie environments are: slash pine, saw palmetto, gallberry, shiny lyonia, rusty lyonia, staggerbush, dahoon holly, ground oak, wire grass, broom sedges, shiny blueberry, xyris, and a variety of annual and perennial herbs and wildflowers blooming seasonally.

The mangrove swamps/grass marshes fringing the Caloosahatchee River are low-lying and dense with head-high leather ferns and somewhat salt-tolerant vegetation. Isolated slightly elevated natural berms occur along portions of the original river bank area and can support luxuriant though limited hammocks with diverse plant elements.

The geology of the central Lee County area is characterized fine-grained wind and wave born sands overlying shelly marls. Most of the surfacial sands are characterized in the *Lee County Soil Survey* as "hydric, level, poorly drained" and are fine-grained wind and water-born deposits from the late Pleistocene/early Holocene. Among the soils present on the subject parcel are: Wulfert muck and Caloosa fine sand. Wulfert muck is a mangrove sand/peat formation present in tidally flooded mangrove swamps (See Figure 5). Gray and tan sands found extensively in the district usually overlie relict marine deposits of shelly marl and marly limestone caprock that are part of Pleistocene formations. Many of these formations are linked to the Caloosahatchee/Fort Thompson/Coffee Mill Hammock series. Marine marls contain lenses and deposits of clay intermixed with varying percentages of sand. These clays

may have been a source for ceramic manufacture by the Formative period Native Americans. Mantling the Pleistocene sands are windblown deposits of gray sands of varying depths.

The North River Assemblage Parcel contains two soil types (Figure 5). Most of these are characterized as fine, poorly drained sand or sandy loams. Many of these occur in the area as formations on moderately elevated ground; others are depressional and are located in the ponds, sloughs and creek banks and beds of the parcel.

Areas of the parcel contain tan and gray sand surfacial zones overlying a dense brown sand spodic horizon (often referred to as "hardpan"). This formation is a zone of organic leaching accumulation. Occasionally, harder "nuggets" or nodules of an iron oxide precipitate will be found in this zone, which is sometimes a basal archaeological zone.

Limestone caprock can contain the index fossil bivalve, *Chione cancellata,* in quantity. Many higher ground formations in the area appear to be bedrock unconformities that consist of fully exposed tabular slabs of limestone caprock containing numerous rounded solution holes.

The north central Lee County area has been the focus of low-impact/low density ranching and farming activities for many years. "Improved" areas are interspersed with undeveloped woodlands. Recently, the area has had increased growth in the form of planned residential communities that have advanced at a steady rate along State Roads 80, 31, and 78.

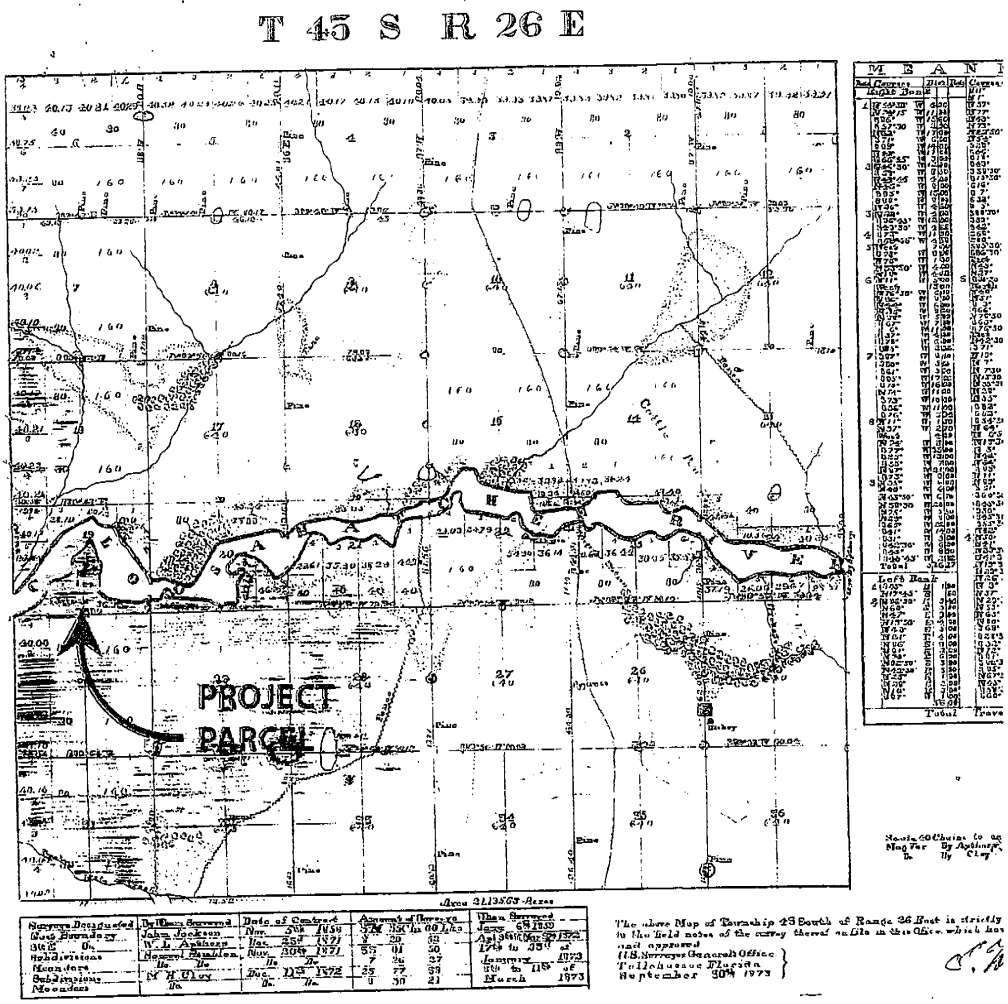


Figure 2. Portion of the 1873 plat map for Township 43S, Range 26E with the modern parcel boundaries superimposed.

N

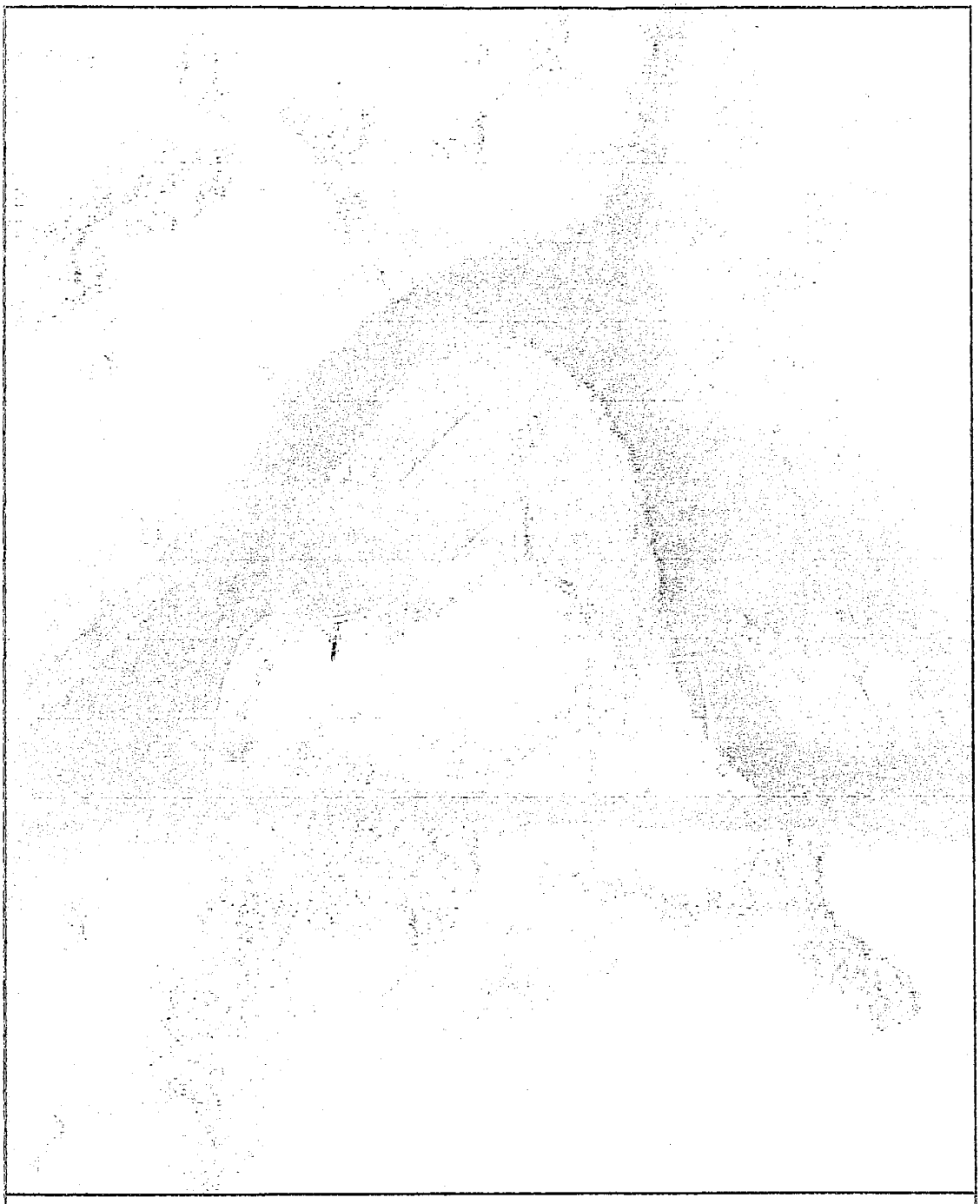


Figure 3. 1944 black and white aerial photograph of the Williams Island area with modern parcel boundaries superimposed.

N

0 660 1320 Feet approx.
0 400 800 Meters approx.

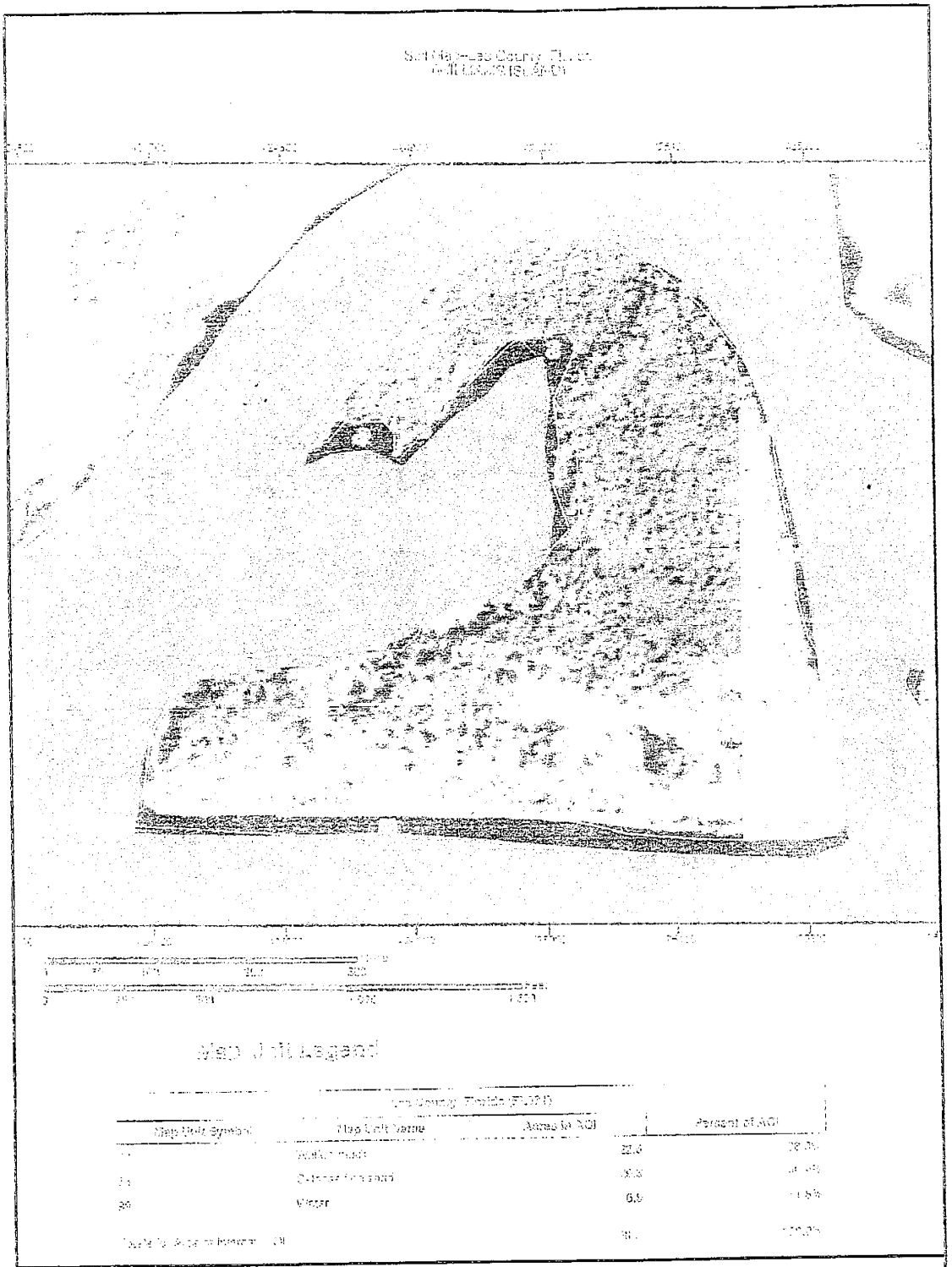


Figure 4. Soil map courtesy of the USDA web soil survey showing soil types found in the Williams Island Parcel.

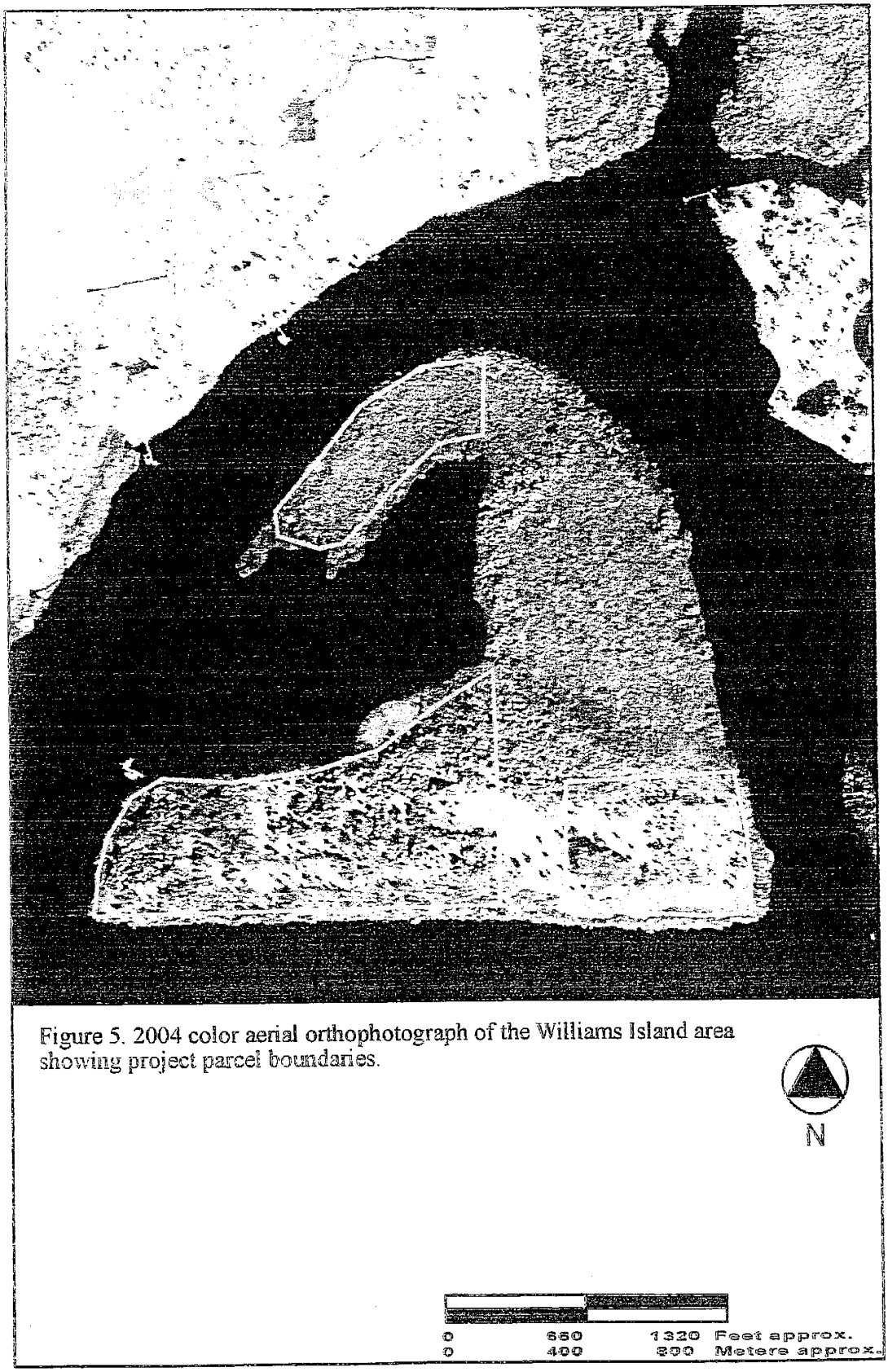


Figure 5. 2004 color aerial orthophotograph of the Williams Island area showing project parcel boundaries.

Figure 6. View east near south central area of island. The rising ground to right is a portion of the heavily-filled areas closest to the Caloosahatchee Waterway

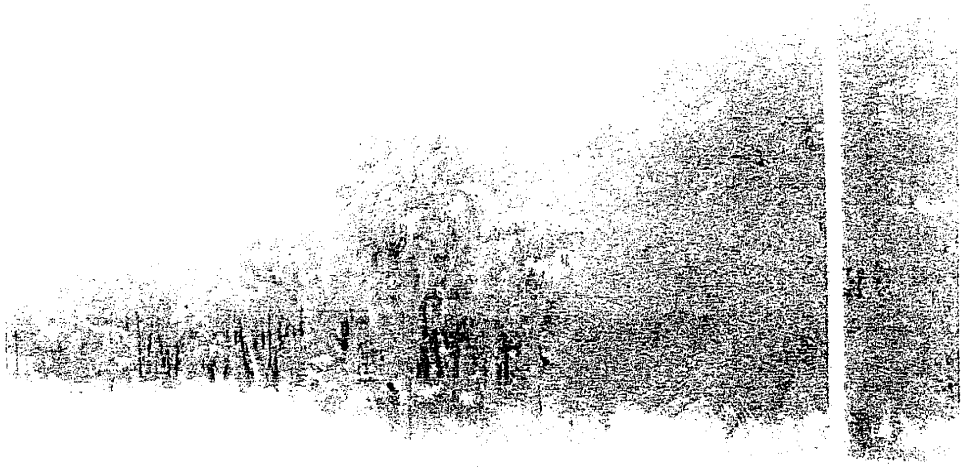


Figure 7. View north in eastern portion of island near vicinity of Shovel Test 9. The area in the foreground near flagpole is heavily filled with dredged spoil.

Previous Research

Southwest Florida has been a focus of archaeological investigations since the 1880s, although much of the early work was directed toward the recovery of museum quality artifacts rather than understanding cultural processes. Griffin (1988:48-50) discussed some of the very early references to archaeological sites in South Florida. He noted that these early reports were mostly casual observations, and few appear to refer to southwest Florida, but rather refer to the southeast and Key West areas.

Kenworthy's (1883) informal report on shell mounds and ancient canals was one of the first reports on southwest Florida archaeological sites. At about the same time as Kenworthy's investigations, Simons (1884) gave a narrative account of some of the very large coastal shell middens, and Douglass (1885) provided further information about prehistoric canals (although he did not accept that they were prehistoric). One account described a canal near Gordon's Pass that is probably the Naples Canal (8CR59), and another further north may be the Pineland Canal. Douglass' diaries record excavations of a post-contact era site (8CR41) on Horrs Island, as evidenced by the presence of European artifacts (Griffin, 1988:50-51). Douglass visited Lostman's River and other areas in the Ten Thousand Island area including Horrs Island (1890).

In 1895 Durnford reported that cordage and other artifacts were recovered from a mangrove muck pond on Marco Island (8CR49). The material was shown to Cushing, who mounted a major project to recover more material from the site. Cushing (1897) reported recovering wood and other perishable artifacts from the muck pond on Marco Island, adjacent to a large shell works and midden village site. Publication of illustrations of the spectacular finds generated a great deal of subsequent interest. Wells M. Sawyer, a young artist accompanying the expedition, produced an excellent and presumably accurate contour map for the entire Key Marco Shell Midden. This map is valuable to present-day efforts in understanding many of the now obliterated features and interpreting (reconstructing) the "architecture" of the shell midden. Widmer (1983) notes that Cushing also focused attention on the nonagricultural chiefdom level of social organization supported by the rich estuary and marine resources, although his anthropological observations have remained overshadowed by the wealth of artifacts.

Moore (1900, 1905, 1907) investigated a number of sites along the Collier/Lee County coast, apparently attempting to find material comparable to Cushing's finds. Although Moore provided information about site locations and general contents, most of his work was extremely crude and uncontrolled, by both contemporary archaeological standards, and by modern standards.

The first attempt to systematically survey and investigate archaeological sites was initiated by Ales Hrdlička, who visited a number of sites along the coast and tidal mangrove estuaries in 1918, focusing on the Ten Thousand Island region (Hrdlička 1922). Hrdlička noted that southwest Florida was a distinct region within south Florida and made an attempt to type sites by function.

Matthew Stirling's (1931, 1933) excavation of a burial mound on Horrs Island represents one of the first controlled excavations in Collier/Lee Counties (although he attempted stratigraphic control, Cushing had little success in his wet site excavation). The site was named the Blue Hill Mound, but it is not recorded under that name in the FMSF (either as a primary or secondary name), so it is unclear exactly which site he excavated, although it was probably site 8CR41 (McMichaels, 1982). These reports by Stirling are preliminary, and apparently neither a final report nor a skeletal analysis has been published.

John M. Goggin was the first to define a south Florida cultural area (Glades Area), and describe south Florida ceramics (Glades ware), establishing a basis for later archaeological work. He published an analysis of the ceramic sequence in south Florida (Goggin, 1939, 1940). In later reports (Goggin, 1947, 1949a, 1949b), he formulated a basic framework of cultural areas and chronologies that is still current (although modifications with additional data have been made, see further discussion below). Goggin (1949b) summarized much of this information in an unpublished manuscript, which Griffin (1988) thoroughly described.

In passing, one unfortunate aspect of Goggin's work was a dependence on informant information for location of sites (especially interior sites) and he had a real concern that existing sites would be looted. This concern resulted in his either deliberately or incidentally reporting vague locational data for many sites. Some of these sites have never been satisfactorily relocated, although a few have undoubtedly been re-recorded by later investigators.

For several decades, much of the subsequent archaeological investigations in the region took place in Lee and Charlotte Counties, especially in the Cape Haze, Charlotte Harbor and Pine Island areas. It is rumored that Goggin had a "gentleman's agreement" with many of the other leading practicing Florida archaeologists of the time that the South Florida area was his exclusive province to investigate. If this rumor is correct, it might explain the neglect shown the southwest Florida area in the archaeological arena from the end of World War II to Goggin's death in 1964.

In 1956, Sears reported on a large village and mound complex at the mouth of Turner River on Chokoloskee Bay south of Marco Island, and in 1967 he reported on the results of a survey of the Cape Coral area (Sears, 1956, 1957). Laxson (1966) reported on excavations at Turner River Jungle Garden site, which is upriver from the Turner River site, although these have been confused in recent accounts.

Van Beck and Van Beck (1965) excavated three small test pits on Marco Island (at the Marco midden, 8CR48) associated with the Cushing site (8CR49). The resulting publication of this work was some of the first reported scientific archaeological work to come from the southwest Florida area in nearly twenty years (Van Beck and Van Beck, 1965).

In 1967 through 1969, Marco Island was extensively surveyed and a few sites were tested through excavation by Cockrell, Morrell, and others (Morrell, 1969). No complete site

report was ever published, although an unpublished and incomplete manuscript is available. Some of these sites were discussed in Cockrell's master's thesis (1970). Widmer performed a survey of Big Key, John Stevens Creek, Barfield Bay, Blue Hill Bay, and Collier Bay, which are proximal to Marco Island (Widmer, 1974). Widmer eventually utilized his southwest coast experience to write a doctoral dissertation on the Calusa that not only remains the definitive work on that group, but also explored the relationship between subsistence adaptation and cultural evolution (Widmer, 1983).

In Lee County, Arlene Fradkin and other investigators from the University of Florida began an ongoing involvement with the Pine Island Sound/Sanibel Island area in the 1970s. Her first investigations were at the Wightman site on northern Sanibel Island (Fradkin, 1976).

Several archaeologists excavated at Horrs Island in the 1980s. McMichaels (1982) reviewed sites on Horrs Island in a Master's thesis. In 1983, Marquardt began a series of investigations at Josslyn Key, Useppa Island, Pineland, Buck Key, Galt Island in Lee County, and at Big Mound Key in Charlotte County (Marquardt, 1984, 1987, 1988, 1992). Marquardt and Russo have investigated Horrs Island in Collier County. A number of the large shell midden village sites they excavated appear to be late Archaic, and they expect to document a more elaborate social organization at these sites and larger sedentary or semi-sedentary population sizes than previously known for that period (Russo, 1990, and pers. comm.).

Most of these studies focused on the coastal sites, as have subsequent summaries and discussions. Recent work on the interior has made significant advances in documenting the extent and intensity of inland resources, especially in the Big Cypress and Everglades parks (Ehrenhard *et al.*, 1978, 1979; Ehrenhard and Taylor 1980; Ehrenhard *et al.*, 1980; Taylor and Komara 1983; Taylor, 1984, 1985). Griffin's (1988) synthesis of the Everglades Park data is the defining work on south Florida archaeology to date. Athens (1983) summarized some of the results of the Big Cypress survey, but more analysis of this data resource is needed.

Beriault and colleagues (1981) reported on salvage excavations at Bay West Nursery (8CR200). Their description of the site includes a well known but rare and infrequently documented Early and Middle Archaic use of ponds for cemeteries.

In 1995, Widmer and Story began an ongoing investigation at the Key Marco Midden (Widmer, 1996). In the first season they excavated with the help of graduate students and volunteers. The results of their work have appeared in the *Florida Anthropologist*.

In the last two decades the pressure of development as well as a recognized need for preservation or mitigation of prehistoric sites has led to a number of reports by commercial cultural resource management consultants. While most of these reports are limited in scope due to restriction to a small tract of land, many have produced useful summaries of regional archaeological, as well as insightful analysis of the relationship between site types and location and ecotypes (Almy and Deming 1982, 1986a, 1986b,

1986c, 1987, Austin 1987, Carr and Allerton 1988a, 1988b, Deming and Almy 1987, 1988, Fay and Carr 1990, Fuhrmeister et al. 1990, Martinez 1977, Miller and Fryman 1978, Swift and Carr 1989).

Arthur W. Lee, John Beriault and others in the Southwest Florida Archaeological Society (SWFAS) have recorded and investigated a large number of archaeological sites in Collier and Lee Counties. It is an ongoing effort of the Society to publish and disseminate reports and manuscripts (Lee *et al.*, 1993, 1997, 1998; Beriault, 1973, 1982, 1986, 1987; Beriault and Strader, 1984). Many of these reports deal with small interior seasonal sites. In addition, Beriault has provided several unpublished manuscripts as to site types and areas (Beriault 1982, 1987).

The Archaeological and Historical Conservancy, Inc. (AHC) has investigated several large parcels in the Olga/Buckingham area. In 1998, AHC personnel assessed the Veranda Parcel which is located two miles south of the present subject parcel and located four prehistoric sites and three historic sites (Beriault and Carr 1998). In 2000, AHC personnel conducted a Phase I assessment of the ±300-acre Orange River Parcel located three miles south of the subject parcel. There they located three prehistoric sites. In early 2005, AHC personnel discovered two prehistoric sites at the 650-acre Portico Parcel located on the Buckingham-Olga Road four miles southeast of the subject parcel (Mankowski et al 2005). The present investigator (Beriault) has also produced an historic study of the Caloosahatchee River east of Ft. Myers (Beriault 2001). Five other AHC projects have been performed within four miles of the subject parcel with an additional two archaeological sites having been located.

Literature Review

A site search was requested on 9-10-07 with the Florida Division of Historic Resources for relevant archives and literature for the project parcel area. This included, but was not limited to site forms from the Master Site File in Tallahassee concerning previously recorded sites within a 1.6 kilometer (1.0 mile) radius of the North River Assemblage Parcel and reports for cultural resource investigations previously conducted within a 1.6 kilometer (1.0 mile) radius of the North River Assemblage Parcel (Table 1).

Table 1. Literature Review Summary

Previously Recorded Archaeological Sites:	
In Survey Parcel	0
Within 1.6 km (1.0 mi) of Parcel	4 (8ILL1982, 8LL1986, 8LL2030, 8LL2338)
Previous Investigations:	
In Survey Parcel	0
Within 1.6 km (1.0 mi) of Parcel	4

A review of state site files conducted on September 10th, 2007 resulted in the identification of four previously recorded sites at or about 1.6 kilometers (1.0 miles) from, but *outside*, of the survey parcel (Table 2). Seventeen historic standing structures are also reported for the area; none of these are within the project parcel boundaries.

Table 2. Previously Recorded Sites Summary[1]

Site No.	Site Chronology	Site Type	References	In Survey Parcel	Outside of Parcel
8LL1982	Prehistoric: Likely Glades	Interior Midden	*Carr and Beriault, 2001*		√
8LL1986	Historic 19th-20th Century	Citrus Packing House	*Carr and Beriault, 2001*		√
8LL2030	Historic 19th-20th Century	King family Homestead	*Carr and Beriault, 2001*		√
8LL2338	Historic 19th-20th Century	Howard House	*Mankowski and Beriault, 2005*		√

Notes: [1]Based on sites within 1.6 kilometers (1.0 miles) of the survey parcel.

A review of the projects conducted in the same area indicated four investigations previously conducted within 1.6 kilometers (1.0 miles) of the North River Assemblage Parcel (Table 3). None of these investigations were within the parcel.

Table 3. Previous Investigations[1]

Survey No.	Date	Author	Title	In Parcel	Out of Parcel
3144	1992	Weant, Laura and Nickerson, Michael	*Historic Report and Survey Supplement for Lee County, Florida*		√
3460	1993	Fuhrmeister, Charles and Estabrook, Richard	*Survey of the Southwest Florida Pipeline Company Corridor Realignment, DeSoto, Charlotte, and Lee Counties, Florida*		√
6575	2001	Carr, Robert S. and Beriault, John G.	*An Archaeological and Historical Assessment of the Verandah Parcel,, Lee County, Florida*		√
11581	2005	Mankowski, Joseph and Beriault, John G.	*A Phase One Archaeological Assessment of the Olga Parcel, Lee County*		√

Notes: [1]Based on sites within 1.6 kilometers (1.0 miles) of the survey parcel.

Cultural Summary

Stirling was the first to distinguish the indigenous prehistoric cultures of southern Florida in 1936 by defining a Glades cultural area, including all of south Florida (Carr *et al.*, 1994b:9; Milanich, 1994:5-6). Griffin (1988) pointed out that this was not formulated as a strict cultural area, but it was rather a geographic region with some common cultural traits. Kroeber (1939), in a review of North American prehistory, utilized a slightly different term, the "South Florida Area," basing his definition on both environmental and cultural factors. Subsequently Goggin delineated more particular boundaries for southern Florida and divided the region into three sub-areas: "Okeechobee" around Lake Okeechobee, "Tekesta" for southeast Florida and the Florida Keys, and "Calusa" for Southwest Florida (Carr *et al.*, 1994b:10; Goggin, 1947:114-127).

Following Goggin's study, subsequent researchers have refined or altered the cultural distinctions attributed to southern Florida's prehistoric populations. There has been criticism that Goggin's names and definitions were based on historic accounts of the main (proto) historic groups found in the respective regions and not on the archaeological evidence of spatial, temporal, and cultural differences (Sears, 1966; Griffin, 1974; Carr and Beriault, 1984; Griffin, 1988). Griffin, in particular, questioned the distinctions. He believed that South Florida cultures varied only by local environmental conditions and ceramic exchange rates. Griffin believed the inhabitants of prehistoric southern Florida were mainly dwelling on the coast and that the interior was nearly uninhabited and under-utilized. Griffin designated the entire southern Florida region as the "Circum-Glades" area (Eck, 1997:5; Griffin, 1974:342-346). This new designation for the area was furthered by a widely circulated book on Florida archaeology by Milanich and Fairbanks (1980). Griffin later (1988) retreated to some extent from his earlier position as further research (particularly by Ehrenhard, Carr, Komara, and Taylor in the Big Cypress and Carr in the eastern Everglades in the 1970s and 1980s) showed abundant sites (and concomitant use and habitation) in the interior and Everglades.

Carr and Beriault, in particular, have taken issue with the concept of a Circum-Glades region. Carr's research in the Big Cypress and Everglades and his subsequent analysis demonstrating variation of key cultural markers (particularly in decorated ceramics) formed the basis for this contention. There is abundant evidence for cultural (and probably political or tribal) diversity in the various areas of south Florida. Carr and Beriault particularly noted and defined differences between the lower southwest Florida coast, which they termed the "Ten Thousand Island" region, and the area to the north, which they called the "Caloosahatchee" region. This latter area they believed to be the seat of the historic Calusa chiefdomship, although previous (and some subsequent) researchers have called the entire southwest Florida from Cape Sable to the Cape Haze peninsula (and beyond) in Charlotte County "Calusa."

Griffin, in his definitive 1988 synthesis on Everglades archaeology, attempted to reconcile and refine some of the conflict in the definition of south Florida prehistoric and historic culture areas. As stated by Carr and colleagues (1994b), "the issue...appears in part to be one of trying to determine the significance of regional and temporal variation,

rather than whether these differences are real." There is evidence that changes through time in regional political affiliations or realties makes any model *not* addressing this complex issue two-dimensional. The Calusa hegemony that was in place by the time of the arrival of Europeans may have begun as early as 800 AD in the Ten Thousand Island "district" or area (Griffin, 1988:321; Carr *et al.*, 1994b:12). There is currently ongoing research to further refine present thought as to cultural affiliations in south Florida. It would seem only a matter of time before new directions and emphases provide a more accurate summation of south Florida cultural affinities.

Using the present models, the coastal zones of Collier County and southern Lee County contain three distinct culture areas. Indian Hill on Marco Island lies thirty miles from the projected interface by Carr and Beriault (1984) of the Caloosahatchee area (called the "the 'heartland' of the Calusa," Carr *et al.*, 1994b:12) to the north, and the Ten Thousand Islands area to the south. At a yet undefined point to the east lies the Okeechobee cultural area, but the boundary, if it is a definite, fixed one, is likely to occur in the vicinity of the Immokalee rise forty miles or more to the northeast of Indian Hill. Further work is in progress by Carr to address the issue of where the southwest boundaries of the Okeechobee culture area occur.

Temporal Periods and Adaptations

At the same time that the south Florida archaeological cultural models have evolved over the past 60-plus years, so have the temporal markers or framework on which we base evolution of that culture. Much of this latter effort has resulted from comparisons made between the recovered artifacts from the 100-year period of scientific and *non*scientific excavation and collection by the various individuals and institutions (and others) enumerated in part above. This Floridian effort must be seen against the broader background of archaeological work in eastern North America and the New World as a whole. All of these efforts have been mutually complimentary and certainly not exclusive.

In South Florida, the following periods and adaptations are generally accepted. Part of this chronology involving the later or Formative period is called the Glades sequence in honor of Goggin, the greater part of whose work in defining the ceramic sequence or markers has withstood the test of time and subsequent criticism (Goggin, 1939, 1947, 1949c). From Goggin's day to present, pottery variability in form, substance, and decoration has proven useful for providing time markers, at least during the archaeologically-brief ($\pm$ 3500 year) period spanning the late Archaic and Formative periods that it was produced. Other artifact types and their variations have, to present, proven somewhat less reliable as absolute indicants of prehistoric age. Radiocarbon dating, a phenomena of the last 30-plus years, provides, within the standard deviation expressed in plus-or-minus years BP (before present), a relatively absolute date for a given sample and provides a yardstick to measure traits or distinctions in provenienced artifacts. Determining and adequately defining what traits we can discern against this absolute is part of the ongoing function of the regional archaeological effort.

The following information is generalized and abbreviated. The dates are approximate; transitions between periods are in reality more gradual that the manner they are expressed for convenience.

Paleo Period (14,000 – 10,000 BP)

During the Paleo Period, the first Native Americans began moving into the southeastern portion of North America and Florida. Most evidence of their presence in Florida can be reliably dated to about 10,000 BP.

There are no known Paleoindian sites in Lee County. Several are documented from elsewhere in south Florida, including Warm Mineral Springs and Little Salt Springs in Sarasota County (Cockrell and Murphy, 1978; Clausen and Gifford, 1975), Harney Flats in Hillsborough County (Daniel and Wisenbaker, 1987) and the Cutler Fossil Site in Dade County (Carr, 1986).

During this period, the terminal Wisconsian ice age, the climate was probably less extreme, with cooler summers and warmer winters. The climate was also drier, and sea levels were lower (Carbone, 1983; Allerton and Carr 1988a; Griffin, 1988).

One reason that possible Paleo period sites have not been discovered in Charlotte County is that the shoreline may have been as much as 100 miles further west due to lower sea levels. Drier conditions may have made the interior very inhospitable, and the shallow estuarine and littoral sites that existed were flooded by post-ice age Holocene sea rises.

Any possible interior sites from the Paleo Period may be unrecognizable due to lack of diagnostic artifacts, subsequent reuse of site areas, low population density, and few permanent camps. These and other factors may help explain the absence to date of identifiable Paleo period sites in the area.

Archaic Period (10,000 - 2,500 BP)

The Archaic period reflects a post-Pleistocene shift in adaptation marked by an increase in the seasonal exploitation of a broad spectrum of food resources, a more restricted use of territory due to regional specialization, and more semi-sedentary habitation sites. No ceramics are known until the Late Archaic. During the Archaic, regional specializations became more marked, not only with material culture but also with distinct local utilization of local plant and animal resource.

As mentioned above, there is, as yet, no firm evidence of human presence in southwest Florida during the Paleo period (Allerton and Carr, 1988:14). This is also true for the Early Archaic (8500-7000BP), as there is evidence of an environment too arid to support scrub oak, and the presence of shifting wind formed dunes (Watts, 1975; Widmer, 1983).

By about 6500 BP mesic conditions began to spread, although localized xeric conditions continued (and still exist in some areas) through South Florida. Middle Archaic sites

dating from this time are rare, although the Bay West Nursery site (8CR200) in Collier County and the Ryder Pond site (8LL1850) in Lee County near Bonita Springs provide evidence of occupation, as do several sites in southeast Florida. The Bay West site is a Middle Archaic cypress pond cemetery, associated with a lithic scatter. The Ryder Pond site is a similar mortuary pond site surrounded by pine flatwoods (Carr and Heinz, 1996). Beriault has also recorded several aceramic shell scatters in coastal sand hills (paleo dunes), some of which may date to the Middle Archaic. Griffin (1988) summarizes evidence indicating that despite the rise of available surface water, brackish estuaries and other major modern landscape features had not formed, and population (or repopulation) was still sparse.

During the Archaic period sea levels began to rise at a fairly rapid rate, estimated at 8.3 cm. per 100 years 6000-3000 BP, and 3.5 cm per 100 years afterwards (Scholl *et al.*, 1969), although whether sea levels were steadily rising or oscillating is still unclear (see Griffin 1988; Allerton and Carr, 1990 for recent reviews of the literature). Data is somewhat difficult to sort out as sea level rise was accompanied by both shore regression and transgression in places. As conditions became wetter (and warmer) in the interior, cypress swamps and hardwood sub-tropical forests established themselves by about 5000 BP (Carbone 1983, Delcourt and Delcourt 1981).

By late Middle or early Late Archaic times (4000 years BP) there were significant shell mounds and middens on Horrs Island, Marco Island, and elsewhere in the coastal regions, suggesting that the estuary system had been established and was being utilized to provide the subsistence basis for denser populations and semi-sedentary settlements (Morrell, 1969; Cockrell, 1970). At Useppa Island in Lee County, excavations have provided radiocarbon dates from pre-ceramic shell middens ranging between roughly 4900 BP and 5600 BP, suggesting that the Middle Archaic as well as Late Archaic periods had a growing dependence on shellfish resources (Milanich *et al.*, 1984). There are aceramic coastal sand hill and interior wetland sites as well, but these have not been demonstrated to be Archaic despite some investigators equating aceramic with preceramic. Radiocarbon dates for these sites would clarify this point.

Allerton and Carr (1988) noted that a number of stratified sites in the wet mangrove and marsh areas of the Everglades, as well as on Horrs Island, contain Archaic preceramic horizons, although it is unclear if aceramic was equated with preceramic. Additional supporting evidence of interior use by Archaic peoples will provide a new dimension to the archaeological understanding of Archaic resource utilization. Allerton and Carr point out that if the wet tree islands were initially used by Archaic people, then at least some of the hardwood hammocks in swamp environments were raised in elevation (with subsequent changes in vegetation) due to human activities. Post-Archaic people extensively utilized these hammocks and continued to advance their development as distinct geomorphic features. This is obviously an area where additional archaeological investigations have a potential to contribute to understanding the interaction of geomorphic and cultural evolution in Southwest Florida.

Toward the end of the Archaic there was the introduction of fiber-tempered pottery into the archaeological record, often used as a marker of the Orange Phase, commencing at about 4000 BP, either coincident with or soon after the development of the extensive shell middens. The Late Archaic Orange Phase subsistence strategy is characterized by intensive use of shellfish and marine resources, as well as being marked by an accelerated trend toward regional specializations.

A number of the large shell middens on Marco Island (Cockrell, 1970), Horrs Island (Russo n.d.), Cape Haze (Bullen and Bullen, 1956), and elsewhere date from this period or earlier, as they contain fiber-tempered ceramics, although there are known aceramic (preceramic?) levels below the Orange Phase deposits that may date to the Middle Archaic. These shell middens are usually capped by deposits from later occupations as well.

Formative Stage or Glades Periods (2500 BP - 500 BP)

The Formative or Glades adaptation, based on hunting, fishing, and the harvesting of shellfish and plants, was similar to the Archaic, but was characterized by increasing specializations in gathering strategies and tool-making. Earlier writers have typed this hunter-gatherer society as primitive or "low-level" (Kroeber, 1939). However, there is certainly evidence from the specialization of tools, from the beautifully-executed wood carvings from Key Marco in Collier County and those from Fort Center near Lake Okeechobee (Cushing, 1897; Sears, 1982), and from the historic accounts of the Calusa hegemony, that the south Florida area had an advanced culture that Goggin (1964) has called a "stratified non-agrarian society."

The preceding Late Archaic late Orange phase (also known as the transitional phase) was marked by changes in pottery, and terminated with the relatively rapid replacement of fiber-tempered pottery with sand-tempered, limestone-tempered, and chalky "temperless" pottery. It was also characterized by changes in ceramic style and often by reduction in the size of stone projectile points.

The Formative Stage (beginning about 2500 BP) is divided in south Florida into the Glades Periods sequence. Subsistence adaptation is marked by a narrowing spectrum of resource use, as well as continued trends toward regional diversity and ecological specializations, marked in part by the proliferation of inland resource extraction encampments.

Formative Period cultural evolution eventually led to increased political sophistication, perhaps initially of modest dimensions, but culminating in broad regional political alliances and regulation of materials and goods (*i.e.* resources) between the coast and inland areas (Milanich and Fairbanks, 1980). By protohistoric and contact times the Calusa were the dominant tribal group, gaining broad political influence and at least partial control over much of south Florida as far north as central Brevard County. Historically, the main Calusa village has been regarded as "Calos" on Mound Key in

Estero Bay in Lee County, although 50 to 70 large villages were under direct Calusa control by contact times (Griffin, 1988).

During the Formative Periods, village sites grew to the proportions of large multi-use complexes, particularly along the coast and barrier islands of southwest Florida. Some of the projected intra-site functions of the elements of these complex shellworks were as temples, canals, causeways, temple and platform mounds, courtyards and watercourts. Current research involving the excavating of large contiguous areas of these shell mound complexes is beginning to establish demonstrable uses for the features of these large sites, upon which heretofore were merely speculated (Widmer, 1996).

Tidal estuary rivers and inland hammocks along deep water sloughs, marshes, and permanent ponds were seasonally visited for extraction of natural resources, and are now marked by small to relatively large black dirt middens, some of which may have been semi-permanent hamlets. The pine and cypress flatwoods appear to have supported few sites, although areas around Lake Trafford and other rich interior areas developed substantial sites, including sand mounds, and may be more similar to the Okeechobee cultural area than to the coastal cultures.

In 1992, Dickel and Carr excavated a Deptford Period burial mound (the Oak Knoll Site) in the Bonita Bay Tract north of the Imperial River. Exotic trade items and seventy or more human burials were among the material findings. The resulting conclusions and subsequent surveying and testing of the Bonita Bay Shell works (8LL717) suggest social stratification and complexity may extend further back into the past than the Formative period (Dickel and Carr, 1992).

Coastal sites (shell middens) reflect a predominate dependence on fish and shellfish, wild plant foods and products, and larger inland game. The inland sites show a greater reliance on interior resources, including large, medium and small mammals, turtle, small freshwater fish, alligator, snake, frogs, and, sometimes, freshwater shellfish. Interior and coastal resource exchange can be documented by the consistent finds of moderate amounts of marine shell in many interior middens, as well as interior resources in coastal middens.

The Formative Stage (with a nod to Goggin) has been often termed the Glades cultural tradition. Much of this "tradition" is focused on decorated ceramics, the minority in the archaeological record, although the majority of recovered (rim) sherds are plainware. However, despite this, pottery (and its decorations) is usually utilized as the major temporal marker(s) for fitting sites into a temporal framework. Changes in pottery do not represent mere changes in artistic motifs, but reflect inter- and intra-regional trade contacts and outside cultural influences (possibly through exogamy, shifting of populations, and even the through evolution of a culture through time). Whatever the influences, the Glades tradition is continuous from post-Archaic times to contact times.

Despite the fact that exogamy is likely to have been practiced, traders or other specialists probably moved between major cultural areas in small numbers, and genetic flow

probably accompanied cultural exchange, although perhaps not on the same scale. This may have increased in later times due to use of traditional obligations of kinship and intermarriage to stabilize alliances that were not codified into a formal legal system.

The Caloosahatchee subarea's chronology has been defined based on the ceramic sequences found there. Below is a table partially adapted from Susan Lynn White in her analysis of Galt Island ceramics (White 1995) which she in turn adapted from Randolph Widmer's book on the evolution of the Calusa (Widmer 1988):

Table 1: Caloosahatchee Area Ceramic Sequence

Period/Time Range	Characteristic Traits
Caloosahatchee I (500 B.C.- A.D.700	□ Sand-tempered Plain predominant □ Belle Glade Plain absent
Caloosahatchee II (A.D. 700-1200)	□ First appearance of Belle Glade Plain □ Increase in Belle Glade Plain use
Caloosahatchee III (A.D. 1200-1400)	□ Englewood ceramics □ St. Johns Check Stamped
Caloosahatchee IV (A.D. 1400-1513)	□ Safety Harbor
Caloosahatchee V (A.D. 1513-1750)	□ European goods □ Mission period aboriginal pottery □ Pinellas Plain-Glades Tooled □ Decrease in Sand-tempered Plain use □ Laminated/contorted paste □ Small amounts of St. Johns Plain

By European contact times (the first half of the 16th century), the southwest coast of Florida was maintaining a vigorous, possibly expanding political chiefdom with a broad network of alliances, as well as a rich and ancient cultural tradition without an agricultural base. However, direct conflict with Europeans and, more importantly, exposure to European diseases led to the rapid decline of the Calusa. By the mid 1700s their numbers had greatly diminished. The remnants of this once-powerful tribe may have left south Florida in the 1760s with the Spanish for relocation in Cuba. Others may have become indistinguishable from Spanish Cuban fishermen who worked the great fishing "ranchos" in the Pine Island Sound region catching and salting fish for export to Cuba. Other groups of Native Americans may have fused with the Creek-derived Seminoles.

In the late 1700s, members of the Creek tribe were forced into Florida from Georgia and Alabama. They were later called Seminoles, from the Spanish term "cimmarones." Pressures from colonial (and later) white encroachment on their traditional territories

forced them into the Big Cypress and Everglades area by the 1830s. By this time, most of the cultural identity of pre-contact times had been lost, although some of the Calusa subsistence strategies may have been partly adopted by Seminoles. A number of Seminole period sites have been documented on earlier Glades middens. This coincidence may in part reflect the paucity of high land in the interior (Ehrenhard *et al.*, 1978, 1979, 1980; Ehrenhard and Taylor, 1980; Taylor and Komara, 1983; Taylor, 1984, 1985). Older midden sites (particularly those called "black dirt" middens) can be rich agriculturally as well as archaeologically, making these foci for historic Seminole gardens and fruit groves.

Seminole periods in south Florida are divided into I (1820-1860), II (1860-1900) and III (1900-1940) (Ehrenhard *et al.*, 1978). Post-1940 Seminole camps are designated "Late Seminole" in some reports. These designations reflect the different stages of Seminole migration into south Florida, Seminole displacement and active conflict with the expanding American culture, and the eventual refuge by Seminole remnants in Big Cypress and Everglades regions. Military records, and, in particular, several sketch maps by military personnel done in the 1830s and 1840s and the Ives military map of South Florida (1856) shows evidence of investigations at and near "Malco Inlet," "Casimba," "Good Land," and "Cape Romans."

Seminole Wars in the Southwest Florida Area

The advent of the Second and Third Seminole Wars (1834-38, 1855-58) disrupted the peaceful settlement of the Southwest Florida region. There were a number of forts, "temporary" and permanent, established along the Caloosahatchee River during this time. Fort Dulaney was established at Punta Rassa near the mouth of the Caloosahatchee in 1837 and was occupied intermittently through 1841, and again in 1855. After a hurricane destroyed Ft. Dulaney in 1841, Fort Harvie was established upriver. The name of this fort was changed in 1850 by its commander General Twiggs to honor his new son-in-law, Col. Abraham Myers. Fort Myers was thus created, and became the chief fort of the region.

From this central administrative point, a line of forts was established up the Caloosahatchee River. They were: Fort Denaud, Fort Adams, Fort Thompson, and Fort Center on Fisheating Creek leading into Lake Okeechobee. Other forts and "temporary depots" were established south into the Big Cypress Swamp such as Fort Simon Drum, Temporary Depot Number One, Fort Doane, Fort Simmons, Fort Keis, Fort Foster, Fort Shackleford, and others.

A number of military expeditions were sent south along the coast during the Second and Third Seminole Wars with the objectives of interdicting trade in guns and ammunition between the Seminoles and the Spanish-Cuban fishing community, and hunting and capturing Indians. General Thomas Lawson, who had just been appointed Surgeon General of the United States, commanded one of the early notable expeditions. Lawson's expedition left Fort Harvie (Fort Myers) in February 1838. Elements of Lawson's command explored the area in and around the Caxambas Point area, discovering two

abandoned Indian villages in the Blackwater River/Palm Bay area. Other expeditions bivouacked at Cape Romano and Caxambas Point. Colonel Rogers, of the ill-fated Parkhill expedition, wrote several dispatches from Cape Romano in the Caxambas area in 1858, describing the ambush of Captain Parkhill's party at the headwaters of Turner River. The Collier County Museum is the repository for a collection of military artifacts purportedly found by a local collector near Indian Hill in the early 1960s. This material may have originated with one of the various military expeditions stopping at Caxambas Point.

The military road linking Fort Myers with Fort Thompson on the bank of the Caloosahatchee River passed south of the Orange River and crossed the creek head two miles southwest of the subject parcel.

Fort Myers/Olga Area History

After the Civil War in 1868, the International Ocean Telegraph Company obtained a twenty-year charter to operate a telegraph line through the state and to run a submarine cable to Key West and Cuba. The company brought the line through Fort Myers, crossing the Caloosahatchee River at Olga, and thence to Punta Rassa. Several settlers moved to the area, including many that had fought in the Seminole and Civil Wars. In 1885, Fort Myers was incorporated as a city. In 1887, the area that is now Lee County became a county, supposedly resulting from a fire destroying the new schoolhouse in Fort Myers. Some of the local citizens, led by Capt. F.A. Hendry, traveled to Key West (the seat of Monroe County of which Lee was then a part) and petitioned for funds to rebuild the school. When they were rebuffed, they called a meeting in the yard of the burned school and sent a delegation to Tallahassee requesting status as a new county. Various sources credit either Capt. Hendry or Peter O. Knight with proposing that the county be named after the Civil War hero Robert E. Lee.

Early cattlemen such as Jacob Summerlin drove cattle across a ford in the Caloosahatchee River near the subject parcel both before and after the Civil War. This ford may have existed where a trail is shown crossing the Caloosahatchee River in the 1875 plat map. A large cattle pen north of the Caloosahatchee River and a fence line for directing cattle south toward the Orange River are shown on the 1875 plat map. A settler named Wilkison had a residence and fields east of the subject parcel. Another homestead, the Hickey homestead, is depicted approximately 2 miles southeast of the subject parcel.

In 1881 Hamilton Disston began dredging the Caloosahatchee River extending that waterway directly to Lake Okeechobee. The famous Falls of the River at Fort Thompson were destroyed, and in 1885, an Hungarian naturalist Angelo Heilprin traveled there to study the geology and collect fossils new to science, one of which (*Strombus leidyii*) he named for his superior Joseph Leidy, the Father of American Paleontology. This and subsequent dredging activity over the next 100 years would change the essential nature of the Caloosahatchee River from a narrow winding stream to a "highway" for river traffic and a conduit for the rapidly developing industries of citrus, for other crops such as

tomatoes and for other vegetables, logging, and cattle. Population and small communities were rapidly increasing in the Caloosahatchee region.

During the late 19th-century, several small outlying river side communities were created east of Fort Myers, such as Olga, Alva, Buckingham, Fort Denaud and Labelle. Olga was a farming community similar to Buckingham. The first mention of Olga was in 1885 by the newly founded Fort Myers Press. Olga had been established at a point on the south bank of the Caloosahatchee River one mile east of where the telegraph line from the north crossed the river. Olga at that time was a post office described as a "pretty site" owned by a L. McNeill. The present-day location of Olga is slightly east of the Fort Myers Shores subdivision. Just east of Olga was Hollingsworth Ferry where thousands of cattle crossed from the north side of the river en route for Punta Rassa and shipment to Key West and Cuba.

In the 1920s through the very early 1950s, the area, particularly east and south of Olga was extensively exploited for pine and cypress logging and lumbering. C.J. Jones Lumber Co. and other timber concerns had a vast network of temporary logging railroads running south and east into southern Lee and Collier Counties. These railroads converged on a saw mill several miles east of the subject parcel to the south of the Caloosahatchee River and on a main saw mill in a community called Slater that was on the north side of the Caloosahatchee River northeast of Ft. Myers. Many hundreds of people lived in large temporary camps near these two locations. Peak activity for these two facilities was in the mid 1930s to the period of World War II, when the demand for timber was very high for barracks and other military structures.

The Buckingham Air Field was established during World War II in the 1940s about four miles to the southwest. This was an extensive facility of several thousand people, both civilian and military. The base's prime function was as a way station for large bombers such as the B-17, which flew from there to Miami and onto the Azores and Europe. The air base was dismantled following the end of the war and little remains at the site.

Methodology

Prior to conducting fieldwork in the project parcel, relevant archives and literature were reviewed. This included, but was not limited to, studying previous archaeological reports for sites in Lee County, reviewing information from the Master Site File in Tallahassee concerning nearby sites, and examining USGS maps of the project area. Also, black and white and color aerial photographs from the project area, which could aid in revealing anthropogenic changes to the topography and floral communities, were interpreted.

Research Design

This Phase I cultural resource survey of the three Williams Island parcels incorporated the use of certain predictive archaeological site models. These models are based on topographic and vegetative attributes that are associated with prehistoric and historic sites in north-central Lee County and the Caloosahatchee River. These models postulate that high ground live oak/tropical hardwood hammocks in close proximity to wetlands, ponds, rivers and creeks are moderate to high probability areas for archaeological sites. The elevational information on the USGS Fort Myers map for the area also was used. One Moderate to High Probability Zone was identified throughout the parcel based on the interpretation of aerial photographs and as a result of ground truthing (Figure 3). This was the higher ground closest to the original riverbank located generally along the northern portions of the island.

Fieldwork

The subject parcel was assessed by pedestrian survey and subsurface testing. A total of 17 shovel tests (50 cm^2) was dug across the parcel, each to an average of 1 meter in depth (where possible). All excavated material was screened through a 1/4" diameter mesh and any material of archaeological significance collected was sent to AHC in Davie for cleaning, cataloging, and analysis.

Shovel testing was hindered due to the presence throughout an estimated 80 percent of the two southern parcels of one or more meters of fill placed there by dredging. These fill areas could not be effectively shovel tested and are indicated in Figure 8.

Collections

All collected material were placed in self-sealing plastic bags and transferred to the AHC lab in Davie to be cleaned and catalogued. All collected materials and field notes repose at the AHC facility in Davie.

Informants

Interviews with several ranch staff and managers Andy Tilton, a long time area resident living close to the project parcel failed to reveal any additional information on historic or archaeological sites on the parcel. Additionally Paul Williams, former owner of Williams Island was interviewed. Mr. Williams knew of no archaeological or historic sites, though mentioned finding over a twenty-year span disassociated/redeposited metal "pieces" he believed were associated with railroad activities.

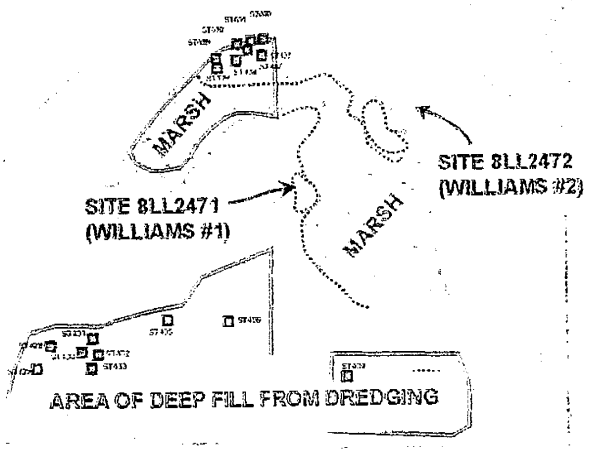


Figure 8. Map of Williams Island showing location of moderate to high probability zones , transects, shovel tests, and archaeological sites.

= NEGATIVE SHOVEL TEST

= MODERATE TO HIGH PROBABILITY ZONE

= AREA OF FILL

= PROJECT BOUNDARIES

N

USGS MAPS: FORT MYERS, REV. 1991
TOWNSHIP 43S, RANGE 26E, SECTION 19

0	330	660	1320 Feet approx.
0	200	400	000 Meters approx.

Results and Conclusions

This Phase I cultural resource assessment of the Williams Island parcels resulted in no prehistoric or historic sites being documented within the three subject parcels, however, two prehistoric sites were observed in the adjacent wetlands.

A check with the Florida Division of Historic Resources on 9-10-07 indicates that there are no previously recorded historical or archaeological sites for Township 46S, Range 23E, Section 19. No historic buildings occur on the subject parcel although there are two modern structures on the parcel. The structures were built in the early 1980's according to the former property owner, Paul Williams. A check with the Lee County Property Appraiser webpage indicates no historic sites designated for the island.

A total of 17 shovel tests was dug judgmentally where possible in the largely-filled areas of the island (Figure 8). High, moderate, and low probability areas were assessed. A moderate to high probability zone was identified as being the areas of higher ground closest to the original course of the Caloosahatchee River on the north side of the island.

No archaeological or historic material, features or sites were noted on the three Williams Island parcels, however, two scatters of prehistoric materials were observed by the investigators outside the project parcels on the north-west and western shore of the island ontop a sandy berm. Those two sites, 8LL2471 and 8LL2472, were not tested as part of this assessment. Site forms for these two sites were submitted to the Florida Master Site File in Tallahassee.

Although a systematic effort was made to locate additional sites across the subject parcel without success, there is a possibility that other archaeological sites, features and artifacts occur. Should subsequent development reveal this, efforts should be made to protect or document these resources. In the event that human remains are discovered then the provisions of Florida Statute 872.05, the Unmarked Human Graves Act, will apply.

References Cited

Allerton, D and RS Carr

1988 An Archaeological Survey of the Shell Big Cypress Seismic Project (DNR permit G81-86). Manuscript on file, Archaeological and Historical Conservancy, Florida.

1990 An Archaeological and Historical Assessment of the Goodland Marina Project Tract, Collier County. Conducted for Coastal Engineering Consultants.

Almy, MM and JG Deming

1982 Cultural Resources Survey of the Emerald Lakes Tract in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota FMSF #902.

1986a Archaeological Assessment Survey of Twelve Lakes, Collier County, Florida. Archaeological Consultants Inc., Sarasota.

1986b Archaeological Assessment of Bretonne Park, Collier County, Florida Archaeological Consultants Inc., Sarasota.

1986c Archaeological Assessment of City Gate Commercial Park, Collier County, Florida. Archaeological Consultants Inc., Sarasota.

1987 Archaeological Assessment Survey of Designated Potions of the Woodlands in Collier County, Florida. Archaeological Consultants Inc., Sarasota.

Athens, WP

1983 *The Spatial Distribution of Glades Period Sites within the Big Cypress National Preserve, Florida.* Masters thesis on file, Florida State University, Tallahassee, Florida.

Beriault, JG

1973 A Preliminary Report on the Area Known as the Collier-Coral Ridge Tract, Southwest Florida. Unpublished Ms, on file at FMSF, Tallahassee and AHC, Miami.

1982 A Preliminary Report on Stratigraphic Excavations at Addison Key, Collier County, Florida. Unfinished MS.

1986 Report and Recommendations Concerning the Barron Collier Company Tract on Chokoloskee Island, Collier County, Florida, MS on file, AHC.

1987 Suggestions for a Collier County site Model, a report submitted to the Archaeological and Historical Conservancy, December 15th, 1987. MS on file, AHC.

1998 An Archaeological Survey of the Standerfer Parcel, Lee County, Florida. *AHC Technical Report #226.*

2001 An Archaeological Survey of the Riverwood Parcel, Bonita Springs, Lee County, Florida. *AHC Technical Report #292.*

2003 A Phase 1 Archaeological Survey of the Arborwood Parcel, Lee County, Florida, *AHC Technical Report #438*

2004 A Phase I Archaeological Survey of the Bokeelia Parcel, Lee County, Florida, *AHC Technical Report #598*

2005 A Phase II Archaeological Survey of the Bokeelia Parcel, Lee County, Florida, *AHC Technical Report* #650

2005a A Phase I Archaeological Assessment of the Turtle Cay Parcel, Lee County, Florida. *AHC Technical Report #658*

Beriault, JG, RS Carr, J Stipp, R Johnson, and J Meeder
1981 The Archaeological Salvage of the Bay West Site, Collier County, Florida. In *Florida Anthropologist 34*(20):39-58.

Beriault, JG and RS Carr
1998 An Archaeological Survey of the Winding Cypress Parcel, Collier County, Florida. *AHC Technical Report #221.*

Beriault, JG and C Strader
1984 A Preliminary Report on Stratigraphic Excavation on Chokoloskee Island, Florida. Southwest Florida Archaeological Society, MS on file, AHC.

Beriault, John G. and Victor Longo
2002 A Phase Two Archaeological Assessment of the Riverwood Parcel, Bonita Springs, Lee County, Florida *AHC Technical Report #370.*

Beriault, John G., and John Crump
2005 A Phase One Archaeological Assessment of the Bonita 120 RPD Parcel, Lee County, Florida *AHC Technical Report #641.*

Bullen, RP and AK Bullen
1956 Excavation on Cape Haze Peninsula, Florida. *Contributions of the Florida State Museum. Social Sciences I,* Gainesville, Florida.

Carbone, VA
1983 Late Quaternary Environments in Florida and the Southeast. *The Florida Anthropologist 36*:3-17.

Carr, RS
1986 Preliminary Report on Excavations at the Cutler Fossil Site (8DA2001) in Southern Florida. *The Florida Anthropologist 39*:231-232.

1989 An Archaeological and Historical Survey of Part of the Williamson Property, Collier County, Florida. Archaeological and Historical Conservancy, Miami. FMSF 2458.

2002 "The Archaeology of Everglades Tree Islands" in *Tree Islands of the Everglades,* edited by Fred H. Sklar and A. Van der Valk, Kluver Academic Publishers, Boston

Carr, RS and D Allerton
1988a An Archaeological Survey of North Keewaydin Island, Collier County, Florida. Archaeological and Historical Conservancy, Miami, Florida.

1988b An Archaeological and Historical Assessment of the Goodland Marina Project Tract, Collier County, Florida. MS on file, Archaeological and Historical Conservancy, Miami, Florida.

Carr, RS and JG Beriault
1984 Prehistoric Man In South Florida. In PJ Gleason (ed), *Environments of South Florida: Present and Past II.* Coral Gables: Miami Geological Society, FL. pp. 1-14.

Carr, Robert s. and John G. Beriault
2001 An Archaeological and Historical Survey of the Verandah Parcel, lee County, Florida. *AHC Technical Report #247.*

Carr, RS and K Heinz
1996 Archaeological Excavations at the Ryder Pond Site, 8LL1850, Lee County, FL. April, 1986.

Carr, RS and W Steele
1993 An Archaeological Survey and Assessment of the Lely Resort Properties, Collier County, Florida. *AHC Technical Report #70.*

Carr, RS, W Steele and J Davis
1994a A Phase I Archaeological and Historical Assessment of the Piper Tract, Collier County, Florida. April, 1994.

1994b A Phase II Archaeological and Historical Assessment of the Piper Tract, Collier County, Florida. June, 1994.

Clausen, C and J Gifford
1975 Florida spring confirmed as 10,000 year old early man site. *The Florida Anthropologist 8* (3), Part 2.

Cockrell, WA
1970 Glades I and Pre-Glades Settlement and Subsistence Patterns on Marco Island (Collier County, Florida). M.A. thesis of file, Florida State University, Tallahassee, Florida.

Cockrell, WA and L Murphy
1978 Pleistocene Man in Florida. *Archaeology of Eastern North America Vol. 6.* Newark, Delaware: Eastern States Archaeological Federation.

Cushing, FH
1897 Exploration of Ancient Key-Dwellers' Remains on the Gulf Coast of Florida. *Proceedings of the American Philosophical Society,* Philadelphia 35 (153): 1-329-448.

Daniel, RI and M Wisenbaker
1987 *Harney Flats.* Baywood Publishing Company, Farmingdale, New York.

Delcourt, PA and HR Delcourt
1981 Vegetation Maps for Eastern North America: 40,000 Years B.P. to Present. In R.C. Romans (editor) *Geobotany II.* New York: Olenum Publishing Press.

Deming, JG and M Almy
1987 A Cultural Resource Assessment Survey of the Audubon Country Club Tract in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota, Florida. FMSF 1487.

1988 Mitigative Excavation at Selected Portions of Site Complex 8CR860 in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota, Florida. FMSF 1813.

Dickel, D and RS Carr
1992 Archaeological Investigations at Bonita Bay Properties, Phase II. Lee County, FL. *AHC Technical Report #49.*

Douglass, AE
1885 Ancient Canals on the South-west Coast of Florida. *American Antiquarian 7*:227-285.

1890 Mounds in Florida. *American Antiquarian 12*:105-107.

Durnford, CD
1895 The discovery of aboriginal netting, rope, and wood implements in a muck deposit in west Florida. *American Naturalist 29*: 1032-1039.

Ehrenhard, JE, RS Carr, and RC Taylor
1978 *The Archaeological Survey of Big Cypress National Preserve: Phase I.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

1979 The Big Cypress National Preserve: Archaeological Survey Season 2. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Ehrenhard, JE and RC Taylor
1980 *The Big Cypress National Preserve: Archaeological Survey Season 3.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Ehrenhard, JE, RC Taylor, and G Komara
1980 *Big Cypress National Preserve Cultural Resource Inventory Season 4.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Fay, P and RS Carr
1990 An Archaeological Review Of Select Sites of Impact in the National Panther Refuge, Collier County, Florida. *AHC Technical Report #22.*

Fradkin, A
1976 The Wightman Site: A Study of Prehistoric Culture and Environment on Sanibel Island, Lee County, Florida. M.A. Thesis, Department of Anthropology, University of Florida, Gainesville.

Fuhrmeister, C, RJ Austin, and H Hansen
1990 Cultural Resource Assessment Survey of the Collier Tract 22 Development Site, Collier County, Florida. Piper Archaeological Research Inc. St. Petersburg, Florida. FMSF 2423.

Goggin, JM
1939 A Ceramic Sequence in South Florida. *New Mexico Anthropologist* 3:36-40.

1940 The distribution of pottery wares in the Glades Archaeological Area of South Florida. *New Mexico Anthropologist 4*:22-33.

1947 A Preliminary Definition of Archaeological areas and Periods in Florida. *American Antiquity* 13:114-127.

1949a Cultural Occupation at Goodland Point, Florida. *The Florida Anthropologist* 2(3-4): 65-91.

1949b The Archaeology of the Glades Area. Unpublished MS on file, SE Archaeological Research Center, NPS, Tallahassee, Fl.

1949c Cultural Traditions in Florida Prehistory. In J.W. Griffin (editor) *The Florida Indian and his Neighbors.* Winter Park, Florida: Rollins College.

Goggin, JM and WC Sturtevant
1964 The Calusa: A Stratified, Nonagricultural Society (with notes on sibling marriage). In W Goodenough (editor) *Explorations in Cultural Anthropology: Essays in Honor of George Peter Murdock.* New York: McGraw Hill. Pp. 179-291.

Griffin, JW
1974 Archaeology and Environment in South Florida. In P.J. Gleason (ed.), *Environments of South Florida: Present and Past II.* Coral Gables: Miami Geological Society, pp 342-346.

1988 The Archaeology of Everglades National Park: A Synthesis. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Hrdlička, A
1922 The *Anthropology of Florida.* Deland, Florida: Publications of the Florida State Historical Society 1.

Jordan, Elaine Blohm
1982 Pine Island, the Forgotten Island. Author Printing: Cape Coral, FL.

Kenworthy, CJ
1883 Ancient Canals in Florida. *Smithsonian Institution Annual Report for 1881:* 105-109.

Kroeber, AL
1939 *Cultural and Natural Areas in Native North America.* Berkeley: University of California Press.

Laxson, DD
1966 The Turner River Jungle Gardens Site, Collier County, Florida. *The Florida Anthropologist* 19: 125-140.

Lee, AR, JG Beriault, W Buschelman, J Belknap
1993 A Small Site - Mulberry Midden, 8CR697 - Contributes to Knowledge of the Transitional Period. *The Florida Anthropologist* 46:43-52.

Lee, AR, JG Beriault, J Belknap, WM Buschelman, AL Snapp and JW Thompson
1997 Salvage Excavation of an Archaic Period Special-Purpose Site in Collier County. *The Florida Anthropologist* 50:11-24.

1988 Heineken Hammock, 8CR231: A Late Archaic Corridor Site in Collier County. Southwest Florida Archaeological Society. Naples, Florida.

McMichaels, A
1982 A Cultural Resource Assessment of Horrs Island, Collier County, Florida. MA thesis, Department of Anthropology University of Florida, Gainesville.

Goggin, JM and WC Sturtevant
1964 The Calusa: A Stratified, Nonagricultural Society (with notes on sibling marriage). In W Goodenough (editor) *Explorations in Cultural Anthropology: Essays in Honor of George Peter Murdock.* New York: McGraw Hill. Pp. 179-291.

Griffin, JW
1974 Archaeology and Environment in South Florida. In P.J. Gleason (ed.), *Environments of South Florida: Present and Past II.* Coral Gables: Miami Geological Society, pp 342-346.

1988 The Archaeology of Everglades National Park: A Synthesis. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Hrdlička, A
1922 The *Anthropology of Florida.* Deland, Florida: Publications of the Florida State Historical Society 1.

Jordan, Elaine Blohm
1982 Pine Island, the Forgotten Island. Author Printing: Cape Coral, FL.

Kenworthy, CJ
1883 Ancient Canals in Florida. *Smithsonian Institution Annual Report for 1881:* 105-109.

Kroeber, AL
1939 *Cultural and Natural Areas in Native North America.* Berkeley: University of California Press.

Laxson, DD
1966 The Turner River Jungle Gardens Site, Collier County, Florida. *The Florida Anthropologist* 19: 125-140.

Lee, AR, JG Beriault, W Buschelman, J Belknap
1993 A Small Site - Mulberry Midden, 8CR697 - Contributes to Knowledge of the Transitional Period. *The Florida Anthropologist* 46:43-52.

Lee, AR, JG Beriault, J Belknap, WM Buschelman, AL Snapp and JW Thompson
1997 Salvage Excavation of an Archaic Period Special-Purpose Site in Collier County. *The Florida Anthropologist* 50:11-24.

1988 Heineken Hammock, 8CR231: A Late Archaic Corridor Site in Collier County. Southwest Florida Archaeological Society. Naples, Florida.

McMichaels, A
1982 A Cultural Resource Assessment of Horrs Island, Collier County, Florida. MA thesis, Department of Anthropology University of Florida, Gainesville.

Marquardt, WH
1984 *The Josslyn Island Mound and its Role in the Investigation of Southwest Florida's Past.* Gainesville: Florida State Museum, Department of Anthropology, Miscellaneous Project Report Series 22.

1987 The Calusa Social Formation in Protohistoric South Florida. In T.C. Patterson and C.W. Gailey (editors) *Power Relations and State Formation.* Washington, D.C.: Archaeology Section, American Anthropological Association, pp. 98-116.

1988 Politics and Production Among the Calusa of South Florida. In T. Ingold, D. Riches, and J. Woodburn (editors) *Hunters and Gatherers 1: History, Evolution, and Social Change.* London: Berg Publishers, pp. 161-188.

1992 Recent Archaeological and Paleoenvironmental Investigations in Southwest Florida. In W.H. Marquardt (editor), *Culture and Environment in the Domain of the Calusa.* Gainesville: Institute of Archaeology and Paleoenvironmental Studies. Monograph 1, University of Florida, pp. 9-58.

Martinez, C
1977 Archaeological and Historical Survey and Assessment of the Proposed Collier County 201 Waste Water Management Facilities, Collier County, Florida. Russell & Axon Inc. and Smally, Welford & Nalven Inc. FMSF #257.

Milanich, JT
1994 *Archaeology of Precolumbian Florida.* Gainesville: University Press of Florida.

Milanich JT, J Chapman, AS Cordell, S Hale, and R Merrinan
1984 Prehistoric Development of Calusa Society in Southwest Florida: Excavation on Useppa Island. In D.D. Davis (editor) *Perspectives on Gulf Coast Prehistory.* Gainesville: University Presses of Florida, pp. 258-314.

Milanich, JT. and CH Fairbanks
1980 *Florida Archaeology.* New York: Academic Press.

Miller, JJ and ML Fryman
1978 An Archaeological and Historical Survey of the Collier Bay Tract, Marco Island. Cultural Resource Management Inc., Tallahassee, Florida. FMSF #3124.

Moore, CB
1900 Certain Antiquities of the Florida West Coast. *Journal of the Academy of Natural Science*, Philadelphia 11:369-394.

1905 Miscellaneous Investigations in Florida. *Journal of the Academy of Natural Science,* Philadelphia 13:299-325.

1907 Notes on the Ten Thousand Islands. *Journal of the Academy of Natural Science,* Philadelphia 13:458-470.

Morrell, RL
1967 Florida site form for site 8CR107.

1969 Fiber-tempered Pottery from Southwestern Florida. Abstract of presented paper, American Anthropological Association Annual Meeting, New Orleans, on file at AHC.

Russo, M
1990 Report I on Archaeological Investigations by the Florida Museum of Natural History at Horrs Island, Collier County, Florida. FMSF 2353.

Scholl, DW, FC Craighead, and M Stuiver
1969 Florida Submergence Curve Revisited: Its Relation to Coastal Sedimentation Rates. *Science 163*: 562-564.

Sears, WH
1956 The Turner River Site, Collier County, Florida. *The Florida Anthropologist 9*(2):47-60.

1966 Everglades National Park Archaeological Base Mapping Part I. Unpublished, FMSF MS# 1009.

1967 Archaeological Survey of the Cape Coral Area at the Mouth of the Caloosahatchee River. *The Florida Anthropologist* 20: 93-102.

1982 *Fort Center: An Archaeological Site in the Lake Okeechobee Basin.* Gainesville: University of Florida Press.

Simons, MH
1884 Shell Heaps in Charlotte Harbor, Florida. *Smithsonian Institution Annual Report for 1882:* 794-796.

Stirling, MW
1931 Mounds of the Vanished Calusa Indians of Florida. *Smithsonian Institution Explorations and Field Work for 1930:* 167-172.

1933 Report of the Chief. *Bureau of American Ethnology Annual Report* 48:3-21.

1936 Florida Cultural Affiliations in Relation to Adjacent Areas. In *Essays in Anthropology in Honor of Alfred Louis Kroeber.* Berkeley: University of California Press, pp 351-357.

Swift, A and RS Carr
1989 An Archaeological Survey of Caxambas Estates, Collier County, Florida. Archaeological and Historical Conservancy, Miami, FL. *AHC Technical Report #13.*

Taylor, RC
1984 Everglades National Park Archaeological Inventory and Assessment Season 2: Interim Report. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

1985 Everglades National Park Archaeological Inventory and Assessment Season 3: Interim Report. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Taylor, RC and G Komara
1983 *Big Cypress Preserve Archaeological Survey: Season 5.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Van Beck, JC and LM Van Beck
1965 The Marco Midden, Marco Island, Florida. *The Florida Anthropologist* 16:1-20.

Widmer, RJ
1974 A Survey and Assessment of Archaeological Resources on Marco Island, Collier County, Florida. Ms on file, FMSF #265.

1983 The Evolution of the Calusa, a Non-agricultural Chiefdom on the Southwest Florida Coast. Ph.D. thesis, Pennsylvania State University, distributed by University Microfilms International, Ann Arbor, Michigan.

1996 Recent Excavations at the Key Marco Site, 8CR48, Collier County, Florida. *The Florida Anthropologist* 49:10-26.

Williams, JL
1837 *The Territory of Florida.* Gainesville: University Press of Florida.

Ent D (FMSF only)__/__/__

Survey Log Sheet

Florida Master Site File
Version 2.0 9/97

Survey # (FMSF only)_____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (Name and project phase) Williams (Havens) Island Parcels Phase One Cultural Resource Assessment

Report Title (exactly as on title page) A Phase One Cultural Resource Assessment of the Williams Island Parcels, Lee County, Florida

Report Author(s) (as on title page– individual or corporate; last names first) Carr, Robert S., Beriault, John G., Mankowski, Joseph F.

Publication Date (year):_2007_ **Total Number of Pages in Report** (Count text, figures, tables, not site forms) _37_____

Publication Information (If relevant, series and no. in series, publisher, and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*: see *Guide to the Survey Log Sheet*.) Archaeological and Historical Survey Technical Report #824

Supervisor(s) of Fieldwork (whether or not the same as author[s]; last name first) Carr, Robert S.

Affiliation of Fieldworkers (organization, city) Archaeological and Historical Conservancy(AHC), Davie, FL

Key Words/Phrases (Don't use the county, or common words like *archaeology*, *structure*, *survey*, *architecture*. Put the most important first. Limit each word or phrase to 25 characters.) Williams Island, Havens Island, Trout Creek, Owl Creek, Caloosahatchee

Survey Sponsors (corporation, government unit, or person who is directly paying for fieldwork)

Name Bonita Bay Properties, Inc.

Address/Phone 9990 Coconut Road, Suite 200, Bonita Springs, Fl 34135

Recorder of *Log Sheet* __John G. Beriault Date ***Log Sheet*** Completed __9_/_24__/_07__

Is this survey or project a continuation of a previous project? X No θ Yes: Previous survey #(s) [FMSF only] _____

Mapping

Counties (List each one in which field survey was done - do not abbreviate; use supplement sheet if necessary)
Lee County

USGS 1:24,000 Map(s) : Map Name/Date of Latest Revision (use supplement sheet if necessary): Fort Myers, rev. 1991

Description of Survey Area

Dates for Fieldwork: Start _9_/15_/07___ End _10/2__/_07__ **Total Area Surveyed** (fill in one) _____ hectares _20_____ acres

Number of Distinct Tracts or Areas Surveyed ___three_____

If Corridor (fill in one for each): **Width** _____ meters _____ feet **Length** _____ kilometers _____ miles

HR6E06610-97 Florida Master Site File, Division of Historical Resources, Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250
Phone 850-487-2299,*Suncom* 277-2299, *FAX* 850-921-0372, *Email* fmsfile@mail.dos.state.fl.us, *Web* http://www.dos.state.fl.us/dhr/msf/
S:\2007 PROJECT FOLDERS\North River Revised 2007.77\WILLIAMS ISLAND\Report\Text\WILLIAMS ISLAND SURVEY LOG 11-21-07.doc 11/23/07 3:05 PM

Research and Field Methods

Types of Survey (check all that apply): x archaeological θ architectural X historical/archival θ underwater θ other: _____

Preliminary Methods (4Check as many as apply to the project as a whole. If needed write others at bottom).

θ Florida Archives (Gray Building)	θ library research- *local public*	θ local property or tax records	θ windshield
θ Florida Photo Archives (Gray Building)	θ library-special collection - *nonlocal*	θ newspaper files	X aerial photography
x FMSF site property search	θ Public Lands Survey (maps at DEP)	θ literature search	
θ FMSF survey search	x local informant(s)	θ Sanborn Insurance maps	

x other (describe)grayline aerial photographs and USGS Map _____

Archaeological Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), **S**(-ome: 20-50%); **M**(-ost: 50-90%); or **A**(-ll, Nearly all: 90-100%). If needed write others at bottom.

θ Check here if **NO** archaeological methods were used.

___ surface collection, controlled	___ other screen shovel test (size: ____)	___ block excavation (at least 2x2 M)
__A_ surface collection, uncontrolled	___ water screen (finest size: ____)	___ soil resistivity
__A_ shovel test-1/4"screen	___ posthole tests	___ magnetometer
___ shovel test-1/8" screen	___ auger (size:____)	___ side scan sonar
___ shovel test 1/16"screen	___ coring	___ unknown
___ shovel test-unscreened	___ test excavation (at least 1x2 M)	

___ other (describe): _____

Historical/Architectural Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), **S**(-ome: 20-50%); **M**(-ost: 50-90%); or **A**(-ll, Nearly all: 90-100%). If needed write others at bottom.

___ Check here if **NO** historical/architectural methods were used.

___ building permits	___ demolition permits	___ neighbor interview	___ subdivision maps
___ commercial permits	__X exposed ground inspected	_X_ occupant interview	__X tax records
___ interior documentation	___ local property records	___ occupation permits	___ unknown

___ other (describe): _____

Scope/Intensity/Procedures Review of USGS maps and aerial photographs followed by boat, and pedestrian survey of entire parcel, the selection of one MPZ, and the excavation of 17 shovel tests judgmentally and systematically.

Survey Results (cultural resources recorded)

Site Significance Evaluated? θYes θNo If *Yes*, circle NR-eligible/significant site numbers below.

Site Counts: Previously Recorded Sites ___None _____ **Newly Recorded Sites None** _____

Previously Recorded Site #'s (List site #'s without "8." Attach supplementary pages if necessary) _____

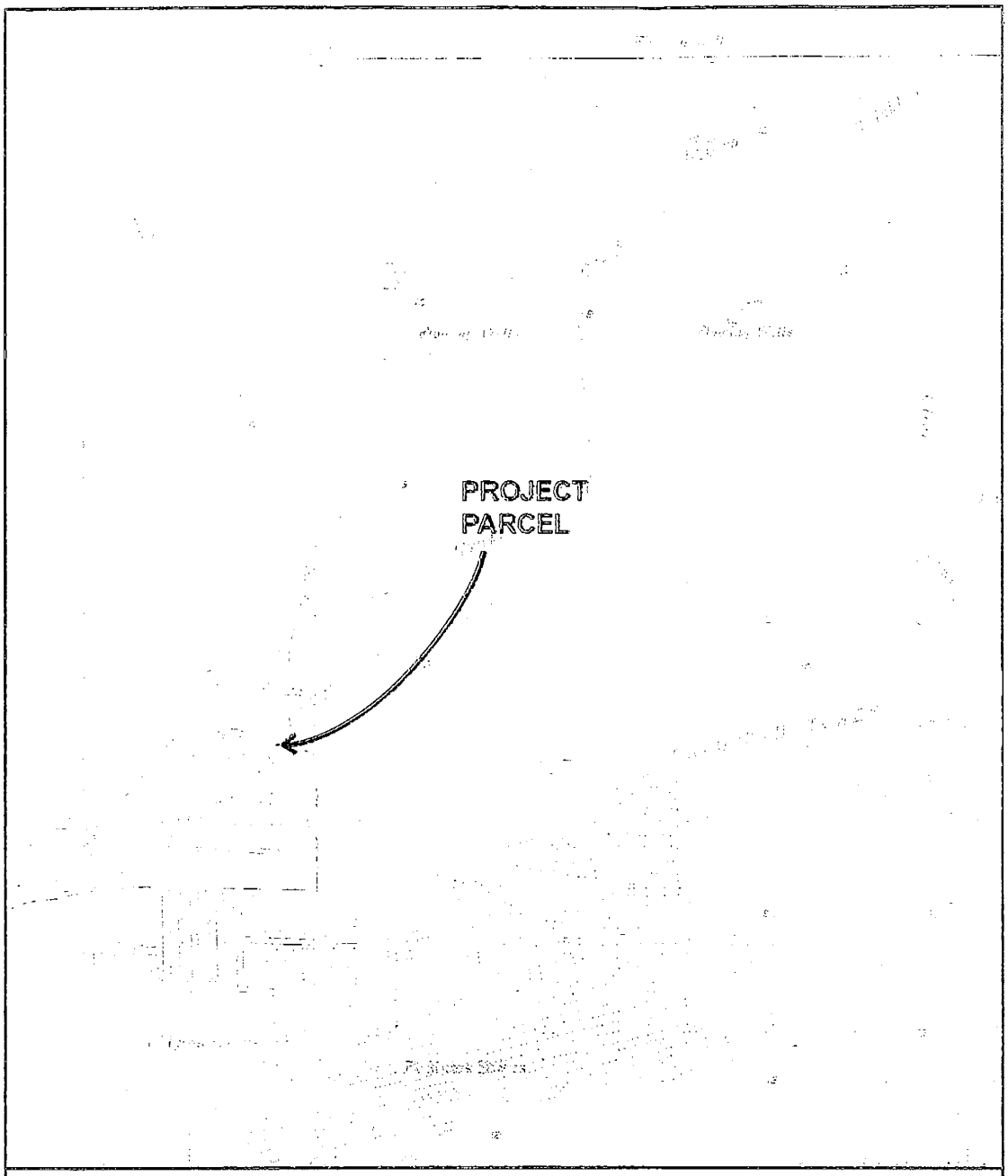
Newly Recorded Site #'s (Are you sure all are originals and not updates? Identify methods used to check for updates, ie, researched the FMSF records. List site #'s without "8." Attach supplementary pages if necessary.)

Site Form Used: X SmartForm θ FMSF Paper Form θ Approved Custom Form: Attach copies of written approval from FMSF Supervisor.

DO NOT USE ♣♣♣♣♣♣SITE FILE USE ONLY♣♣♣♣♣♣DO NOT USE

BAR Related		BHP Related
θ 872	θ 1A32	θ State Historic Preservation Grant
θ CARL	θ UW	θ Compliance Review: CRAT # _____

ATTACH PLOT OF SURVEY AREA ON PHOTOCOPIES OF USGS 1:24,000 MAP(S)



Map of the Williams Island Parcel area.

N

USGS MAP: FORT MYERS, REV. 1991

TOWNSHIP 43S, RANGE 26E, SECTION 19

0	1/4	1/2	1 Mile approx.
0	.4	.8	1.6 Kilometer approx.

A PHASE I CULTURAL RESOURCE ASSESSMENT SURVEY OF THE NORTH RIVER ASSEMBLAGE PARCELS, LEE COUNTY, FLORIDA

By:

Robert S. Carr, M.S.
John G. Beriault, B.A.
Joseph F. Mankowski, M.A.

ARCHAEOLOGICAL AND HISTORICAL CONSERVANCY, INC.
Davie, Florida 33314

For:

BONITA BAY PROPERTIES, INC.

OCTOBER 2007
AHC PROJECT NO. 2007.77
AHC TECHNICAL REPORT NO. 814

A Phase I Cultural Resource Assessment Survey of the North River Assemblage Parcels, Lee County, Florida

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October 2007
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24. Map of the North River parcel showing location of archaeological sites 45

Consultant Summary

In April -July 2006 and September 2007, the Archaeological and Historical Conservancy, Inc. (AHC) conducted a Phase I cultural resource assessment for Bonita Bay Properties, Inc. of the North River Assemblage Parcel located in western Lee County. The combined ±520 hectare (±1300 acre) subject parcel was surveyed to locate sites of archaeological and/or historical significance.

This assessment was conducted to fulfill historic resource requirements in response to Florida's Chapters 267 and 373. This assessment was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties. The work and the report conform to the specifications set forth in Chapter IA-46, Florida Administrative Code.

The parcel encompasses parts of Sections 16, 17, 18, 19, and 20 in Township 43 South, Range 26 East (Figure 1). The parcel encompasses citrus groves, improved pasture, woodlands, and wetlands. Much of the parcel has been previously farmed and covered with fill (Figure 3). Prior to development the parcel area was hydric and mesic woodlands vegetated in slash pine/saw palmetto flatwoods, wetlands were characterized as cypress sloughs and grass marshes. The Trout and Owl Creeks exhibit a mangrove fringe near their confluence with the Caloosahatchee River.

The subject parcel was investigated with a pedestrian survey and subsurface testing. It was determined that the areas closest to the Caloosahatchee River as well as creeks, ponds, sloughs were Moderate to High Probability Zones (MPZ/HPZ) for archaeological sites. Ten higher probability areas were identified on the project parcel. Overall, 602 shovel tests (50 cm^2) were dug systematically and judgmentally across the parcel. Five previously unrecorded archaeological sites were documented: 8LL2395, 8LL2396, 8LL2397, 8LL2398, and 8LL2399. Four of the sites are small prehistoric middens or camps, and one, 8LL2399, is a possible burial mound. No historic buildings occur on the subject parcel although there are six modern buildings on the parcel.

It is the consultant's opinion that four of the archaeological sites on the North River Assemblage Parcels are potentially eligible for listing on the National Register of Historic Places and should be preserved or subject to Phase II investigations if preservation is not feasible. One site, 8LL2396, is small and although available data does not indicate National Register significance, other site components are possible and if the site area is proposed for development, then Phase II testing is recommended.

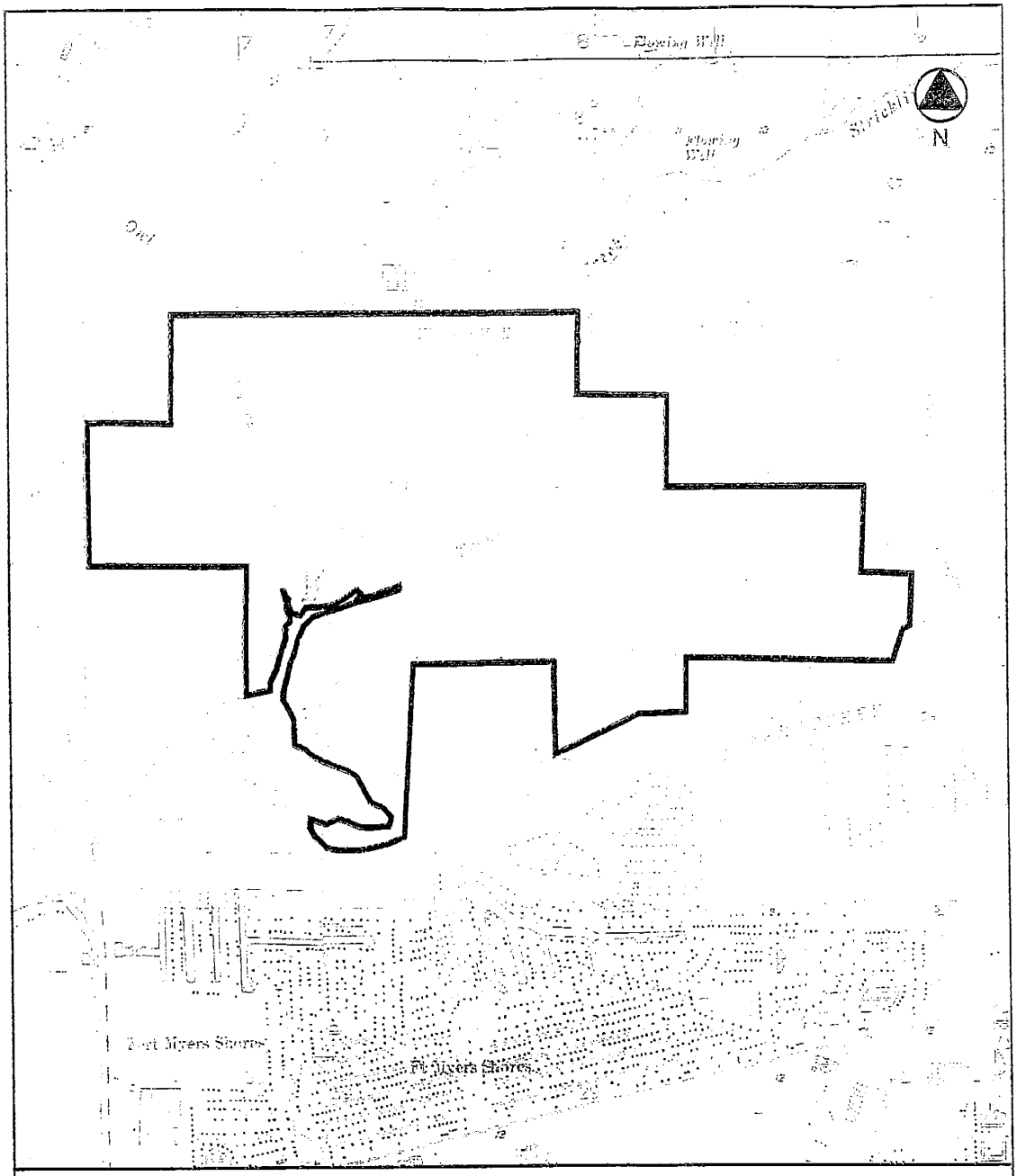


Figure 1. Map of the North River Assemblage Parcel area.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

Project Setting

The North River Assemblage Parcels is located in parts of Sections 16, 17, 18, 19, and 20 in Township 43S, Range 26E immediately south of County Road 78 in north central Lee County (Figure 1). The ±520-hectare (±1300-acre) project area is a polygon, with sides that are more or less oriented to the cardinal points. The subject parcel is bordered by State Road 31 on the west, on a portion of the northern side by State Road 78, and on the other sides by cleared fields, undeveloped woodland, the Caloosahatchee River and Trout and Owl Creeks. The relevant USGS maps are Olga and Fort Myers, Fla.

The subject parcel includes improved areas such as citrus groves and cattle range as well as natural areas of palmetto and slash pine flat woods, oak/cabbage palm hammocks, and several creeks that drain southward into the Caloosahatchee River. Prior land alterations include clearing, grading and ditching. Many portions of the parcel have been previously farmed with winter vegetables and are currently citrus groves.

An arbitrary division was made of the North River Assemblage Parcel into two subparcels to facilitate description of the parcel areas for this report (Figure 6). Subparcel One is the parcel portion west of Trout Creek; Subparcel Two is the parcel portion east and south of Trout Creek. These parcels are roughly equal in area with Subparcel One at approximately 260 hectares (650 acres) and Subparcel Two at 272 hectares (680 acres).

Subparcel One is a generally low lying area of improved pasture and wetlands. Owl Creek drains across part of the parcel. The subparcel was generally historic wetlands. Subparcel Two is bound on the north by Trout Creek and contains an approximately 36-hectare (90-acre) area of fill (Figures 11, 12).

The immediate region is low-lying to moderately elevated (5-10 feet, NGVD) vegetated in slash pine/saw palmetto flatwoods with grassy marshes. Slash pine flatwoods communities are usually situated on high ground in much of western Lee County. Historically, floral communities which contain a dense, often head-high understory of saw palmetto, were subject to and maintained by periodic forest fires. Fires either began naturally through lightning strikes or were started by prehistoric Indians or by early settlers to aid hunting or cattle grazing. Among the plants typically found in the slash pine/saw palmetto flatland/prairie environments are: slash pine, saw palmetto, gallberry, shiny lyonia, rusty lyonia, staggerbush, dahoon holly, ground oak, wire grass, broom sedges, shiny blueberry, xyris, and a variety of annual and perennial herbs and wildflowers blooming seasonally.

The geology of the central Lee County area is characterized by fine-grained wind and wave born sands overlying shelly marls. Most of the surfacial sands are characterized in the *Lee County Soil Survey* as "hydric, level, poorly drained" and are fine-grained wind and water-born deposits from the late Pleistocene/early Holocene. Among the soils present on the subject parcel are: Myakka fine sand, Pompano Fine Sand, Hallandale Fine Sand, Isles Fine Sand and Immokalee sands. A soil category designed as Peckish Mucky Fine Sand is a mangrove sand/peat formation present in tidally flooded mangrove swamps (See Figure 5). Gray and tan sands found extensively in the district usually overlie relict marine deposits of shelly marl and marly limestone caprock that are part of Pleistocene formations. Many of these formations are linked to the Caloosahatchee/Fort

Thompson/Coffee Mill Hammock series. Marine marls contain lenses and deposits of clay intermixed with varying percentages of sand. These clays may have been a source for ceramic manufacture by the Formative period Native Americans. Mantling the Pleistocene sands are windblown deposits of gray sands of varying depths.

The North River Assemblage Parcel contains eighteen soil types (Figure 5). Most of these are characterized as fine, poorly drained sand or sandy loams. Many of these occur in the area as formations on moderately elevated ground; others are depressional and are located in the ponds, sloughs and creek banks and beds of the parcel. Among those noted are: Caloosa fine sand (28% of parcel), Copeland Sandy Loam (23.6% of parcel), Oldsmar sand (24.6% of parcel), and Boca fine sand (13.1% of parcel). All others represent individually less than two percent of parcel area, and collectively total the remaining 10.7 percent of the parcel.

Areas of the parcel contain tan and gray sand surfacial zones overlying a dense brown sand spodic horizon (often referred to as "hardpan"). This formation is a zone of organic leaching accumulation. Occasionally, harder "nuggets" or nodules of an iron oxide precipitate will be found in this zone, which is sometimes a basal archaeological zone.

Limestone caprock can contain the index fossil bivalve, *Chione cancellata,* in quantity. Many higher ground formations in the area appear to be bedrock unconformities that consist of fully exposed tabular slabs of limestone caprock containing numerous rounded solution holes.

The north central Lee County area has been the focus of low-impact/low density ranching and farming activities for many years. "Improved" areas are interspersed with undeveloped woodlands. Recently, the area has had increased growth in the form of planned residential communities that have advanced at a steady rate along State Roads 80, 31, and 78.

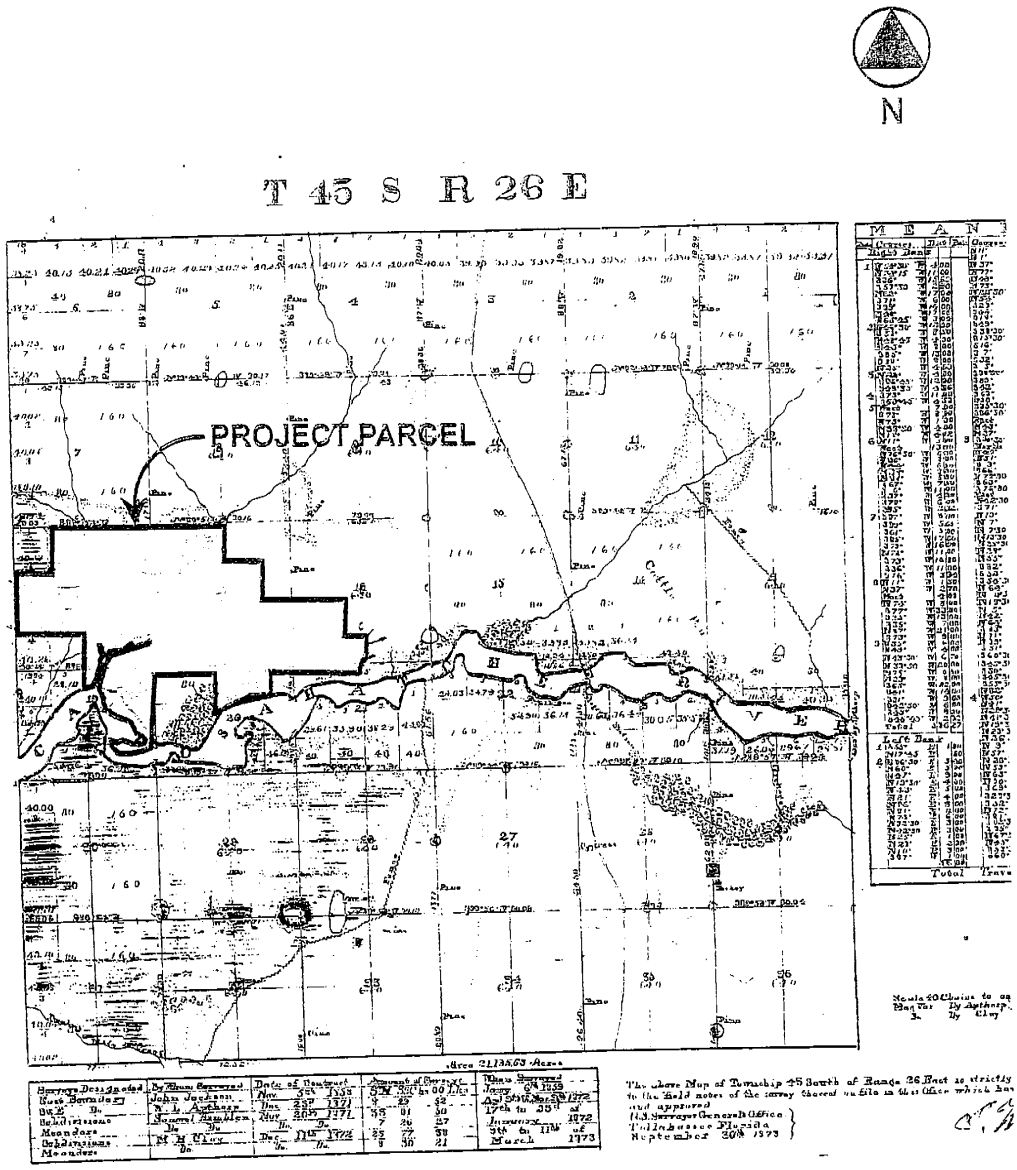


Figure 2. Portion of the 1873 plat map for Township 43S, Range 26E with the project parcel boundaries superimposed.

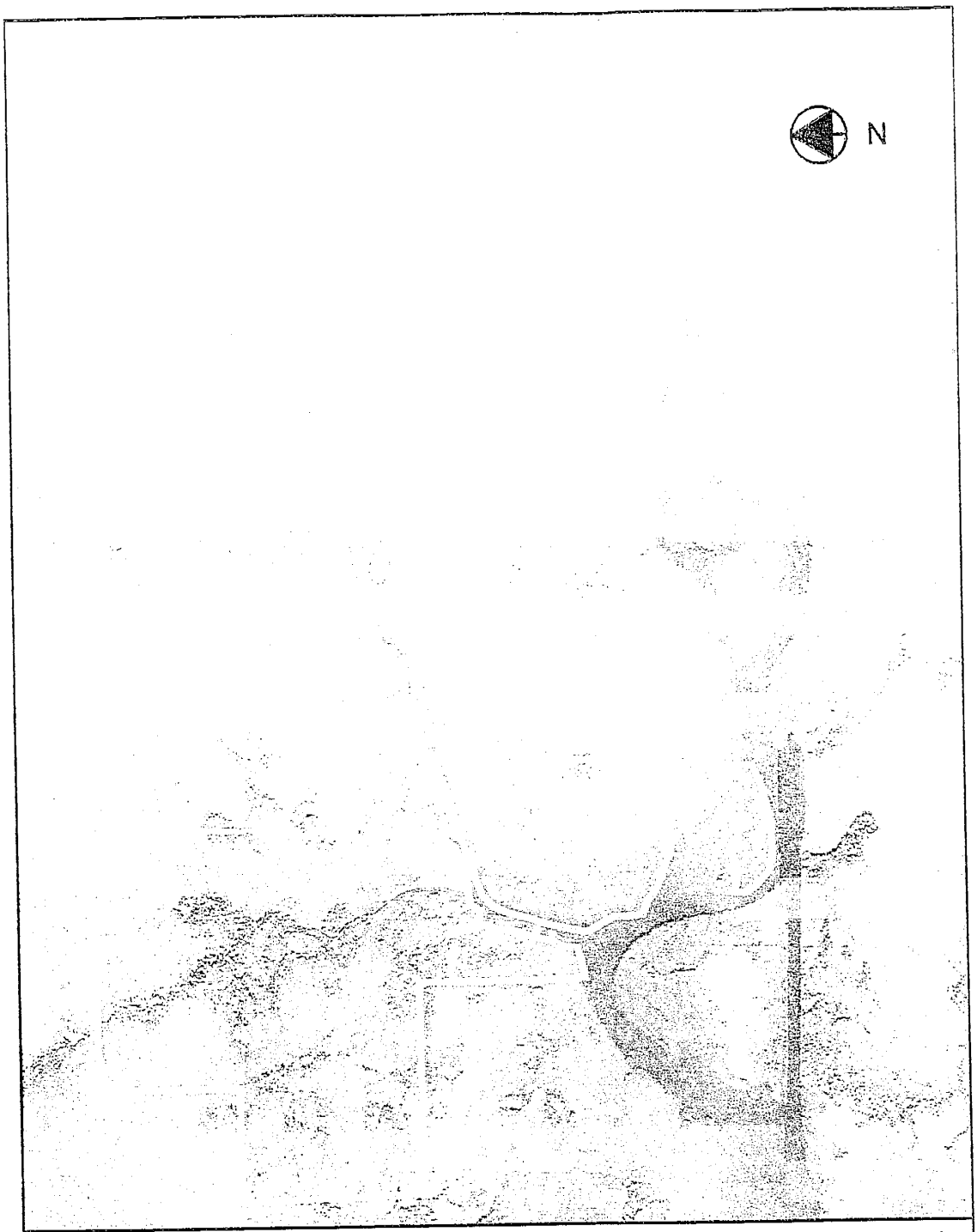


Figure 3. 1944 black and white aerial photographs of the North River Assemblage Project Parcel.

Figure 4. 2004 color aerial orthophotograph of the North River Assemblage Project Parcel area.

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

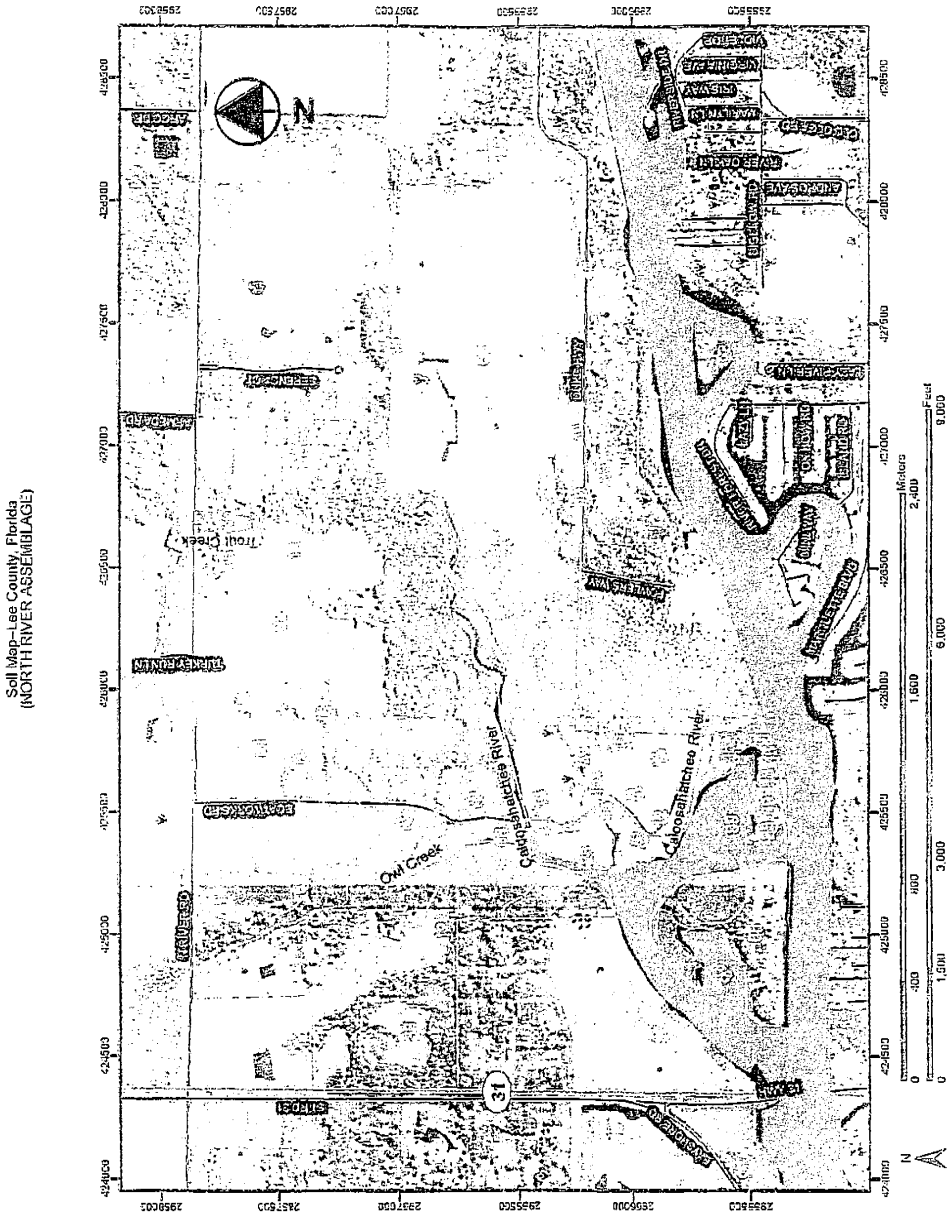


Figure 5. USDA-NRCS soil map survey showing soil types found in the project parcel.

Map Unit Legend

Lee County, Florida (FL071)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Hallandale fine sand	25.5	1.9%
11	Myakka fine sand	8.3	0.6%
12	Felda fine sand	10.4	0.7%
13	Boca fine sand	152.4	11.7%
23	Wulfert muck	28.9	2.1%
30	Pineda fine sand	9.4	0.6%
35	Immokalee sand	16.3	1.2%
36	Oldsmar sand	313.5	22.5%
38	Wabasso sand	28.6	2.1%
39	Isles fine sand, depressional	1.9	0.1%
40	Andaka sand, depressional	5.0	0.4%
42	Copeland sandy loam, depressional	282.9	20.3%
50	Felda fine sand, depressional	17.6	1.3%
51	Floridana sand, depressional	3.3	0.2%
55	Gecsa fine sand	0.0	0.0%
66	Colgoss fine sand	379.8	27.3%
68	Malabar gravelly fine sand	3.9	0.3%
72	Bradenton fine sand	15.0	1.1%
99	Water	76.8	5.5%
Totals for Area of Interest (AOI)		1,391.1	100.0%

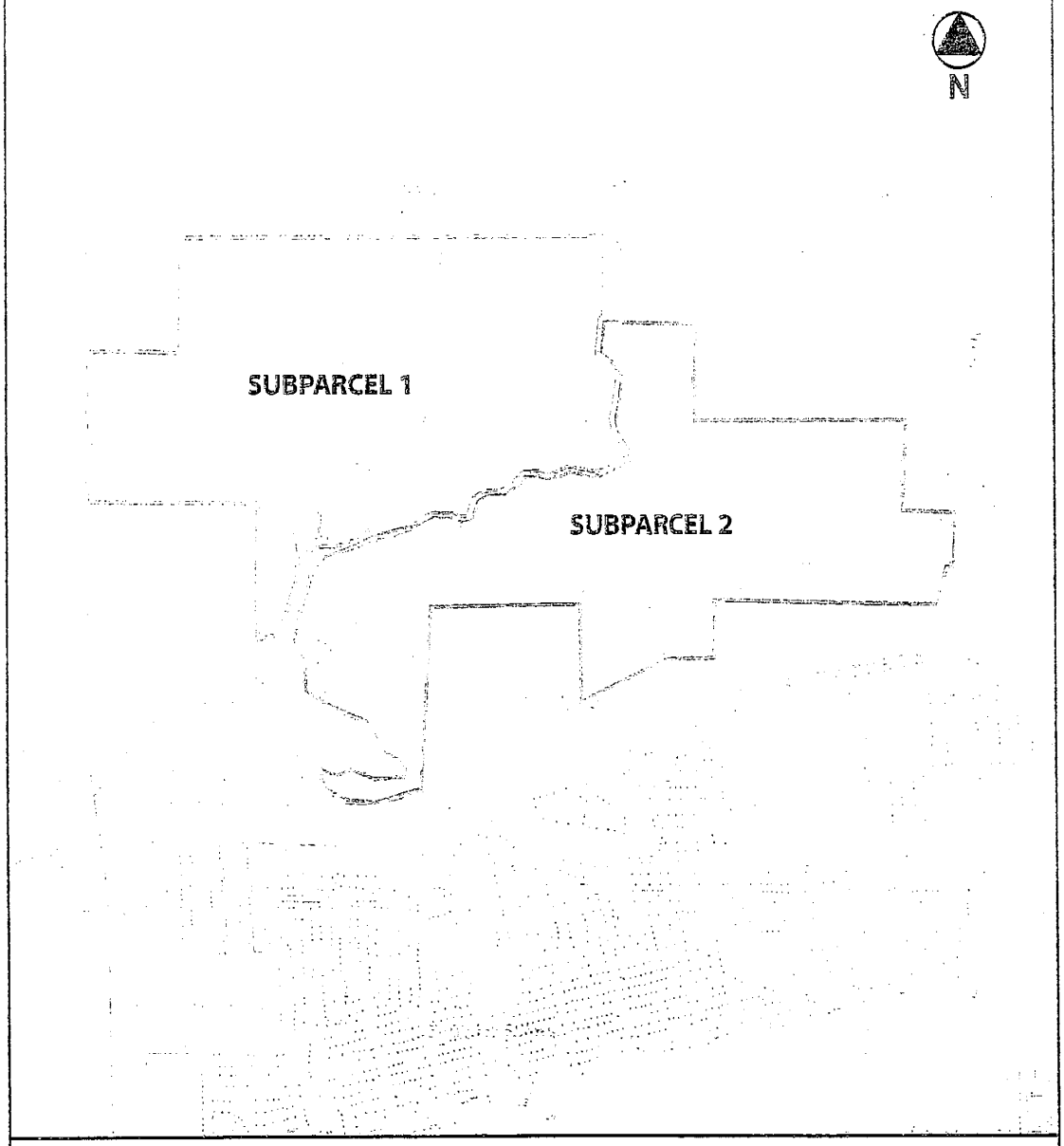


Figure 6. Map of the North River Assemblage Project Parcel area showing two subparcels as divided for cultural resource assessment.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

Figure 7. View west at open pasture in southeast quadrant of the parcel.

Figure 8. View west at large marsh pond in the west center of the parcel in the North River Assemblage. Shovel tests were placed at 30-meter intervals around the circumference of the pond.

Previous Research

Southwest Florida has been a focus of archaeological investigations since the 1880s, although much of the early work was directed toward the recovery of museum quality artifacts rather than understanding cultural processes. Griffin (1988:48-50) discussed some of the very early references to archaeological sites in South Florida. He noted that these early reports were mostly casual observations, and few appear to refer to southwest Florida, but rather refer to the southeast and Key West areas.

Kenworthy's (1883) informal report on shell mounds and ancient canals was one of the first reports on southwest Florida archaeological sites. At about the same time as Kenworthy's investigations, Simons (1884) gave a narrative account of some of the very large coastal shell middens, and Douglass (1885) provided further information about prehistoric canals (although he did not accept that they were prehistoric). One account described a canal near Gordon's Pass that is probably the Naples Canal (8CR59), and another further north may be the Pineland Canal. Douglass' diaries record excavations of a post-contact era site (8CR41) on Horrs Island, as evidenced by the presence of European artifacts (Griffin, 1988:50-51). Douglass visited Lostman's River and other areas in the Ten Thousand Island area including Horrs Island (1890).

In 1895 Durnford reported that cordage and other artifacts were recovered from a mangrove muck pond on Marco Island (8CR49). The material was shown to Cushing, who mounted a major project to recover more material from the site. Cushing (1897) reported recovering wood and other perishable artifacts from the muck pond on Marco Island, adjacent to a large shell works and midden village site. Publication of illustrations of the spectacular finds generated a great deal of subsequent interest. Wells M. Sawyer, a young artist accompanying the expedition, produced an excellent and presumably accurate contour map for the entire Key Marco Shell Midden. This map is valuable to present-day efforts in understanding many of the now obliterated features and interpreting (reconstructing) the "architecture" of the shell midden. Widmer (1983) notes that Cushing also focused attention on the nonagricultural chiefdom level of social organization supported by the rich estuary and marine resources, although his anthropological observations have remained overshadowed by the wealth of artifacts.

Moore (1900, 1905, 1907) investigated a number of sites along the Collier/Lee County coast, apparently attempting to find material comparable to Cushing's finds. Although Moore provided information about site locations and general contents, most of his work was extremely crude and uncontrolled, by both contemporary archaeological standards, and by modern standards.

The first attempt to systematically survey and investigate archaeological sites was initiated by Ales Hrdlička, who visited a number of sites along the coast and tidal mangrove estuaries in 1918, focusing on the Ten Thousand Island region (Hrdlička 1922). Hrdlička noted that southwest Florida was a distinct region within south Florida and made an attempt to type sites by function.

Matthew Stirling's (1931, 1933) excavation of a burial mound on Horrs Island represents one of the first controlled excavations in Collier/Lee Counties (although he attempted stratigraphic

control, Cushing had little success in his wet site excavation). The site was named the Blue Hill Mound, but it is not recorded under that name in the FMSF (either as a primary or secondary name), so it is unclear exactly which site he excavated, although it was probably site 8CR41 (McMichaels, 1982). These reports by Stirling are preliminary, and apparently neither a final report nor a skeletal analysis has been published.

John M. Goggin was the first to define a south Florida cultural area (Glades Area), and describe south Florida ceramics (Glades ware), establishing a basis for later archaeological work. He published an analysis of the ceramic sequence in south Florida (Goggin, 1939, 1940). In later reports (Goggin, 1947, 1949a, 1949b), he formulated a basic framework of cultural areas and chronologies that is still current (although modifications with additional data have been made, see further discussion below). Goggin (1949b) summarized much of this information in an unpublished manuscript, which Griffin (1988) thoroughly described.

In passing, one unfortunate aspect of Goggin's work was a dependence on informant information for location of sites (especially interior sites) and he had a real concern that existing sites would be looted. This concern resulted in his either deliberately or incidentally reporting vague locational data for many sites. Some of these sites have never been satisfactorily relocated, although a few have undoubtedly been re-recorded by later investigators.

For several decades, much of the subsequent archaeological investigations in the region took place in Lee and Charlotte Counties, especially in the Cape Haze, Charlotte Harbor and Pine Island areas. It is rumored that Goggin had a "gentleman's agreement" with many of the other leading practicing Florida archaeologists of the time that the South Florida area was his exclusive province to investigate. If this rumor is correct, it might explain the neglect shown the southwest Florida area in the archaeological arena from the end of World War II to Goggin's death in 1964.

In 1956, Sears reported on a large village and mound complex at the mouth of Turner River on Chokoloskee Bay south of Marco Island, and in 1967 he reported on the results of a survey of the Cape Coral area (Sears, 1956, 1957). Laxson (1966) reported on excavations at Turner River Jungle Garden site, which is upriver from the Turner River site, although these have been confused in recent accounts.

Van Beck and Van Beck (1965) excavated three small test pits on Marco Island (at the Marco midden, 8CR48) associated with the Cushing site (8CR49). The resulting publication of this work was some of the first reported scientific archaeological work to come from the southwest Florida area in nearly twenty years (Van Beck and Van Beck, 1965).

In 1967 through 1969, Marco Island was extensively surveyed and a few sites were tested through excavation by Cockrell, Morrell, and others (Morrell, 1969). No complete site report was ever published, although an unpublished and incomplete manuscript is available. Some of these sites were discussed in Cockrell's master's thesis (1970). Widmer performed a survey of Big Key, John Stevens Creek, Barfield Bay, Blue Hill Bay, and Collier Bay, which are proximal to Marco Island (Widmer, 1974). Widmer eventually utilized his southwest coast experience to write a doctoral dissertation on the Calusa that not only remains the definitive work on that

group, but also explored the relationship between subsistence adaptation and cultural evolution (Widmer, 1983).
In Lee County, Arlene Fradkin and other investigators from the University of Florida began an ongoing involvement with the Pine Island Sound/Sanibel Island area in the 1970s. Her first investigations were at the Wightman site on northern Sanibel Island (Fradkin, 1976).

Several archaeologists excavated at Horrs Island in the 1980s. McMichaels (1982) reviewed sites on Horrs Island in a Master's thesis. In 1983, Marquardt began a series of investigations at Josslyn Key, Useppa Island, Pineland, Buck Key, Galt Island in Lee County, and at Big Mound Key in Charlotte County (Marquardt, 1984, 1987, 1988, 1992). Marquardt and Russo have investigated Horrs Island in Collier County. A number of the large shell midden village sites they excavated appear to be late Archaic, and they expect to document a more elaborate social organization at these sites and larger sedentary or semi-sedentary population sizes than previously known for that period (Russo, 1990, and pers. comm.).

Most of these studies focused on the coastal sites, as have subsequent summaries and discussions. Recent work on the interior has made significant advances in documenting the extent and intensity of inland resources, especially in the Big Cypress and Everglades parks (Ehrenhard *et al.*, 1978, 1979; Ehrenhard and Taylor 1980; Ehrenhard *et al.*, 1980; Taylor and Komara 1983; Taylor, 1984, 1985). Griffin's (1988) synthesis of the Everglades Park data is the defining work on south Florida archaeology to date. Athens (1983) summarized some of the results of the Big Cypress survey, but more analysis of this data resource is needed.

Beriault and colleagues (1981) reported on salvage excavations at Bay West Nursery (8CR200). Their description of the site includes a well known but rare and infrequently documented Early and Middle Archaic use of ponds for cemeteries.

In 1995, Widmer and Story began an ongoing investigation at the Key Marco Midden (Widmer, 1996). In the first season they excavated with the help of graduate students and volunteers. The results of their work have appeared in the *Florida Anthropologist*.

In the last two decades the pressure of development as well as a recognized need for preservation or mitigation of prehistoric sites has led to a number of reports by commercial cultural resource management consultants. While most of these reports are limited in scope due to restriction to a small tract of land, many have produced useful summaries of regional archaeological, as well as insightful analysis of the relationship between site types and location and ecotypes (Almy and Deming 1982, 1986a, 1986b, 1986c, 1987, Austin 1987, Carr and Allerton 1988a, 1988b, Deming and Almy 1987, 1988, Fay and Carr 1990, Fuhrmeister et al. 1990, Martinez 1977, Miller and Fryman 1978, Swift and Carr 1989).

Arthur W. Lee, John Beriault and others in the Southwest Florida Archaeological Society (SWFAS) have recorded and investigated a large number of archaeological sites in Collier and Lee Counties. It is an ongoing effort of the Society to publish and disseminate reports and manuscripts (Lee *et al.*, 1993, 1997, 1998; Beriault, 1973, 1982, 1986, 1987; Beriault and Strader, 1984). Many of these reports deal with small interior seasonal sites. In addition,

Beriault has provided several unpublished manuscripts as to site types and areas (Beriault 1982, 1987).

The Archaeological and Historical Conservancy, Inc. (AHC) has investigated several large parcels in the Olga/Buckingham area. In 1998, AHC personnel assessed the Veranda Parcel which is located two miles south of the present subject parcel and located four prehistoric sites and three historic sites (Beriault and Carr 1998). In 2000, AHC personnel conducted a Phase I assessment of the ±300-acre Orange River Parcel located three miles south of the subject parcel. There they located three prehistoric sites. In early 2005, AHC personnel discovered two prehistoric sites at the 650-acre Portico Parcel located on the Buckingham-Olga Road four miles southeast of the subject parcel (Mankowski et al 2005). The present investigator (Beriault) has also produced an historic study of the Caloosahatchee River east of Ft. Myers (Beriault 2001). Five other AHC projects have been performed within four miles of the subject parcel with an additional two archaeological sites having been located.

Literature Review

A site search was requested on 9-10-07 with the Florida Division of Historic Resources for relevant archives and literature for the project parcel area. This included, but was not limited to site forms from the Master Site File in Tallahassee concerning previously recorded sites within a 1.6 kilometer (1.0 mile) radius of the North River Assemblage Parcel and reports for cultural resource investigations previously conducted within a 1.6 kilometer (1.0 mile) radius of the North River Assemblage Parcel (Table 1).

Table 1. Literature Review Summary

Previously Recorded Archaeological Sites:	
In Survey Parcel	0
Within 1.6 km (1.0 mi) of Parcel	4 (8LL1982, 8LL1986, 8LL2030, 8LL2338)
Previous Investigations:	
In Survey Parcel	0
Within 1.6 km (1.0 mi) of Parcel	4

A review of state site files conducted on September 10th, 2007 resulted in the identification of four previously recorded sites at or about 1.6 kilometers (1.0 miles) from, but *outside*, of the survey parcel (Table 2). Seventeen historic standing structures are also reported for the area; none of these are within the project parcel boundaries.

Table 2. Previously Recorded Sites Summary[1]

Site No.	Site Chronology	Site Type	References	In Survey Parcel	Outside of Parcel
8LL1982	Prehistoric: Likely Glades	Interior Midden	*Carr and Beriault, 2001*		√
8LL1986	Historic 19th-20th Century	Citrus Packing House	*Carr and Beriault, 2001*		√
8LL2030	Historic 19th-20th Century	King family Homestead	*Carr and Beriault, 2001*		√
8LL2338	Historic 19th-20th Century	Howard House	*Mankowski and Beriault, 2005*		√

A review of the projects conducted in the same area indicated four investigations previously conducted within 1.6 kilometers (1.0 miles) of the North River Assemblage Parcel (Table 3). None of these investigations were within the parcel.

Table 3. Previous Investigations[1]

Survey No.	Date	Author	Title	In Parcel	Out of Parcel
3144	1992	Weant, Laura and Nickerson, Michael	*Historic Report and Survey Supplement for Lee County, Florida*		√
3460	1993	Fuhrmeister, Charles and Estabrook, Richard	*Survey of the Southwest Florida Pipeline Company Corridor Realignment, DeSoto, Charlotte, and Lee Counties, Florida*		√
6575	2001	Carr, Robert S. and Beriault, John G.	*An Archaeological and Historical Assessment of the Verandah Parcel,, Lee County, Florida*		√
11581	2005	Mankowski, Joseph and Beriault, John G.	*A Phase One Archaeological Assessment of the Olga Parcel, Lee County*		√

Notes: [1]Based on sites within 1.6 kilometers (1.0 miles) of the survey parcel.

Cultural Summary

Stirling was the first to distinguish the indigenous prehistoric cultures of southern Florida in 1936 by defining a Glades cultural area, including all of south Florida (Carr *et al.*, 1994b:9; Milanich, 1994:5-6). Griffin (1988) pointed out that this was not formulated as a strict cultural area, but it was rather a geographic region with some common cultural traits. Kroeber (1939), in a review of North American prehistory, utilized a slightly different term, the "South Florida Area," basing his definition on both environmental and cultural factors. Subsequently Goggin delineated more particular boundaries for southern Florida and divided the region into three sub-areas: "Okeechobee" around Lake Okeechobee, "Tekesta" for southeast Florida and the Florida Keys, and "Calusa" for Southwest Florida (Carr *et al.*, 1994b:10; Goggin, 1947:114-127).

Following Goggin's study, subsequent researchers have refined or altered the cultural distinctions attributed to southern Florida's prehistoric populations. There has been criticism that Goggin's names and definitions were based on historic accounts of the main (proto) historic groups found in the respective regions and not on the archaeological evidence of spatial, temporal, and cultural differences (Sears, 1966; Griffin, 1974; Carr and Beriault, 1984; Griffin, 1988). Griffin, in particular, questioned the distinctions. He believed that South Florida cultures varied only by local environmental conditions and ceramic exchange rates. Griffin believed the inhabitants of prehistoric southern Florida were mainly dwelling on the coast and that the interior was nearly uninhabited and under-utilized. Griffin designated the entire southern Florida region as the "Circum-Glades" area (Eck, 1997:5; Griffin, 1974:342-346). This new designation for the area was furthered by a widely circulated book on Florida archaeology by Milanich and Fairbanks (1980). Griffin later (1988) retreated to some extent from his earlier position as further research (particularly by Ehrenhard, Carr, Komara, and Taylor in the Big Cypress and Carr in the eastern Everglades in the 1970s and 1980s) showed abundant sites (and concomitant use and habitation) in the interior and Everglades.

Carr and Beriault, in particular, have taken issue with the concept of a Circum-Glades region. Carr's research in the Big Cypress and Everglades and his subsequent analysis demonstrating variation of key cultural markers (particularly in decorated ceramics) formed the basis for this contention. There is abundant evidence for cultural (and probably political or tribal) diversity in the various areas of south Florida. Carr and Beriault particularly noted and defined differences between the lower southwest Florida coast, which they termed the "Ten Thousand Island" region, and the area to the north, which they called the "Caloosahatchee" region. This latter area they believed to be the seat of the historic Calusa chiefdomship, although previous (and some subsequent) researchers have called the entire southwest Florida from Cape Sable to the Cape Haze peninsula (and beyond) in Charlotte County "Calusa."

Griffin, in his definitive 1988 synthesis on Everglades archaeology, attempted to reconcile and refine some of the conflict in the definition of south Florida prehistoric and historic culture areas. As stated by Carr and colleagues (1994b), "the issue...appears in part to be one of trying to determine the significance of regional and temporal variation, rather than whether these differences are real." There is evidence that changes through time in regional political affiliations or realties makes any model *not* addressing this complex issue two-dimensional. The Calusa hegemony that was in place by the time of the arrival of Europeans may have begun as early as

800 AD in the Ten Thousand Island "district" or area (Griffin, 1988:321; Carr *et al.*, 1994b:12). There is currently ongoing research to further refine present thought as to cultural affiliations in south Florida. It would seem only a matter of time before new directions and emphases provide a more accurate summation of south Florida cultural affinities.

Using the present models, the coastal zones of Collier County and southern Lee County contain three distinct culture areas. Indian Hill on Marco Island lies thirty miles from the projected interface by Carr and Beriault (1984) of the Caloosahatchee area (called the "the 'heartland' of the Calusa," Carr *et al.*, 1994b:12) to the north, and the Ten Thousand Islands area to the south. At a yet undefined point to the east lies the Okeechobee cultural area, but the boundary, if it is a definite, fixed one, is likely to occur in the vicinity of the Immokalee rise forty miles or more to the northeast of Indian Hill. Further work is in progress by Carr to address the issue of where the southwest boundaries of the Okeechobee culture area occur.

Temporal Periods and Adaptations

At the same time that the south Florida archaeological cultural models have evolved over the past 60-plus years, so have the temporal markers or framework on which we base evolution of that culture. Much of this latter effort has resulted from comparisons made between the recovered artifacts from the 100-year period of scientific and *non*scientific excavation and collection by the various individuals and institutions (and others) enumerated in part above. This Floridian effort must be seen against the broader background of archaeological work in eastern North America and the New World as a whole. All of these efforts have been mutually complimentary and certainly not exclusive.

In South Florida, the following periods and adaptations are generally accepted. Part of this chronology involving the later or Formative period is called the Glades sequence in honor of Goggin, the greater part of whose work in defining the ceramic sequence or markers has withstood the test of time and subsequent criticism (Goggin, 1939, 1947, 1949c). From Goggin's day to present, pottery variability in form, substance, and decoration has proven useful for providing time markers, at least during the archaeologically-brief ($\pm$ 3500 year) period spanning the late Archaic and Formative periods that it was produced. Other artifact types and their variations have, to present, proven somewhat less reliable as absolute indicants of prehistoric age. Radiocarbon dating, a phenomena of the last 30-plus years, provides, within the standard deviation expressed in plus-or-minus years BP (before present), a relatively absolute date for a given sample and provides a yardstick to measure traits or distinctions in provenienced artifacts. Determining and adequately defining what traits we can discern against this absolute is part of the ongoing function of the regional archaeological effort.

The following information is generalized and abbreviated. The dates are approximate; transitions between periods are in reality more gradual that the manner they are expressed for convenience.

Paleo Period (14,000 – 10,000 BP)

During the Paleo Period, the first Native Americans began moving into the southeastern portion of North America and Florida. Most evidence of their presence in Florida can be reliably dated to about 10,000 BP.

There are no known Paleoindian sites in Lee County. Several are documented from elsewhere in south Florida, including Warm Mineral Springs and Little Salt Springs in Sarasota County (Cockrell and Murphy, 1978; Clausen and Gifford, 1975), Harney Flats in Hillsborough County (Daniel and Wisenbaker, 1987) and the Cutler Fossil Site in Dade County (Carr, 1986).

During this period, the terminal Wisconsian ice age, the climate was probably less extreme, with cooler summers and warmer winters. The climate was also drier, and sea levels were lower (Carbone, 1983; Allerton and Carr 1988a; Griffin, 1988).

One reason that possible Paleo period sites have not been discovered in Charlotte County is that the shoreline may have been as much as 100 miles further west due to lower sea levels. Drier conditions may have made the interior very inhospitable, and the shallow estuarine and littoral sites that existed were flooded by post-ice age Holocene sea rises.

Any possible interior sites from the Paleo Period may be unrecognizable due to lack of diagnostic artifacts, subsequent reuse of site areas, low population density, and few permanent camps. These and other factors may help explain the absence to date of identifiable Paleo period sites in the area.

Archaic Period (10,000 - 2,500 BP)

The Archaic period reflects a post-Pleistocene shift in adaptation marked by an increase in the seasonal exploitation of a broad spectrum of food resources, a more restricted use of territory due to regional specialization, and more semi-sedentary habitation sites. No ceramics are known until the Late Archaic. During the Archaic, regional specializations became more marked, not only with material culture but also with distinct local utilization of local plant and animal resource.

As mentioned above, there is, as yet, no firm evidence of human presence in southwest Florida during the Paleo period (Allerton and Carr, 1988:14). This is also true for the Early Archaic (8500-7000BP), as there is evidence of an environment too arid to support scrub oak, and the presence of shifting wind formed dunes (Watts, 1975; Widmer, 1983).

By about 6500 BP mesic conditions began to spread, although localized xeric conditions continued (and still exist in some areas) through South Florida. Middle Archaic sites dating from this time are rare, although the Bay West Nursery site (8CR200) in Collier County and the Ryder Pond site (8LL1850) in Lee County near Bonita Springs provide evidence of occupation, as do several sites in southeast Florida. The Bay West site is a Middle Archaic cypress pond cemetery, associated with a lithic scatter. The Ryder Pond site is a similar mortuary pond site surrounded by pine flatwoods (Carr and Heinz, 1996). Beriault has also recorded several aceramic shell scatters in coastal sand hills (paleo dunes), some of which may date to the Middle Archaic.

Griffin (1988) summarizes evidence indicating that despite the rise of available surface water, brackish estuaries and other major modern landscape features had not formed, and population (or repopulation) was still sparse.

During the Archaic period sea levels began to rise at a fairly rapid rate, estimated at 8.3 cm. per 100 years 6000-3000 BP, and 3.5 cm per 100 years afterwards (Scholl *et al.*, 1969), although whether sea levels were steadily rising or oscillating is still unclear (see Griffin 1988; Allerton and Carr, 1990 for recent reviews of the literature). Data is somewhat difficult to sort out as sea level rise was accompanied by both shore regression and transgression in places. As conditions became wetter (and warmer) in the interior, cypress swamps and hardwood sub-tropical forests established themselves by about 5000 BP (Carbone 1983, Delcourt and Delcourt 1981).

By late Middle or early Late Archaic times (4000 years BP) there were significant shell mounds and middens on Horrs Island, Marco Island, and elsewhere in the coastal regions, suggesting that the estuary system had been established and was being utilized to provide the subsistence basis for denser populations and semi-sedentary settlements (Morrell, 1969; Cockrell, 1970). At Useppa Island in Lee County, excavations have provided radiocarbon dates from pre-ceramic shell middens ranging between roughly 4900 BP and 5600 BP, suggesting that the Middle Archaic as well as Late Archaic periods had a growing dependence on shellfish resources (Milanich *et al.*, 1984). There are aceramic coastal sand hill and interior wetland sites as well, but these have not been demonstrated to be Archaic despite some investigators equating aceramic with preceramic. Radiocarbon dates for these sites would clarify this point.

Allerton and Carr (1988) noted that a number of stratified sites in the wet mangrove and marsh areas of the Everglades, as well as on Horrs Island, contain Archaic preceramic horizons, although it is unclear if aceramic was equated with preceramic. Additional supporting evidence of interior use by Archaic peoples will provide a new dimension to the archaeological understanding of Archaic resource utilization. Allerton and Carr point out that if the wet tree islands were initially used by Archaic people, then at least some of the hardwood hammocks in swamp environments were raised in elevation (with subsequent changes in vegetation) due to human activities. Post-Archaic people extensively utilized these hammocks and continued to advance their development as distinct geomorphic features. This is obviously an area where additional archaeological investigations have a potential to contribute to understanding the interaction of geomorphic and cultural evolution in Southwest Florida.

Toward the end of the Archaic there was the introduction of fiber-tempered pottery into the archaeological record, often used as a marker of the Orange Phase, commencing at about 4000 BP, either coincident with or soon after the development of the extensive shell middens. The Late Archaic Orange Phase subsistence strategy is characterized by intensive use of shellfish and marine resources, as well as being marked by an accelerated trend toward regional specializations.

A number of the large shell middens on Marco Island (Cockrell, 1970), Horrs Island (Russo n.d.), Cape Haze (Bullen and Bullen, 1956), and elsewhere date from this period or earlier, as they contain fiber-tempered ceramics, although there are known aceramic (preceramic?) levels

below the Orange Phase deposits that may date to the Middle Archaic. These shell middens are usually capped by deposits from later occupations as well.

Formative Stage or Glades Periods (2500 BP - 500 BP)

The Formative or Glades adaptation, based on hunting, fishing, and the harvesting of shellfish and plants, was similar to the Archaic, but was characterized by increasing specializations in gathering strategies and tool-making. Earlier writers have typed this hunter-gatherer society as primitive or "low-level" (Kroeber, 1939). However, there is certainly evidence from the specialization of tools, from the beautifully-executed wood carvings from Key Marco in Collier County and those from Fort Center near Lake Okeechobee (Cushing, 1897; Sears, 1982), and from the historic accounts of the Calusa hegemony, that the south Florida area had an advanced culture that Goggin (1964) has called a "stratified non-agrarian society."

The preceding Late Archaic late Orange phase (also known as the transitional phase) was marked by changes in pottery, and terminated with the relatively rapid replacement of fiber-tempered pottery with sand-tempered, limestone-tempered, and chalky "temperless" pottery. It was also characterized by changes in ceramic style and often by reduction in the size of stone projectile points.

The Formative Stage (beginning about 2500 BP) is divided in south Florida into the Glades Periods sequence. Subsistence adaptation is marked by a narrowing spectrum of resource use, as well as continued trends toward regional diversity and ecological specializations, marked in part by the proliferation of inland resource extraction encampments.

Formative Period cultural evolution eventually led to increased political sophistication, perhaps initially of modest dimensions, but culminating in broad regional political alliances and regulation of materials and goods (*i.e.* resources) between the coast and inland areas (Milanich and Fairbanks, 1980). By protohistoric and contact times the Calusa were the dominant tribal group, gaining broad political influence and at least partial control over much of south Florida as far north as central Brevard County. Historically, the main Calusa village has been regarded as "Calos" on Mound Key in Estero Bay in Lee County, although 50 to 70 large villages were under direct Calusa control by contact times (Griffin, 1988).

During the Formative Periods, village sites grew to the proportions of large multi-use complexes, particularly along the coast and barrier islands of southwest Florida. Some of the projected intra-site functions of the elements of these complex shellworks were as temples, canals, causeways, temple and platform mounds, courtyards and watercourts. Current research involving the excavating of large contiguous areas of these shell mound complexes is beginning to establish demonstrable uses for the features of these large sites, upon which heretofore were merely speculated (Widmer, 1996).

Tidal estuary rivers and inland hammocks along deep water sloughs, marshes, and permanent ponds were seasonally visited for extraction of natural resources, and are now marked by small to relatively large black dirt middens, some of which may have been semi-permanent hamlets. The pine and cypress flatwoods appear to have supported few sites, although areas around Lake

Trafford and other rich interior areas developed substantial sites, including sand mounds, and may be more similar to the Okeechobee cultural area than to the coastal cultures.

In 1992, Dickel and Carr excavated a Deptford Period burial mound (the Oak Knoll Site) in the Bonita Bay Tract north of the Imperial River. Exotic trade items and seventy or more human burials were among the material findings. The resulting conclusions and subsequent surveying and testing of the Bonita Bay Shell works (8LL717) suggest social stratification and complexity may extend further back into the past than the Formative period (Dickel and Carr, 1992).

Coastal sites (shell middens) reflect a predominate dependence on fish and shellfish, wild plant foods and products, and larger inland game. The inland sites show a greater reliance on interior resources, including large, medium and small mammals, turtle, small freshwater fish, alligator, snake, frogs, and, sometimes, freshwater shellfish. Interior and coastal resource exchange can be documented by the consistent finds of moderate amounts of marine shell in many interior middens, as well as interior resources in coastal middens.

The Formative Stage (with a nod to Goggin) has been often termed the Glades cultural tradition. Much of this "tradition" is focused on decorated ceramics, the minority in the archaeological record, although the majority of recovered (rim) sherds are plainware. However, despite this, pottery (and its decorations) is usually utilized as the major temporal marker(s) for fitting sites into a temporal framework. Changes in pottery do not represent mere changes in artistic motifs, but reflect inter- and intra-regional trade contacts and outside cultural influences (possibly through exogamy, shifting of populations, and even the through evolution of a culture through time). Whatever the influences, the Glades tradition is continuous from post-Archaic times to contact times.

Despite the fact that exogamy is likely to have been practiced, traders or other specialists probably moved between major cultural areas in small numbers, and genetic flow probably accompanied cultural exchange, although perhaps not on the same scale. This may have increased in later times due to use of traditional obligations of kinship and intermarriage to stabilize alliances that were not codified into a formal legal system.

The Caloosahatchee subarea's chronology has been defined based on the ceramic sequences found there. Below is a table partially adapted from Susan Lynn White in her analysis of Galt Island ceramics (White 1995) which she in turn adapted from Randolph Widmer's book on the evolution of the Calusa (Widmer 1988):

Table 4. Caloosahatchee Area Ceramic Sequence

Period/Time Range	**Characteristic Traits**
Caloosahatchee I (500 B.C.- A.D.700	□ Sand-tempered Plain predominant □ Belle Glade Plain absent
Caloosahatchee II (A.D. 700-1200)	□ First appearance of Belle Glade Plain □ Increase in Belle Glade Plain use

Caloosahatchee III (A.D. 1200-1400)	☐ Englewood ceramics ☐ St. Johns Check Stamped
Caloosahatchee IV (A.D. 1400-1513)	☐ Safety Harbor
Caloosahatchee V (A.D. 1513-1750)	☐ European goods ☐ Mission period aboriginal pottery ☐ Pinellas Plain-Glades Tooled ☐ Decrease in Sand-tempered Plain use ☐ Laminated/contorted paste ☐ Small amounts of St. Johns Plain

By European contact times (the first half of the 16th century), the southwest coast of Florida was maintaining a vigorous, possibly expanding political chiefdom with a broad network of alliances, as well as a rich and ancient cultural tradition without an agricultural base. However, direct conflict with Europeans and, more importantly, exposure to European diseases led to the rapid decline of the Calusa. By the mid 1700s their numbers had greatly diminished. The remnants of this once-powerful tribe may have left south Florida in the 1760s with the Spanish for relocation in Cuba. Others may have become indistinguishable from Spanish Cuban fishermen who worked the great fishing "ranchos" in the Pine Island Sound region catching and salting fish for export to Cuba. Other groups of Native Americans may have fused with the Creek-derived Seminoles.

In the late 1700s, members of the Creek tribe were forced into Florida from Georgia and Alabama. They were later called Seminoles, from the Spanish term "cimmarones." Pressures from colonial (and later) white encroachment on their traditional territories forced them into the Big Cypress and Everglades area by the 1830s. By this time, most of the cultural identity of pre-contact times had been lost, although some of the Calusa subsistence strategies may have been partly adopted by Seminoles. A number of Seminole period sites have been documented on earlier Glades middens. This coincidence may in part reflect the paucity of high land in the interior (Ehrenhard *et al.*, 1978, 1979, 1980; Ehrenhard and Taylor, 1980; Taylor and Komara, 1983; Taylor, 1984, 1985). Older midden sites (particularly those called "black dirt" middens) can be rich agriculturally as well as archaeologically, making these foci for historic Seminole gardens and fruit groves.

Seminole periods in south Florida are divided into I (1820-1860), II (1860-1900) and III (1900-1940) (Ehrenhard *et al.*, 1978). Post-1940 Seminole camps are designated "Late Seminole" in some reports. These designations reflect the different stages of Seminole migration into south Florida, Seminole displacement and active conflict with the expanding American culture, and the eventual refuge by Seminole remnants in Big Cypress and Everglades regions. Military records, and, in particular, several sketch maps by military personnel done in the 1830s and 1840s and the Ives military map of South Florida (1856) shows evidence of investigations at and near "Malco Inlet," "Casimba," "Good Land," and "Cape Romans."

Seminole Wars in the Southwest Florida Area

The advent of the Second and Third Seminole Wars (1834-38, 1855-58) disrupted the peaceful settlement of the Southwest Florida region. There were a number of forts, "temporary" and

permanent, established along the Caloosahatchee River during this time. Fort Dulaney was established at Punta Rassa near the mouth of the Caloosahatchee in 1837 and was occupied intermittently through 1841, and again in 1855. After a hurricane destroyed Ft. Dulaney in 1841, Fort Harvie was established upriver. The name of this fort was changed in 1850 by its commander General Twiggs to honor his new son-in-law, Col. Abraham Myers. Fort Myers was thus created, and became the chief fort of the region.

From this central administrative point, a line of forts was established up the Caloosahatchee River. They were: Fort Denaud, Fort Adams, Fort Thompson, and Fort Center on Fisheating Creek leading into Lake Okeechobee. Other forts and "temporary depots" were established south into the Big Cypress Swamp such as Fort Simon Drum, Temporary Depot Number One, Fort Doane, Fort Simmons, Fort Keis, Fort Foster, Fort Shackleford, and others.

A number of military expeditions were sent south along the coast during the Second and Third Seminole Wars with the objectives of interdicting trade in guns and ammunition between the Seminoles and the Spanish-Cuban fishing community, and hunting and capturing Indians. General Thomas Lawson, who had just been appointed Surgeon General of the United States, commanded one of the early notable expeditions. Lawson's expedition left Fort Harvie (Fort Myers) in February 1838. Elements of Lawson's command explored the area in and around the Caxambas Point area, discovering two abandoned Indian villages in the Blackwater River/Palm Bay area. Other expeditions bivouacked at Cape Romano and Caxambas Point. Colonel Rogers, of the ill-fated Parkhill expedition, wrote several dispatches from Cape Romano in the Caxambas area in 1858, describing the ambush of Captain Parkhill's party at the headwaters of Turner River. The Collier County Museum is the repository for a collection of military artifacts purportedly found by a local collector near Indian Hill in the early 1960s. This material may have originated with one of the various military expeditions stopping at Caxambas Point.

The military road linking Fort Myers with Fort Thompson on the bank of the Caloosahatchee River passed south of the Orange River and crossed the creek head two miles southwest of the subject parcel.

Fort Myers/Olga Area History

After the Civil War in 1868, the International Ocean Telegraph Company obtained a twenty-year charter to operate a telegraph line through the state and to run a submarine cable to Key West and Cuba. The company brought the line through Fort Myers, crossing the Caloosahatchee River at Olga, and thence to Punta Rassa. Several settlers moved to the area, including many that had fought in the Seminole and Civil Wars. In 1885, Fort Myers was incorporated as a city. In 1887, the area that is now Lee County became a county, supposedly resulting from a fire destroying the new schoolhouse in Fort Myers. Some of the local citizens, led by Capt. F.A. Hendry, traveled to Key West (the seat of Monroe County of which Lee was then a part) and petitioned for funds to rebuild the school. When they were rebuffed, they called a meeting in the yard of the burned school and sent a delegation to Tallahassee requesting status as a new county. Various sources credit either Capt. Hendry or Peter O. Knight with proposing that the county be named after the Civil War hero Robert E. Lee.

Early cattlemen such as Jacob Summerlin drove cattle across a ford in the Caloosahatchee River near the subject parcel both before and after the Civil War. This ford may have existed where a trail is shown crossing the Caloosahatchee River in the 1875 plat map. A large cattle pen north of the Caloosahatchee River and a fence line for directing cattle south toward the Orange River are shown on the 1875 plat map. A settler named Wilkison had a residence and fields east of the subject parcel. Another homestead, the Hickey homestead, is depicted approximately 2 miles southeast of the subject parcel.

In 1881 Hamilton Disston began dredging the Caloosahatchee River extending that waterway directly to Lake Okeechobee. The famous Falls of the River at Fort Thompson were destroyed, and in 1885, an Hungarian naturalist Angelo Heilprin traveled there to study the geology and collect fossils new to science, one of which (*Strombus leidyii*) he named for his superior Joseph Leidy, the Father of American Paleontology. This and subsequent dredging activity over the next 100 years would change the essential nature of the Caloosahatchee River from a narrow winding stream to a "highway" for river traffic and a conduit for the rapidly developing industries of citrus, for other crops such as tomatoes and for other vegetables, logging, and cattle. Population and small communities were rapidly increasing in the Caloosahatchee region.

During the late 19th-century, several small outlying river side communities were created east of Fort Myers, such as Olga, Alva, Buckingham, Fort Denaud and Labelle. Olga was a farming community similar to Buckingham. The first mention of Olga was in 1885 by the newly founded Fort Myers Press. Olga had been established at a point on the south bank of the Caloosahatchee River one mile east of where the telegraph line from the north crossed the river. Olga at that time was a post office described as a "pretty site" owned by a L. McNeill. The present-day location of Olga is slightly east of the Fort Myers Shores subdivision. Just east of Olga was Hollingsworth Ferry where thousands of cattle crossed from the north side of the river en route for Punta Rassa and shipment to Key West and Cuba.

In the 1920s through the very early 1950s, the area, particularly east and south of Olga was extensively exploited for pine and cypress logging and lumbering. C.J. Jones Lumber Co. and other timber concerns had a vast network of temporary logging railroads running south and east into southern Lee and Collier Counties. These railroads converged on a saw mill several miles east of the subject parcel to the south of the Caloosahatchee River and on a main saw mill in a community called Slater that was on the north side of the Caloosahatchee River northeast of Ft. Myers. Many hundreds of people lived in large temporary camps near these two locations. Peak activity for these two facilities was in the mid 1930s to the period of World War II, when the demand for timber was very high for barracks and other military structures.

The Buckingham Air Field was established during World War II in the 1940s about four miles to the southwest. This was an extensive facility of several thousand people, both civilian and military. The base's prime function was as a way station for large bombers such as the B-17, which flew from there to Miami and onto the Azores and Europe. The air base was dismantled following the end of the war and little remains at the site.

Methodology

Prior to conducting fieldwork in the project parcel, relevant archives and literature were reviewed. This included, but was not limited to, studying previous archaeological reports for sites in Lee County, reviewing information from the Master Site File in Tallahassee concerning nearby sites, and examining USGS maps of the project area. Also, black and white and color aerial photographs from the project area, which could aid in revealing anthropogenic changes to the topography and floral communities, were interpreted.

Research Design

This Phase I cultural resource survey of the North River Assemblage Parcel incorporated the use of certain predictive archaeological site models. These models are based on topographic and vegetative attributes that are associated with prehistoric and historic sites in north-central Lee County and the Caloosahatchee River. These models postulate that high ground live oak/tropical hardwood hammocks in close proximity to wetlands, ponds, rivers and creeks are moderate to high probability areas for prehistoric archaeological sites. The elevational information on the USGS Fort Myers and Olga maps for the area also was used. Ten Moderate to High Probability Zones were identified throughout the parcel based on the interpretation of aerial photographs and as a result of ground truthing (Figure 3).

Fieldwork

The subject parcel was assessed by pedestrian survey and subsurface testing. A total of 602 shovel tests (50 cm^2) was dug across the parcel, each to an average of 1 meter in depth (where possible). All excavated material was screened through a 1/4" diameter mesh and any material of archaeological significance collected was sent to AHC in Davie for cleaning, cataloging, and analysis.

Transects were established for all moderate to high probability zones across the parcel. Higher probability zones were identified as all elevated ground in close proximity to the Caloosahatchee River, creeks, ponds, and marshes. Four moderate to high probability zone areas were identified on both banks of Owl and Trout Creeks and additional higher probability areas were identified on the historical riverbanks of the Caloosahatchee River. Other discrete areas of possible oak vegetation or higher relief noted during analysis of aerial photographs and USGS maps were ground truthed. Determinations were made in the field as to whether these areas of interest were recent modern alterations or natural features with a moderate to high probability of being associated with archaeological sites. All areas assessed as moderate to high probability zones were shovel tested in 10-30 meter intervals.

Thirty-one transects were established across the parcel (Figures 9-12). Some of the transects were straight and oriented to the cardinal points; others followed the course of the two principal creeks, the historic banks of the Caloosahatchee River, or along upland/wetland intergrades. The cardinal transects traversed the low probability areas and were plotted at intervals of separation of between 130 meters (400 feet) and 160 meters (500 feet) apart. Test holes intervals on these cardinal transects varied from 30 to 100 meter intervals depending on where they crossed higher

probability areas. In addition, judgmental test holes were dug when topographic/vegetative features of higher probability were encountered. It should be noted that most areas of the parcel adjacent to the Caloosahatchee River were covered with one to five meters of fill/spoil generated from the dredging of the Caloosahatchee Waterway. These fill areas could not be effectively shovel tested and are so indicated (Figures 11, 12).

Collections

All collected material were placed in self-sealing plastic bags and transferred to the AHC lab in Davie to be cleaned and catalogued. All collected materials and field notes repose at the AHC facility in Davie.

Informants

Interviews with several ranch staff and managers Andy Tilton, a long time area resident living close to the project parcel failed to reveal any additional information on historic or archaeological sites on the parcel.

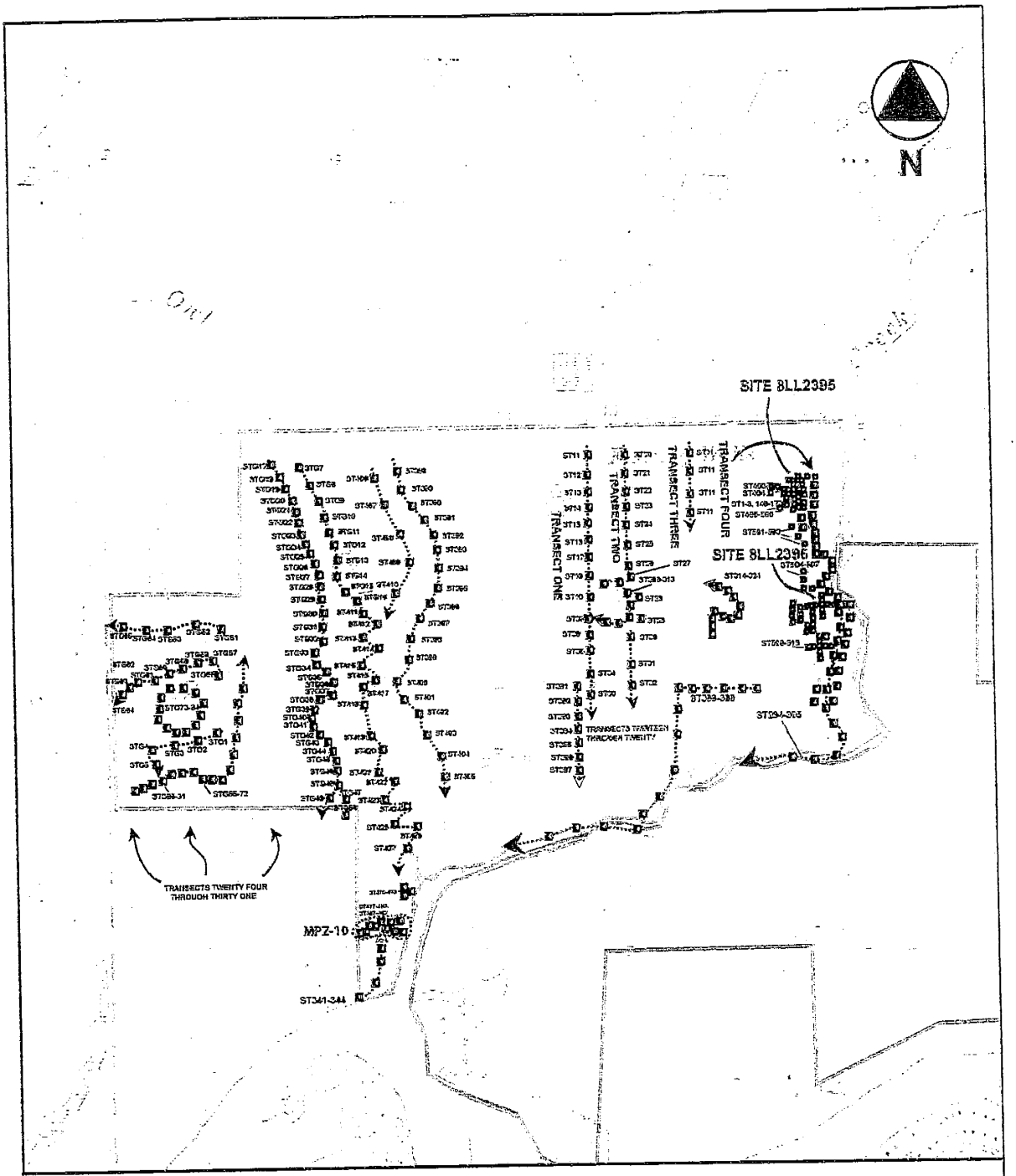


Figure 9. Map of the Subparcel 1 area of the North River Assemblage Project Parcel showing the location of moderate to high probability zones, transects and shovel tests.

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= MODERATE TO HIGH PROBABILITY ZONE

0 660 1320 2640 Feet
0 200 400 800 Meters

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

Figure 10. Aerial photograph of the North River Assemblage Project Parcel, Subparcel 1 area showing the location of moderate to high probability zones, transects, and shovel tests.

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= MODERATE TO HIGH PROBABILITY ZONE

0	660	1320	2640 Feet
0	200	400	800 Meters

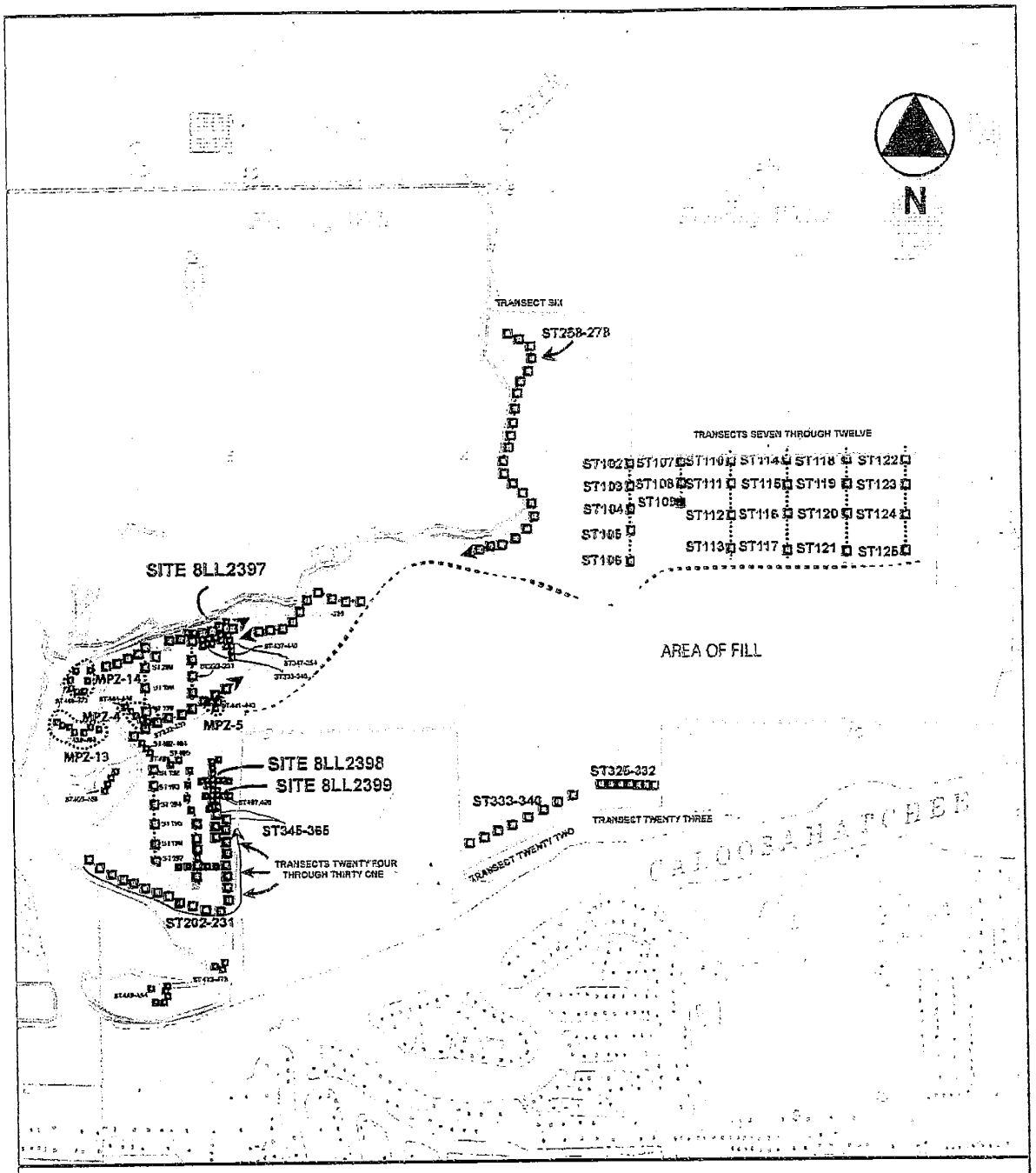


Figure 11. Map of the Subparcel 2 of the North River Assemblage showing the location of moderate to high probability zones, transects, and shovel tests.

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= AREA OF FILL

= MODERATE TO HIGH PROBABILITY ZONE

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	660	1320	2640 Feet
0	200	400	800 Meters

Figure 12. Aerial photograph of the North River Assemblage Project Parcel, Subparcel 2 area showing the location of moderate to high probability zones, transects, and shovel tests.

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= MODERATE TO HIGH PROBABILITY ZONE

= AREA OF FILL

0	660	1320	2640	Feet
0	200	400	800	Meters

Summary of Sites

State Site Number:	**8LL2395**
Site Name:	Twisted Oak
Environmental Setting:	Cleared field / climax cabbage palm / live oak / hardwood hammock near Trout Creek
Location:	Township 43S, Range 26E, Section 17
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	The site occupies a slightly elevated linear ridge adjacent to the flood terrace of Trout Creek (Figure 15). The site is located in cleared open pasture with one massive live oak (Figures 10, 11). The site is characterized by ceramics and lithic debitage. Cultural deposits begin 35 cm below surface. Site size is estimated at 30 meters (100 feet) on an east-west axis and about 25 meters (75 feet) on a north-south axis.
Chronology:	Prehistoric: late Archaic Period to Glades I-II
Collections:	Faunal bone, sand tempered ceramics (39), chert flakes (2) (FS 3, 5, 6)
Previous Research:	None
Preservation Quality:	Good to excellent. The site is in a cleared field. There is little disturbance to the cultural strata.
Ownership:	Private
Significance:	Site is of local significance and is potentially eligible for listing on the National Register of Historic Places based on Criterion D.

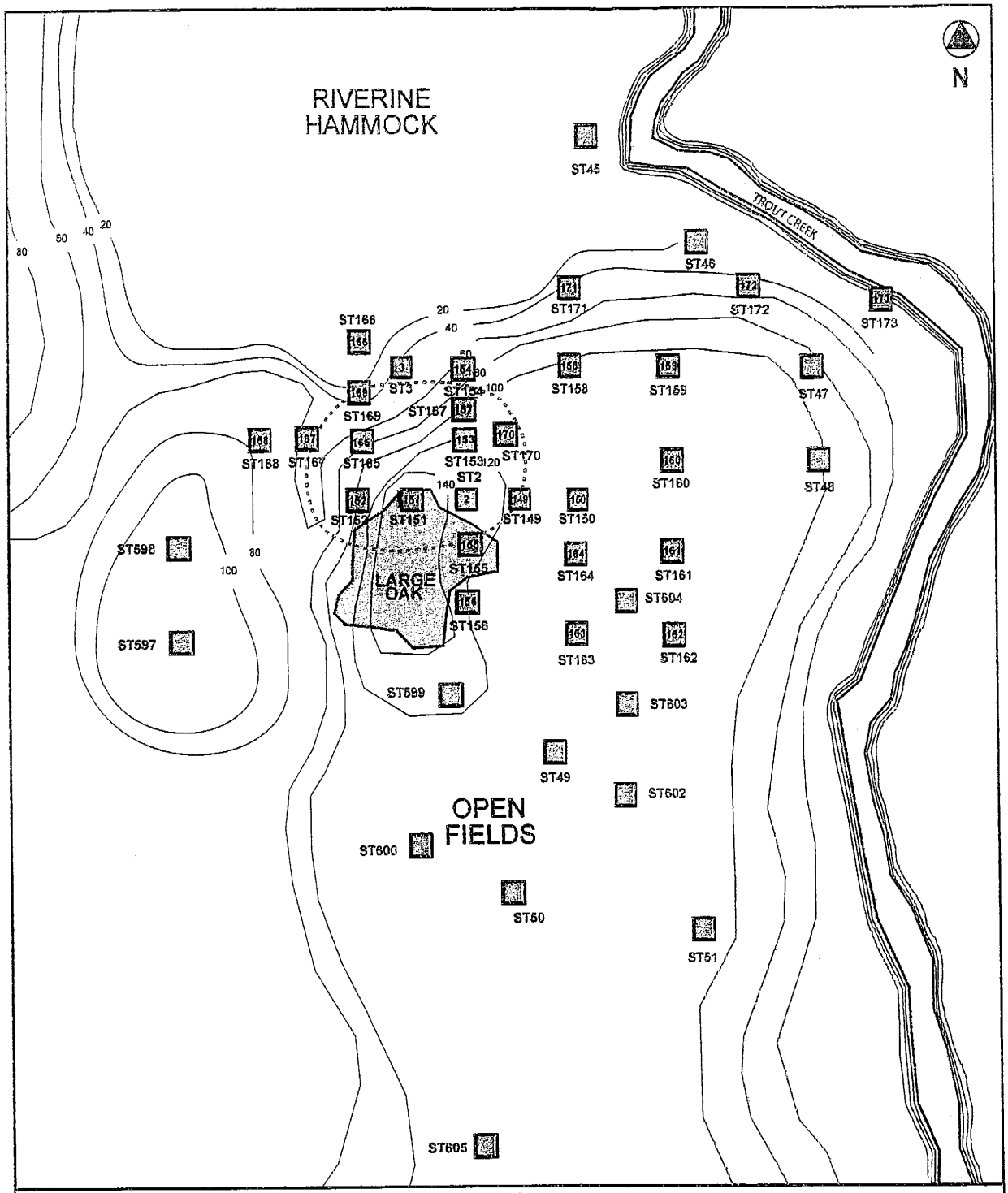


Figure 13. Map of the Twisted Oak Site, 8LL2395, area showing location of shovel tests (ST).

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= ESTIMATED SITE BOUNDARIES

Contours Approximate

0 25 50 100 Feet
0 8 16 30 Meters

State Site Number:	**8LL2396**
Site Name:	Trout Creek
Environmental Setting:	Cleared field and remnant cabbage palm / live oak hammock near Trout Creek
Location:	Township 43S, Range 26E, Section 17
Site Type:	Midden? Artifact scatter?
Site Function:	Habitation, resource extraction
Description:	The site occupies a slightly elevated linear ridge immediately west of Trout Creek. The site area is located in cleared open pasture with live oaks associated with a remnant riverine hammock. The site is located in a bend of the creek about 150 feet (45.72 meters) south of the bridge crossing the creek. The site is characterized as a concentration of pottery sherds beginning at 35 cm below surface. Site size is unknown but adjacent negative tests suggests a small site area. The site tends to center on a point encompassed by the present creek location.
Chronology:	Prehistoric: Glades I – II ?
Collections:	Sand tempered ceramics (9) (FS 4)
Previous Research:	None
Preservation Quality:	Good to excellent. The site is in a cleared field, but there is little disturbance of the cultural strata.
Ownership:	Private
Significance:	Based on available data, the site is not regarded as potentially eligible for listing on the National Register of Historic Places. However, Phase II testing is recommended if the site area is not preserved.

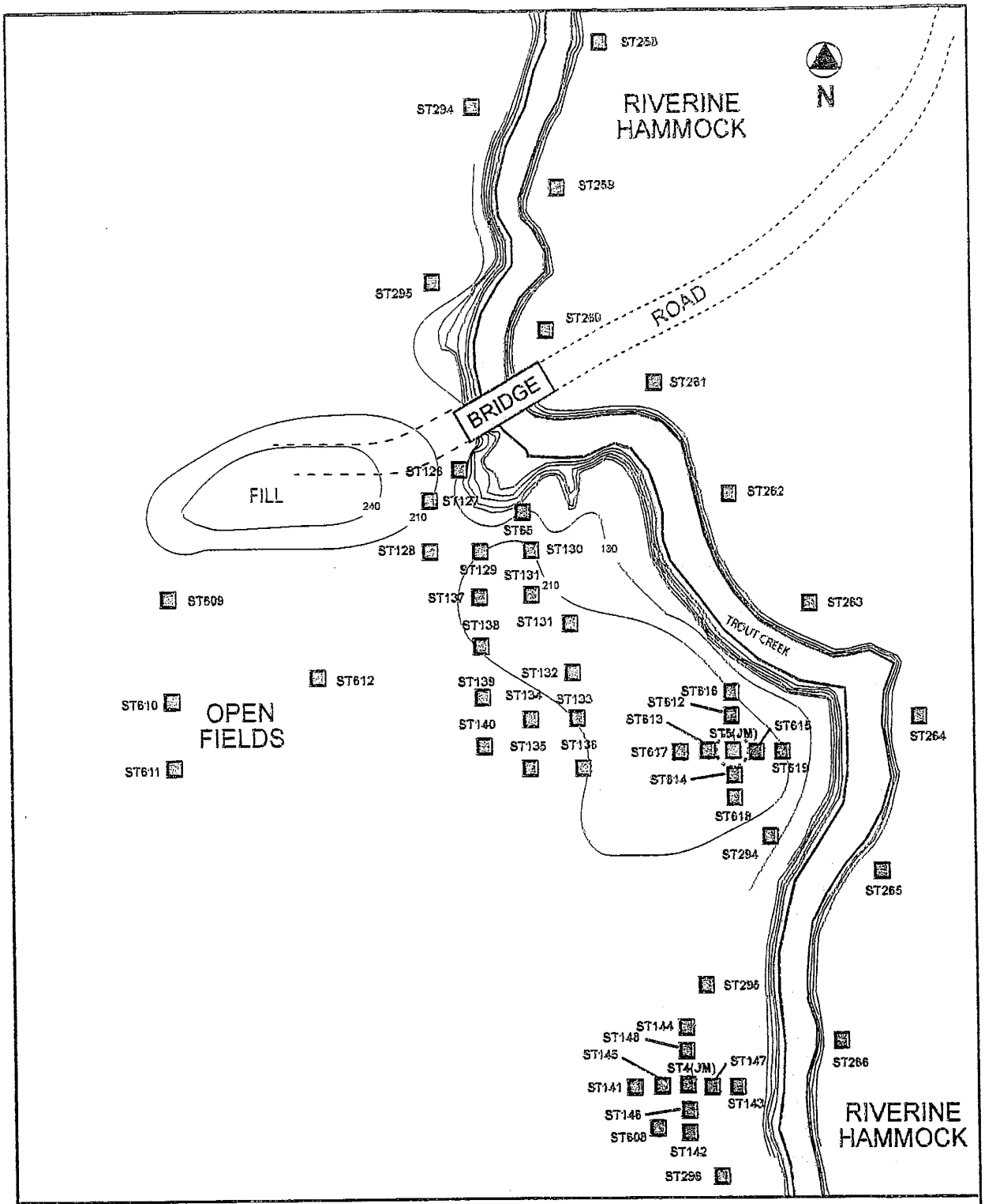


Figure 14. Map of the Trout Creek Site, 8LL2396, area showing location of shovel tests (ST).

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= Estimated site boundary

Contours Approximate

Figure 15. View east at the Twisted Oak, 8LL2395, site area. Note slight rise in topography. North edge of the site is to the right of the individuals shown.

Figure 16. View north toward bend in Trout Creek slightly to northwest of Trout Creek Site, 8LL2396.

Figure 17. View southeast at Trout Creek Site, 8LL2396, on the western bank of Trout Creek (in background).

Figure 18. View north. Field crew are standing in the center of the Trout Creek Hunt Camp Site, 8LL2397 on the south bank of Trout Creek.

State Site Number:	**8LL2397**
Site Name:	Trout Creek Hunt Camp
Environmental Setting:	Cleared field / live oak grove near lower course of Trout Creek
Location:	Township 43S, Range 26E, Section 18
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	This small site occupies a slightly elevated but distinct linear ridge south of and paralleling Trout Creek. The flood plain near the lower course of Trout Creek is an extensive low-lying brackish marsh/swamp, and the site occupies the high ground interface on the south bank of the creek. The site area is located in a live oak grove with open understory. The site is characterized as a 20 to 30 cm thick lens of cultural material beginning at surface. Material recovered includes a sparse amount of ceramics, faunal bone (including deer antler and tooth), lithic debitage and abundant Carolina marsh clams. Site size is estimated at 100 feet on an east-west axis and 50 feet on a north-south axis. The site tends to center on a small elevated ridge.
Chronology:	Prehistoric: late Archaic Period to Glades I - II
Collections:	Faunal bone, sand tempered ceramics (10), marine shell (FS 11 - 14)
Previous Research:	None
Preservation Quality:	Good to excellent. The site is near a cleared field, but there is little disturbance to the cultural strata.
Ownership:	Private
Significance:	The site is of local significance and is potentially eligible for listing on the National Register of Historic Places based on Criterion D.

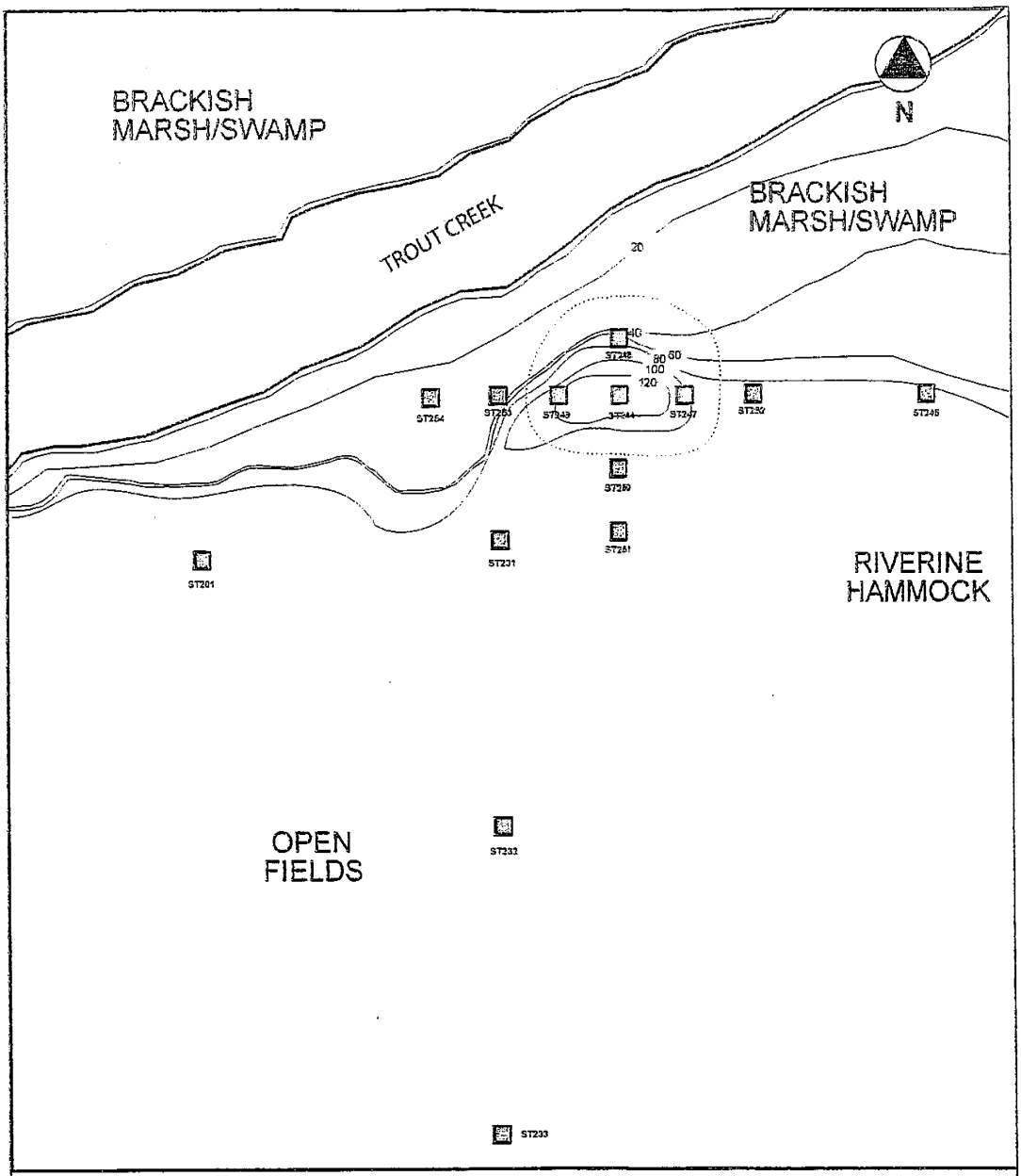


Figure 19. The Trout Creek Hunt Camp Site, 8LL2397, area showing the location of Phase I shovel tests (ST).

State Site Number:	**8LL2398**
Site Name:	Intrigue
Environmental Setting:	Tropical hardwood hammock within tall cypress head / slough
Location:	Township 43S, Range 26E, Section 19
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	The site occupies a slightly elevated linear ridge within the western area of a climax cypress head. The site is west of the central depressional pond of the cypress head. The site is characterized by a 30 cm thick deposit of shell refuse largely consisting of oyster that begins at the surface. Material recovered includes oyster shell and faunal bone. Site size is estimated at 18 meters on an east-west axis and 50 meters on a north-south axis. The site tends to center on the small elevated ridge. This is an unusual site both in terms of the marine shell content and its location in a cypress head feature. The site is heavily vegetated in camphorwood with some moderate-sized gumbo-limbos.
Chronology:	Prehistoric: Glades I - II
Collections:	Faunal bone, marine shell (FS 1, 7, 8, 9)
Previous Research:	None
Preservation Quality:	Excellent. The site is undisturbed.
Ownership:	Private
Significance:	Site is of at least local significance, and potentially eligible for listing on the National Register of Historic Places based on Criterion D.

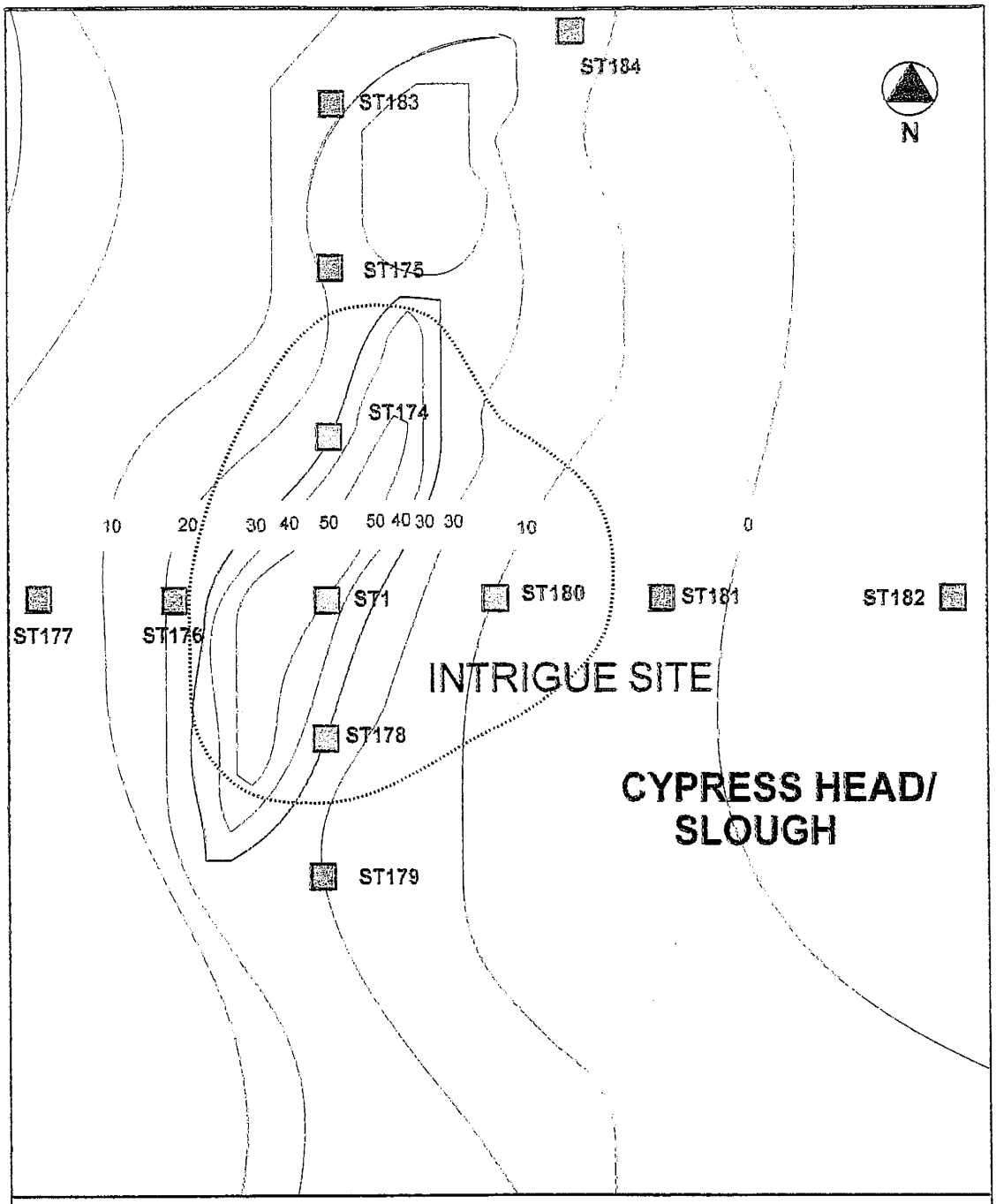


Figure 20. The Intrigue Site, 8LL2398, area showing the location of Phase I shovel tests (ST).

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= ESTIMATED SITE BOUNDARIES

Contours Approximate

0 25 50 100 Feet
0 8 16 30 Meters

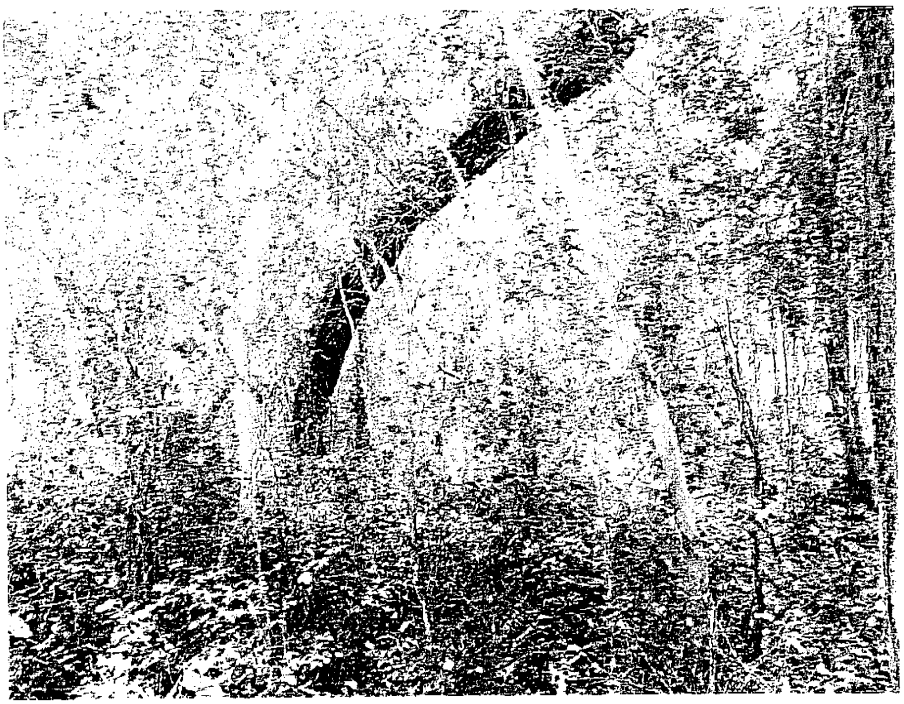


Figure 21. View south at elevated ridge area of Intrigue Site, 8LL2398. Note the grove of mature camphorwood and gumbo limbo trees.

Figure 22. View south at the Majestic Gumbo Limbo Site, 8LL2399. Note the large gumbo limbo in the background.

State Site Number:	**8LL2399**
Site Name:	Majestic Gumbo-Limbo
Environmental Setting:	Tropical hardwood hammock within western area of tall cypress head
Location:	Township 43S, Range 26E, Section 19
Site Type:	Constructed mound, possible burial mound
Site Function:	Habitation?, possible mortuary
Description:	The site is characterized by a moderately elevated knoll or mound well within the western area of a climax cypress head/slough feature. The site area is located west of the central depressional area of the cypress head and approximately 200 feet south of the Intrigue Site, 8LL2398. Site elevation is approximately 60-70cm above the surrounding low marshy cypress swamp. Site size is estimated at 15 meters (50 feet) on an east-west axis and 25 meters (80 feet) on a north-south axis. The site likely centers on the elevated knoll. It is possible the mound is constructed and may represent a burial area or house mound. One piece of oyster shell was recovered from a shovel test. This is an unusual site both in terms of the configuration and location in a cypress head feature. The site is heavily vegetated in camphorwood with one massive-sized gumbo-limbo at the south end of the feature.
Chronology:	Prehistoric: Unknown
Collections:	Marine shell (FS 2)
Previous Research:	None
Preservation Quality:	Excellent
Ownership:	Private
Significance:	Site is of at least local significance, and potentially eligible for listing on the National Register of Historic Places, based on Criterion D and because it is likely a burial mound.

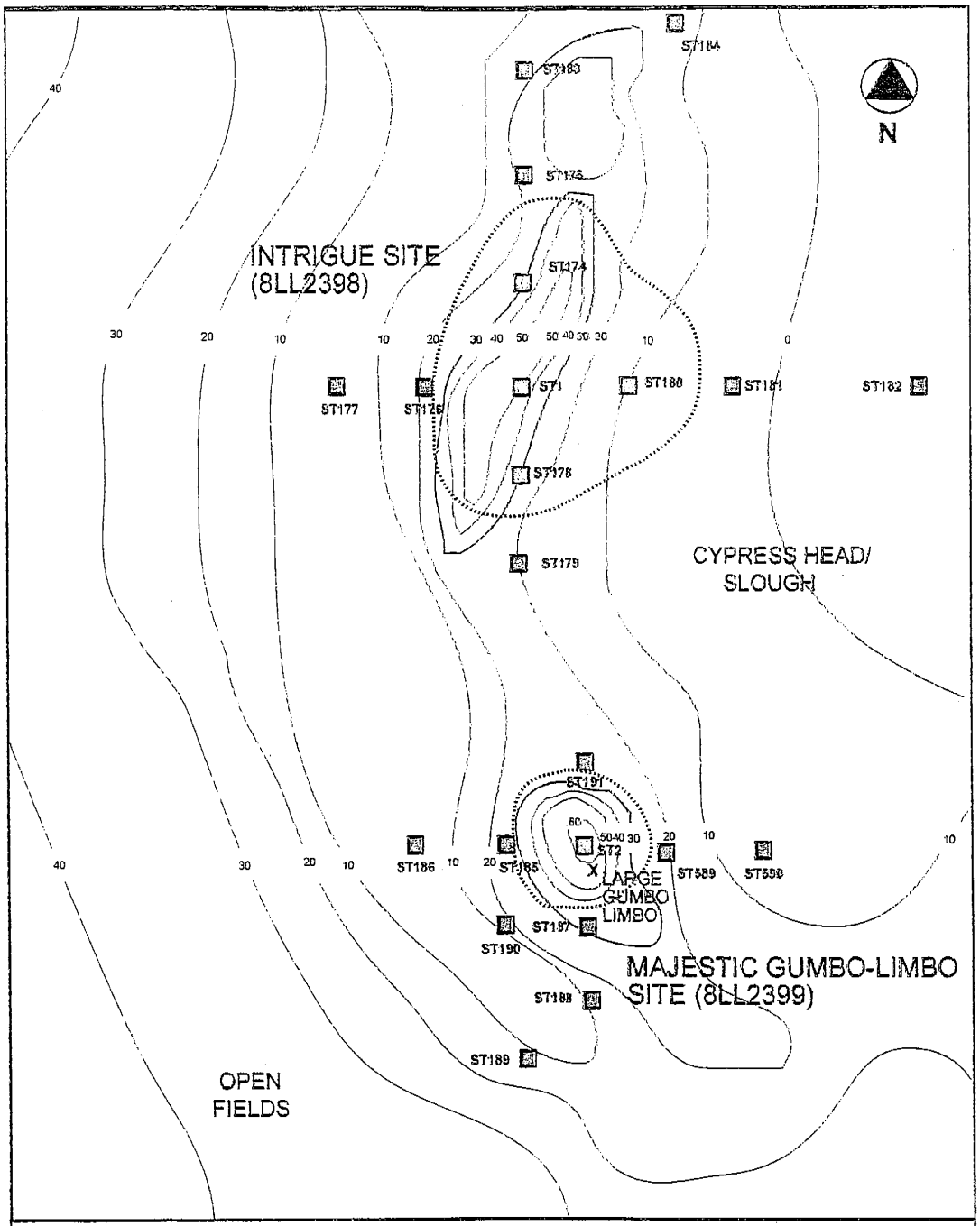


Figure 23. The Intrigue Site, 8LL2398, and Majestic Gumbo-Limbo Site, 8LL2399 areas showing the location of Phase I shovel tests (ST).

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

= ESTIMATED SITE BOUNDARIES

Results and Conclusions

This Phase I cultural resource assessment of the North River Assemblage Parcels resulted in the documentation of five previously unrecorded prehistoric sites: 8LL2395, 8LL2396, 8LL2397, 8LL2398, and 8LL2399 (Figure 24). At least three of these sites appear to be small middens or artifact scatters representing possible camps. Site 8LL2399, based on its form and elevation, may be a constructed burial mound.

A check with the Florida Division of Historic Resources on 9-10-07 indicates that there are no previously recorded historical or archaeological sites for Township 46S, Range 23E, Sections 16, 17, 18, 19, 20. No historic buildings occur on the subject parcel although there are six modern structures on the parcel.

A total of 602 shovel tests was dug along 31 transects (Figures 8, 9). High, moderate, and low probability areas were assessed. Eight higher probability zones were identified along the several creeks and the Caloosahatchee River that traverse the parcel. Three of the sites were found on the bank of Trout Creek and two sites were found within a cypress swamp.

Fifteen field specimens representing individual or groups of archaeological materials were recovered during shovel testing. All were prehistoric and included shell refuse, faunal bone, two chert flakes, and 58 STP pottery sherds. Faunal bone includes fish, reptile, and turtle. The recovered material suggests a Late Archaic-Woodland age of human activity (ca. 500 B.C. – A.D. 1000) for the subject parcel.

It is the consultant's opinion that four of the five archaeological sites are regarded as potentially eligible for listing on the National Register of Historic Places based on Criterion D and that these should be preserved if possible and if avoidance is not feasible then Phase II excavations should be conducted. Two of the sites are within wetlands (i.e. 8LL2398 and 8LL2399) and the others are near the creek banks should make preservation a viable option. Site 8LL2396 is a small artifact scatter, and based on available data, does not appear to be eligible for listing on the National Register of Historic Places. However, other site components are possible and if the site area is proposed for development, then Phase II testing is recommended.

Although a systematic effort was made to locate additional sites across the subject parcel without success, there is a likelihood that other archaeological sites, features and artifacts occur. Should subsequent development reveal this, efforts should be made to protect or document these resources. In the event that human remains are discovered then the provisions of Florida Statute 872.05, the Unmarked Human Graves Act, will apply.

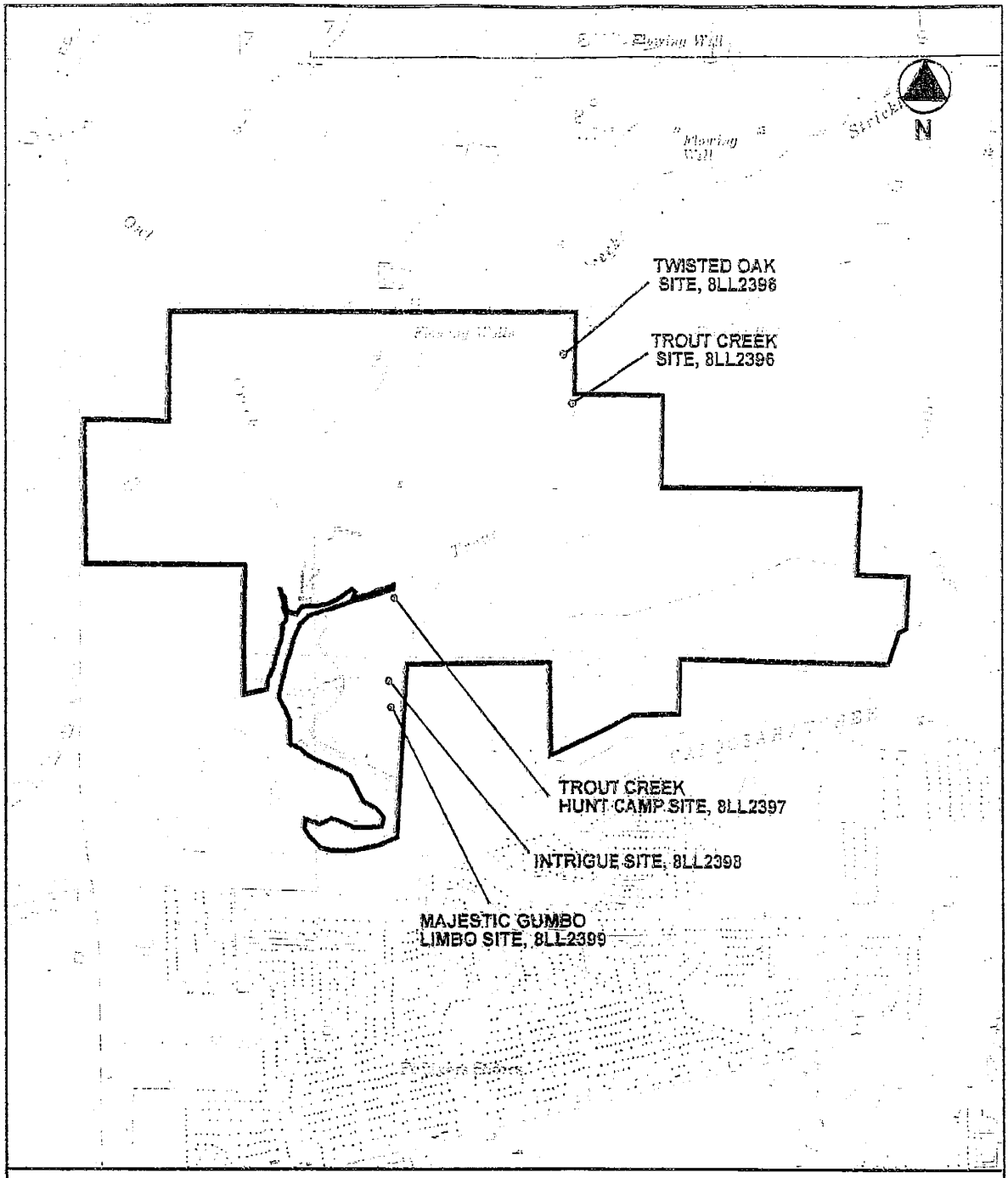


Figure 24. Map of the North River Assemblage Project Parcel showing the location of archaeological sites.

USGS Maps: Fort Myers, Rev. 1991; OLGA, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

References Cited

Allerton, D and RS Carr

1988 An Archaeological Survey of the Shell Big Cypress Seismic Project (DNR permit G81-86). Manuscript on file, Archaeological and Historical Conservancy, Florida.

1990 An Archaeological and Historical Assessment of the Goodland Marina Project Tract, Collier County. Conducted for Coastal Engineering Consultants.

Almy, MM and JG Deming

1982 Cultural Resources Survey of the Emerald Lakes Tract in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota FMSF #902.

1986a Archaeological Assessment Survey of Twelve Lakes, Collier County, Florida. Archaeological Consultants Inc., Sarasota.

1986b Archaeological Assessment of Bretonne Park, Collier County, Florida Archaeological Consultants Inc., Sarasota.

1986c Archaeological Assessment of City Gate Commercial Park, Collier County, Florida. Archaeological Consultants Inc., Sarasota.

1987 Archaeological Assessment Survey of Designated Potions of the Woodlands in Collier County, Florida. Archaeological Consultants Inc., Sarasota.

Athens, William P.

1983 *The Spatial Distribution of Glades Period Sites within the Big Cypress National Preserve, Florida.* Masters thesis on file, Florida State University, Tallahassee, Florida.

Beriault, JG

1973 A Preliminary Report on the Area Known as the Collier-Coral Ridge Tract, Southwest Florida. Unpublished Ms, on file at FMSF, Tallahassee and AHC, Miami.

1982 A Preliminary Report on Stratigraphic Excavations at Addison Key, Collier County, Florida. Unfinished MS.

1986 Report and Recommendations Concerning the Barron Collier Company Tract on Chokoloskee Island, Collier County, Florida, MS on file, AHC.

1986 Suggestions for a Collier County site Model, a report submitted to the Archaeological and Historical Conservancy, December 15th, 1987. MS on file, AHC.

1998 An Archaeological Survey of the Standerfer Parcel, Lee County, Florida. *AHC Technical Report #226.*

2001 An Archaeological Survey of the Riverwood Parcel, Bonita Springs, Lee County, Florida. *AHC Technical Report #292.*

2003 A Phase 1 Archaeological Survey of the Arborwood Parcel, Lee County, Florida, *AHC Technical Report #438*

2004 A Phase I Archaeological Survey of the Bokeelia Parcel, Lee County, Florida, *AHC Technical Report #598*

2005 A Phase II Archaeological Survey of the Bokeelia Parcel, Lee County, Florida, *AHC Technical Report* #650

2005a A Phase I Archaeological Assessment of the Turtle Cay Parcel, Lee County, Florida. *AHC Technical Report #658*

Beriault, JG, RS Carr, J Stipp, R Johnson, and J Meeder
1981 The Archaeological Salvage of the Bay West Site, Collier County, Florida. In *Florida Anthropologist 34*(20):39-58.

Beriault, JG and RS Carr
1998 An Archaeological Survey of the Winding Cypress Parcel, Collier County, Florida. *AHC Technical Report #221.*

Beriault, JG and C Strader
1984 A Preliminary Report on Stratigraphic Excavation on Chokoloskee Island, Florida. Southwest Florida Archaeological Society, MS on file, AHC.

Beriault, John G. and Victor Longo
2002 A Phase Two Archaeological Assessment of the Riverwood Parcel, Bonita Springs, Lee County, Florida *AHC Technical Report #370.*

Beriault, John G., and John Crump
2005 A Phase One Archaeological Assessment of the Bonita 120 RPD Parcel, Lee County, Florida *AHC Technical Report #641.*

Bullen, RP and AK Bullen
1956 Excavation on Cape Haze Peninsula, Florida. *Contributions of the Florida State Museum. Social Sciences I,* Gainesville, Florida.

Carbone, VA
1983 Late Quaternary Environments in Florida and the Southeast. *The Florida Anthropologist 36*:3-17.

Carr, RS
1986 Preliminary Report on Excavations at the Cutler Fossil Site (8DA2001) in Southern Florida. *The Florida Anthropologist 39*:231-232.

1989 An Archaeological and Historical Survey of Part of the Williamson Property, Collier County, Florida. Archaeological and Historical Conservancy, Miami. FMSF 2458.

2002 "The Archaeology of Everglades Tree Islands" in *Tree Islands of the Everglades,* edited by Fred H. Sklar and A. Van der Valk, Kluver Academic Publishers, Boston

Carr, RS and D Allerton
1988a An Archaeological Survey of North Keewaydin Island, Collier County, Florida. Archaeological and Historical Conservancy, Miami, Florida.

1988b An Archaeological and Historical Assessment of the Goodland Marina Project Tract, Collier County, Florida. MS on file, Archaeological and Historical Conservancy, Miami, Florida.

Carr, RS and JG Beriault
1984 Prehistoric Man In South Florida. In PJ Gleason (ed), *Environments of South Florida: Present and Past II.* Coral Gables: Miami Geological Society, FL. pp. 1-14.

Carr, Robert s. and John G. Beriault
2001 An Archaeological and Historical Survey of the Verandah Parcel, lee County, Florida. *AHC Technical Report #247.*

Carr, RS and K Heinz
1996 Archaeological Excavations at the Ryder Pond Site, 8LL1850, Lee County, FL. April, 1986.

Carr, RS and W Steele
1993 An Archaeological Survey and Assessment of the Lely Resort Properties, Collier County, Florida. *AHC Technical Report #70.*

Carr, RS, W Steele and J Davis
1994a A Phase I Archaeological and Historical Assessment of the Piper Tract, Collier County, Florida. April, 1994.

1994b A Phase II Archaeological and Historical Assessment of the Piper Tract, Collier County, Florida. June, 1994.

Clausen, C and J Gifford
1975 Florida spring confirmed as 10,000 year old early man site. *The Florida Anthropologist 8* (3), Part 2.

Cockrell, WA
1970 Glades I and Pre-Glades Settlement and Subsistence Patterns on Marco Island (Collier County, Florida). M.A. thesis of file, Florida State University, Tallahassee, Florida.

Cockrell, WA and L Murphy
1978 Pleistocene Man in Florida. *Archaeology of Eastern North America Vol. 6.* Newark, Delaware: Eastern States Archaeological Federation.

Cushing, FH
1897 Exploration of Ancient Key-Dwellers' Remains on the Gulf Coast of Florida. *Proceedings of the American Philosophical Society,* Philadelphia 35 (153): 1-329-448.

Daniel, RI and M Wisenbaker
1987 *Harney Flats.* Baywood Publishing Company, Farmingdale, New York.

Delcourt, PA and HR Delcourt
1981 Vegetation Maps for Eastern North America: 40,000 Years B.P. to Present. In R.C. Romans (editor) *Geobotany II.* New York: Olenum Publishing Press.

Deming, JG and M Almy
1987 A Cultural Resource Assessment Survey of the Audubon Country Club Tract in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota, Florida. FMSF 1487.

1988 Mitigative Excavation at Selected Portions of Site Complex 8CR860 in Northwest Collier County, Florida. Archaeological Consultants Inc., Sarasota, Florida. FMSF 1813.

Dickel, D and RS Carr
1992 Archaeological Investigations at Bonita Bay Properties, Phase II. Lee County, FL. *AHC Technical Report #49.*

Douglass, AE
1885 Ancient Canals on the South-west Coast of Florida. *American Antiquarian* 7:227-285.

1890 Mounds in Florida. *American Antiquarian 12*:105-107.

Durnford, CD
1895 The discovery of aboriginal netting, rope, and wood implements in a muck deposit in west Florida. *American Naturalist 29*: 1032-1039.

Ehrenhard, JE, RS Carr, and RC Taylor
1978 *The Archaeological Survey of Big Cypress National Preserve: Phase I.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

1979 The Big Cypress National Preserve: Archaeological Survey Season 2. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Ehrenhard, JE and RC Taylor
1980 *The Big Cypress National Preserve: Archaeological Survey Season 3.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Ehrenhard, JE, RC Taylor, and G Komara
1980 *Big Cypress National Preserve Cultural Resource Inventory Season 4.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Fay, P and RS Carr
1990 An Archaeological Review Of Select Sites of Impact in the National Panther Refuge, Collier County, Florida. *AHC Technical Report #22.*

Fradkin, A
1976 The Wightman Site: A Study of Prehistoric Culture and Environment on Sanibel Island, Lee County, Florida. M.A. Thesis, Department of Anthropology, University of Florida, Gainesville.

Fuhrmeister, C, RJ Austin, and H Hansen
1990 Cultural Resource Assessment Survey of the Collier Tract 22 Development Site, Collier County, Florida. Piper Archaeological Research Inc. St. Petersburg, Florida. FMSF 2423.

Goggin, JM
1939 A Ceramic Sequence in South Florida. *New Mexico Anthropologist* 3:36-40.

1940 The distribution of pottery wares in the Glades Archaeological Area of South Florida. *New Mexico Anthropologist 4*:22-33.

1947 A Preliminary Definition of Archaeological areas and Periods in Florida. *American Antiquity* 13:114-127.

1949a Cultural Occupation at Goodland Point, Florida. *The Florida Anthropologist* 2(3-4): 65-91.

1949b The Archaeology of the Glades Area. Unpublished MS on file, SE Archaeological Research Center, NPS, Tallahassee, Fl.

1949c Cultural Traditions in Florida Prehistory. In J.W. Griffin (editor) *The Florida Indian and his Neighbors.* Winter Park, Florida: Rollins College.

Goggin, JM and WC Sturtevant
1964 The Calusa: A Stratified, Nonagricultural Society (with notes on sibling marriage). In W Goodenough (editor) *Explorations in Cultural Anthropology: Essays in Honor of George Peter Murdock.* New York: McGraw Hill. Pp. 179-291.

Griffin, JW
1974 Archaeology and Environment in South Florida. In P.J. Gleason (ed.), *Environments of South Florida: Present and Past II.* Coral Gables: Miami Geological Society, pp 342-346.

1988 The Archaeology of Everglades National Park: A Synthesis. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Hrdlička, A
1922 The *Anthropology of Florida.* Deland, Florida: Publications of the Florida State Historical Society 1.

Jordan, Elaine Blohm
1982 Pine Island, the Forgotten Island. Author Printing: Cape Coral, FL.

Kenworthy, CJ
1883 Ancient Canals in Florida. *Smithsonian Institution Annual Report for 1881:* 105-109.

Kroeber, AL
1939 *Cultural and Natural Areas in Native North America.* Berkeley: University of California Press.

Laxson, DD
1966 The Turner River Jungle Gardens Site, Collier County, Florida. *The Florida Anthropologist* 19: 125-140.

Lee, AR, JG Beriault, W Buschelman, J Belknap
1993 A Small Site - Mulberry Midden, 8CR697 - Contributes to Knowledge of the Transitional Period. *The Florida Anthropologist* 46:43-52.

Lee, AR, JG Beriault, J Belknap, WM Buschelman, AL Snapp and JW Thompson
1997 Salvage Excavation of an Archaic Period Special-Purpose Site in Collier County. *The Florida Anthropologist* 50:11-24.

1988 Heineken Hammock, 8CR231: A Late Archaic Corridor Site in Collier County. Southwest Florida Archaeological Society. Naples, Florida.

McMichaels, A
1982 A Cultural Resource Assessment of Horrs Island, Collier County, Florida. MA thesis, Department of Anthropology University of Florida, Gainesville.

Marquardt, WH
1984 *The Josslyn Island Mound and its Role in the Investigation of Southwest Florida's Past.* Gainesville: Florida State Museum, Department of Anthropology, Miscellaneous Project Report Series 22.

1987 The Calusa Social Formation in Protohistoric South Florida. In T.C. Patterson and C.W. Gailey (editors) *Power Relations and State Formation.* Washington, D.C.: Archaeology Section, American Anthropological Association, pp. 98-116.

1988 Politics and Production Among the Calusa of South Florida. In T. Ingold, D. Riches, and J. Woodburn (editors) *Hunters and Gatherers 1: History, Evolution, and Social Change.* London: Berg Publishers, pp. 161-188.

1992 Recent Archaeological and Paleoenvironmental Investigations in Southwest Florida. In W.H. Marquardt (editor), *Culture and Environment in the Domain of the Calusa.* Gainesville: Institute of Archaeology and Paleoenvironmental Studies. Monograph 1, University of Florida, pp. 9-58.

Martinez, C
1977 Archaeological and Historical Survey and Assessment of the Proposed Collier County 201 Waste Water Management Facilities, Collier County, Florida. Russell & Axon Inc. and Smally, Welford & Nalven Inc. FMSF #257.

Milanich, JT
1994 *Archaeology of Precolumbian Florida.* Gainesville: University Press of Florida.

Milanich JT, J Chapman, AS Cordell, S Hale, and R Merrinan
1984 Prehistoric Development of Calusa Society in Southwest Florida: Excavation on Useppa Island. In D.D. Davis (editor) *Perspectives on Gulf Coast Prehistory.* Gainesville: University Presses of Florida, pp. 258-314.

Milanich, JT. and CH Fairbanks
1980 *Florida Archaeology.* New York: Academic Press.

Miller, JJ and ML Fryman
1978 An Archaeological and Historical Survey of the Collier Bay Tract, Marco Island. Cultural Resource Management Inc., Tallahassee, Florida. FMSF #3124.

Moore, CB
1900 Certain Antiquities of the Florida West Coast. *Journal of the Academy of Natural Science*, Philadelphia 11:369-394.

1905 Miscellaneous Investigations in Florida. *Journal of the Academy of Natural Science,* Philadelphia 13:299-325.

1907 Notes on the Ten Thousand Islands. *Journal of the Academy of Natural Science,* Philadelphia 13:458-470.

Morrell, RL
1967 Florida site form for site 8CR107.

1969 Fiber-tempered Pottery from Southwestern Florida. Abstract of presented paper, American Anthropological Association Annual Meeting, New Orleans, on file at AHC.

Russo, M
1990 Report I on Archaeological Investigations by the Florida Museum of Natural History at Horrs Island, Collier County, Florida. FMSF 2353.

Scholl, DW, FC Craighead, and M Stuiver
1969 Florida Submergence Curve Revisited: Its Relation to Coastal Sedimentation Rates. *Science 163*: 562-564.

Sears, WH
1956 The Turner River Site, Collier County, Florida. *The Florida Anthropologist 9*(2):47-60.

1966 Everglades National Park Archaeological Base Mapping Part I. Unpublished, FMSF MS# 1009.

1967 Archaeological Survey of the Cape Coral Area at the Mouth of the Caloosahatchee River. *The Florida Anthropologist* 20: 93-102.

1982 *Fort Center: An Archaeological Site in the Lake Okeechobee Basin.* Gainesville: University of Florida Press.

Simons, MH
1884 Shell Heaps in Charlotte Harbor, Florida. *Smithsonian Institution Annual Report for 1882:* 794-796.

Stirling, MW
1931 Mounds of the Vanished Calusa Indians of Florida. *Smithsonian Institution Explorations and Field Work for 1930:* 167-172.

1933 Report of the Chief. *Bureau of American Ethnology Annual Report* 48:3-21.

1936 Florida Cultural Affiliations in Relation to Adjacent Areas. In *Essays in Anthropology in Honor of Alfred.Louis Kroeber.* Berkeley: University of California Press, pp 351-357.

Swift, A and RS Carr
1989 An Archaeological Survey of Caxambas Estates, Collier County, Florida. Archaeological and Historical Conservancy, Miami, FL. *AHC Technical Report #13.*

Taylor, RC
1984 Everglades National Park Archaeological Inventory and Assessment Season 2: Interim Report. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

1985 Everglades National Park Archaeological Inventory and Assessment Season 3: Interim Report. National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Taylor, RC and G Komara
1983 *Big Cypress Preserve Archaeological Survey: Season 5.* National Park Service, Southeast Archaeological Center, Tallahassee, Florida.

Van Beck, JC and LM Van Beck
1965 The Marco Midden, Marco Island, Florida. *The Florida Anthropologist* 16:1-20.

Widmer, RJ
1974 A Survey and Assessment of Archaeological Resources on Marco Island, Collier County, Florida. Ms on file, FMSF #265.

1983 The Evolution of the Calusa, a Non-agricultural Chiefdom on the Southwest Florida Coast. Ph.D. thesis, Pennsylvania State University, distributed by University Microfilms International, Ann Arbor, Michigan.

1996 Recent Excavations at the Key Marco Site, 8CR48, Collier County, Florida. *The Florida Anthropologist* 49:10-26.

Williams, JL
1837 *The Territory of Florida*. Gainesville: University Press of Florida.

APPENDIX 1: NORTH RIVER ASSEMBLAGE PHASE I SHOVEL TEST LOG (POSITIVES ONLY)

ST1: (50cm^2) Positive, placed in the south end of the Intrigue Site, 8LL2398
0-16cm Dark gray sand, shell midden, dense oyster shell, sparse faunal bone (**FS-1**)
16-30cm Gray marl, cultural deposit ends
30-45cm Light gray marl

ST2: (50cm^2) Positive, placed in the center of what is now known as the Majestic Gumbo Limbo Site, 8LL2399
0-15cm Dark gray sand, sparse shell (**FS-2**)
15-36cm Gray clayey sand

ST4: (50cm^2) Positive, 23meters (70 feet) due south of ST3, now designated the Twisted Oak Site, 8LL2395.
0-20cm Gray sand
20-65cm Light gray sand, STP ceramics (**FS-3**)
65-69cm Brown hardpan

ST6: (50cm^2) Positive, 28 meters (90 feet) due north of ST5, now designated the Trout Creek Site, 8LL2396
0-23cm Gray sand
23-68cm Light gray sand, thick STP ceramics (**FS-4**)

ST153: (50cm^2) Positive, 8 meters (25 feet) north of ST2
0-20cm Gray sand, chert (**FS-5**)
20-83cm Light gray sand

ST174: (50cm^2) Positive, 8 meters (25 feet) north of ST1
0-24cm Dark brown silty loam, shell, fish vertebra (**FS-7**)
24-35cm Light gray clay

ST178: (50cm^2) Positive, 8 meters (25 feet) south of ST1
0-13cm Brown silty loam
13-51cm Gray silty sandy clay, Fossilized (?) bone (**FS-8**)

ST180: (50cm^2) Positive, 8 meters (25 feet) east of ST1
0-12cm Dark brown silty clay loam, faunal bone (**FS-9**)
12-50cm Gray silty sandy clay

ST187: (50cm^2) Positive, 8 meters (25 feet) south of ST2
0-35cm Brown silty loam, faunal bone and teeth (**FS-10**)
35-42cm Gray clay

ST244: (50cm^2) Positive, 30 meters (100 feet) east of ST243
0-45cm Dark brown silty loam, shell faunal bone STP ceramics (**FS-11**)
45-50cm Yellowish brown clay

ST247: (50cm^2) Positive, 8 meters (25 feet) east of ST244
0-21cm Dark brown sand, shell and STP ceramics (**FS-12**)
21-31cm Pale brown sand
31-38cm Brown clay

ST248: (50cm^2) Positive, 8 meters (25 feet) north of ST244
0-35cm Dark brown silty sand, shell, bone, deer antler, deer teeth (**FS-13**)
35-44cm Brown sandy clay

ST249: (50cm^2) Positive, 8 meters (25 feet) west of ST244
0-21cm Dark brown silty sand, faunal bone, shell, STP ceramics (**FS-14**)
21-45cm Brown sand
45-50cm Brown sandy clay

ST349: (50cm^2) Positive, 60 meters (200 feet) south of ST348. This finding was adjudged a "single artifact occurrence" by subsequent shovel testing.
0-30cm Dark gray sand
30-70cm Pale brown sand, one chert flake (**FS-15**)

APPENDIX 2: NORTH RIVER ASSEMBLAGE PHASE I FIELD SPECIMEN (FS) LOG

Field Specimen Number	Provenience (Shovel Test Number and Depth)	Description	Collector
1	ST1, 0-16cm, Intrigue Site, 8LL2398	Marine shell (82.1g), faunal bone (10g), terrestrial shell (2.1g)	JM
2	ST2, 0-15cm, Majestic Gumbo Limbo Site, 8LL2399	Marine shell (3.5g), terrestrial shell (3.7g)	JM
3	ST4, 20-65cm, Twisted Oak Site, 8LL2395	STP body sherds (35), STP rim sherds (2), charcoal (1g)	JM
4	ST6, 23-68cm, Trout Creek Site, 8LL2396	Thick STP body sherds (9)	JM
5	ST153, 0-35cm, Twisted Oak Site, 8LL2395	Chert flake (1)	JC
6	ST165, 0-40cm, Twisted Oak Site, 8LL2395	STP body sherds (2)	JC
7	ST174, 0-24cm, Intrigue Site, 8LL2398	Marine shell (21.4g) faunal bone (.4g)	JC
8	ST178, 13-51cm, Intrigue Site, 8LL2398	Limestone (13.9g)	JC
9	ST180, 0-33cm, Intrigue Site, 8LL2398	Faunal bone (.4g)	JC
10	ST187, 0-35cm	Faunal bone (3.4g)	JC
11	ST244, 0-45cm, Trout Creek Hunt Camp Site, 8LL2397	Marine shell (26.4g), faunal bone (2.4g), STP body sherds (2)	JC
12	ST247, 0-21cm, Trout Creek Hunt Camp Site, 8LL2397	Marine shell (32.4g), STP body sherds (5), STP rim sherds (1)	JC
13	ST248, 0-35cm, Trout Creek Hunt Camp Site, 8LL2397	Marine shell (63.6g) faunal bone (22.2g)	JC
14	ST249, 0-43cm, Trout Creek Hunt Camp Site, 8LL2397	Marine shell (9.3g), faunal bone (2.6g), STP body sherds (2)	JC
15	ST349, 40 cm depth, single artifact occurrence in southwestern part of parcel	Chert flake (1)	JC

JM = Joe Mankowski
JC = John Crump

Ent D (FMSF only)__/__/__

Survey Log Sheet

Florida Master Site File
Version 2.0 9/97

Survey # (FMSF only)_____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (Name and project phase) North River Assemblage Parcel Phase One Cultural Resource Assessment

Report Title (exactly as on title page) A Phase I Culutral Resource Assessment Survey of the North River Assemblage Parcels, Lee County, Florida

Report Author(s) (as on title page– individual or corporate; last names first) Carr, Robert S., Beriault, John G., Mankowski, Joseph F.

Publication Date (year): 2007 **Total Number of Pages in Report** (Count text, figures, tables, not site forms): 59

Publication Information (If relevant, series and no. in series, publisher, and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*: see *Guide to the Survey Log Sheet*.): Archaeological and Historical Survey Technical Report #814, Project No. 2007.77

Supervisor(s) of Fieldwork (whether or not the same as author[s]; last name first): Carr, Robert S.

Affiliation of Fieldworkers (organization, city): Archaeological and Historical Conservancy, Inc. (AHC), Davie, FL

Key Words/Phrases (Don't use the county, or common words like *archaeology*, *structure*, *survey*, *architecture*. Put the most important first. Limit each word or phrase to 25 characters.): Trout Creek, Owl Creek, Caloosahatchee

Survey Sponsors (corporation, government unit, or person who is directly paying for fieldwork)

Name: Bonita Bay Properties, Inc.

Address/Phone: 9990 Coconut Road, Suite 200, Bonita Springs, FL 34135

Recorder of *Log Sheet* John G. Beriault **Date *Log Sheet* Completed:** 11/23/2007

Is this survey or project a continuation of a previous project? X No θ Yes: Previous survey #(s) [FMSF only] _____

Mapping

Counties (List each one in which field survey was done - do not abbreviate; use supplement sheet if necessary): Lee

USGS 1:24,000 **Map(s) : Map Name/Date of Latest Revision** (use supplement sheet if necessary): Olga, rev. 1987; Fort Myers, 1991

Description of Survey Area

Dates for Fieldwork: Start 2/20/2006 End 10/02/2007 **Total Area Surveyed** (fill in one) 520 hectares 1300 acres

Number of Distinct Tracts or Areas Surveyed one

If Corridor (fill in one for each): **Width** _____ meters _____ feet **Length** _____ kilometers _____ miles

HR6E066 10-97 Florida Master Site File, Division of Historical Resources, Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250
Phone 850-487-2299, *Suncom* 277-2299, *FAX* 850-921-0372, *Email* fmsfile@mail.dos.state.fl.us, *Web* http://www.dos.state.fl.us/dhr/msf/
S:\2007 PROJECT FOLDERS\North River Revised 2007.77\NorthRiver_Rpt_814_FirstDraft\NorthRiver_Rpt_Txt\NorthRiver_SurveyLog.doc 11/26/07 9:17 AM

Survey Log Sheet of the Florida Master Site File

Research and Field Methods

Types of Survey (check all that apply): x archaeological θ architectural X historical/archival θ underwater θ other:_____

Preliminary Methods (4Check as many as apply to the project as a whole. If needed write others at bottom).

θ Florida Archives (Gray Building) θ library research- *local public* θ local property or tax records θ windshield
θ Florida Photo Archives (Gray Building) θ library-special collection - *nonlocal* θ newspaper files ■ aerial photography
■FMSF site property search θ Public Lands Survey (maps at DEP) θ literature search
θ FMSF survey search ■local informant(s) θ Sanborn Insurance maps
■other (describe)grayline aerial photographs and USGS Map _____

Archaeological Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

θ Check here if **NO** archaeological methods were used.

___ surface collection, controlled ___ other screen shovel test (size: ____) ___ block excavation (at least 2x2 M)
_A_ surface collection, **un**controlled ___ water screen (finest size: ____) ___ soil resistivity
_A_ shovel test-1/4"screen ___ posthole tests ___ magnetometer
___ shovel test-1/8" screen ___ auger (size:____) ___ side scan sonar
___ shovel test 1/16"screen ___ coring ___ unknown
___ shovel test-unscreened ___ test excavation (at least 1x2 M)
___ other (describe):_____

Historical/Architectural Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

■ Check here if **NO** historical/architectural methods were used.

___ building permits ___ demolition permits ___ neighbor interview ___ subdivision maps
___ commercial permits ___ exposed ground inspected ___ occupant interview ___ tax records
___ interior documentation ___ local property records ___ occupation permits ___ unknown
___ other (describe): _____

Scope/Intensity/Procedures: Review of USGS maps and aerial photographs followed by vehicular, boat, and pedestrian survey of entire parcel, the selection of eight MPZ, and the excavation of 618 shovel tests judgmentally and systematically in thirty-one transects.

Survey Results (cultural resources recorded)

Site Significance Evaluated? ■Yes θNo If Yes, circle NR-eligible/significant site numbers below.

Site Counts: Previously Recorded Sites None Newly Recorded Sites Five

Previously Recorded Site #'s (List site #'s without "8." Attach supplementary pages if necessary) _____

Newly Recorded Site #'s (Are you sure all are originals and not updates? Identify methods used to check for updates, ie, researched the FMSF records. List site #'s without "8." Attach supplementary pages if necessary.): LL2395, LL2396, LL2397, LL2398, LL2399

Site Form Used: θ SmartForm ■ FMSF Paper Form θ Approved Custom Form: Attach copies of written approval from FMSF Supervisor.

DO NOT USE ♣♣♣♣♣♣SITE FILE USE ONLY♣♣♣♣♣♣DO NOT USE

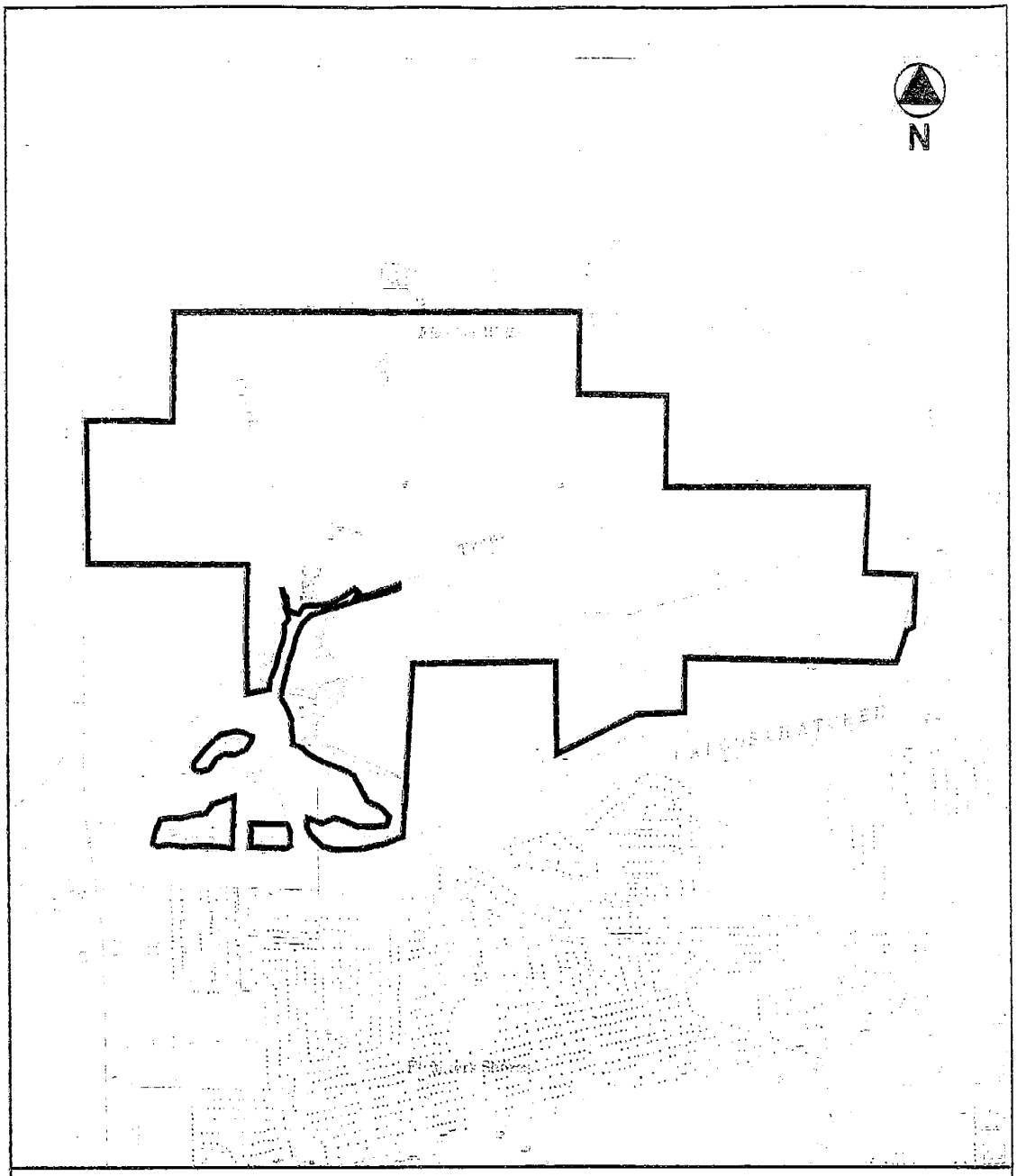
BAR Related

θ 872 θ 1A32
θ CARL θ UW

BHP Related

θ State Historic Preservation Grant
θ Compliance Review: CRAT #_____

ATTACH PLOT OF SURVEY AREA ON PHOTOCOPIES OF USGS 1:24,000 MAP(S)



Survey Log Form Map. USGS map of the North River Assemblage Project Parcel area.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

Page 1
X Original
☐ Update

ARCHAEOLOGICAL SITE FORM
FLORIDA MASTER SITE FILE
Version 2.2 12/95

Site #8LL2395
Recorder #
Field Date 8/20/06
Form Date 9/14/06

Site Name(s) Twisted Oak [Multiple Listing #8]
Project Name North River Assemblage Parcel [Survey #]
Ownership: X private-profit ☐private-nonprofit ☐private-individual private-unspecified ☐city ☐county ☐state ☐ federal ☐foreign ☐native american ☐unknown
USGS 7.5 map name & date Olga (1987) County Lee
Township 43S Range 26E Section 17 ¼ Sect.: ☐NE X NW ☐SE ☐ SW (check all that apply)
City / Town Fort Myers in Current City Limits? Y X N
UTM: zone ☐16 X 17 easting _____0 northing _____0
Address / Vicinity of / Route to State Road 31 to juncture with SR78, thence east 1.5 miles Site is 400 yards south of road and west of Trout Creek. A large twisted oak marks center of site area.
Landgrant Tax Parcel #
Name of Public Tract (e.g., park)

TYPE OF SITE (Check all choices that apply; if needed write others in at bottom)

SETTING

X Land - *terrestrial*
☐ Cave/Sink - *subterranean*
- ☐ terrestrial
- ☐ aquatic
- ☐ intermittently flooded

☐ Wetland - *palustrine*
- ☐ usually flooded (historically)
- ☐ sometimes flooded
- ☐ usually dry

☐ Lake/Pond - *lacustrine*
☐ River/Stream/Creek - *riverine*
☐ Tidal - *estuarine*
☐ Saltwater - *marine*
- ☐ marine unspecified
- ☐ "high energy" marine
- ☐ "low energy" marine

STRUCTURES - OR - FEATURES

☐ aboriginal boat
☐ agric/farm bldg
☐ burial mound
☐ building remains
☐ cemetery/grave
☐ dump/refuse
☐ earthworks
☐ fort
X midden
☐ mill unspecified
☐ mission
☐ mound unspecified
☐ plantation
☐ platform mound
☐ road segment
☐ shell midden
☐ shell mound
☐ shipwreck
☐ subsurface features
☐ surface scatter
☐ well

FUNCTION

☐ none specified
X campsite
X extractive site
☐ habitation (prehistoric)
☐ homestead (historic)
☐ farmstead
☐ village (prehistoric)
☐ town (historic)
☐ quarry

other

HISTORIC CONTEXTS (Check all that apply, except use most specific subphases only)

Aboriginal

☐ Alachua
☐ Archaic Unspecified?
☐ Belle Glade I
☐ Belle Glade II
☐ Belle Glade III
☐ Belle Glade IV
☐ Belle Glade Unspec
☐ Cades Pond
☐ Deptford
☐ Early Archaic
☐ Early Swift Creek
☐ Englewood
☐ Fort Walton
☐ Glades Ia
☐ Glades Ib
☐ Glades I Unspec
☐ Glades IIa
☐ Glades IIb
☐ Glades IIc
☐ Glades II Unspec
☐ Glades IIIa
☐ Glades IIIb
☐ Glades IIIc
☐ Glades III Unspec
X Glades Unspec
☐ Hickory Pond
☐ Late Archaic
☐ Late Swift Creek
☐ Leon-Jefferson
☐ Malabar I
☐ Malabar II
☐ Manasota
☐ Middle Archaic ?
☐ Mount Taylor
☐ Norwood
☐ Orange
☐ Paleoindian
☐ Pensacola
☐ Perico Island
☐ Safety Harbor
☐ St. Augustine
☐ St. Johns Ia
☐ St. Johns Ib
☐ St. Johns I Unspecified
☐ St. Johns IIa
☐ St. Johns IIb
☐ St. Johns IIc
☐ St. Johns II Unspecified
☐ St. Johns Unspecified
☐ Santa Rosa
☐ Santa Rosa-Swift Creek
☐ Seminole: Colonization
☐ Seminole: 1st War To 2d
☐ Seminole: 2d War To 3d
☐ Seminole: 3d War On
☐ Seminole-Unspecified
☐ Swift Creek Unspecified
☐ Transitional
☐ Weeden Island I
☐ Weeden Island II
☐ Weeden Island Unspec
☐ Prehistoric Nonceramic
☐ Prehistoric Ceramic
☐ Prehistoric Unspecified

Nonaboriginal

☐ 1st Spanish 1513-99
☐ 1st Spanish 1600-99
☐ 1st Spanish 1700-1763
☐ 1st Spanish Unspecified
☐ British 1763-1783
☐ 2nd Spanish 1783-1821
☐ Amer.Territor'l 1821-45
☐ Amer.Civil War 1861-65
☐ American 19th Century
☐ quarry American 20th Century
☐ American Unspecified
☐ African-American

☐ other (Less common phases are not checklisted. For historic sites, also give specific dates if known)

SURVEYOR'S EVALUATION OF SITE

Potentially eligible for local designation?	X yes	☐no	☐ insuff. info	Name of Local Register eligible for:
Individually eligible for National Register?	x yes	☐no	☐ insuff. info	
Potential contributor to NR district?	☐yes	☐no	X insuff. info	

Explanation of Evaluation (Required if evaluated; limit to 3 lines; attach full justification)
A fairly intact, moderate intensity scatter of lithics and ceramics.
Recommendations for Site Preservation or further investigation

DHR USE ONLY======== OFFICIAL EVALUATIONS ========DHR USE ONLY

NR DATE ___/___/____	*KEEPER-NR ELIGIBILITY:*	☐y ☐n	*Date* ___/___/____
	SHPO-NR ELIGIBILITY:	☐y ☐n ☐pe ☐ii	*Date* ___/___/____
DELIST DATE ___/___/____	*LOCAL DESIGNATION:*		*Date* ___/___/____
	Local office		

National Register Criteria for Evaluation ☐a ☐b ☐c ☐d

ARCHAEOLOGICAL SITE FORM

Site #8LL2395

FIELD METHODS (Check one or more methods for detection and for boundaries)

Site Detection

☐ no field check
☐ literature search
☐ informant report
☐ literature search
☐ posthole digger
☐ exposed ground
☐ posthole digger
☐ auger--size:___
☐ unscreened shovel
☐ block excavations
x screened shovel
☐ aerial photo
☐ Field visit and survey
☐ remote sensing
☐ information

Site Boundaries

☐ bounds unknown
☐ none by recorder
☐ auger--size:___
☐ remote sensing
☐ insp exposed ground
☐ estimate or guess
☐ unscreened shovel
x screened shovel

Number, size, depth, pattern of units; screen size Approximately 12 50-cm judgmental and systematic shovel tests

SITE DESCRIPTION

Extent Size (m^2) 2500m2 Depth/stratigraphy of cultural deposit 35cm deep x 20cm thick

Temporal Interpretation Components: ☐ single ☐ prob single X prob multiple ☐ multiple ☐ uncertain ☐ unknown

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations.

Integrity Overall disturbance: ☐ none seen X minor ☐ substantial ☐ major ☐ redeposited destroyed-document! ☐ unknown

Disturbances / threats / protective measures

Area Collected _____ m^2 Surface: #collect. Units____ Excavation: #contiguous blocks

ARTIFACTS

Total Artifacts #____ (C)ount or (E)stimate? c Surface #_____ Subsurface #_____

Overall Collection Strategy

☐ unknown
x unselective (all artifacts)
☐ selective (some artifacts)
☐ mixed selectivity
☐ uncollected
☐ general (not by subarea)
☐ controlled (by subarea)
☐ variable spatial control
☐ Other _____

Artifact Categories / Artifact Depositions

____ unspecified
A lithics, aboriginal
A ceramic-aboriginal
____ ceramic-nonaboriginal
____ daub
____ brick/bldg matl
____ glass
____ precious metal/coin
____ nonlocal-exotic
____ metal, nonprecious
____ bone-human
A bone-animal
____ bone-unspecif
____ unworked shell
____ worked shell
____ Other _____

Disposition List

A - this category always collected
O - observed, not collected
I - informant reported or collected
S - some items in category collected
R - collected & reburied at site
U - unknown

(Use abbreviation(s) from Deposition List to fill blank(s) of pertinent Artifact Categories)

DIAGNOSTICS (Type and frequency)

1. chert flakes N=2
2. _____ N=_
3. _____ N=_
4. _____ N=
5. _____ N=_
6. _____ N=
7. _____ N=__
8. _____ N=
9. _____ N=__
10. _____ N=__
11. _____ N=__
12. _____ N=__

ENVIRONMENT

Nearest fresh water (type & name) Trout Creek Distance (m)/bearing 60M East

Natural community Open cleared field, oak hammock

Local vegetation Grass, large live oak

Topography Gently rolling, moderately elevated MIN Elevation 3 m MAX Elevation 4 m

Present land use Cattle pasture

SCS soil series Boca fine sand Soil association Immokalee/ Caloosahatchee

FURTHER INFORMATION

Informant(s): Name/Address/Phone John G. Beriault

Location & File numbers (field notes, artifacts/accession nos, photographs/negative nos.) Archaeological and Historical Conservancy, Inc. 4800 SW 64th Avenue, Suite 107, Davie, FL 33314 (954) 792-9776 Fax: (954)-792-9554 email: archlgcl@bellsouth.net

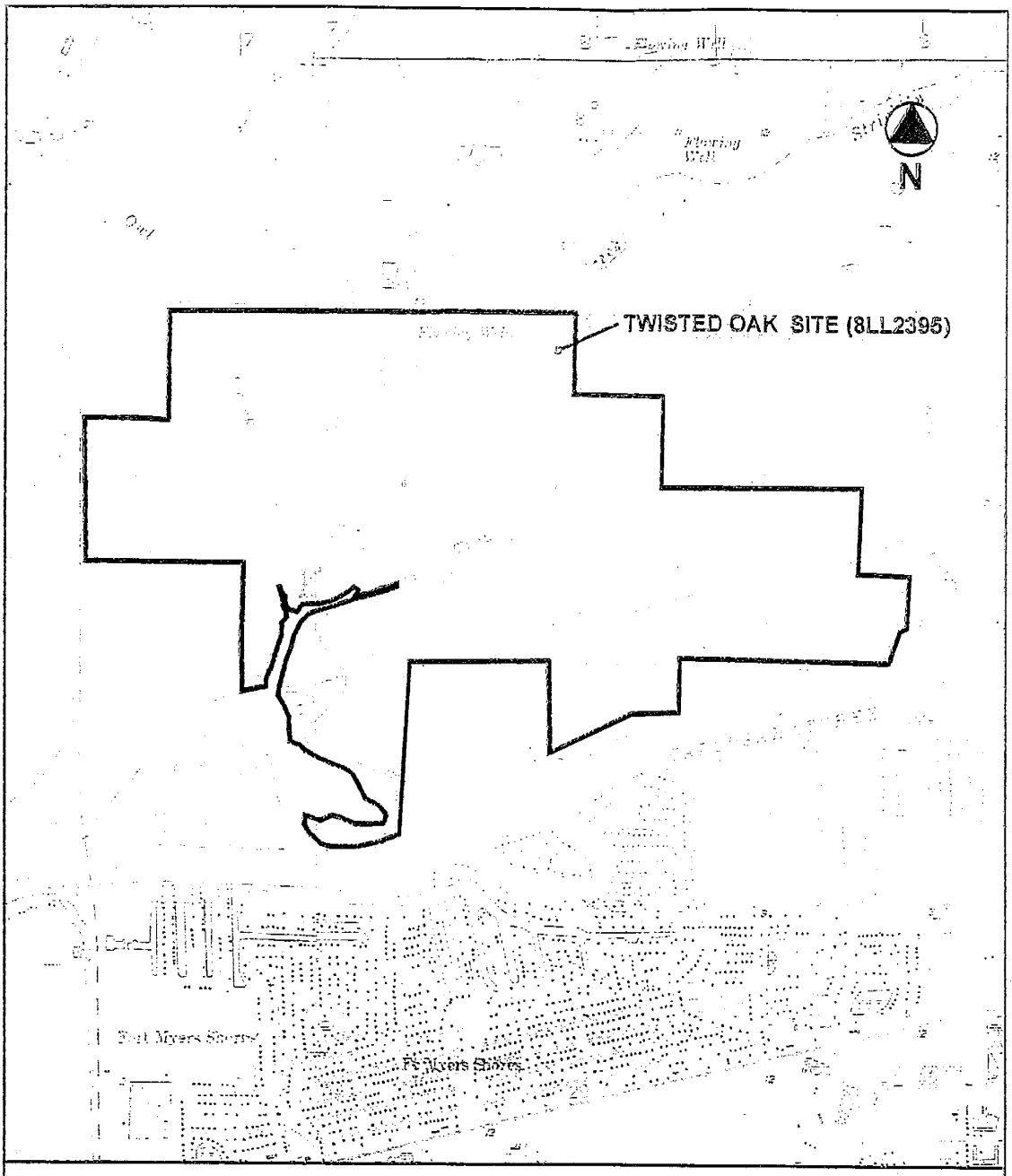
Manuscripts or Publications on the site (Use Continuation Sheet, give FSF# if relevant)

Recorder(s): Name/Address/Phone John G. Beriault

Affiliation or FAS Chapter FAS, SHA, AHC

*** PLEASE INCLUDE SITE PLANS ***

LARGE SCALE MAP: At 1"=200' or larger scale, show: site boundaries, scale, North arrow, datum, test/collection units, tie-ins to USGS.
NARRATIVE DESCRIPTION/CONTINUATIONS: Attach additional sheets with detailed information or with continuations.



USGS map of the North River Assemblage Project Parcel showing the location of the Twisted Oak Site, 8LL2395.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0 1/4 1/2 1.0 Mile
0 0.4 0.8 1.6 Kilometer

Page 1
x Original
☐ Update

ARCHAEOLOGICAL SITE FORM
FLORIDA MASTER SITE FILE
Version 2.2 12/95

Site #8LL2396
Recorder #
Field Date 8/20/ 06
Form Date 9/14/ 06

Site Name(s) Trout Creek [Multiple Listing #8]
Project Name North River Assemblage Parcel [Survey #]
Ownership: X private-profit ☐private-nonprofit ☐private-individual private-unspecified ☐city ☐county ☐state ☐ federal ☐foreign ☐native american ☐unknown
USGS 7.5 map name & date Olga (1987) County Lee
Township 43S Range 26E Section 17 ¼ Sect.: ☐NE X NW ☐SE ☐ SW (check all that apply)
City / Town _ Fort Myers in Current City Limits? Y X N
UTM: zone ☐16 X 17 easting _ _ _ _ _ 0 northing _ _ _ _ _ _ 0
Address / Vicinity of / Route to State Road 31 to juncture with SR78, thence east 1.5 miles Site is 800 yards south of road and west of Trout Creek. A bridge marks north edge of site area area.
Landgrant Tax Parcel #
Name of Public Tract (e.g., park)

TYPE OF SITE (Check all choices that apply; if needed write others in at bottom)

SETTING

X Land - *terrestrial*
☐ Cave/Sink - *subterranean*
- ☐ terrestrial
- ☐ aquatic
- ☐ intermittently flooded

☐ Wetland - *palustrine*
- ☐ usually flooded (historically)
- ☐ sometimes flooded
- ☐ usually dry

☐ Lake/Pond - *lacustrine*
☐ River/Stream/Creek - *riverine*
☐ Tidal - *estuarine*
☐ Saltwater - *marine*
- ☐ marine unspecified
- ☐ "high energy" marine
- ☐ "low energy" marine

other

STRUCTURES - OR - FEATURES

☐ aboriginal boat	☐ fort	☐ road segment
☐ agric/farm bldg	X midden	☐shell midden
☐ burial mound	☐ mill unspecified	☐ shell mound
☐ building remains	☐ mission	☐ shipwreck
☐ cemetery/grave	☐ mound unspecified	☐ subsurface features
☐ dump/refuse	☐ plantation	☐ surface scatter
☐ earthworks	☐ platform mound	☐ well

FUNCTION

☐ none specified
X campsite
X extractive site
☐ habitation (prehistoric)
☐ homestead (historic)
☐ farmstead
☐ village (prehistoric)
☐ town (historic)
☐ quarry

HISTORIC CONTEXTS (Check all that apply, except use most specific subphases only)

Aboriginal

☐ Alachua	☐ Fort Walton	☐ Hickory Pond	☐ Perico Island	☐ Seminole: Colonization	
☐ Archaic Unspecified?	☐ Glades Ia	☐ Late Archaic	☐ Safety Harbor	☐ Seminole: 1st War To 2d	
☐ Belle Glade I	☐ Glades Ib	☐ Late Swift Creek	☐ St. Augustine	☐ Seminole: 2d War To 3d	
☐ Belle Glade II	☐ Glades I Unspec	☐ Leon-Jefferson	☐ St. Johns Ia	☐ Seminole: 3d War On	
☐ Belle Glade III	☐ Glades IIa	☐ Malabar I	☐ St. Johns Ib	☐ Seminole-Unspecified	
☐ Belle Glade IV	☐ Glades IIb	☐ Malabar II	☐ St. Johns I Unspecified	☐ Swift Creek Unspecified	
☐ Belle Glade Unspec	☐ Glades IIc	☐ Manasota	☐ St. Johns IIa	☐ Transitional	
☐Cades Pond	☐ Glades II Unspec	☐ Middle Archaic	☐ St. Johns IIb	☐ Weeden Island I	
☐ Deptford	☐Glades IIIa	☐ Mount Taylor	☐ St. Johns IIc	☐ Weeden Island II	
☐ Early Archaic	☐ Glades IIIb	☐ Norwood	☐ St. Johns II Unspecified	☐ Weeden Island Unspec	
☐ Early Swift Creek	☐ Glades IIIc	☐ Orange	☐ St. Johns Unspecified	☐ Prehistoric Nonceramic	
☐ Englewood	☐ Glades III Unspec	☐ Paleoindian	☐ Santa Rosa	☐ Prehistoric Ceramic	
	X Glades Unspec	☐ Pensacola	☐ Santa Rosa-Swift Creek	☐ Prehistoric Unspecified	

Nonaboriginal

- ☐ 1st Spanish 1513-99
- ☐ 1st Spanish 1600-99
- ☐ 1st Spanish 1700-1763
- ☐ 1st Spanish Unspecified
- ☐ British 1763-1783
- ☐ 2nd Spanish 1783-1821
- ☐ Amer.Territor'l 1821-45
- ☐ Amer.Civil War 1861-65
- ☐ American 19th Century
- ☐ quarry American 20th Century
- ☐ American Unspecified
- ☐ African-American

☐ other (Less common phases are not checklisted. For historic sites, also give specific dates if known)

SURVEYOR'S EVALUATION OF SITE

Potentially eligible for local designation? ☐yes x no ☐ insuff. info
Individually eligible for National Register? ☐ yes X no ☐ insuff. info
Potential contributor to NR district? ☐yes x no ☐ insuff. info

Name of Local Register eligible for:

Explanation of Evaluation (Required if evaluated; limit to 3 lines; attach full justification)
A fairly intact, light intensity scatter of ceramics.
Recommendations for Site Preservation or further investigation

DHR USE ONLY======== OFFICIAL EVALUATIONS ========DHR USE ONLY

NR DATE ___/___/____	*KEEPER-NR ELIGIBILITY:*	☐y ☐n	*Date* ___/___/____
	SHPO-NR ELIGIBILITY:	☐y ☐n ☐pe ☐ii	*Date* ___/___/____
DELIST DATE ___/___/____	*LOCAL DESIGNATION:*		*Date* ___/___/____
	Local office		

National Register Criteria for Evaluation ☐a ☐b ☐c ☐d

ARCHAEOLOGICAL SITE FORM

Site #8LL2396

FIELD METHODS (Check one or more methods for detection and for boundaries)

Site Detection

☐ no field check
☐ literature search
☐ informant report
☐ literature search
☐ posthole digger
☐ exposed ground
☐ posthole digger
☐ auger--size:___
☐ unscreened shovel
☐ block excavations
X screened shovel
☐ aerial photo
☐ Field visit and survey
☐ remote sensing
☐ information

Site Boundaries

☐ bounds unknown
☐ none by recorder
☐ auger--size:___
☐ remote sensing
☐ insp exposed ground
☐ estimate or guess
☐ unscreened shovel
X screened shovel

Number, size, depth, pattern of units; screen size Approximately 20 50-cm judgmental and systematic shovel tests

SITE DESCRIPTION

Extent Size (m^2) 100m2 Depth/stratigraphy of cultural deposit 35cm deep x 20cm thick

Temporal Interpretation Components: ☐ single x prob single ☐ prob multiple ☐ multiple ☐ uncertain ☐ unknown
Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations.

Integrity Overall disturbance: ☐ none seen X minor ☐ substantial ☐ major ☐ redeposited destroyed-document! ☐ unknown
Disturbances / threats / protective measures
Area Collected ____ m^2 Surface: #collect. Units____ Excavation: #contiguous blocks

ARTIFACTS

Total Artifacts #____ (C)ount or (E)stimate? c Surface # Subsurface #

Overall Collection Strategy

☐ unknown
X unselective (all artifacts)
☐ selective (some artifacts)
☐ mixed selectivity
☐ uncollected
☐ general (not by subarea)
☐ controlled (by subarea)
☒ variable spatial control
☐ Other

Artifact Categories / Artifact Depositions

____ unspecified
____ lithics, aboriginal
A ceramic-aboriginal
____ ceramic-nonaboriginal
____ daub
____ brick/bldg matl
____ glass
____ precious metal/coin
____ nonlocal-exotic
____ metal, nonprecious
____ bone-human
____ bone-animal
____ bone-unspecif
____ unworked shell
____ worked shell
____ Other

Disposition List

A - this category always collected
O - observed, not collected
I - informant reported or collected
S - some items in category collected
R - collected & reburied at site
U - unknown

(Use abbreviation(s) from Deposition List to fill blank(s) of pertinent Artifact Categories)

DIAGNOSTICS (Type and frequency)

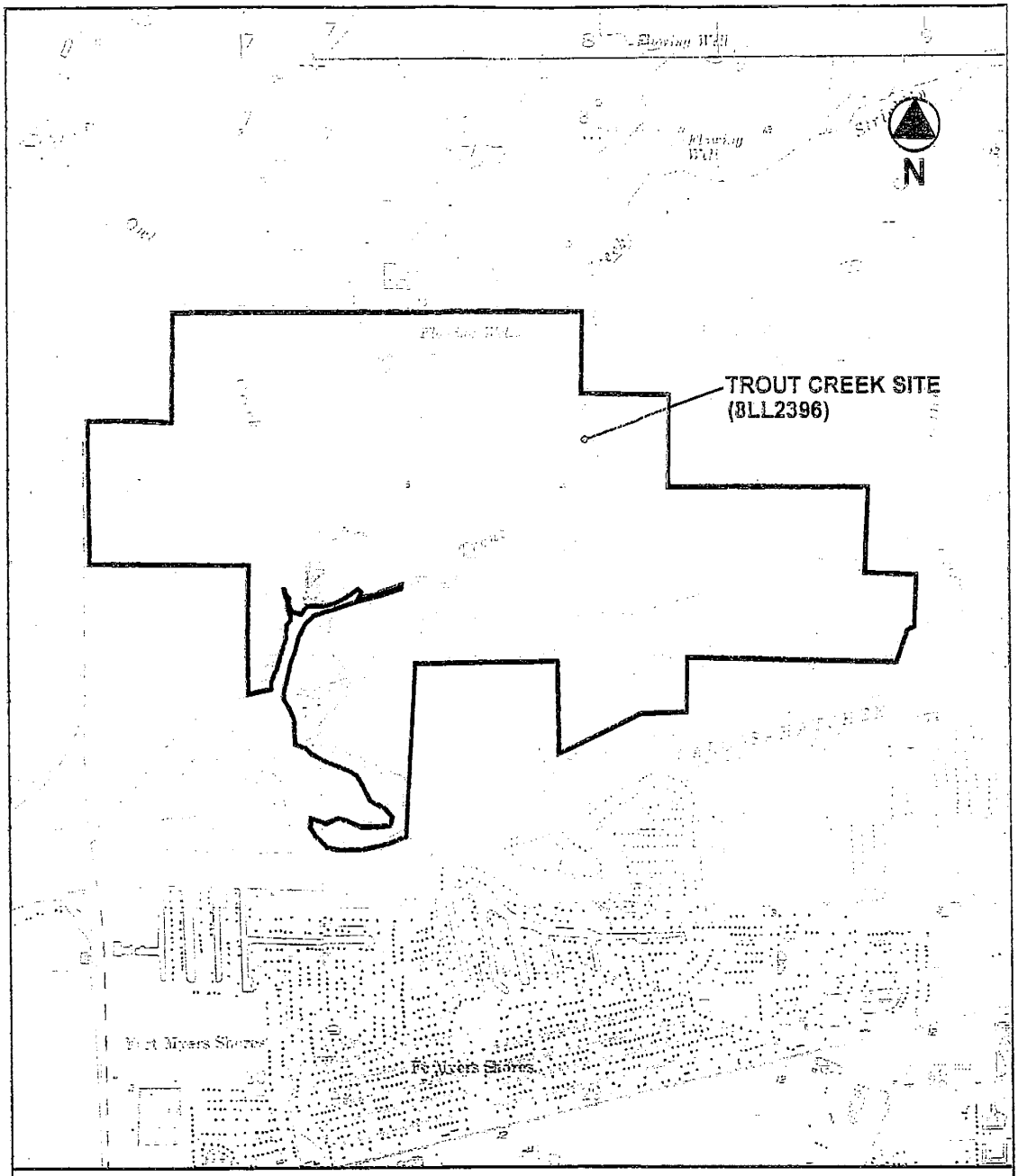
1. ____ N=
2. ____ N=
3. ____ N=
4. ____ N=
5. ____ N=
6. ____ N=
7. ____ N=
8. ____
9. ____ N=
10. ____ N=
11. ____ N=
12. ____ N=

ENVIRONMENT

Nearest fresh water (type & name) Trout Creek Distance (m)/bearing 10M East
Natural community Open cleared field, oak hammock
Local vegetation Grass, large live oaks
Topography Gently rolling, moderately elevated MIN Elevation 3 m MAX Elevation 4 m
Present land use Cattle pasture
SCS soil series Boca fine sand Soil association Immokalee/ Caloosahatchee

FURTHER INFORMATION

Informant(s): Name/Address/Phone John G. Beriault
Location & File numbers (field notes, artifacts/accession nos, photographs/negative nos.) Archaeological and Historical Conservancy, Inc.
4800 S.W. 64th Avenue, Suite 107, Davie, FL 33314 (954) 792-9776 Fax: (954) 792-9554 email: archlgcl@bellsouth.net
Manuscripts or Publications on the site (Use Continuation Sheet, give FSF# if relevant)



USGS map of the North River Assemblage Project Parcel showing the location of the Trout Creek Site, 8LL2396.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

* * * PLEASE INCLUDE SITE PLANS * * *
LARGE SCALE MAP: At 1"=200' or larger scale, show: site boundaries, scale, North arrow, datum, test/collection units, tie-ins to USGS.
NARRATIVE DESCRIPTION/CONTINUATIONS: Attach additional sheets with detailed information or with continuations.

Computer Document File Irving F:\DOCS\FORMS\AR_95.DOC

Appendix

Page 1
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☐ Update

ARCHAEOLOGICAL SITE FORM
FLORIDA MASTER SITE FILE
Version 2.2 12/95

Site #8LL2397
Recorder # _____
Field Date 8/20/06
Form Date 9/14/06

Site Name(s) Trout Creek Hunt Camp [Multiple Listing #8 _____]
Project Name North River Assemblage [Survey # _____]
Ownership: X private-profit ☐private-nonprofit ☐private-individual private-unspecified ☐city ☐county ☐state ☐ federal ☐foreign ☐native american ☐unknown
USGS 7.5 map name & date Olga (1987) County Lee
Township 43S Range 26E Section 18 ¼ Sect.: ☐NE ☐ NW X SE ☐ SW (check all that apply)
City / Town _ Fort Myers in Current City Limits? Y X N
UTM: zone ☐16 X 17 easting _____0 northing _____0
Address / Vicinity of / Route to State Road 31 to juncture with SR78, thence east 1.5 miles to Owl Creek Road, thence south .8 miles Site is 300 yards east of road and south of Trout Creek.
Landgrant _____ Tax Parcel # _____
Name of Public Tract (e.g., park) _____

TYPE OF SITE (Check all choices that apply; if needed write others in at bottom)

SETTING

X Land - *terrestrial*
☐ Cave/Sink - *subterranean*
- ☐ terrestrial
- ☐ aquatic
- ☐ intermittently flooded

☐ Wetland - *palustrine*
- ☐ usually flooded (historically)
- ☐ sometimes flooded
- ☐ usually dry

☐ Lake/Pond - *lacustrine*
☐ River/Stream/Creek - *riverine*
☐ Tidal - *estuarine*
☐ Saltwater - *marine*
- ☐ marine unspecified
- ☐ "high energy" marine
- ☐ "low energy" marine

other _____

STRUCTURES - OR - FEATURES

☐ aboriginal boat	☐ fort	☐ road segment
☐ agric/farm bldg	X midden	☐shell midden
☐ burial mound	☐ mill unspecified	☐ shell mound
☐ building remains	☐ mission	☐ shipwreck
☐ cemetery/grave	☐ mound unspecified	☐ subsurface features
☐ dump/refuse	☐ plantation	☐ surface scatter
☐ earthworks	☐ platform mound	☐ well

FUNCTION

☐ none specified
X campsite
X extractive site
☐ habitation (prehistoric)
☐ homestead (historic)
☐ farmstead
☐ village (prehistoric)
☐ town (historic)
☐ quarry

HISTORIC CONTEXTS (Check all that apply, except use most specific subphases only)

Aboriginal

☐ Alachua	☐ Fort Walton	☐ Hickory Pond	☐ Perico Island	☐ Seminole: Colonization	
☐ Archaic Unspecified?	☐ Glades Ia	☐ Late Archaic	☐ Safety Harbor	☐ Seminole: 1st War To 2d	
☐ Belle Glade I	☐ Glades Ib	☐ Late Swift Creek	☐ St. Augustine	☐ Seminole: 2d War To 3d	
☐ Belle Glade II	☐ Glades I Unspec	☐ Leon-Jefferson	☐ St. Johns Ia	☐ Seminole: 3d War On	
☐ Belle Glade III	☐ Glades IIa	☐ Malabar I	☐ St. Johns Ib	☐ Seminole-Unspecified	
☐ Belle Glade IV	☐ Glades IIb	☐ Malabar II	☐ St. Johns I Unspecified	☐ Swift Creek Unspecified	
☐ Belle Glade Unspec	☐ Glades IIc	☐ Manasota	☐ St. Johns IIa	☐ Transitional	
☐Cades Pond	☐ Glades II Unspec	☐ Middle Archaic	☐ St. Johns IIb	☐ Weeden Island I	
☐ Deptford	☐Glades IIIa	☐ Mount Taylor	☐ St. Johns IIc	☐ Weeden Island II	
☐ Early Archaic	☐ Glades IIIb	☐ Norwood	☐ St. Johns II Unspecified	☐ Weeden Island Unspec	
☐ Early Swift Creek	☐ Glades IIIc	☐ Orange	☐ St. Johns Unspecified	☐ Prehistoric Nonceramic	
☐ Englewood	☐ Glades III Unspec	☐ Paleoindian	☐ Santa Rosa	☐ Prehistoric Ceramic	
	X Glades Unspec	☐ Pensacola	☐ Santa Rosa-Swift Creek	☐ Prehistoric Unspecified	

Nonaboriginal

- ☐ 1st Spanish 1513-99
- ☐ 1st Spanish 1600-99
- ☐ 1st Spanish 1700-1763
- ☐ 1st Spanish Unspecified
- ☐ British 1763-1783
- ☐ 2nd Spanish 1783-1821
- ☐ Amer.Territor'l 1821-45
- ☐ Amer.Civil War 1861-65
- ☐ American 19th Century
- ☐ quarry American 20th Century
- ☐ American Unspecified
- ☐ African-American

☐ other (Less common phases are not checklisted. For historic sites, also give specific dates if known) _____

SURVEYOR'S EVALUATION OF SITE

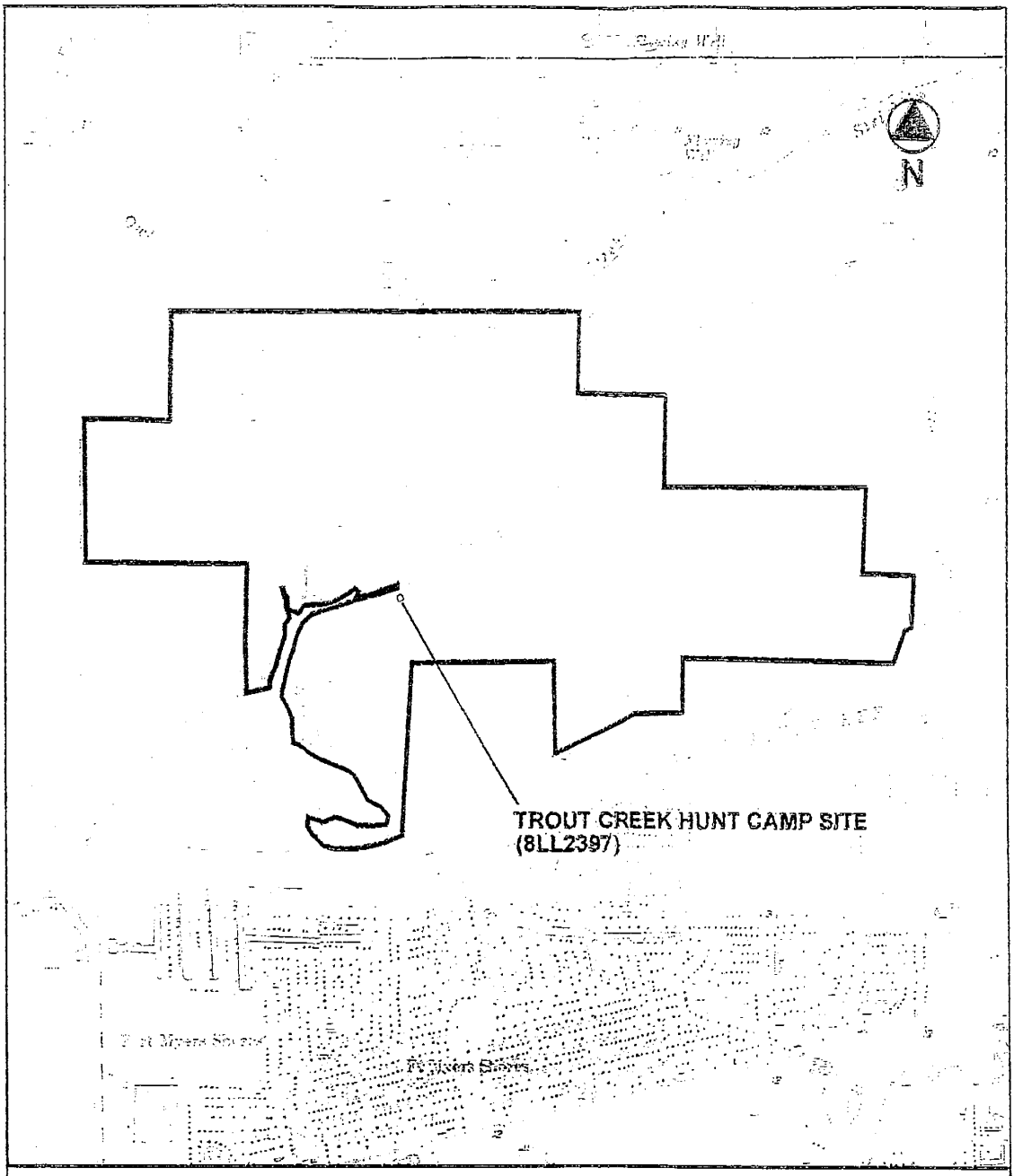
Potentially eligible for local designation?	X yes	☐no	☐ insuff. info	Name of Local Register eligible for:
Individually eligible for National Register?	x yes	☐no	☐ insuff. info	_____
Potential contributor to NR district?	☐yes	☐no	X insuff. info	_____

Explanation of Evaluation (Required if evaluated; limit to 3 lines; attach full justification)
A fairly intact, moderate intensity creekside midden deposit with shell, faunal bone, lithics and ceramics. _____
Recommendations for Site Preservation or further investigation

_____

DHR USE ONLY======== OFFICIAL EVALUATIONS ========DHR USE ONLY

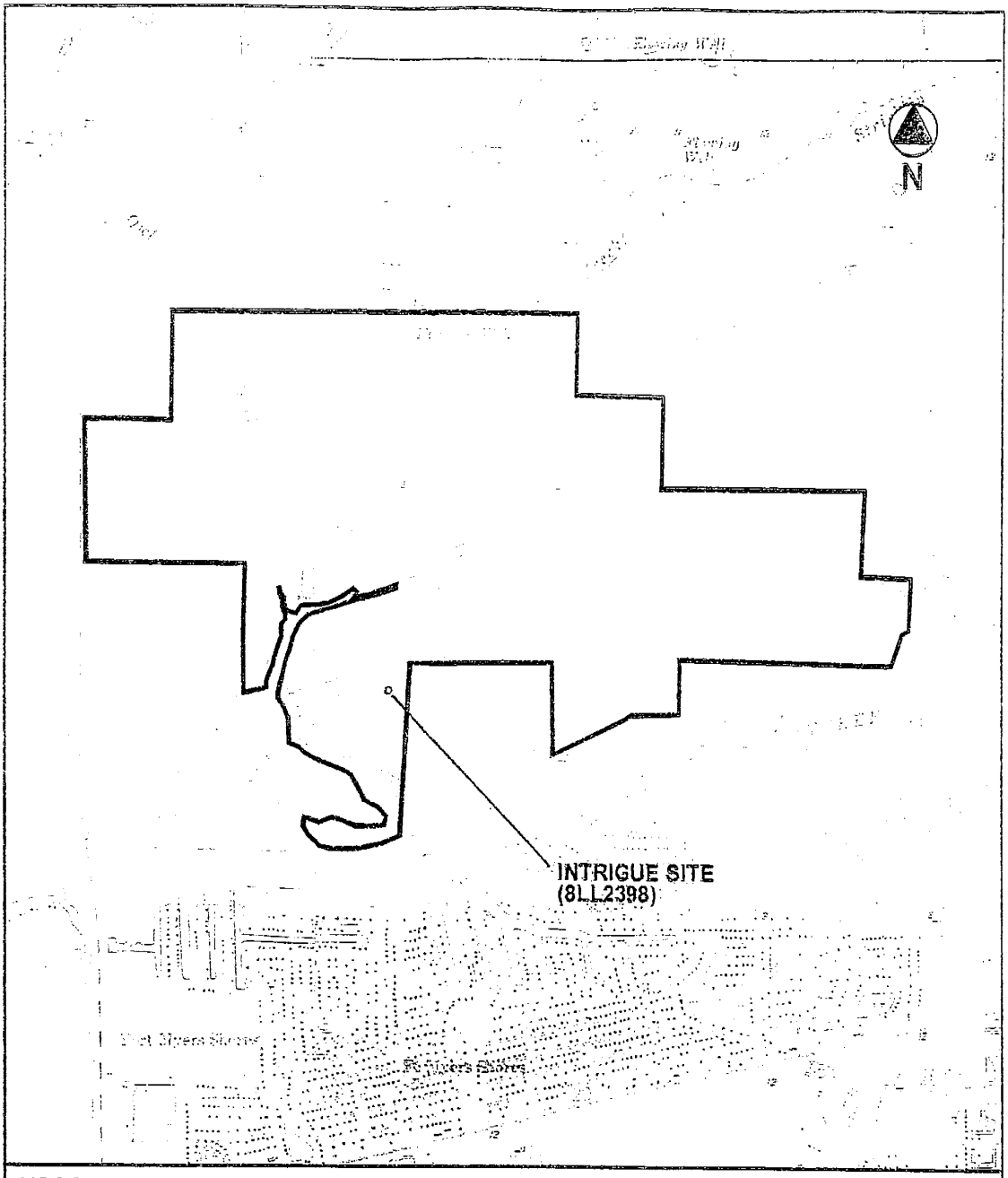
NR DATE	KEEPER-NR ELIGIBILITY:					
___/___/____	SHPO-NR ELIGIBILITY:	☐y	☐n	☐pe	☐ii	Date ___/___/____
DELIST DATE	LOCAL DESIGNATION:					Date ___/___/____



USGS map of the North River Assemblage Project Parcel showing the location of the Trout Creek Hunt CampSite, 8LL2397.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer



USGS map Of the North River Assemblage Project Parcel showing the location of the Intrigue Site, 8LL2398.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0 1/4 1/2 1.0 Mile
0 0.4 0.8 1.6 Kilometer

ARCHAEOLOGICAL SITE FORM

Site #8LL2397

FIELD METHODS (Check one or more methods for detection and for boundaries)

Site Detection

- ☐ no field check
- ☐ literature search
- ☐ informant report
- ☐ literature search
- ☐ posthole digger
- ☐ exposed ground
- ☐ posthole digger
- ☐ auger--size:___
- ☐ unscreened shovel
- ☐ block excavations
- X screened shovel
- ☐ aerial photo
- ☐ Field visit and survey
- ☐ remote sensing
- ☐ information

Site Boundaries

- ☐ bounds unknown
- ☐ none by recorder
- ☐ auger–size:___
- ☐ remote sensing
- ☐ insp exposed ground
- ☐ estimate or guess
- ☐ unscreened shovel
- X screened shovel

Number, size, depth, pattern of units; screen size approximately 10 50-cm judgmental and systematic shovel tests

SITE DESCRIPTION

Extent Size (m^2) 750m2 Depth/stratigraphy of cultural deposit surface to 30 cm thick

Temporal Interpretation Components: ☐ single ☐ prob single X prob multiple ☐ multiple ☐ uncertain ☐ unknown

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations.

Integrity Overall disturbance: ☐ none seen X minor ☐ substantial ☐ major ☐ redeposited destroyed-document! ☐ unknown

Disturbances / threats / protective measures

Area Collected ____ m^2 Surface: #collect. Units____ Excavation: #contiguous blocks

ARTIFACTS

Total Artifacts #____ (C)ount or (E)stimate? c Surface #____ Subsurface #____

Overall Collection Strategy

- ☐ unknown
- X unselective (all artifacts)
- ☐ selective (some artifacts)
- ☐ mixed selectivity
- ☐ uncollected
- ☐ general (not by subarea)
- ☐ controlled (by subarea)
- ☐ variable spatial control
- ☐ Other ____

Artifact Categories / Artifact Depositions

- ____ unspecified
- A lithics, aboriginal
- A ceramic-aboriginal
- ____ ceramic-nonaboriginal
- ____ daub
- ____ brick/bldg matl
- ____ glass
- ____ precious metal/coin
- ____ nonlocal-exotic
- ____ metal, nonprecious
- ____ bone-human
- A bone-animal
- ____ bone-unspecif
- A unworked shell
- A worked shell
- ____ Other ____

Disposition List

- **A** - this category always collected
- **O** - observed, not collected
- **I** - informant reported or collected
- **S** - some items in category collected
- **R** - collected & reburied at site
- **U** - unknown

(Use abbreviation(s) from Deposition List to fill blank(s) of pertinent Artifact Categories)

DIAGNOSTICS (Type and frequency)

1. ____ N=
2. ____ N=
3. ____ N=
4. ____ N=
5. ____ N=
6. ____ N=
7. ____ N=
8. ____ N=
9. ____ N=
10. ____ N=
11. ____ N=
12. ____ N=

ENVIRONMENT

Nearest fresh water (type & name) Trout Creek Distance (m)/bearing 10M North

Natural community Open cleared field, riverine oak hammock

Local vegetation Grass, live oak

Topography Moderately elevated, riverbank MIN Elevation 3 m MAX Elevation 4 m

Present land use Cattle pasture

SCS soil series Boca fine sand Soil / association Immokalee Caloosahatchee

FURTHER INFORMATION

Informant(s): Name/Address/Phone John G. Beriault

Location & File numbers (field notes, artifacts/accession nos, photographs/negative nos.) Archaeological and Historical Conservancy, Inc.
4800 S.W. 64th Avenue, Suite 107, Davie, FL 33314 (954) 792-9776 Fax: (954) 792-9554 email: archlgcl@bellsouth.net

Manuscripts or Publications on the site (Use Continuation Sheet, give FSF# if relevant)

Recorder(s): Name/Address/Phone John G. Beriault

Affiliation or FAS Chapter FAS, SHA, AHC

Appendix

Page 1
x Original
☐ Update

ARCHAEOLOGICAL SITE FORM
FLORIDA MASTER SITE FILE
Version 2.2 12/95

Site #8LL2399
Recorder #
Field Date 8/20/ 06
Form Date 9/14/ 06

Site Name(s) Majestic Gumbo Limbo [Multiple Listing #8]
Project Name North River Assemblage Parcel [Survey #]
Ownership: X private-profit ☐private-nonprofit ☐private-individual private-unspecified ☐city ☐county ☐state ☐ federal ☐foreign ☐native american ☐unknown
USGS 7.5 map name & date Olga (1987). County Lee
Township 43S Range 26E Section 19 ¼ Sect.: X NE ☐ NW ☐SE ☐ SW (check all that apply)
City / Town _ Fort Myers in Current City Limits? Y X N
UTM: zone ☐16 X 17 easting _ _ _ _ _ 0 northing _ _ _ _ _ _ _ 0
Address / Vicinity of / Route to State Road 31 to juncture with SR78, thence east 1.5 miles to Owl Creek Road, thence south .9 miles Site is 400 yards east of road and 400 yards south of Trout Creek in SW portion of tall cypress dome feature 200 feet south of Intrigue Site, 8LL2398 area.
Landgrant Tax Parcel #
Name of Public Tract (e.g., park)

TYPE OF SITE (Check all choices that apply; if needed write others in at bottom)

SETTING

X Land - *terrestrial*
☐ Cave/Sink - *subterranean*
☐ terrestrial
☐ aquatic
☐ intermittently flooded
☐ Wetland - *palustrine*
☐ usually flooded (historically)
☐ sometimes flooded
☐ usually dry
☐ Lake/Pond - *lacustrine*
☐ River/Stream/Creek - *riverine*
☐ Tidal - *estuarine*
☐ Saltwater - *marine*
☐ marine unspecified
☐ "high energy" marine
☐ "low energy" marine

STRUCTURES - OR - FEATURES

☐ aboriginal boat
☐ agric/farm bldg
☐ burial mound
☐ building remains
☐ cemetery/grave
☐ dump/refuse
☐ earthworks
☐ fort
X midden
☐ mill unspecified
☐ mission
☐ mound unspecified
☐ plantation
☐ platform mound
☐ road segment
☐shell midden
☐ shell mound
☐ shipwreck
☐ subsurface features
☐ surface scatter
☐ well

FUNCTION

☐ none specified
☐ campsite
☐ extractive site
☐ habitation (prehistoric)
☐ homestead (historic)
☐ farmstead
☐ village (prehistoric)
☐ town (historic)
☐ quarry

Other Unknown: Possible burial mound

HISTORIC CONTEXTS (Check all that apply, except use most specific subphases only)

Aboriginal

☐ Alachua
☐ Archaic Unspecified?
☐ Belle Glade I
☐ Belle Glade II
☐ Belle Glade III
☐ Belle Glade IV
☐ Belle Glade Unspec
☐Cades Pond
☐ Deptford
☐ Early Archaic
☐ Early Swift Creek
☐ Englewood
☐ Fort Walton
☐ Glades Ia
☐ Glades Ib
☐ Glades I Unspec
☐ Glades IIa
☐ Glades IIb
☐ Glades IIc
☐ Glades II Unspec
☐Glades IIIa
☐ Glades IIIb
☐ Glades IIIc
☐ Glades III Unspec
X Glades Unspec
☐ Hickory Pond
☐ Late Archaic
☐ Late Swift Creek
☐ Leon-Jefferson
☐ Malabar I
☐ Malabar II
☐ Manasota
☐ Middle Archaic
☐ Mount Taylor
☐ Norwood
☐ Orange
☐ Paleoindian
☐ Pensacola
☐ Perico Island
☐ Safety Harbor
☐ St. Augustine
☐ St. Johns Ia
☐ St. Johns Ib
☐ St. Johns I Unspecified
☐ St. Johns IIa
☐ St. Johns IIb
☐ St. Johns IIc
☐ St. Johns II Unspecified
☐ St. Johns Unspecified
☐ Santa Rosa
☐ Santa Rosa-Swift Creek
☐ Seminole: Colonization
☐ Seminole: 1st War To 2d
☐ Seminole: 2d War To 3d
☐ Seminole: 3d War On
☐ Seminole-Unspecified
☐ Swift Creek Unspecified
☐ Transitional
☐ Weeden Island I
☐ Weeden Island II
☐ Weeden Island Unspec
☐ Prehistoric Nonceramic
☐ Prehistoric Ceramic
☐ Prehistoric Unspecified

Nonaboriginal

☐ 1st Spanish 1513-99
☐ 1st Spanish 1600-99
☐ 1st Spanish 1700-1763
☐ 1st Spanish Unspecified
☐ British 1763-1783
☐ 2nd Spanish 1783-1821
☐ Amer.Territor'l 1821-45
☐ Amer.Civil War 1861-65
☐ American 19th Century
☐ quarry American 20th Century
☐ American Unspecified
☐ African-American

☐ other (Less common phases are not checklisted. For historic sites, also give specific dates if known)

SURVEYOR'S EVALUATION OF SITE

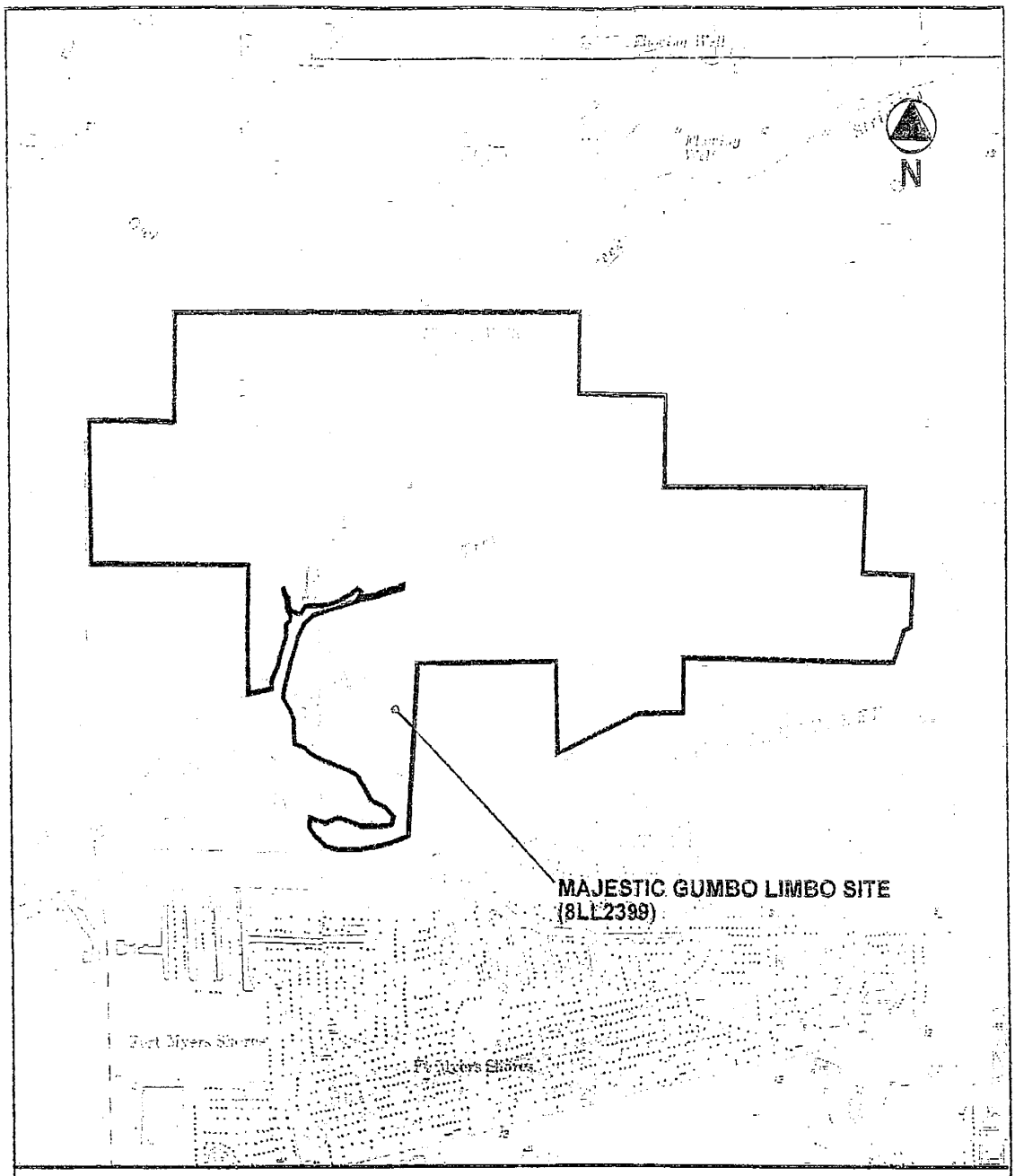
Potentially eligible for local designation?	X yes	☐no	☐ insuff. info	Name of Local Register eligible for:
Individually eligible for National Register?	x yes	☐no	☐ insuff. info	
Potential contributor to NR district?	☐yes	☐no	X insuff. info	

Explanation of Evaluation (Required if evaluated; limit to 3 lines; attach full justification)
A n intact, high sand knoll feature with light cultural deposit in cypress dome.
Recommendations for Site Preservation or further investigation

DHR USE ONLY======== OFFICIAL EVALUATIONS ========DHR USE ONLY

NR DATE	*KEEPER-NR ELIGIBILITY:*	☐y ☐n	*Date* __/__/____
__/__/____	*SHPO-NR ELIGIBILITY:*	☐y ☐n ☐pe ☐ii	*Date* __/__/____
DELIST DATE	*LOCAL DESIGNATION:*		*Date* __/__/____
__/__/____	*Local office*		

National Register Criteria for Evaluation ☐a ☐b ☐c ☐d



USGS map Of the North River Assemblage Project Parcel showing the location of the Majestic Gumbo Limbo Site, 8LL2399.

USGS Maps: Fort Myers, Rev. 1991; Olga, Rev. 1987
Township 43S, Range 26E, Sections 16, 17, 18, 19, 20

0	1/4	1/2	1.0 Mile
0	0.4	0.8	1.6 Kilometer

ARCHAEOLOGICAL SITE FORM

Site #8LL2398

FIELD METHODS (Check one or more methods for detection and for boundaries)

Site Detection

☐ no field check
☐ literature search
☐ informant report
☐ literature search
☐ posthole digger
☐ exposed ground
☐ posthole digger
☐ auger--size:___
☐ unscreened shovel
☐ block excavations
x screened shovel
☐ aerial photo
☐ Field visit and survey
☐ remote sensing
☐ information

Site Boundaries

☐ bounds unknown
☐ none by recorder
☐ auger--size:___
☐ remote sensing
☐ insp exposed ground
☐ estimate or guess
☐ unscreened shovel
x screened shovel

Number, size, depth, pattern of units; screen size approximately 12 50-cm judgmental and systematic shovel tests

SITE DESCRIPTION

Extent Size (m^2) 1500m2 Depth/stratigraphy of cultural deposit Surface to 45cm deep

Temporal Interpretation Components: ☐ single ☐ prob single X prob multiple ☐ multiple ☐ uncertain ☐ unknown

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations.

Integrity Overall disturbance: ☐ none seen X minor ☐ substantial ☐ major ☐ redeposited destroyed-document! ☐ unknown

Disturbances / threats / protective measures

Area Collected _____ m^2 Surface: #collect. Units____ Excavation: #contiguous blocks

ARTIFACTS

Total Artifacts #____ (C)ount or (E)stimate? c Surface #_____ Subsurface #_____

Overall Collection Strategy

☐ unknown
x unselective (all artifacts)
☐ selective (some artifacts)
☐ mixed selectivity
☐ uncollected
☐ general (not by subarea)
☐ controlled (by subarea)
☐ variable spatial control
☐ Other _____

Artifact Categories / Artifact Depositions

____ unspecified
A lithics, aboriginal
A ceramic-aboriginal
____ ceramic-nonaboriginal
____ daub
____ brick/bldg matl
____ glass
____ precious metal/coin
____ nonlocal-exotic
____ metal, nonprecious
____ bone-human
A bone-animal
____ bone-unspecif
A unworked shell
A worked shell
____ Other _____

Disposition List

A - this category always collected
O - observed, not collected
I - informant reported or collected
S - some items in category collected
R - collected & reburied at site
U - unknown

(Use abbreviation(s) from Deposition List to fill blank(s) of pertinent Artifact Categories)

DIAGNOSTICS (Type and frequency)

1. _____ N=_
2. _____ N=_
3. _____ N=_
4. _____ N=
5. _____ N=_
6. _____ N=__
7. _____ N=__
8. _____ N=__
9. _____ N=__
10. _____ N=__
11. _____ N=__
12. _____ N=__

ENVIRONMENT

Nearest fresh water (type & name) Cypress solution pond Distance (m)/bearing 10M East

Natural community Tropical hardwood hammock surrounded by cypress slough

Local vegetation Camphorwood, myrsine, cypress, marsh plants

Topography Elevated ridge in cypress slough MIN Elevation 3 m MAX Elevation 4 m

Present land use Undeveloped

SCS soil series Anclote sand, depressional Soil association Immokalee/ Caloosahatchee

FURTHER INFORMATION

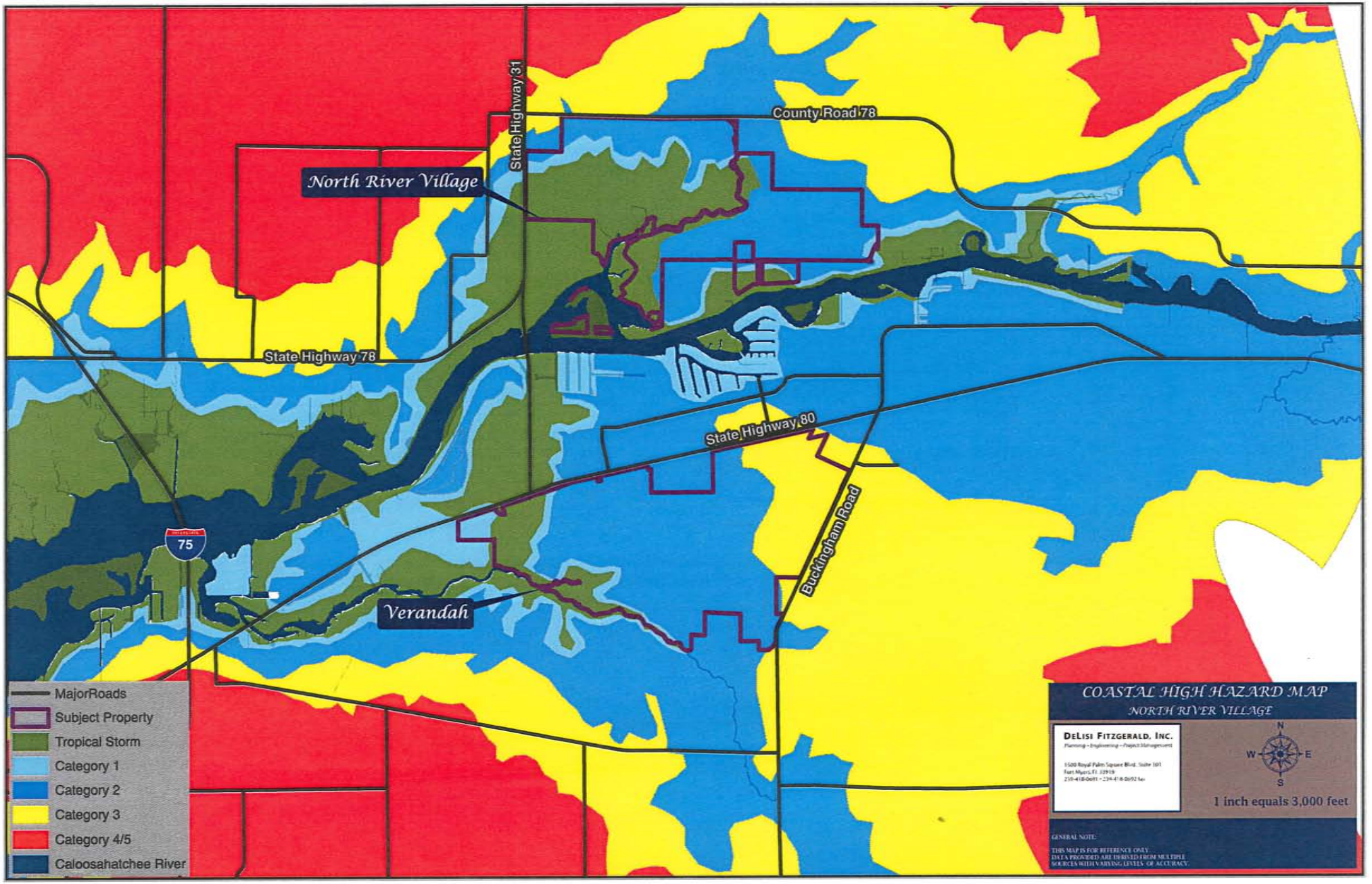
Informant(s): Name/Address/Phone John G. Beriault

Location & File numbers (field notes, artifacts/accession nos, photographs/negative nos.) Archaeological and Historical Conservancy, Inc.
4800 S.W. 64th Avenue, Suite 107, Davie, FL 33314 (954) 792-9776 Fax: (954) 792-9554 email: archlgcl@bellsouth.net

Manuscripts or Publications on the site (Use Continuation Sheet, give FSF# if relevant)

Recorder(s): Name/Address/Phone John G. Beriault

Affiliation or FAS Chapter FAS, SHA, AHC


North River Village
State Highway 31
County Road 78
State Highway 78
State Highway 80
Buckingham Road
75
Verandah
MajorRoads
Subject Property
Tropical Storm
Category 1
Category 2
Category 3
Category 4/5
Caloosahatchee River
COASTAL HIGH HAZARD MAP
NORTH RIVER VILLAGE
DeLisi Fitzgerald, Inc.
N
W
E
S
1 inch equals 3,000 feet
GENERAL NOTE:
THIS MAP IS FOR REFERENCE ONLY.
DATA PROVIDED ARE DERIVED FROM MULTIPLE SOURCES WITH VARYING LEVELS OF ACCURACY.

From: Dan Trescott [mailto:dtrescott@swfrpc.org]
Sent: Wednesday, October 24, 2007 9:56 AM
To: Margaret Emblidge
Subject: RE: Hurricane Evacuation and Shelters

Hello Margaret:
Yes, I would agree a shelter in Hendry or eastern Lee County would be great, particularly a shelter that would meet American Red Cross Shelter standards.

Daniel L. Trescott, Principal Planner
DRI/Hurricane/Sea Level Rise Planning
Southwest Florida Regional Planning Council
1926 Victoria Ave.
Fort Myers, FL 33901
Office: 239.338.2550 Ext. 220
Fax: 239.338.2560
Suncom 748.2550 Ext. 220
email: dtrescott@swfrpc.org
Web: http://www.swfrpc.org

From: Margaret Emblidge [mailto:MargaretE@BonitaBayGroup.com]
Sent: Tuesday, October 23, 2007 4:16 PM
To: Dan Trescott
Subject: Hurricane Evacuation and Shelters

Hi Dan regarding the North River Village property, we discussed the opportunities for mitigating hurricane evacuation impacts. You agreed that the methodology for determining hurricane evacuation patterns shows most traffic in Lee County heading to I-75. I also understand that the statutes allow for mitigation for impacts to development located in the Coastal High Hazard Areas. It is my understanding that based on the 2004/2005 hurricane seasons that the evacuation patterns showed many of evacuees going east and in particular east on SR 80. You also indicated that there was a choke point on SR 80 where it intersects with SR 29. So now that you have more real life information on the evacuation patterns would you agree that since a lot of the traffic is going east; that providing a shelter in eastern Lee County, or Hendry County, west of SR 29 would make sense. Please let me know if you would agree with this mitigation approach. Thank you for you consideration of these questions.

Margaret Emblidge, AICP
Bonita Bay Group
Director of Entitlements and Governmental Affairs
9990 Coconut Road, Suite 200
Bonita Springs, FL 34135
Ofc. 239-390-1147
Cell 239-233-3192

Bonita Bay Group®

December 11, 2007

COMMUNITY OUTREACH
Achieving a Shared Vision for North River Village

Bonita Bay Group initiated the community visioning process for North River Village in February 2007 as part of a dedicated effort to seek input from neighbors, community leaders, government officials, environmental organizations and interested stakeholders. During the past 10 months, the Bonita Bay Group team has held 38 community meetings involving more than 120 citizens to understand issues of concern and work together to achieve a shared vision for the project.

Duke Highway Residents. An ongoing series of meetings has been held with Duke Highway residents, the neighbors immediately south of North River Village. The residents had questions about the views from the front of their homes, being part of a neighborhood, access to Duke Highway and the condition of the road, wildlife protection, buffering of the property's edges, river water quality, access and use of the North River Village and the preservation of the area's rural and riverine character. The Bonita Bay Group team refined the plans based on the input received from these neighboring property owners, and today the majority of Duke Highway residents support the project. The following are direct quotes from a few of the letters sent to the Lee County Commissioners by Duke Highway residents:

"Bonita Bay Group is a high caliber developer, and their plans for clustered density and preserved edge conditions set a very good precedent for the area."

Roger Culver
14120 Duke Highway

"We must confess, when we first heard that the property on North River Road was bought by a developer we were disappointed. After speaking with you and Paul though, our disappointment has turned into enthusiasm and excitement."

Larry and Carla Ronco
14600 Duke Highway

"From the very beginning of their planning stages, we have been invited to several of their presentations and they have allowed us to express our concerns about the proposed project. They have responded to every one of the issues, such as well water, sewage, security, etc. and they have changed their plan in accordance with our concerns."

Joseph Sterlacci

14130 Duke Highway

Olga Residents. The community outreach effort has also included community leaders from Olga and residents living to the west, north and east of the property. Neighborhood group meetings were held with the residents living in Telegraph Creek, Serenoa Court and along State Road 31, County Road 78 and Old Bayshore Road. These residents initially expressed concerns about widening SR 31, flooding issues and fire service to the area. In response to their concerns, meetings focused specifically on transportation and water issues were held with Ron Talone, David Plummer and Associates, the team's transportation consultant, and Andy Tilton, Johnson Engineering, engineer. Ongoing meetings will continue to be held with residents. The following quote is from a letter sent by an Olga resident to the Lee County Commissioners.

"I have been extremely impressed with Bonita Bay Group's level of commitment to community outreach. We are very happy to have them as neighbors and hope you'll support their plans for North River Village."

Robert Quillen
22920 North River Road

Alva Residents. Several meetings have been held with the board and officers of Alva, Inc. As a result of those meetings, the plan has been revised to comply with many of the Alva, Inc. proposed Standards for Development. The plan clusters housing toward the interior of the project to preserve the rural character along River Road, preserves heritage trees, enhances wildlife corridors, protects and preserves existing flow-ways, uses native vegetation to the greatest extent possible and sets a new standard for green building with all single-family builders following Florida Green Building Coalition guidelines. In response to the density issue raised by Alva, Inc. and County staff, the density of the revised plan has been decreased to two residential units per acre.

Alva, Inc.

North Fort Myers Community Planning Panel. The Bonita Bay Group team presented the North River Village Visioning Update to the North Fort Myers Community Panel on November 6.

Environmental Partnerships. In an effort to ensure creative and innovative approaches in the development of North River Village, Bonita Bay Group conducted an Integrated Ecological Design/Hydrology Planning Workshop on October 4. The daylong session brought together a group of experts including environmental engineers; ecological consultants including Dr. Martin Wannalista, University of Central Florida's Stormwater Management Academy, and Dr. Harvey Harper, PE, Environmental Research & Design; the South Florida Water Management District, including Bob Brown, director of regulation, and Ricardo Valera, PE, regulatory operations director; Lee County Commissioner Ray Judah; and a nationally recognized ecological restoration, water resource and ecological engineering firm. These environmental stewards evaluated opportunities for implementation of low impact design techniques and state-of-the-art surface water scenario with the ultimate

goal of raising the standards for development along the Caloosahatchee River by preserving the quality of natural waterways, lakes and underground water supplies by reducing contaminants in stormwater runoff. In addition, the North River environmental team is coordinating with Babcock Ranch team to coordinate efforts on wildlife/waterway connections, transportation planning and the CR 78 overlay.

Environmental Leaders. The plan for North River Village sets new standards of environmental stewardship based on input received from elected officials, community leaders and environmental stakeholders. Meetings on the proposed plan have been scheduled with leaders from The Conservancy of Southwest Florida, the Southwest Florida office of the Florida Wildlife Federation and Collier Audubon.

Amy Vetter

From: Margaret Emblidge [MargaretE@BonitaBayGroup.com]
Sent: Thursday, June 19, 2008 4:25 PM
To: Dan Delisi
Subject: FW: North River Village CPA #07566; Transportation Policies

Margaret Emblidge, AICP
Director of Entitlements and Government Affairs
Bonita Bay Group
9990 Coconut Road
Bonita Springs, FL 34135
Ofc. 239-390-1147
Cell 239- 233-3192

From: Loveland, David M. [mailto:LOVELADM@leegov.com]
Sent: Tuesday, June 03, 2008 9:59 AM
To: Ronald Talone; Noble, Matthew A.
Cc: Collins, Donna Marie ; Margaret Emblidge; nealemontgomery@paveselaw.com
Subject: RE: North River Village CPA #07566; Transportation Policies

No, I am in agreement with Matt.

David M. Loveland, AICP
Manager, Transportation Planning
Lee County Dept. of Transportation
1500 Monroe Street
Fort Myers, FL 33901
NOTE CHANGE: (239)533-8509
loveladm@leegov.com

From: Ronald Talone [mailto:ronald.talone@dplummer.com]
Sent: Tuesday, June 03, 2008 9:57 AM
To: Noble, Matthew A.; Loveland, David M.
Cc: Collins, Donna Marie ; MargaretE@bonitabaygroup.com; nealemontgomery@paveselaw.com
Subject: RE: North River Village CPA #07566; Transportation Policies

Thanks, Matt.

Do you have anything else, Dave?

Ron

From: Noble, Matthew A. [mailto:NOBLEMA@leegov.com]
Sent: Tuesday, June 03, 2008 9:01 AM
To: Ronald Talone; Loveland, David M.
Cc: Collins, Donna Marie ; MargaretE@bonitabaygroup.com; nealemontgomery@paveselaw.com
Subject: RE: North River Village CPA #07566; Transportation Policies

Ok, I will take a stab @ it. Staff believes the project's density should be limited to the allowable density under the Rural category until the needed improvements are funded and put in the Financially Feasible Plan, that is until the

funds have been delivered to the County to make the necessary improvements. No zoning or local DO approvals for more than one unit per acre until the developer agreement has been executed and the mitigation necessary to fund the road improvements have been delivered to the County. I believe this is consistent with the discussions that has taken place among the staff...

From: Ronald Talone [mailto:ronald.talone@dplummer.com]
Sent: Monday, June 02, 2008 10:12 AM
To: Loveland, David M.
Cc: Collins, Donna Marie ; Noble, Matthew A.; MargaretE@bonitabaygroup.com; nealemontgomery@paveselaw.com
Subject: FW: North River Village CPA #07566; Transportation Policies

Hi, Dave.

Margaret Emblidge forwarded our proposed transportation policies for the NRV Comp Plan Amendment (attached) to the staff on Feb. 29 (below). Please let us know what the Lee County DOT's position is regarding our proposed transportation policies.

Thanks.

Ron

From: Margaret Emblidge [mailto:MargaretE@BonitaBayGroup.com]
Sent: Friday, February 29, 2008 10:11 AM
To: loveladm@leegov.com; collinsdm@leegov.com; Noble, Matthew A.
Cc: nealemontgomery@paveselaw.com; Dan Ciesielski; Dave Tillis; Dan Delisi; Ronald Talone
Subject: North River Village Transportation Policies

Hi Folks. I have attached the proposed transportation policies based on our last meeting. Please review these and let us know if this captures our goals. Once we have finalized this language we will begin the process of drafting the developer agreement. This language will also be included in the additional information packet to be submitted Monday March 3rd. We look forward to your comments. Thank you.

Margaret Emblidge, AICP
Director of Entitlements and Government Affairs
Bonita Bay Group
9990 Coconut Road
Bonita Springs, FL 34135
Ofc. 239-390-1147
Cell 239- 233-3192

NORTH RIVER VILLAGE
COMPREHENSIVE PLAN AMENDMENT

TRAFFIC STUDY

Project #07548

August 8, 2008

Prepared by:
DAVID PLUMMER & ASSOCIATES
1531 Hendry Street
Fort Myers, FL 33901

NORTH RIVER VILLAGE COMPREHENSIVE PLAN AMENDMENT

TRAFFIC STUDY

Introduction

This report does not present new traffic analysis. Rather, it provides a consolidation of the latest information that was provided to Lee County in three previous submittals:

1. North River Village Comprehensive Plan Amendment Traffic Study, dated September 17, 2006
2. North River Village CPA Transportation Sufficiency Response, dated July 31, 2007
3. E-mail dated October 24, 2007, from Ronald Talone of DPA to David Loveland of Lee County DOT

The North River Village Comprehensive Plan Amendment (CPA) (hereafter referred to as the CPA) is a proposed mixed-use, residential and resort development located east of SR 31 and south of CR 78, as shown in Exhibit 1. The CPA site, which will have direct access to both SR 31 and CR 78, is entirely within unincorporated Lee County. So, the rules and regulation of Lee County apply to this CPA.

Under the proposed Comprehensive Plan Amendment (CPA), the CPA would include 2,500 residential units, with 1,500 single-family units and 1,000 multifamily units. In addition, it is assumed that there will be 100 hotel rooms and 150,000 sq. ft. of commercial space. Social-recreational facilities will include the existing marina, a clubhouse and extensive social and recreational facilities and activities.

The traffic impacts of the proposed CPA have been evaluated based on comparative travel model assignments, both with and without the CPA, under the adopted Lee County 2030 Financially-Feasible Plan. As specified in Lee County's Application for a Comprehensive Plan Amendment, the study examines projected roadway conditions within a three-mile radius of the site.

Since the CPA Traffic Study has been prepared, there have been a number of developments.

First, there are currently no plans for a golf course on the property. The affects of this change are negligible because, although the golf course captured some residential trips internally, these were offset by external trips generated by the golf course. So, removal of the golf course has a negligible affect on external trips.

Second, agreement has been reached between the Applicant and the County staff regarding the appropriate mitigation for the traffic impacts of this CPA on SR 31 and SR 80. The Applicant has agreed to fund improvements to both SR 31 and SR 80 above and beyond the payment of road impact fees. This is explained later in the report in the section titled Traffic Mitigation.

Executive Summary

The conclusions of this traffic analysis are:

- Under the proposed Comprehensive Plan Amendment (CPA), the CPA would include 2,500 residential units, with 1,500 single-family units and 1,000 multifamily units, 100 hotel rooms, 150,000 sq. ft. of commercial space, the existing marina and extensive social and recreational facilities and activities.

- The CPA will have direct access to both SR 31 and CR 78.

- There are only two scheduled improvements in the study area: (1) bridge repair and rehabilitation is scheduled for the Wilson Pigott Draw Bridge on SR 31 over the Caloosahatchee River in FY 2009; and (2) design and installation of traffic signals at the intersection of SR 31 and SR 78 is scheduled through FY 2009.

- Although the MPO 2030 LRTP Highway Element does not include any planned road improvements in the study area that are considered financially feasible, there are two projects in the adopted 2030 Plan that are Contingent Upon Additional Funds: (1) the six-laning of SR 80 between SR 31 and Buckingham Road; and (2) the two-lane extension of Nalle Grade Road east to SR 31.

- Projected 2030 Traffic Conditions Without the CPA indicate that the four-lane segments of SR 80 between SR 31 and Tropic Avenue are expected to exceed the adopted LOS standard in 2030. This deficiency has been addressed in the 2030 Plan through the inclusion of the widening of SR 80 between SR 31 and Buckingham Road as a needed project that is Contingent Upon Additional Funding.

- Only one additional road segment is expected to exceed the adopted LOS standard under 2030 Traffic Conditions With the CPA. That is the segment of SR 31 between SR 78 (Bayshore Road) and the CPA entrance, which will need to be widened to four laness.

- The CPA's off-site traffic impacts will be mitigated, in part, through the payment of road impact fees adopted by Lee County. Based on the current road impact fee schedule, the development associated with the proposed CPA is expected to pay approximately $22.8 million in road impact fees. These fees can be used by the County to make whatever improvements are necessary on SR 31, SR 80, CR 78 and other roads in the area.

- In addition to the payment of road impact fees, the Applicant has agreed to fund (without credit against road impact fees) the widening of SR 31 to four lanes between the CPA Entrance and SR 78 (Bayshore Road) and the construction of major intersection improvements at the SR 80/SR 31 and SR 80/Buckingham Road intersections. The details of this agreement will be set forth in a Development Agreement between the Applicant and Lee County.

Existing Roadway Network

SR 31 is a major north-south arterial road extending from SR 80 north into Charlotte County. It is a two-lane, undivided roadway.

CR 78, which is also known as North River Road, is a two-lane, undivided road connecting SR 31 with the Alva community in eastern Lee County and SR 29 in Hendry County.

SR 80 is a major east-west arterial road connecting Fort Myers with LaBelle, Clewiston and the East Coast of Florida. SR 80 is a six-lane divided arterial road from Ortiz Avenue to SR 31 and a four-lane, divided road from SR 31 to east of LaBelle.

SR 78 (Bayshore Road) is currently a two-lane, undivided arterial road from SR 31 west to I-75. It is four lanes west of I-75.

Scheduled Road Improvements

The scheduled road improvements in Lee County are shown on a map produced by Lee County and titled Major Road Improvements Programmed Through Construction Phase, F.Y. 2007/08 – 2011/12. This map is provided in Appendix A. There are no scheduled improvements within the study area shown on this map.

However, the FDOT Adopted Work Program includes two projects:

- Bridge repair and rehabilitation is scheduled for the Wilson Pigott Draw Bridge on SR 31 over the Caloosahatchee River in FY 2009.

- Design and installation of traffic signals at the intersection of SR 31 and SR 78 is scheduled through FY 2009.

Planned Road Improvements

The Lee County Metropolitan Planning Organization (MPO) recently approved the Lee County 2030 Transportation Plan. The 2030 LRTP Highway Element Map, which is included in Appendix B, identifies improvements that are considered financially feasible and improvements that are contingent upon additional funds.

Although there are no improvements in the study area that are considered financially feasible, there are two projects in the adopted 2030 Plan that are Contingent Upon Additional Funds:

- The six-laning of SR 80 between SR 31 and Buckingham Road.

- The two-lane extension of Nalle Grade Road east to SR 31.

Level of Service Standards

Roadway level of service (LOS) standards generally vary, depending upon whether the road is a State or County road and whether the road is in an urban or rural area. Furthermore, State roads on the Florida Intrastate Highway System (FIHS) generally have more stringent LOS standards than other roads.

DCA rules require that Florida DOT LOS standards, rather than local standards, apply on FIHS roads. SR 80 east of I-75 is on the FIHS. Accordingly, the LOS standard on SR 80 within the study area is LOS "D".

For non-FIHS roads and County roads, the standards adopted in the local government comprehensive plans apply. The LOS standard on non-FIHS and County roads within unincorporated Lee County, including SR 31, CR 78 (North River Road) and SR 78 (Bayshore Road), is LOS "E".

Comparative Travel Model Assignments With and Without the CPA

The adopted Lee County MPO travel model was used to run comparative travel model assignments, both with and without the proposed CPA, under the adopted Lee County 2030 Financially-Feasible Plan. For these assignments, the future year 2030 road network includes only those projects considered to be financially feasible. Therefore, the projects that are Contingent Upon Additional Funding are not included in the network.

The Lee County MPO's 2030 socioeconomic data projections were used for these assignments. The socioeconomic data projections were recently updated during the development of the 2030 LRTP.

The background Traffic Analysis Zones (TAZs) in the area did not include substantial numbers of units or employees. The land use assumptions in these background TAZ's were not modified from what were provided by the MPO, except for the addition of TAZ 316 to represent the CPA.

New Traffic TAZ 316 is located in the southeast quadrant of the SR 31/CR 78 intersection and has access connections (centroid connectors) from TAZ 316 to both of these roads. There were no other changes to the model TAZ structure.

For the assignment with the CPA, the assumed development parameters associated with the CPA were input into the ZDATA1 and ZDATA2 files for new zone TAZ 316. The format of the input data is the same for TAZ 316 as for all other zones in the system, with residential units and hotel rooms in ZDATA1 and employees in ZDATA2.

The FSUTMS input and output files for all travel model assignments have been previously provided to the County staff.

2030 Traffic Conditions Without the CPA

Exhibit 2 provides the results of the travel model assignment of future 2030 Traffic Conditions Without the CPA under the 2030 Financially-Feasible Plan. This is the MPO's 2030 travel model assignment without any revisions. Road segments that are expected to exceed the adopted LOS standard without the CPA are highlighted in light yellow.

As shown in Exhibit 2, all roads north of the river and east of I-75 are expected to operate at or above the adopted LOS standard.

The four-lane segments of SR 80 between SR 31 and Tropic Avenue, however, are expected to exceed the adopted LOS standard. These deficiencies have been addressed in the 2030 Plan through the inclusion of the widening of SR 80 between SR 31 and Buckingham Road as a needed project that is Contingent Upon Additional Funding.

It is important to recognize that these deficiencies occur under the 2030 Financially-Feasible Plan, as adopted by the MPO and Lee County. Therefore, it is not the result of the proposed CPA, which is not even included in this assignment.

2030 Traffic Conditions With the CPA

For comparison, the same travel model assignment was re-run with the CPA added in TAZ 316.

In Lee County's sufficiency review of the original traffic study dated September 17, 2006, the County staff questioned whether or not the traffic assessment of 2030 Traffic Conditions With the Project was based on a worst case scenario. The staff suggested that, since single-family units have a higher trip generation rate than multi-family and condominium units, the traffic assessment should assume that all of the proposed residential are single-family units.

DPA was advised by the Applicant that the developable land associated with this CPA will not accommodate 2,500 or more single-family units. For this reason, the Applicant assumed a 60% SF (1,500 units) and 40% MF (1,000) mix of residential units as the base scenario, Scenario A. To be responsive to the staff's concern, however, DPA conducted a series of tests to identify an alternative Scenario B, which has as a reduced number of total units (2,200 units), but all single-family units, and produces comparable traffic generation and impacts to Scenario A.

It is the Applicant's intent that language be included in the CPA to limit the number of residential units to either 2,500 residential units (with 1,500 SF and 1,000 MF units), 2,200 residential units (all 2,200 SF), or some other mix of single-family and multifamily units that produces the same or fewer external trips.

Base Scenario A includes 2,500 residential units, with 1,500 single-family units and 1,000 multifamily units. In addition, it is assumed that there will be 100 hotel rooms, 150,000 sq. ft. of commercial space, the existing marina, and an 18-hole golf course.

Alternative Scenario B includes 2,200 residential units, with all being single-family units. The non-residential uses remain the same as in Scenario A: 100 hotel rooms, 150,000 sq. ft. of commercial space, the existing marina, and an 18-hole golf course.

Both Scenario A and Scenario B were evaluated separately for 2030 Traffic Conditions With the CPA in the first sufficiency response. As for 2030 Traffic Conditions Without the CPA, the model assignments were run with the latest MPO socioeconomic data for background zones.

The results of the travel model assignments for 2030 Traffic Conditions With the CPA (Scenario A), and 2030 Traffic Conditions With the CPA (Scenario B) are provided in Exhibit 3A Revised and Exhibit 3B Revised, respectively. As in Exhibit 2, road segments that are expected to exceed the adopted LOS standard without the CPA are highlighted in light yellow. These include the same two SR 80 road segments.

Only one additional road segment, highlighted in light green, is expected to exceed the adopted LOS standard with the proposed CPA. This is the segment of SR 31 between SR 78 (Bayshore Road) and the entrance to the CPA, which will need to be widened to four lanes. The 2030 Plan would have to be amended to include this improvement.

During a meeting to discuss the first sufficiency response, the Lee County staff raised three technical issues related to how DPA coded the CPA in the travel model assignments for 2030 Traffic Conditions With the Project. In response to the staff's comments, DPA updated the 2030 travel model assignment for 2030 Traffic Conditions With the CPA (Scenario A) to reflect the revisions requested by staff. Here is a summary of the three issues and how they were addressed in the revised model assignment.

- DPA had used an employment conversion rate of 1.7 employees per 1,000 sq. ft. for the 150,000 sq. ft. of commercial space in the CPA. This contemporary rate, which was provided by Fishkind & Associates, reflects recent trends toward larger commercial establishments. The staff requested that the analysis utilize a rate of 2.5 employees per thousand sq. ft., which is the rate that has been used for years by both the County and DPA. While DPA continues to believe that the rate of 1.7 is appropriate, DPA re-ran the model assignment using the rate of 2.5 preferred by staff.

- DPA had used an occupancy rate of 1.9 persons per hotel room. The staff said that the figure should be over 2.0. Following the meeting, DPA ran a sort of the ZDATA1 file by hotel occupancy rate and found that most hotel occupancy rates ranged from 1.2 to 2.4. One zone had an occupancy rate of 2.5. DPA continues to believe that an occupancy rate of 1.9, which is a mid-range value, is appropriate. However, DPA re-ran the model assignment using a higher rate (2.4), as preferred by staff.

- DPA had used 41 service employees to represent the proposed golf course and existing marina. The staff asked why DPA had not used 110 employees, as in the original CPA Traffic Study. DPA used 40 employees for the golf course, as recommended by Fishkind & Associates, and 1 employee for the marina, based on data found in ITE Trip

Generation. Again, to be responsive to staff, DPA re-ran the model assignment using 110 service employees to represent the golf course and marina.

The results of the revised travel model assignment, with the three revisions listed above, were e-mailed to the County staff on October 24, 2007. These results for 2030 Future Conditions With the Project (Scenario A) are shown in Exhibit 3A Revised 10/15/07.

As shown in Exhibit 3A Revised, these three revisions produced small changes in the traffic volumes in the study area. But, the road segments that exceed the LOS standard are the same three segments as before: SR 80 from SR 31 to Davis Boulevard, SR 80 from Davis Boulevard to Tropic Avenue, and SR 31 from Bayshore Road (SR 78) to the CPA Entrance.

One change since the CPA Traffic Study was prepared is that there are currently no plans for a golf course on the property. The affects of this change are negligible because, although the golf course captured some residential trips internally, these were offset by external trips generated by the golf course. So, removal of the golf course has a negligible affect on external trips.

Traffic Mitigation

The CPA will mitigate its external transportation impacts, in part, through the payment of road impact fees. As shown in Exhibits 4A and 4B, based on the current road impact fee schedule, the development associated with the proposed CPA would generate approximately $22.8 million in road impact fees under both the base Scenario A and alternate Scenario B.

These road impact fee payments can be used by the County to fund whatever road improvements are found to be necessary to support general growth in the area, including this CPA. Specifically, the road impact fees could be used for improvements to SR 31, SR 80, CR 78 (North River Road) and any other roads in the study area.

Since this CPA Traffic Study was prepared, the Applicant has met several times with the County staff to discuss the appropriate traffic mitigation for this proposed CPA. The County staff could not support the approval of this CPA unless it could be demonstrated that needed improvements to the deficient segments on SR 31 and SR 80 are financially feasible.

To ensure the financial feasibility of these needed improvements, the Applicant has agreed to fund (without credit against road impact fees) the widening of SR 31 to four lanes between the CPA Entrance and SR 78 (Bayshore Road) and the construction of major intersection improvements at the SR 80/SR 31 and SR 80/Buckingham Road intersections. A preliminary outline of this agreement is provided in Appendix C of this report.

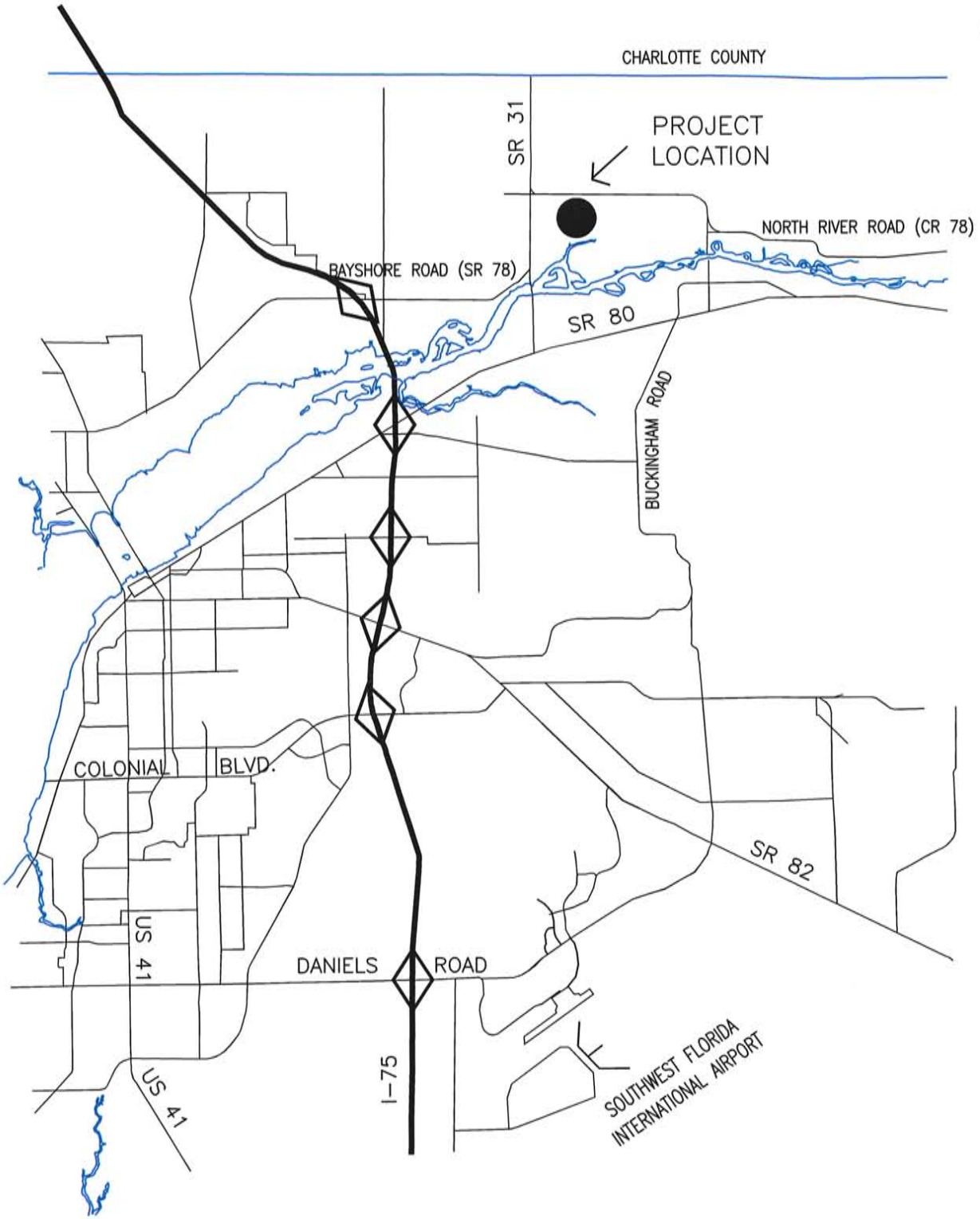
The details of this agreement will be set forth in a Development Agreement between the Applicant and Lee County. The Applicant and the Staff have been discussing these details over the past several weeks. A draft Development Agreement will accompany this CPA application, when it is presented for approval.

In addition to off-site traffic mitigation, the Developer of the properties in the CPA will also be responsible for providing site-related improvements within the development and at the CPA's entrances. This would include turn lane improvements onto and off of SR 31 and CR 78.

Land Use Conversions

As with most development proposals, there is some uncertainty regarding the actual mix of uses. For this reason, the Applicant would like the ability to convert hotel units to residential units and vice versa. This flexibility will be needed as the CPA evolves.

To this end, a land use conversion matrix has been developed based on ITE trip generation rates/equations. This matrix, which is provided as Exhibit 5 Revised, provides the conversion rates for converting hotel units to single-family and multifamily units and vice versa. In addition, it provides conversion rates for converting single-family units to multifamily units and vice versa.



dpa	NORTH RIVER VILLAGE COMPREHENSIVE PLAN AMENDMENT	PROJECT LOCATION	06519/01B/0905 1

EXHIBIT 2 REVISED
NORTH RIVER VILLAGE CPA #07548
FUTURE TRAFFIC CONDITIONS WITHOUT CPA
DIRECTIONAL PEAK HOUR, PEAK SEASON (K100)

UNDER 2030 FINANCIALLY-FEASIBLE PLAN

						BACKGROUND TRAFFIC										TOTAL TRAFFIC		(7) SERVICE VOLUME							
			(1)	(2)		(3)	(4)	(5)		(6)	Backgnd	Dir.		Backgrd Peak Hr Volume		Total Peak Hr Volume						V/C		LOS	
ROADWAY	FROM	TO	# of Lanes	LOS Std	PCS #	FSUTMS PSWDT	Backgnd Traffic	PSWDT/ AADT Factor	AADT	K100 Factor	Peak Hr Volume	Split NE	Split SW	NE	SW	NE	SW	@ LOS C	@ LOS D	@ LOS E	@ STD	NE	SW	NE	SW
BAYSHORE RD.	Palm Creek Dr.	SR 31	2LU	E	5	12,040	12,040	1.060	11,360	0.094	1,070	0.55	0.45	589	482	589	482	760	900	920	920	0.64	0.52	C	C
NORTH RIVER RD.	SR 31	Project Entrance	2LU	E	5	3,881	3,881	1.060	3,660	0.094	340	0.55	0.45	187	153	187	153	760	900	920	920	0.20	0.17	B	B
	Project Entrance	N Olga Rd.	2LU	E	5	3,414	3,414	1.060	3,220	0.094	300	0.55	0.45	165	135	165	135	760	900	920	920	0.18	0.15	B	B
	N Olga Rd.	Taylor Rd.	2LU	E	5	2,891	2,891	1.060	2,730	0.094	260	0.55	0.45	143	117	143	117	760	900	920	920	0.16	0.13	B	B
SR 31	SR 80	Bayshore Rd.	2LU	E	5	14,211	14,211	1.060	13,410	0.094	1,260	0.55	0.45	693	567	693	567	760	900	920	920	0.75	0.62	C	C
	Bayshore Rd.	Project Entrance	2LU	E	5	12,933	12,933	1.060	12,200	0.094	1,150	0.55	0.45	633	518	633	518	760	900	920	920	0.69	0.56	C	C
	Project Entrance	North River Rd.	2LU	E	5	12,929	12,929	1.060	12,200	0.094	1,150	0.55	0.45	633	518	633	518	760	900	920	920	0.69	0.56	C	C
	North River Rd.	County Line	2LU	E	4	9,340	9,340	1.093	8,550	0.094	800	0.51	0.49	408	392	408	392	760	900	920	920	0.44	0.43	C	C
SR 80	I-75	SR 31	6LD	D	5	54,063	54,063	1.060	51,000	0.094	4,790	0.55	0.45	2,635	2,156	2,635	2,156	2,850	2,920	2,920	2,920	0.90	0.74	C	B
	SR 31	Davis Blvd.	4LD	D	5	47,039	47,039	1.060	44,380	0.094	4,170	0.55	0.45	2,294	1,877	2,294	1,877	1,900	1,950	1,950	1,950	1.18	0.96	F	C
	Davis Blvd.	Tropic Ave.	4LD	D	5	43,224	43,224	1.060	40,780	0.094	3,830	0.55	0.45	2,107	1,724	2,107	1,724	1,900	1,950	1,950	1,950	1.08	0.88	F	C
	Tropic Ave.	Buckingham Rd.	4LD	D	5	33,771	33,771	1.060	31,860	0.094	2,990	0.55	0.45	1,645	1,346	1,645	1,346	1,900	1,950	1,950	1,950	0.84	0.69	C	B

FOOTNOTES:

(1) Lee County 2030 Financial Feasible Plan number of lanes.
(2) Lee County roadway LOS standard based on The Lee Plan, Policy 22.1.1.
(3) Peak season weekday traffic (PSWDT) volumes based on FSUTMS travel model assignment.
(4) Background traffic estimated by subtracting Project PSWDT from the total PSWDT.
(5) PSADT/AADT factor based on Lee County 2006 permanent count station data.
(6) K(100) factors derived from Lee County 2006 permanent count station data.
(7) Lee County Generalized Service Volumes, November 2005.

EXHIBIT 3A REVISED
NORTH RIVER VILLAGE CPA #07548
FUTURE TRAFFIC CONDITIONS WITH COMP PLAN AMENDMENT SCENARIO A (2,500 UNITS WITH SF/MF MIX + 100 HOTEL ROOMS + GOLF AND MARINA)
DIRECTIONAL PEAK HOUR, PEAK SEASON (K100)

UNDER 2030 FINANCIALLY-FEASIBLE PLAN

						BACKGROUND TRAFFIC										TOTAL TRAFFIC		(7) SERVICE VOLUME							
			(1)	(2)		(3)	(4)	(5)		(6)	Backgnd	Dir.		Backgrd Peak Hr Volume		Total Peak Hr Volume						V/C		LOS	
ROADWAY	FROM	TO	# of Lanes	LOS Std	PCS #	FSUTMS PSWDT	Backgnd Traffic	PSWDT/ AADT Factor	AADT	K100 Factor	Peak Hr Volume	Split NE	Split SW	NE	SW	NE	SW	@ LOS C	@ LOS D	@ LOS E	@ STD	NE	SW	NE	SW
BAYSHORE RD.	Palm Creek Dr.	SR 31	2LU	E	5	13,545	13,545	1.060	12,780	0.094	1,200	0.55	0.45	660	540	660	540	760	900	920	920	0.72	0.59	C	C
NORTH RIVER RD.	SR 31	Project Entrance	2LU	E	5	3,639	3,639	1.060	3,430	0.094	320	0.55	0.45	176	144	176	144	760	900	920	920	0.19	0.16	B	B
	Project Entrance	N Olga Rd.	2LU	E	5	3,684	3,684	1.060	3,480	0.094	330	0.55	0.45	182	149	182	149	760	900	920	920	0.20	0.16	B	B
	N Olga Rd.	Taylor Rd.	2LU	E	5	3,090	3,090	1.060	2,920	0.094	270	0.55	0.45	149	122	149	122	760	900	920	920	0.16	0.13	B	B
SR 31	SR 80	Bayshore Rd.	2LU	E	5	18,159	18,159	1.060	17,130	0.094	1,610	0.55	0.45	886	725	886	725	760	900	920	920	0.96	0.79	D	C
	Bayshore Rd.	Project Entrance	2LU	E	5	23,423	23,423	1.060	22,100	0.094	2,080	0.55	0.45	1,144	936	1,144	936	760	900	920	920	1.24	1.02	F	F
	Project Entrance	North River Rd.	2LU	E	5	9,997	9,997	1.060	9,430	0.094	890	0.55	0.45	490	401	490	401	760	900	920	920	0.53	0.44	C	C
	North River Rd.	County Line	2LU	E	4	9,340	9,340	1.093	8,550	0.094	800	0.51	0.49	408	392	408	392	760	900	920	920	0.44	0.43	C	C
SR 80	I-75	SR 31	6LD	D	5	58,401	58,401	1.060	55,100	0.094	5,180	0.55	0.45	2,849	2,331	2,849	2,331	2,850	2,920	2,920	2,920	0.98	0.80	C	B
	SR 31	Davis Blvd.	4LD	D	5	46,867	46,867	1.060	44,210	0.094	4,160	0.55	0.45	2,288	1,872	2,288	1,872	1,900	1,950	1,950	1,950	1.17	0.96	F	C
	Davis Blvd.	Tropic Ave.	4LD	D	5	43,022	43,022	1.060	40,590	0.094	3,820	0.55	0.45	2,101	1,719	2,101	1,719	1,900	1,950	1,950	1,950	1.08	0.88	F	C
	Tropic Ave.	Buckingham Rd.	4LD	D	5	33,105	33,105	1.060	31,230	0.094	2,940	0.55	0.45	1,617	1,323	1,617	1,323	1,900	1,950	1,950	1,950	0.83	0.68	B	B

FOOTNOTES:

(1) Lee County 2030 Financial Feasible Plan number of lanes.
(2) Lee County roadway LOS standard based on The Lee Plan, Policy 22.1.1.
(3) Peak season weekday traffic (PSWDT) volumes based on FSUTMS travel model assignment.
(4) Background traffic estimated by subtracting Project PSWDT from the total PSWDT.
(5) PSADT/AADT factor based on Lee County 2006 permanent count station data.
(6) K(100) factors derived from Lee County 2006 permanent count station data.
(7) Lee County Generalized Service Volumes, November 2005.

EXHIBIT 3B REVISED
NORTH RIVER VILLAGE CPA #07548
FUTURE TRAFFIC CONDITIONS WITH COMP PLAN AMENDMENT SCENARIO B (2,200 UNITS WITH ALL SF + 100 HOTEL ROOMS + GOLF AND MARINA)
DIRECTIONAL PEAK HOUR, PEAK SEASON (K100)

UNDER 2030 FINANCIALLY-FEASIBLE PLAN

						BACKGROUND TRAFFIC										TOTAL TRAFFIC		(7) SERVICE VOLUME							
			(1)	(2)		(3)	(4)	(5)		(6)	Backgnd	Dir.		Backgrd Peak Hr Volume		Total Peak Hr Volume						V/C		LOS	
ROADWAY	FROM	TO	# of Lanes	LOS Std	PCS #	FSUTMS PSWDT	Backgnd Traffic	PSWDT/ AADT Factor	AADT	K100 Factor	Peak Hr Volume	Split NE	Split SW	NE	SW	NE	SW	@ LOS C	@ LOS D	@ LOS E	@ STD	NE	SW	NE	SW
BAYSHORE RD.	Palm Creek Dr.	SR 31	2LU	E	5	13,487	13,487	1.060	12,720	0.094	1,200	0.55	0.45	660	540	660	540	760	900	920	920	0.72	0.59	C	C
NORTH RIVER RD.	SR 31	Project Entrance	2LU	E	5	3,625	3,625	1.060	3,420	0.094	320	0.55	0.45	176	144	176	144	760	900	920	920	0.19	0.16	B	B
	Project Entrance	N Olga Rd.	2LU	E	5	3,658	3,658	1.060	3,450	0.094	320	0.55	0.45	176	144	176	144	760	900	920	920	0.19	0.16	B	B
	N Olga Rd.	Taylor Rd.	2LU	E	5	3,094	3,094	1.060	2,920	0.094	270	0.55	0.45	149	122	149	122	760	900	920	920	0.16	0.13	B	B
SR 31	SR 80	Bayshore Rd.	2LU	E	5	18,066	18,066	1.060	17,040	0.094	1,600	0.55	0.45	880	720	880	720	760	900	920	920	0.96	0.78	D	C
	Bayshore Rd.	Project Entrance	2LU	E	5	23,257	23,257	1.060	21,940	0.094	2,060	0.55	0.45	1,133	927	1,133	927	760	900	920	920	1.23	1.01	F	F
	Project Entrance	North River Rd.	2LU	E	5	9,994	9,994	1.060	9,430	0.094	890	0.55	0.45	490	401	490	401	760	900	920	920	0.53	0.44	C	C
	North River Rd.	County Line	2LU	E	4	9,340	9,340	1.093	8,550	0.094	800	0.51	0.49	408	392	408	392	760	900	920	920	0.44	0.43	C	C
SR 80	I-75	SR 31	6LD	D	5	58,313	58,313	1.060	55,010	0.094	5,170	0.55	0.45	2,844	2,327	2,844	2,327	2,850	2,920	2,920	2,920	0.97	0.80	C	B
	SR 31	Davis Blvd.	4LD	D	5	46,727	46,727	1.060	44,080	0.094	4,140	0.55	0.45	2,277	1,863	2,277	1,863	1,900	1,950	1,950	1,950	1.17	0.96	F	C
	Davis Blvd.	Tropic Ave.	4LD	D	5	42,884	42,884	1.060	40,460	0.094	3,800	0.55	0.45	2,090	1,710	2,090	1,710	1,900	1,950	1,950	1,950	1.07	0.88	F	C
	Tropic Ave.	Buckingham Rd.	4LD	D	5	32,962	32,962	1.060	31,100	0.094	2,920	0.55	0.45	1,606	1,314	1,606	1,314	1,900	1,950	1,950	1,950	0.82	0.67	B	B

FOOTNOTES:

(1) Lee County 2030 Financial Feasible Plan number of lanes.
(2) Lee County roadway LOS standard based on The Lee Plan, Policy 22.1.1.
(3) Peak season weekday traffic (PSWDT) volumes based on FSUTMS travel model assignment.
(4) Background traffic estimated by subtracting Project PSWDT from the total PSWDT.
(5) PSADT/AADT factor based on Lee County 2006 permanent count station data.
(6) K(100) factors derived from Lee County 2006 permanent count station data.
(7) Lee County Generalized Service Volumes, November 2005.

EXHIBIT 3A REVISED 10/15/07
NORTH RIVER VILLAGE CPA #07548
FUTURE TRAFFIC CONDITIONS WITH COMP PLAN AMENDMENT SCENARIO A (2,500 UNITS WITH SF/MF MIX + 100 HOTEL ROOMS + GOLF AND MARINA)
DIRECTIONAL PEAK HOUR, PEAK SEASON (K100)

UNDER 2030 FINANCIALLY-FEASIBLE PLAN

						BACKGROUND TRAFFIC										TOTAL TRAFFIC		(7) SERVICE VOLUME							
			(1)	(2)		(3)	(4)	(5)		(6)		Dir.	Split	Backgrd Peak Hr Volume		Total Peak Hr Volume						V/C		LOS	
ROADWAY	FROM	TO	# of Lanes	LOS Std	PCS #	FSUTMS PSWDT	Backgnd Traffic	PSWDT/ AADT Factor	AADT	K100 Factor	Backgnd Peak Hr Volume	NE	SW	NE	SW	NE	SW	@ LOS C	@ LOS D	@ LOS E	@ STD	NE	SW	NE	SW
BAYSHORE RD.	Palm Creek Dr.	SR 31	2LU	E	5	12,378	12,378	1.060	11,680	0.094	1,100	0.55	0.45	605	495	605	495	760	900	920	920	0.66	0.54	C	C
NORTH RIVER RD.	SR 31	Project Entrance	2LU	E	5	5,636	5,636	1.060	5,320	0.094	500	0.55	0.45	275	225	275	225	760	900	920	920	0.30	0.24	B	B
	Project Entrance	N Olga Rd.	2LU	E	5	3,969	3,969	1.060	3,740	0.094	350	0.55	0.45	193	158	193	158	760	900	920	920	0.21	0.17	B	B
	N Olga Rd.	Taylor Rd.	2LU	E	5	3,363	3,363	1.060	3,170	0.094	300	0.55	0.45	165	135	165	135	760	900	920	920	0.18	0.15	B	B
SR 31	SR 80	Bayshore Rd.	2LU	E	5	18,021	18,021	1.060	17,000	0.094	1,600	0.55	0.45	880	720	880	720	760	900	920	920	0.96	0.78	D	C
	Bayshore Rd.	Project Entrance	2LU	E	5	23,030	23,030	1.060	21,730	0.094	2,040	0.55	0.45	1,122	918	1,122	918	760	900	920	920	1.22	1.00	F	E
	Project Entrance	North River Rd.	2LU	E	5	10,220	10,220	1.060	9,640	0.094	910	0.55	0.45	501	410	501	410	760	900	920	920	0.54	0.45	C	C
	North River Rd.	County Line	2LU	E	4	9,340	9,340	1.093	8,550	0.094	800	0.51	0.49	408	392	408	392	760	900	920	920	0.44	0.43	C	C
SR 80	I-75	SR 31	6LD	D	5	58,636	58,636	1.060	55,320	0.094	5,200	0.55	0.45	2,860	2,340	2,860	2,340	2,850	2,920	2,920	2,920	0.98	0.80	D	B
	SR 31	Davis Blvd.	4LD	D	5	46,850	46,850	1.060	44,200	0.094	4,150	0.55	0.45	2,283	1,868	2,283	1,868	1,900	1,950	1,950	1,950	1.17	0.96	F	C
	Davis Blvd.	Tropic Ave.	4LD	D	5	43,019	43,019	1.060	40,580	0.094	3,810	0.55	0.45	2,096	1,715	2,096	1,715	1,900	1,950	1,950	1,950	1.07	0.88	F	C
	Tropic Ave.	Buckingham Rd.	4LD	D	5	33,102	33,102	1.060	31,230	0.094	2,940	0.55	0.45	1,617	1,323	1,617	1,323	1,900	1,950	1,950	1,950	0.83	0.68	B	B

FOOTNOTES:

(1) Lee County 2030 Financial Feasible Plan number of lanes.
(2) Lee County roadway LOS standard based on The Lee Plan, Policy 22.1.1.
(3) Peak season weekday traffic (PSWDT) volumes based on FSUTMS travel model assignment.
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(5) PSADT/AADT factor based on Lee County 2006 permanent count station data.
(6) K(100) factors derived from Lee County 2006 permanent count station data.
(7) Lee County Generalized Service Volumes, November 2005.

EXHIBIT 4A REVISED
LEE COUNTY ROADS IMPACT FEE CALCULATION

Project: NORTH RIVER VILLAGE CPA #07548

2,500 UNITS WITH SF/MF MIX

		Size	Fee Rate /Unit	Amount
Residential:	Single-Family - Detached	1,500	$8,976 /d.u.	$13,464,000
	Multiple Family Building	1,000	$6,297 /d.u.	$6,297,000
	Duplex/Two-Family/Townhouse	0	$6,297 /d.u.	$0
	Hotel / Motel Room/Time-share	100	$6,762 /room	$676,200
	Mobile Home	0	$4,686 /d.u.	$0
	Elder /Disabled Housing	0	$3,261 /site	$0
	Adult Cong. Living Facility (ACLF)	0	$2,025 /d.u.	$0
	Recreatinal Vehicle Site	0	$4,686 /site	$0
Office:	General Office (0-99,999 sf)	0	$7,305 /1,000 s.f.	$0
	General Office (100,000 sf +)	0	$7,305 /1,000 s.f.	$0
	Medical Office	0	$24,126 /1,000 s.f.	$0
	Hospital	0	$11,736 /1,000 s.f.	$0
	Nursing Home	0	$4,071 /1,000 s.f.	$0
	Church	0	$4,575 /1,000 s.f.	$0
	Day Care Center	0	$12,840 /1,000 s.f.	$0
	Elementary / Sec. School (Private)	0	$2,223 /1,000 s.f.	$0
Industrial:	Industrial Park	0	$6,195 /1,000 s.f.	$0
	Warehouse	0	$4,416 /1,000 s.f.	$0
	Mini-Warehouse	0	$1,587 /1,000 s.f.	$0
Retail: (GFA)	Shopping Center (0-99,999 sf)	0	$15,837 /1,000 s.f.	$0
	Shopping Center (100,000-249,999 sf	150,000	$15,837 /1,000 s.f.	$2,375,550
	Shopping Center (250,000-499,999 sf	0	$15,837 /1,000 s.f.	$0
	Shopping Center (500,000 sf +)	0	$15,837 /1,000 s.f.	$0
	Bank	0	$25,134 /1,000 s.f.	$0
	Car Wash, Self Service	0	$5,262 /Stall	$0
	Convenience Store w/Gas Sales	0	$40,305 /1,000 s.f.	$0
	Golf Course (open to public)	0	$2,697 /acre	$0
	Movie Theater	0	$23,220 /1,000 s.f.	$0
	Restaurant, Fast Food	0	$44,337 /1,000 s.f.	$0
	Restaurant, Standard	0	$20,337 /1,000 s.f.	$0

$22,812,750

EXHIBIT 4B REVISED
LEE COUNTY ROADS IMPACT FEE CALCULATION

Project: NORTH RIVER VILLAGE CPA #07548

2,200 UNITS WITH ALL SF

		Size	Fee Rate /Unit	Amount
Residential:	Single-Family - Detached	2,200	$8,976 /d.u.	$19,747,200
	Multiple Family Building	0	$6,297 /d.u.	$0
	Duplex/Two-Family/Townhouse	0	$6,297 /d.u.	$0
	Hotel / Motel Room/Time-share	100	$6,762 /room	$676,200
	Mobile Home	0	$4,686 /d.u.	$0
	Elder /Disabled Housing	0	$3,261 /site	$0
	Adult Cong. Living Facility (ACLF)	0	$2,025 /d.u.	$0
	Recreatinal Vehicle Site	0	$4,686 /site	$0
Office:	General Office (0-99,999 sf)	0	$7,305 /1,000 s.f.	$0
	General Office (100,000 sf +)	0	$7,305 /1,000 s.f.	$0
	Medical Office	0	$24,126 /1,000 s.f.	$0
	Hospital	0	$11,736 /1,000 s.f.	$0
	Nursing Home	0	$4,071 /1,000 s.f.	$0
	Church	0	$4,575 /1,000 s.f.	$0
	Day Care Center	0	$12,840 /1,000 s.f.	$0
	Elementary / Sec. School (Private)	0	$2,223 /1,000 s.f.	$0
Industrial:	Industrial Park	0	$6,195 /1,000 s.f.	$0
	Warehouse	0	$4,416 /1,000 s.f.	$0
	Mini-Warehouse	0	$1,587 /1,000 s.f.	$0
Retail: (GFA)	Shopping Center (0-99,999 sf)	0	$15,837 /1,000 s.f.	$0
	Shopping Center (100,000-249,999 sf	150,000	$15,837 /1,000 s.f.	$2,375,550
	Shopping Center (250,000-499,999 sf	0	$15,837 /1,000 s.f.	$0
	Shopping Center (500,000 sf +)	0	$15,837 /1,000 s.f.	$0
	Bank	0	$25,134 /1,000 s.f.	$0
	Car Wash, Self Service	0	$5,262 /Stall	$0
	Convenience Store w/Gas Sales	0	$40,305 /1,000 s.f.	$0
	Golf Course (open to public)	0	$2,697 /acre	$0
	Movie Theater	0	$23,220 /1,000 s.f.	$0
	Restaurant, Fast Food	0	$44,337 /1,000 s.f.	$0
	Restaurant, Standard	0	$20,337 /1,000 s.f.	$0

$22,798,950

EXHIBIT 5 REVISED

NORTH RIVER VILLAGE #07548
COMPREHENSIVE PLAN AMENDMENT

PM PEAK HOUR TWO-WAY TRIP RATES

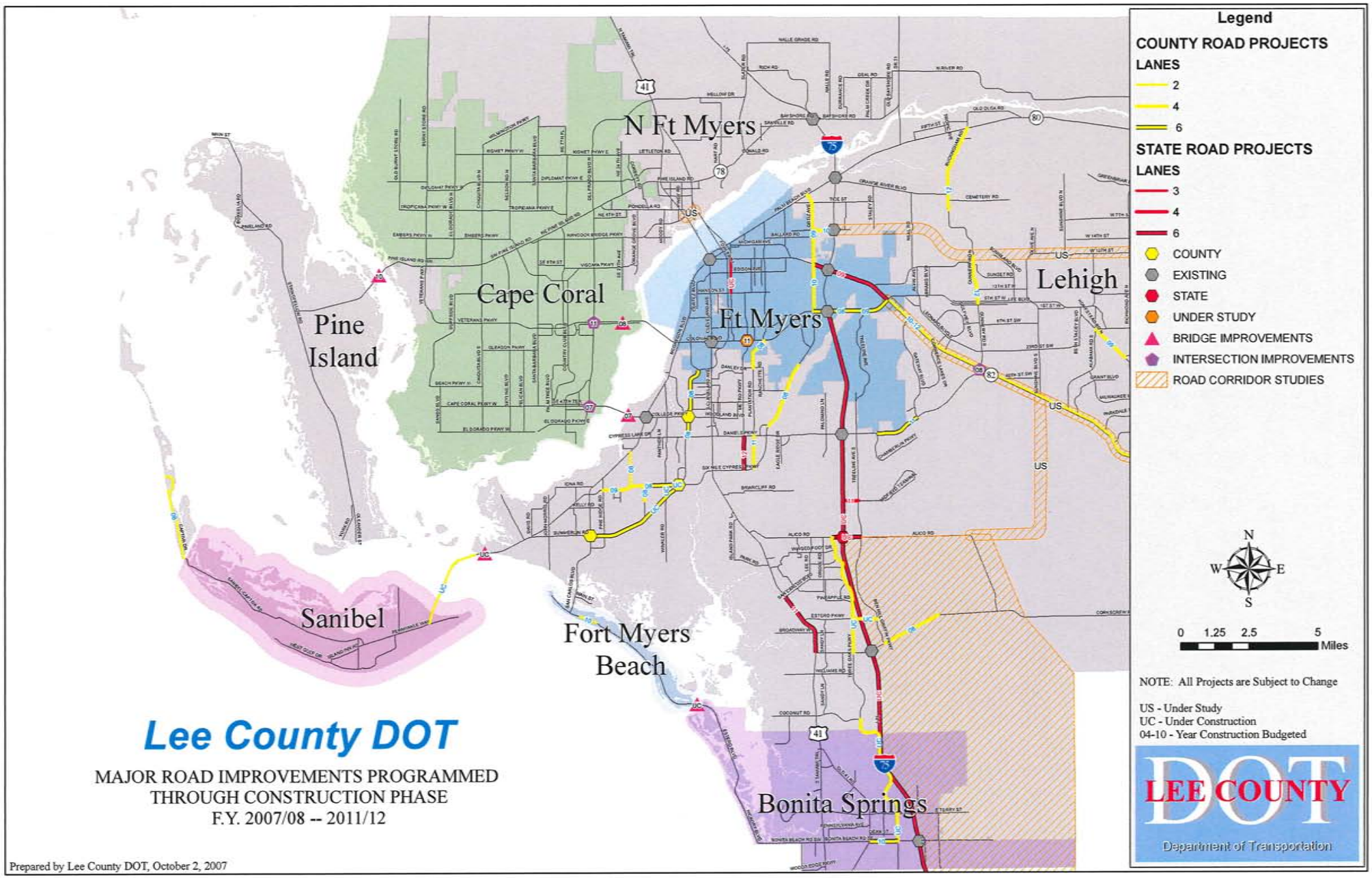
Land Use	Size	Unit	Trips	Trip Rate	/Unit
Singlefamily	1,500	d.u.	1,227	0.818	/per d.u.
Multifamily	1,000	d.u.	397	0.397	/per d.u.
Hotel	100	Rooms	70	0.700	/per unit

LAND USE CONVERSION MATRIX

Land Use		To		
		Singlefamily (d.u.)	Multifamily (d.u.)	Hotel (room)
From	Singlefamily (Per d.u.)	1.0	2.1	1.2
	Multifamily (Per d.u.)	0.5	1.0	0.6
	Hotel (Per rooms)	0.9	1.8	1.0

EXHIBIT A

LEE COUNTY DOT
MAJOR ROAD IMPROVEMENTS TENTATIVELY PROGRAMMED THROUGH CONSTRUCTION PHASE
FY 2007/08 – 2011/12



Lee County DOT

MAJOR ROAD IMPROVEMENTS PROGRAMMED
THROUGH CONSTRUCTION PHASE
F.Y. 2007/08 -- 2011/12

Prepared by Lee County DOT, October 2, 2007

EXHIBIT B

LEE COUNTY MPO
2030 LRTP HIGHWAY ELEMENT MAP

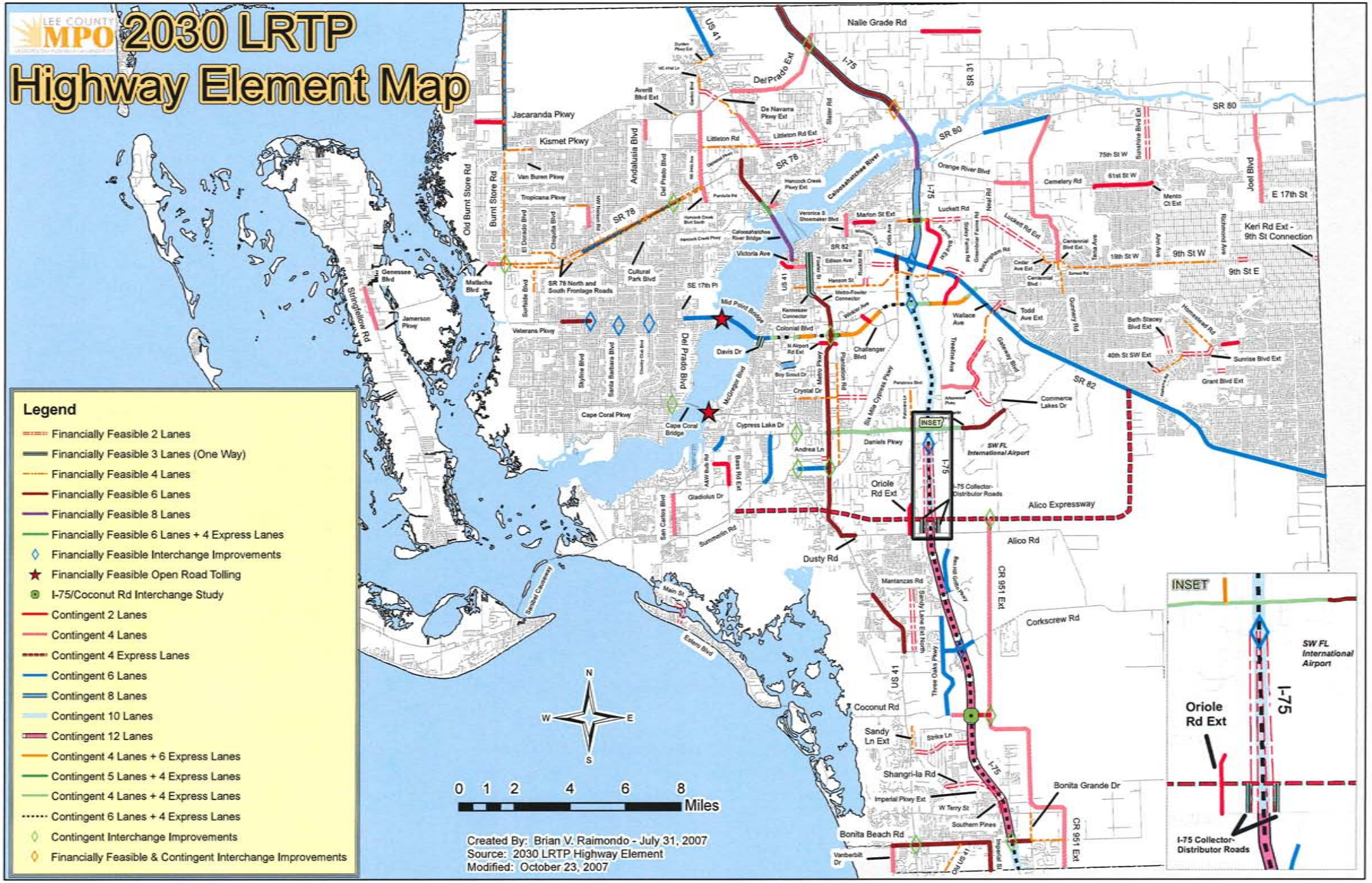

LEE COUNTY MPO
2030 LRTP
Highway Element Map
Legend
Financially Feasible 2 Lanes
Financially Feasible 3 Lanes (One Way)
Financially Feasible 4 Lanes
Financially Feasible 6 Lanes
Financially Feasible 8 Lanes
Financially Feasible 6 Lanes + 4 Express Lanes
Financially Feasible Interchange Improvements
Financially Feasible Open Road Tolling
I-75/Coconut Rd Interchange Study
Contingent 2 Lanes
Contingent 4 Lanes
Contingent 4 Express Lanes
Contingent 6 Lanes
Contingent 8 Lanes
Contingent 10 Lanes
Contingent 12 Lanes
Contingent 4 Lanes + 6 Express Lanes
Contingent 5 Lanes + 4 Express Lanes
Contingent 4 Lanes + 4 Express Lanes
Contingent 6 Lanes + 4 Express Lanes
Contingent Interchange Improvements
Financially Feasible & Contingent Interchange Improvements
N
W
E
S
0 1 2 4 6 8
Miles
Created By: Brian V. Raimondo - July 31, 2007
Source: 2030 LRTP Highway Element
Modified: October 23, 2007
INSET
SW FL International Airport
I-75
Oriole Rd Ext
I-75 Collector-Distributor Roads
Nalle Grade Rd
Del Prado Ext
Jacaranda Pkwy
Kismet Pkwy
Burnt Store Rd
Old Burnt Store Rd
Andalusia Blvd
Littleton Rd
Littleton Rd Ext
SR 78
Cultural Park Blvd
SR 78 North and South Frontage Roads
Veterans Parkway
Del Prado Blvd
Cape Coral Pkwy
Cape Coral Bridge
Mid Point Bridge
Davis Dr
Colonial Blvd
Challenger Blvd
Victoria Ave
SR 82
Hanson St
Edison Ave
Metro-Fowler Connector
Kenseeaw Connector
Cypress Lake Dr
Crystal Dr
Daniels Pkwy
Commerce Lakes Dr
Alico Expressway
Alico Rd
Dusty Rd
Oriole Rd Ext
Gladiolus Dr
Summerlin Rd
Bass Rd Ext
Andrea Ln
Mantanzas Rd
CR 951 Ext
Corkscrew Rd
Coconut Rd
Sandy Ln Ext
Shangri-la Rd
Imperial Pkwy Ext
W Terry St
Bonita Beach Rd
Bonita Grande Dr
Vanderbilt Dr
Old US 41
Imperial St
Orange River Blvd
Cemetery Rd
Luckett Rd
Luckett Rd Ext
Marion St Ext
Caloosahatchee River
Caloosahatchee River Bridge
SR 80
75th St W
61st St W
19th St W
9th St W
9th St E
E 17th St
Joel Blvd
Keri Rd Ext - 9th St Connection
Todd Ave Ext
Wallace Ave
Beth Stacey Blvd Ext
40th St SW Ext
Sunrise Blvd Ext
Grant Blvd Ext
Homestead Rd
Gunnery Rd
Treeline Ave
Gateway Blvd
Six Mile Cypress Pkwy
Plantation Rd
Challenger Blvd
Boy Scout Dr
N Airport Rd Ext
Veronica S Shoemaker Blvd
Hancock Creek Pkwy Ext
Hancock Creek Pkwy
Hancock Creek Blvd South
Pondella Rd
Del Prado Blvd
Andalusia Blvd
Avenida Del Prado
Avenida Del Rio
Avenida Del Sol
Avenida Del Mar
Avenida Del Rey

EXHIBIT C

DRAFT
DEVELOPMENT AGREEMENT OUTLINE

DRAFT - FOR DISCUSSION PURPOSES ONLY

NORTH RIVER VILLAGE COMPREHENSIVE PLAN AMENDMENT
DEVELOPMENT AGREEMENT OUTLINE

February 14, 2008

SR 31 -- Fund Construction from North River Village Entrance to Bayshore Road (SR 78)

1. Project Development and Environment (PD&E) Study conducted by Babcock Ranch
2. Dedication of 300 feet of ROW from NRV Entrance to NRV South Property Line = **$1.0 million**
3. Funding of design and construction of four lanes (within a six-lane cross section) from NRV Entrance to SR 78 = **$3.8 million**
4. Total contributions = **$4.8 million**

SR 80 -- Fund Construction of Intersection Improvements at SR 31 and Buckingham Road

1. Fund proposed intersection improvements, as per Dave Loveland's memo dated December 8, 2007, regarding CPA 2005-00007 (River Hall); estimated cost = **$2,078,448**

   SR 80 at SR 31

   - Add 2nd Southbound to Eastbound Left Turn Lane
   - Add 2nd Eastbound to Northbound Left Turn Lane
   - Add a third through lane Westbound in advance of the SR 31 intersection

   SR 80 at Buckingham Road

   - Add 2nd Northbound to Westbound Left Turn Lane
   - Add 2nd Westbound to Southbound Left Turn Lane
   - Add Northbound Right Turn Lane
   - Add Southbound Right Turn Lane
   - Add 2,500 foot 3rd Eastbound Through Lane
   - Add 2,500 foot 3rd Westbound Through Lane

2. Fund right-of-way acquisition, if any, for intersection improvements listed above; estimated cost = **To be determined.**

3. Total contributions = **$ 2.1 million** plus **ROW costs**, if any.

DEVELOPMENT ORDER
FOR
SOUTH LABELLE VILLAGE
A DEVELOPMENT OF REGIONAL IMPACT
STATE DRI#_____

LET IT BE KNOWN THAT, PURSUANT TO SECTION 380.06, OF THE FLORIDA STATUTES, THE CITY COMMISSION OF THE CITY OF LABELLE, FLORIDA, HAS HEARD AT A PUBLIC HEARING CONVENED ON _____, 2008, THE APPLICATION FOR DEVELOPMENT APPROVAL FOR THE SOUTH LABELLE VILLAGE DEVELOPMENT OF REGIONAL IMPACT (HEREINAFTER REFERRED TO AS SOUTH LABELLE DRI), A MIXED USE DEVELOPMENT IN THE CITY OF LABELLE WHICH INCLUDES APPROXIMATELY 1,018.0 ACRES, MORE OR LESS, TO BE DEVELOPED IN ACCORDANCE WITH THE APPLICATION SUBMITTED TO THE CITY OF LABELLE, IN OCTOBER 2006 BY THE OWNER/APPLICANTS BOB PAUL, INC., JR PAUL, JR. LTD, BRYAN PAUL, INC., AND SOUTH FLORIDA WATER MANAGEMENT DISTRICT(NO LONGER AN OWNER/APPLICANT).

WHEREAS, the City Commission of the City of LaBelle, Florida, has considered the report and recommendations of the Southwest Florida Regional Planning Council, the City of LaBelle Staff, and the Local Planning Agency, the application and sufficiency submittals, and the documents and comments made on the record in the public hearing, and after full consideration of those reports, recommendations, documents, and comments, the City Commission of the City of LaBelle, Florida, finds and determines that:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. South LaBelle DRI is a master planned community located in the incorporated City of LaBelle, Hendry County, Florida, south of State Road 80, and west of State Road 29. The property includes 1,018.0 acres more or less. The South LaBelle DRI includes 2,500 residential units, 220,000 square feet of retail uses, 50,000 square feet of office uses, approximately 50,000 square feet of quasi-public uses, such as a YMCA, and civic uses, such as schools, government offices, and other government uses, 273 acres of common and private open space, and related accessory uses to serve the development. Parks, clubhouses, and community centers shall be accessory uses and shall not be subtracted from the retail or office square footage. Two hundred hotel rooms are permitted, if there is a reduction in other uses such that the net new external trips do not exceed the number of trips projected in the Traffic Impact Statement.

B. The project will commence on or before December 31, 2010, and will be developed in one six year phase.

C. Water supply and wastewater treatment will be provided by the City of LaBelle.

D. The factual findings, conclusions of law, conditions and other terms of this Development Order apply to the property described more completely below:

(Legal description page)

E. The property will be rezoned to a planned unit development (PUD) coincident with the approval of the Application for Development Approval. The property is currently in agricultural use. Agricultural uses may continue on the property after the approval of the PUD zoning and the DRI development order. Agricultural uses may continue after development has begun on those areas not under active development pursuant to this development order.

F. The Application for Development Approval (ADA) for the South LaBelle Village is consistent with the requirements of Section 380.06, Florida Statutes, and it was acknowledged that responses were provided to the sufficiency questions by the Southwest Florida Regional Planning Council staff.

G. 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.

H. The development does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan. The development is consistent with the State Comprehensive Plan if developed in accordance with the conditions set forth herein.

I. 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 _____, 2008. The SWFRPC report and recommendations were subsequently forwarded to the City of LaBelle pursuant to Section 380.06, Florida Statues. The development, as proposed in the ADA and modified by this Development Order, is generally consistent with the report and recommendations of the SWFRPC pursuant to Section 380.06(11), Florida Statutes.

J. The development is located in the South LaBelle Community Land Use Category that was adopted in the City of LaBelle's comprehensive plan in August of 2005. A comprehensive plan amendment to the South LaBelle Community Land Use Category was adopted prior to the adoption of this DRI development order that removed the designation of Urban Reserve Area for that portion of the South LaBelle Community previously under the jurisdiction of Hendry County and was under the ownership of the South Florida Water Management District at the time the application was submitted. The development, as conditioned herein, is consistent with the City of LaBelle Comprehensive Plan, and the land development code.

II. ACTION ON THE REQUEST AND THE CONDITIONS OF APPROVAL

NOW THEREFORE, be it resolved by the City Commission of the City of LaBelle, Florida , in a public meeting duly advertised, constituted and assembled _____, 2008, that the Development of Regional Impact Application for Development Approval submitted by Bob Paul, Inc., JR Paul , Jr. Ltd., Bryan Paul, Inc., and South Florida Water Management District (no longer an owner/applicant) for the project known as South LaBelle Village DRI (South LaBelle), is hereby Approved subject to the condition, restrictions and limitations that follow: For the purpose of this Development Order, the term "Developer" refers to Resource Conservation

Properties, Inc., and includes all of its successors or assigns, and all references to City Ordinances or other regulations, includes future amendments.

A. AFFORDABLE HOUSING

1. The Developer conducted a study in accordance with Rule 9J-2.048, Florida Administrative Code (FAC), the Adequate Housing Uniform Standard Rule. The Developer conducted an analysis to determine the housing demand and determined that the development would generate a demand for 42 very low, 133 low, and 108 moderate income for-sale units. The analysis determined that there was a for rent demand of 43 very low, 14 low, and 35 moderate income units. The study performed by Fishkind and Associates determined that there is no regionally significant unmet demand, in fact after meeting the demand generated by the South LaBelle Village DRI there will be a surplus of 1,845 for-sale and 623 for-rent affordable housing units within all three income categories.

2. The City will adopt a citywide program for linkage fees, mortgage assistance, or some other citywide program to address affordable housing demands in the City by July 31, 2010 or within nine (9) months after the issuance of the first building permit for a dwelling unit (other than a model unit).

3. The Developer will make three annual payments of one hundred and five thousand dollars to the City which shall be placed in a separate account for the purpose of assisting qualified buyers to obtain affordable housing through a mortgage assistance program. The first payment will be due when the first building permit is issued within South LaBelle Village, and the second and third payments will be made one year after the prior year's payment.

B. ENERGY

1. The sales and information center will make educational material and displays for energy efficient options available to all buyers, to permit the buyer to consider the options in the design of their residential units.

2. The Developer or a designated builder will provide a model home, certified by the Florida Green Building coalition. Information on energy efficiency and green building options will be displayed in the certified model for educational purposes. Certification by the Florida Green Building Coalition is based on meeting benchmarks within eight categories, including energy efficiency, water conservation, indoor environmental health and the use of environmentally friendly materials. The model home shall provide educational information on all of the energy efficiency and green building options including green roofs.

3. All community recreational facilities, civic facilities, and commercial areas will be required to provide bicycle parking facilities.

4. To enhance internal transit options, the Developer will incorporate the following:

(a) Pedestrian routes and bikeways that provide a linkage with the street system or other public spaces, avoiding routes through parking lots and other locations separated from the overall system.

(b) The designs will include a pedestrian circulation system which connects the nonresidential uses with residential uses and areas.

(c) Traffic calming techniques to maintain a multi-modal transportation system including pedestrian, bicycles, and automobile traffic.

(d) Provide access to transit facilities when transit facilities are available. This condition does not require the developer to retrofit existing developed areas.

5. The Developer will create residential Architectural Design standards that will encourage energy efficient designs, and builders will include at least one or more of the energy design features, such as building orientation, overhangs, shading through landscape or interior shades, porches, fences, solar roof access, louvers, awnings, or shutters to optimize energy efficiency.

6. Lighting for streets, parking, recreation and other public areas will include energy efficient, low voltage lighting, photovoltaic cells, motion sensors and/or timer on lighting. Lighting will be directional and shielded to prevent glare and spillover of light on neighboring properties.

7. The Developer will consider, where feasible and practical, incorporating alternatives to impervious pavement, such as the use of open areas, and pervious material choices for streets, parking lots, sidewalks, and the trail system to reduce the heat island effect.

8. All recreational areas, sidewalks, trails, and paths will incorporate native shade trees where feasible and good design permits.

9 The site development shall be installed consistent with the Florida Green Building Coalition standards for green development, which are attached hereto and made a part hereof as Exhibit __.

10. All residential units will be designed to have a maximum Home Energy Rating System (HERS) Index of 85.

C. WATER CONSERVATION AND WATER QUALITY

1. The sales and information center will provide educational material and displays for water conservation measures, the educational materials will include information on the use of xeriscape principles in the design of landscaping for the residential units.

2. Water closets will have a maximum water usage of 1.6 gallons/flush. Showerheads and faucets will have a maximum flow of 2.5 gallons/minute at 80 psi water pressure. Faucet aerators will limit flow rates to 0.5 gallons per minute.

3. The landscaping of common areas shall incorporate xeriscape principles and the utilization of native plant species that reduce water consumption. The Developer will strive to use innovative irrigation technology to reduce irrigation water use in the common areas. This condition does not apply to existing and ongoing agricultural and nursery operations.

4. The Developer will create residential design guidelines that will recommend a landscape plan that incorporates native plants and shade trees to minimize the use of irrigation water. This condition will not apply to agricultural activity.

5. The community educational program provided by the Property Owner's Association or the Uniform Community Development District will provide water wise signage identifying Florida Friendly plants. Information on water conservation and fertilizer application educational material will be provided to the community through any community website, newsletters, or other community information programs. An educational program on water conservation will be made available to the community.

D. STORMWATER MANAGEMENT

1. The Developer, the Property Owner's Association, or the Uniform Community Development District will utilize the Best Management Practices for the use of fertilizer, consistent with the soil and climatic conditions. The use of Best Management Practices will stipulate that only controlled release or slow release fertilizers will be used by any Home Owner Association, Property Owner Association, or Uniform Community Development District for common areas unless soil or climatic conditions dictate otherwise. An educational program on fertilizer application will be made available to the community. This condition shall not apply to existing or future agricultural areas.

2. No grasses that require mowing shall be allowed within 6 feet of the control elevation, except where needed for erosion control. Littoral zone plants that do not require mowing or fertilization should be planted in these areas when possible.

3. The Developer must modify the existing agricultural construction and operation permit #26-00082-S to address the construction and operation of the surface water management system for the development approved by this Development Order. The Developer submitted for a conceptual and construction and operation Environmental Resource Permit along with the ADA, and that permit application shall be reviewed and evaluated in accordance with Chapter 40E, FAC, and the South Florida Water Management District (SFWMD) Basis of Review. The SFWMD application number is #070309-25.

4. Silt fences or silt screens will be installed prior to land clearing to protect water quality and to identify areas to be protected from clearing activities. The fences or screen shall be maintained until the construction is complete and until all soil is stabilized. The silt

barriers and any anchor soil or accumulated silt must be removed upon completion of the construction and the stabilization of the soil. The permittee shall be responsible for requiring these measures.

5. Floating turbidity barriers or other devices will be in place on any flowing systems or in open water lake edges prior to initiation of earthwork and shall be maintained until all soil is stabilized.

6. The site contractors will manage turbidity from construction dewatering using structural best management practices (BMPs) prior to discharge to receiving waters. Structural BMPs may include but are not limited to vegetated systems, detention systems (e.g., sedimentation basins), geotextiles, and other methods. The site will be managed to ensure that turbidity and other pollutants from construction dewatering on the property will be performed in a manner that meets the requirements of the State Water Quality Standards, and any requirements of the National Pollutant Discharge Elimination System ("NPDES") general permit for construction.

7. Exposed soils will be stabilized in accordance with NPDES Construction Activities Permit. Stabilization methods include solid sod, seeding, and mulching or hydro mulching to provide a temporary or permanent grass cover. Clearing and grubbing, and grading operations will be timed to limit exposed unstabilized soils, and the timing must comply with the NPDES general construction permit.

8. The Developer shall require contractors to implement storm drain inlet protection (such as hay bales or gravel) to limit sedimentation within the stormwater system.

9. The allowable discharge in a 25 year 3-day storm event will be identified in the South Florida Water management District (SFWMD) Environmental Resource Permit(s).

10. Any development within the FEMA floodplain will have finished floor elevations that meet or exceed the 100 year three day storm event by at least 0.5 feet. No fill or structures will be introduced into the 100 year floodplain without the provision of compensating storage, in accordance with South Florida Water Management review and approval, to ensure all floodplain impacts are properly addressed.

11. The Developer will establish one or more legal operating entities, in accordance with the SFWMD Basis of Review, to maintain the internal stormwater management system. The legal operating entity must check the system on a regular basis to remove any debris that may accumulate in the project lakes, ditches or swales on an as needed basis. If there is erosion to project lake banks the banks must be repaired. The Developer, or the legal operating entities, must undertake routine inspections and maintenance of the stormwater management system and any preserved/enhanced wetland areas on-site, in accordance with the requirements of any applicable Environmental Resource Permit.

12. A Water Management Plan will be developed for the site as part of the Environmental Resource Permit (ERP) construction permit process. The Water Management

Plan will consider treatment swales planted with vegetation, and where practicable, landscape islands to accommodate the detention of runoff, as reviewed and approved by the SFWMD during the ERP approval process. Stormwater runoff will be minimized and recycled where practical through appropriate low impact development design.

13. The stormwater management system shall incorporate littoral zones constructed on slopes consistent with the requirements of the SFWMD, and City requirements and shall be planted in native emergent or submergent aquatic vegetation. Littoral shelves will be constructed within the lake system to provide additional habitat for the listed wading birds. Littoral shelves will be provided along a minimum of 10 % of the shoreline of internal lakes. Any shoreline banks created along the on-site storm water management system that includes littoral zones on slopes must be created in accordance with the SFWMD and City of LaBelle requirements. The Developer shall be responsible for ensuring 80% survival of the native emergency or submergent aquatic vegetation. The Developer shall include, where practical, isolated wading bird "pools" to provide aquatic habitat for mosquito larvae predators, such as Gambusia affinis, and foraging areas for wading bird species, such as wood storks, consistent with the Environmental Resource Permit, or any other necessary permits.

14. The owner or manager of commercial properties must undertake a regularly scheduled vacuum sweeping of streets and impervious parking areas. The Developer shall institute this requirement through deed restrictions.

15. Grease baffles shall be inspected and cleaned and/or repaired on a regular basis by the owner or manager. The maintenance shall be on an inspection period of at least once every 18 months.

16. The development will be designed in a manner that does not cause off-site flooding in accordance with the South Florida Water Management District (SFWMD) and Federal Emergency Management Agency (FEMA) regulations. Off-site flows will not be incorporated into the project system, the off-site flows will be routed through the development without mixing with on-site water or around the site in accordance with the SFWMD rules and regulations. No additional control structures will be used to accomplish this unless required by the SFWMD.

17. Energy dissipaters (such as rip rap, gravel beds, hay bales) shall be installed at the discharge point of pipes or swales if scouring is observed, in accordance with SFWMD criteria.

18. The internal stormwater management lakes and ditches shall be identified as drainage tracts on any recorded plat, or they must be set aside as recorded drainage easements granted to the UCDD, or other legal operating entity responsible for ensuring proper maintenance of the system. Appropriate maintenance easements, not to exceed twenty feet in width, must be provided with adequate access to the maintenance easement to permit proper maintenance of the water management system, as required by the appropriate government entity with jurisdiction over the stormwater management system.

19. The Project will have a centralized irrigation system. Single family residences will be supplied irrigation water through the centralized system. The use of potable water for irrigation by single family residents should be limited to hand watering. Single family domestic wells will not be allowed in the community, except for those in existence on the date of DRI approval. The lowest quality of water available and acceptable shall be utilized for all non-potable water uses. Potable water should not be utilized for non-potable purposes. Reuse water, when available, is the first choice for irrigation. Surface water from lakes will be used until reuse is available, and it will continue to be used to supplement reuse when it is available. On-site non-potable wells will be used in addition to reuse and water from surface water lakes.

20. The Developer shall install reuse trunk lines, as appropriate, for the irrigation of landscaped common areas. When adequate additional reuse is available, reuse lines will be installed for individual users for irrigation.

E. TRANSPORTATION

1. Significant Impact

a. Assessment Development Parameters. The traffic assessment for the project assumes the development parameters set forth below:

Land Use	Units/Floor Area
Total residential units	2,500 units
Single-family residential units	1,375 units
Multifamily residential units	1,125 units
Retail commercial	220,000 sq. ft.
Office commercial	50,000 sq. ft.
Various social/recreational facilities	
98 acres of parks and open space	

The overall Project traffic generation at the Project driveway entrances based on the above development parameters has been estimated to be 1,937 PM peak hour, two-way external trips, including 1,761 net new external trips and 176 pass-by trips.

b. Buildout Traffic Impacts. The traffic assessment on the existing plus committed roadway network indicates that the following significantly impacted roadways and intersections will be operating below adopted level of service standards at Buildout of the South LaBelle Village (2014):

1) Roadways	Needed Improvements
SR 29 from CR 78 to SR 80	Widen to four lanes [2]
SR 29 from Cowboy Way to Helms Road	Widen to four lanes [2]

2) Intersections	Needed Improvements
SR 80/Ft. Denaud Road (CR 78A)	Signalize if warranted
SR 80/Project Entrance [1]	Add WB left-turn lane Add WB right-turn lane Add NB right-turn lane Add SB left-turn lane Signalize if warranted
SR 80/Helms Road	Add WB left-turn lane Add WB right-turn lane Add NB right-turn lane Add SB left-turn lane Signalize if warranted
SR 80/Cowboy Way/Ft. Denaud Road	Retime signal
SR 80/Main Street (SR 29) [2]	Add WB dual left-turn lane Add EB right-turn lane Add WB right-turn lane Add NB right-turn lane Add SB right-turn lane Retime signal
SR 80/Bridge Street (SR 29) [2]	Add EB dual left-turn lane Add EB right-turn lane Add WB right-turn lane Add NB right-turn lane Add SB right-turn lane Retime signal
SR 29/Cowboy Way [2]	Add EB right-turn lane Add WB right-turn lane Add NB right-turn lane Add SB right-turn lane

	Signalize if warranted
SR 29/Helms Road [2]	Add NB left-turn lane Add SB left-turn lane Add NB right-turn lane Add SB right-turn lane Signalize if warranted
SR 29/Project Entrance [1]	Add EB left-turn lane Add EB right-turn lane Add NB left-turn lane Add SB right-turn lane Signalize if warranted

Footnotes:
[1] Site-related improvements.
[2] Or alternative improvements, as per SR 29 PD&E Study

2. Traffic Mitigation

Pursuant to Chapter 380.06(15)(d)4., Florida Statutes, and Rule 9J-2.045, FAC, the Developer will satisfy its transportation mitigation by making the payments, improvements, and right of way dedication described herein.

a. Buildout Proportionate Share. The $2,718,000 proportionate share assessment for this Project is premised on the assumption that the following committed improvement remains committed and on schedule.

- Four-lane widening of SR 80 between Clark Street and Birchwood Parkway

The Project's proportionate share of the cost for needed road and intersection improvements at buildout was estimated to be approximately $2,718,000, which is less than the anticipated road impact fee payments of $6,428,000 for proposed development in the Project under the current Hendry County road impact fee schedule. The higher of the two figures applies. Therefore, the anticipated road impact fee payments of $6,428,000 represent the Project's total proportionate share/traffic mitigation obligation for the South LaBelle Village DRI. No further analysis will be required if the four-lane widening schedule for SR 80 between Clark Street and Birchwood Parkway is adjusted due to the fact

that the road impact fee amount of $6,428,000.00 exceeds the projected proportionate share amount.

b. Traffic Mitigation. The Developer of South LaBelle Village DRI will mitigate the Project's traffic by pipelining the $6,428,000.00 as set forth below.

State Road 29 Widening

1) Payment. In lieu of the payment of road impact fees, the Developer will make the contributions specified below for SR 29 improvements to fully account for the Project's traffic mitigation obligation of $6,428,000. The payments may be financed through a line of credit, bonding or cash payments or a combination of financing methods. A draw-down schedule will be included as part of the bond or letter of credit. The financing method(s) and draw-down schedule(s) will be established through a Developer Contribution Agreement between the Developer and the City. Prior to the adoption of a Development Agreement the Developer may proceed with horizontal development, land preparation, drainage, fill, etc. for the South LaBelle Village and may construct a sales center and up to five model homes. Road impact fees must be paid at the time of building permit for this preliminary development. Any road impact fees paid for this preliminary development will be creditable against the Developer's proportionate share obligations.

2) Concurrency. Concurrency vesting will be granted for all development in the Project, as long as all Traffic Mitigation contributions are made in accordance with this Development Order and the duly adopted Development Contribution Agreement. The approved schedule is specified below in this Development Order.

a) Design for SR 29 Widening. The Developer will fund the preparation of design plans for the widening of SR 29 to four lanes from approximately 880 feet north of Cowboy Way to approximately 880 feet south of the Helms Road intersection, consistent with the cross section identified in the SR 29 Project Development and Environment (PD&E) Study, with appropriate

tapers down to two lanes at each end of the road segment. The design plans will also include necessary side-street approach improvements at the Cowboy Way and Helms Road intersections. The design plans will be funded by the Developer within 90 days of notification in writing that the State has selected the preferred SR 29 alignment in the SR 29 PD&E Study between Cowboy Way and US 27 (and no later than December 31, 2010). The written notice must be provided by either the Florida Department of Transportation or the City of LaBelle.

b) Right-of-Way for SR 29 Widening. The Developer will fund the acquisition of the minimum right-of-way needed, as identified in the design plans, to four-lane SR 29 from north of Cowboy Way to south of Helms Road and to make necessary side-street approach improvements at the Cowboy Way and Helms Road intersections. Actual right-of-way acquisition will be done by the City and/or FDOT. The funding will be provided by the Developer within 90 days of notification to the Developer in writing that the minimum right-of-way requirements for the needed improvements have been identified in the design plans (and no later than March 31, 2012). FDOT or the City of LaBelle will provide written notice.

c) Construction of SR 29 Widening. The Developer shall contribute partial funding for the widening of SR 29 to four lanes from approximately 880 feet north of Cowboy Way to approximately 880 feet south of the Helms Road intersection, consistent with the cross section identified in the SR 29 Project Development and Environment (PD&E) Study, with appropriate tapers down to two lanes at each end of the road segment, plus necessary side-street approach improvements. The amount of this contribution shall not exceed the DRI's total traffic mitigation obligation of $6.4 million minus the DRI's contributions for Design and Right-of-Way acquisition for the SR 29 Widening, as specified above. Upon receipt of this contribution for Construction from the Developer,

the City and FDOT will jointly determine the extent of the widening of this section of SR 29 that can be funded with the Developer's contribution plus any other funds available from other sources at that time, if any. If sufficient funds are available, then the entire SR 29 Widening from north of Cowboy Way to south of Helms Road will be constructed in accordance with the design plans. If not, then the Developer's contribution, plus any other funds that are available at that time, will be used to construct a portion of the SR 29 Widening in accordance with the design plans. Actual construction of the widening will be done by the City or FDOT. This contribution of partial funding for the Construction of the SR 29 Widening will be provided by the Developer within 6 months of notification to the Developer in writing that right-of-way acquisition for the SR 29 Widening has been completed (and no later than March 31, 2013). If FDOT is going to perform the construction, then the City must transfer the funds to FDOT for the specified construction.

d) Credits. All of the above contributions for design, right-of-way acquisition and construction will be creditable against the Project's total traffic mitigation obligation. The actual cost for each contribution will be verified in accordance with acceptable industry standards. If the actual dollar amount of these contributions is less than the Project's total mitigation obligation, then the Developer will provide the City with a cash contribution to make up the difference. The Developer is not obligated to make a contribution in excess of the $6,428,000.00, however if the Developer at its option spends in excess of the $6,428,000.00, any contribution in excess of the Project's total mitigation obligation, will be subject to road impact fee credits which must be paid by the City to the Developer, which the Developer can use to off-set the traffic impacts for any other property owned or operated by the Developer. These credits can also be sold or transferred to other parties in accordance with the ordinance in effect at the time of the transfer.

c. City Obligations

1) Design for SR 29 Widening. The City will notify the Developer in writing when the State selects the preferred SR 29 alignment in the SR 29 PD&E Study between Cowboy Way and US 27. Upon receipt of the Developer's payment for the preparation of the design plans, the City will convey these funds, bond, or letter of credit to the implementing agency or jurisdiction within 30 days. The City will work with the implementing agency to require the design plans to be completed within 18 months of the transfer of the funds (and not later than December 31, 2011). The City will notify the Developer in writing immediately when the minimum right-of-way requirements for the needed improvements have been identified in the design plans.

2) Right-of-Way for SR 29 Widening. Upon receipt of the Developer's payment for the right-of-way acquisition, the City will convey these funds to the implementing agency or jurisdiction within 30 days. The City will work with the implementing agency to require the right-of-way acquisition to be completed within 24 months of the transfer of the funds (and not later than December 31, 2012). The City will notify the Developer in writing immediately when right-of-way acquisition has been completed.

3) Construction of SR 29 Widening. Upon receipt of the Developer's payment of the remainder of the $6,428,000.00 not already spent for the right of way acquisition and the design plans for the funding of the construction of the SR 29 Widening, the City will convey these funds to the implementing agency or jurisdiction within 30 days, and the City will require the implementing agency to pursue and complete construction within 24 months (and not later than December 31, 2014).

4) Capital Improvement Program (CIP). The City has included the design, right-of-way acquisition and construction phases described above in the appropriate year in its Capital Improvement Programs.

3. Site Related Improvements

The Developer is fully responsible for site-related improvements. Site related improvements are all project intersection improvements, including the Developer's fair share of signals, turn lanes and deceleration lanes deemed necessary by the City or other government entity with jurisdiction of the public road consistent with the City's codes for the project's access points onto State Road 80, and any future public roads adjacent or interior to the development. If there is a conflict between the City's rules and the State's rules on a State road, the State's regulations will control.

4. Biennial Transportation Monitoring Report

The Developer must submit a transportation monitoring report on a biennial basis to the City of LaBelle, Hendry County, the Florida Department of Transportation (FDOT), the Florida Department of Community Affairs (FDCA), and the Southwest Florida Regional Planning Council (SFWRPC).

a. The first transportation monitoring report must be submitted two years after the effective date of the DRI Development Order, unless no permanent buildings have been occupied. If the Developer contends that a traffic monitoring report is not required because no traffic impacts have been created, the developer must indicate this fact in writing to the above review agencies. Once the development is required to submit a traffic monitoring report, it must be submitted every two years thereafter, until buildout, whether actual or declared.

b. The monitoring program will be designed in cooperation with the City of LaBelle, Hendry County, FDOT, FDCA and the SWFRPC prior to submittal of the first report. The methodology of the transportation monitoring report may be revised, if agreed upon by all parties.

c. The biennial transportation monitoring program will measure the Project's actual external trip generation and evaluate conditions at the Project's access points. Under Option 2, the biennial transportation monitoring report must contain the following information:

    1) PM peak hour traffic counts with turning movements at the Project's access points onto SR 80, SR 29 and Helms Road (once constructed).

2) A comparison of field measured external Project traffic volumes to the 1,937 PM peak hour, two-way external Project trips estimated at buildout in the DRI traffic study.

3) Estimated existing PM peak hour levels of service and needed improvements at the Project's access points.

4) Estimated future PM peak hour levels of service and needed improvements, based on a one-year projection of future volumes, at the Project's access points.

5) A summary of the status of road improvements assumed to be committed in the DRI traffic study by the City, Hendry County and FDOT, as specified in Section II.E.2.a above.

d. If the biennial transportation monitoring report reveals that the Project's trip generation exceeds the thresholds identified in Section 380.06(19)(b)15, Florida Statutes, then the provisions regarding substantial deviations will take effect.

5. The development will include pedestrian interconnects between development areas.

6. No public transit is available at this time. If public transit becomes available, the Developer will work with the City to identify potential locations for transit stops within the development.

7. To facilitate east-west travel by the public between SR 80 and SR 29, the Developer will construct an internal east-west road connecting SR 80 and SR 29. Construction of this new east-west road will commence within three years of the start of vertical development at South LaBelle Village. The construction of this new east-west road will be substantially completed no later than December 31, 2014, unless delayed by circumstances beyond the control of the Developer.

F. VEGETATION, WILDLIFE AND WETLANDS

1. The Development has 4.59 acres of wetlands and 28+/- acres of agricultural ditches. The on-site wetlands will be preserved and enhanced and placed in conservation easements in accordance with the requirements of the Environmental Resource Permit. The agricultural ditches will be impacted through filling and reshaping pursuant to the Environmental Resource Permit.

2. Prior to the commencement of construction, the limits of wetland preserves will be identified through the use of silt fences to prevent encroachment by construction activities.

3. Wetland preserves will be enhanced through the removal of exotic and nuisance vegetation such as mellalueca, Brazilian pepper, and cattails.

4. A management plan will be drafted and approved in accordance with the Florida Fish and Wildlife Conservation Commission guidance for documented listed species, specifically alligators, and listed wading birds, and any listed species inhabiting the property.

5. The Developer will consider incorporating elements from the Florida Yards and Neighborhoods program. Information will be provided to homeowners on the Florida *Yards and Neighborhoods* program and the University of Florida IFAS fact sheet ENH-860. The Property Owner's Association or the Uniform Community Development District will provide an annual education program for the residents on the Florida Yards and Neighborhoods program.

6. Listed species shall be evaluated, and managed in accordance with applicable State and Federal laws. If any federal or state permits or approvals are required to address listed species the Developer must obtain all necessary permits or approvals. All development-related activity on the Property shall be accomplished in accordance with State and Federal law related to listed species, and in accordance with those laws the activity should be accomplished without harming or harassing any wildlife species classified as endangered, threatened or a species of special concern.

7. Traffic calming devices will be included in the community when appropriate and consistent with the rules and regulations of the City of LaBelle.

8. Lighting within the development shall be designed to limit light spillage off-site and to limit light shining upward. This will be accomplished by incorporating shields, and the use of lighting fixtures designed to limit light spillage. Light spillage shall be restricted in wetland preserves.

9. All on-site areas required by the Environmental Resource Permit for mitigation will be placed in a conservation easement, in accordance with the ERP. The conservation easement shall be granted to the SFWMD, City of LaBelle, or other appropriate government or non-profit entity.

10. Utility lines, such as water, sewer, electric, gas, telephone, cable, etc will be located in public utility easements adjacent to roadways where practical and the location of said lines in conservation areas shall be limited to the extent practical.

11. If the backbone surface water management system includes the creation of a flow-way, any crossings of the flow-way must be designed to maintain the hydrologic function of the flow-way.

12. Exotic vegetation will be removed, and the site will be maintained in an exotic free condition as required by state, local, and federal environmental permits.

13. An Integrated Pest Management ("IPM") will be used within the Project. IPM will incorporate the monitoring of the site for pest related problems, and if a problem is identified that requires attention, action will be taken to address the pest that has the least amount of adverse environmental impact. IPM will maximize the use of biological controls, organic pest control, insecticidal soaps, and fish oils, when these are effective and practical methods of pest control. The Property Owner's Association and any Homeowner's Associations will provide homeowner education as a component of the IPM program. Nothing in this condition will impact any agricultural operations.

14. Appropriate measures will be taken to minimize impacts to preserved wetlands. Wetlands and other preserves will be marked in the field to avoid damage and intrusion into the protected areas. Appropriate BMPs will be employed.

15. Landscaped common open space areas that are replanted will incorporate xeric or native vegetation. Seventy (70) percent of the required trees, and seventy (70) percent of the required shrubs installed in public areas will be native or xeric vegetation. Seventy percent of the required trees in private open space areas will be xeric or native, and fifty (50) percent of the required shrubs in private open space areas will be native or xeric.

G. WASTEWATER MANAGEMENT/WATER SUPPLY

1. The Developer, and any other contractors, or site developers who will use groundwater, or surface water for landscape irrigation, and who will include dewatering as part of the construction activity will do so in accordance with any issued permit or must obtain the appropriate permits from the SFWMD.

2. The Developer will utilize water conservation devices and methods necessary to meet the criteria established in the water conservation measures in the permit to the City of LaBelle. If the developer obtains potable water from a different provider, then the Developer must conform to the water conservation plan of the alternate water supply provider.

3. The Developer shall install reuse lines, as appropriate, for irrigation of landscaped common areas. If additional reuse is available, reuse lines will be provided to individual users for irrigation.

4. Septic systems and potable wells are limited to those used in conjunction with construction trailers, sales offices, model homes and caretaker housing. Any existing septic systems for the agricultural operations will remain until the agricultural use is replaced with development. Permanent septic systems may be used for recreational rest stations. The community will have wells for irrigation. Well water will be used in the beginning and will be used for blending with re-use and lower quality water. When central water and wastewater are available all septic systems and potable will be replaced by connections to the central water and

wastewater system, except for the permanent septic system and potable well used for recreation rest stations and agricultural operations.

5. The potable water, wastewater, and reclaimed water systems will be designed and installed consistent with all applicable regulations of the City, the health department, and any other applicable state and federal agencies. If the City of LaBelle has adopted all or a portion of the SWFRPC Resolution 2007-02 relative to water and wastewater, then the developer must comply with any duly adopted regulations at the time of permit review and approval. If the Developer obtains these utility services from one or more different providers, then the developer must conform to the rules and guidelines of the alternate utility supply provider.

6. Wastewater treatment shall be provided by the City. If the City cannot provide wastewater treatment, the Developer may obtain central wastewater service from an alternate provider, or provide its own facilities.

7. The off-site transmission line extension costs will be borne by all parties who will use the line extension with each developer paying it's prorata share based on flow. The developer will pay for all on-site transmission lines that serve the project.

8. Adequate provisions shall be made for the water supply-related public facilities needed to accommodate the impacts of the proposed development, pursuant to Section 380.06(15)(e)2, F.S. and Rule 9J-2.044(6), F.A.C.

9. The project shall include rain sensors and/or soil moisture sensors for the irrigated common areas in order to preclude irrigation during rainfall events. The project will include low flow irrigation systems for common areas, where feasible.

10. Native landscaping will be incorporated through the project. Landscaped common areas will include concepts from the Florida Yards and Neighborhoods Program principles, and the landscaping must conform to the standards for Florida Number 1, or better as given in Grades and Standards for Nursery Plants (1998 or latest) and Grades and Standards for Nursery Plants Florida Department of Agriculture and Consume Services, Tallahassee, Florida. Invasive or exotic plant species may not be used for landscaped common open space areas, as defined in the Florida Exotic Pest Plan Council's 2007 list of invasive plant species which is attached hereto and made a part hereof as Exhibit ____.

H. EDUCATION.

1. School impact fees are in place in the City of LaBelle. The Developer will pay school impact fees to address the project's impacts on the education system.

2. The Applicant or the Developer will dedicate fifteen (15) acres of land for one elementary school site to the Hendry County School District for impact fee credits. The property for the elementary school site will be dedicated prior to the issuance of the building permit for the 500th residential unit. The school will provide credits to the Developer four years

after the dedication of the property for the value of the land at the time the credits are granted. The school site may be within or outside of the South LaBelle DRI, but it must be located within the City of LaBelle.

3. The Development has satisfied school concurrency through the dedication of the school site and the payment of impact fees.

4. The biennial monitoring report must provide current Level of Service information from the Hendry County School Board.

5. The Developer will design the development to provide the opportunity for the co-location of schools (public or private) with parks, libraries, YMCA's, or other community centers.

I. FIRE AND POLICE

1. The applicant conducted a FIAM analysis that examined, among other items, Fire, EMS, and law enforcement. There is no net negative fiscal impact to the city for fire, EMS, and law enforcement. Should the City adopt fire and EMS impact fees, the fees will be paid in accordance with any duly adopted ordinance for any permits obtained after the effective date of the regulation.

2. The commercial builders shall meet with the City of LaBelle Police Department or the Hendry County Sheriff's Department as long as Hendry County Sheriff's Department has primary law enforcement responsibility for the City of LaBelle, to discuss and evaluate the feasibility of incorporating crime prevention measures and programs during the site development process.

3. Fire flow shall be provided according to the fire flow criteria adopted by the City of LaBelle Fire Department.

4. A site for a sub-station may be included within the community, based on communications with the City of LaBelle. If a site is provided, the City will provide impact fee credits based on the value of the property dedicated at the time the credits are provided. If no fire impact fees are adopted within five years after the effective date of the DRI DO, and a site is dedicated, the dedication will be full and complete mitigation of all Fire, EMS and Police impacts.

J. SOLID WASTE/HAZARDOUS WASTES

1. The project shall be bound by all applicable recycling requirements in effect in the City at the time of the development, as they may be amended, and all solid wastes shall be disposed of by a waste hauler licensed by the State of Florida.

2. The owners or lessees of any buildings that store, display, or handle hazardous materials or wastes as those terms are defined in state and federal regulations, must

comply with all applicable state and federal regulations regarding the storage, display, handling and disposal of hazardous wastes and materials, and medical wastes. All reporting, monitoring, and disposal techniques must be followed. Any off-site disposal of hazardous waste or medical waste will be the responsibility of the business or use that generates the hazardous waste or medical waste subject to all applicable local, state, and federal regulations. It will be the responsibility of the owner or lessee to secure appropriate transportation of said material or wastes that cannot be handled by the regular solid waste disposal service.

3. No owner or lessee of any building, or recreation area, may discharge hazardous waste effluent into the sewage system unless approved by a permit issued by FDEP. There shall be no discharge of hazardous waste or medical wastes from medical facilities into septic tanks.

4. Any commercial operations that routinely handle extremely hazardous chemicals (such as the water and wastewater treatment facilities, hospitals and golf courses) will be required to comply with applicable OSHA and NFPA fire and life safety requirements as well as all other local, state and federal requirements.

5. All grease traps will be required to comply with local and state codes. The wastewater from the grease traps will be sent to a centrally located wastewater treatment facility designed to comply with the applicable effluent quality requirements. The captured grease must be hauled off by a licensed hauler. All restaurant operators must identify their licensed grease transporter prior to obtaining a certificate of occupancy.

6. If a builder constructs a building for the use, display, handling, generation or storage of extremely hazardous materials at threshold planning quantities, the building shall be constructed with impervious floors with floor drains leading to separate impervious holding facilities that are designed to contain and facilitate cleanups of any spill, leakage, or contaminated fluids, unless different construction standards are required by state, federal, or regional regulations.

7. The owner or operator of any facility that qualifies under the Superfund Amendments Reauthorization Act (SARA) Title III of 1986, as it may be amended, and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, as it may amended, shall file hazardous materials report applications in accordance with those acts. The applications shall be updated annually by each reporting facility.

8. The owner or operator of any service station, medical facility, dry cleaner or mechanical shop must comply with all applicable federal, regional, state and local regulations, as they may be amended.

K. HISTORICAL AND ARCHAEOLOGICAL SITES

A professional cultural resource survey was completed. It was determined that no cultural resources were located on the property. However, even though artifact discoveries are

not expected the construction personnel will be advised to notify job supervisors if artifacts are discovered. If artifacts are discovered, construction work will stop in the area of artifact discovery. The builder or developer must notify the City and the Division of Historic Resources of the Florida Department of State. From the date of notification, construction shall be suspended within a radius of one hundred (100') feet of the site of discovery for a period of up to one hundred twenty days (120) to permit an evaluation of the site. Once the evaluation is complete, development can proceed

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS.

A. Compliance with the Comprehensive Plan.

The City of LaBelle has determined that the South LaBelle Village DRI is consistent with the City of LaBelle comprehensive plan.

B. Biennial Reports

The Developer, or its successor(s)-in-title to the undeveloped portions of the Property, must submit a biennial report to the City, the SWFRPC, and the DCA, Division of State Planning, on Form RPM-BSP Annual Report-1. This report must describe the stage of development and the status of compliance with the DRI development order conditions as of the date of submission and be consistent with the rules of DCA. The first monitoring report must be submitted to the DRI Coordinator for the SWFRPC, the DCA, and the City no later than two years after the effective date of this development order. Further reporting must be submitted not later than once every two years for subsequent calendar years thereafter, until Build out, whether actual or declared. Failure to comply with this biennial reporting procedure is governed by Subsection 380.06(18), Florida Statutes, which provides for the temporary suspension of the DRI development order. The Developer must inform successors-in-title to any undeveloped portion of the real property covered by this development order of this reporting requirement. The Mayor, or the Mayor's designee shall be responsible for assuring compliance by the Developer with the development order.

C. Changed Conditions

If the City, during the course of monitoring the development, can demonstrate that substantial changes in the conditions underlying the approval of the development order have occurred or that the development order was based on substantially inaccurate information provided by the Developer, resulting in additional substantial regional impacts, then a substantial deviation shall be deemed to have occurred. A public meeting must be scheduled to make such a determination and the Developer shall be provided written notice in advance of said meeting. If the City makes a determination that there is a substantial change, or a substantial regional impact that wasn't reviewed due to incorrect information submitted by the Developer, then the City shall

notify the Developer in writing of the precise substantial change, the incorrect data that was submitted, and what corrective actions must be taken.

D. Commencement of Development

The development must commence physical development within four years of the effective date of the DRI development order. The Developer may seek an extension of the commencement date from the City of LaBelle should development not commence within four years of the effective date of the DRI DO.

The date to commence is adjusted in this DRI DO from 2008 to 2010, and the buildout date is adjusted from 2014 to 2016. Section 380.06(19)(c), Florida Statutes, provides, "an extension of 5 years or less is not a substantial deviation." The two year adjustment reflected in this DRI DO will be taken into account in any future Notice of Proposed Change for a time extension in the cumulative analysis.

E. Build out Date

The Build out date is December 31, of 2016.

F. Expiration Date

The expiration date is December 31, of 2021. The expiration date permits any development that lawfully began prior to the Build out date to have a reasonable time to be completed.

G. Restrictions on Down Zoning

Pursuant to Section 380.06(15)(c)(3), Florida Statutes, the South LaBelle Village DRI shall not be subject to down zoning, unit density reduction or intensity reduction for a period of ten (10) years from the effective date of this development order unless it is demonstrated that substantial changes in the conditions underlying the approval of this Development Order have occurred, or that this Development Order was based on substantially inaccurate information provided by the Developer.

H. Local Official Responsible for Assuring Compliance

The Public Works Superintendent, or his designee, is the local official responsible for assuring compliance by the developer with the development order.

I. Community Development District

The Developer might elect to petition for the formation of a Uniform Community Development District to serve all or a portion of the project pursuant to Chapter 190, Florida Statutes, as it may be in effect from time to time. The City of LaBelle hereby gives its approval that any such district may undertake the construction and/or funding of all or any of the mitigation and public infrastructure projects for which the Developer is responsible under the terms of this development order, whether within or without the boundaries of the district, and

including the payment of mitigation amounts provided for in this development order, as a co-obligor hereunder. This provision shall not be construed to require the approval of any petition to form such a district.

J. Master Plan of Development

Map H, dated _____, is attached hereto and is incorporated by reference. The Developer may modify the boundaries of development areas and the location of internal roadways to accommodate topography, vegetation, market conditions, traffic circulation, or other site related conditions as long as the modification meets local development regulations. However, this provision may not be used to reduce the size of preserve areas. Precise wetland boundaries will be determined by the South Florida Water Management District, as delegated by the Department of Environmental Protection.

K. General Provisions

1. The approval granted by this Development Order is limited, the approval does not relieve the Developer of the duty to comply with all other applicable local, state or federal permitting requirements.

2. If there is a conflict between a provision in this development order and a provision in an ERP, a Consumptive User Permit, a United States Army Corp of Engineers (ACOE) permit, a FFWCC approval, the provision in the ERP, CUP, ACOE permit, or the FFWCC approval shall prevail.

3. This development order shall be binding upon the City and the Developer, and it shall be a document upon which both parties can rely. This development order shall be binding on all assignees or successors in interest.

4. This development order shall become effective as provided by law.

5. Certified copies of this development order shall be provided by the City to the DCA and SWFRPC as provided in Subsection 380.06(25), Florida Statutes.

6. In the event that any portion or section of this development order is determined to be invalid, illegal, or unconstitutional by a court or agency of competent jurisdiction, such decision shall in no manner affect the remaining portions of this development order which shall remain in full force and effect.

7. Subsequent requests for development permits shall not be required to undergo further review pursuant to Section 380.06, Florida Statutes, unless such development permit gives rise to a substantial deviation from the terms and conditions of this development order.

8. The City shall not accept an application to amend this development order through either the Notice of Proposed Change process, or the Substantial Deviation process,

unless written notice of such application is provided to the Developer named herein. The Developer named herein shall not be required to provide said written notice to itself.

9. The primary mechanisms available to the Developer to ensure compliance with this Development Order are deed restrictions and conditions in real estate contracts that survive closings. The City shall honor all restrictions that limit the number of units, square footage or the manor of development imposed by the Developer to ensure compliance with the terms of this development order.

10. This Development Order is binding upon the Developer(s), and its assigns or successors in interest. Where the Development Order refers to lot owners, business owners or other specific references, those provisions are binding on the entities or individuals references. Those portions of this Development Order that clearly apply only to the project Developer are binding upon any builder/Developer who acquires a tract or parcel of land within the DRI. The Developer may impose or pass on the requirements of this DRI DO to ultimate purchasers through covenants that run with the land.

11. 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 those proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

12. Pursuant to Section 380.06(16), Florida Statutes, the Developer may be eligible for credits for contributions, construction, expansion, or acquisition of public facilities, if the Developer is also subject by local ordinances to impact fees or exactions to meet the same needs. However, no credit will be provided for internal on-site facilities required by City regulations or to any off-site facilities to the extent those facilities are necessary to provide safe and adequate services to the development.

13. The City 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 FDCA has completed their review and has determined not to take an appeal should that occur prior to the expiration of the 45 day period or until the completion of any appellate proceedings, whichever time is greater. In accordance with the requirements of Section 380.06(15)(f), Florida Statues, once this development order is effective, the Developer must record a Notice of its Adoption in the office of the Clerk of the Circuit Court of Hendry County, Florida.

THE MOTION TO ADOPT this Development Order was offered by Commissioner____, and seconded by Commissioner _____ and upon a poll of the members present, the vote was as follows:

Greg Bone _____
David A. Lyons _____
Joseph R. Miller, Jr. _____

Hilda L. Zimmerly _____
Paul Puletti _____

DULY PASSED AND ADOPTED this _____ day of _____, 2008.

CITY COMMISSION CITY OF LABELLE
HENDRY COUNTY, FLORIDA

BY:_____
(Mayor)

ATTEST:

_____, Clerk

APPROVED AS TO FORM

By:_____
Deputy Clerk

BY:_____
City Attorney's Office

The Economic and Fiscal Benefits, Market Demand, Employment and Demographic Information of the North River Village on Lee County, Florida

July 24, 2008

Prepared By:

Fishkind & Associates, Inc.

1415 Panther Lane, Suites 346/347

Naples, Florida 34109

239-254-8585

http://www.fishkind.com

Executive Summary

The Bonita Bay Group ("Client") is in the process of planning and permitting approximately 1,263 +/- acres of land known as North River Village ("Project") and located in north-central Lee County, Florida. Plans for the proposed mixed use community include 2,500 +/- residential units, 20,000 square feet of office space and 75,000 square feet of retail space. The client has asked Fishkind & Associates, Inc. ("Consultant") to provide an economic and fiscal generation report resulting from the development of the Project.

In total, the Project pays for itself in terms of fiscal benefits to the County. The total net fiscal benefit to the County is $28.2 million over a 20-year period. The net present value of the fiscal benefit on the County for that time frame is $6.3 million. The positive net present value demonstrates that this development pays for itself in terms of benefits to the County in today's dollars. The County will see an increase of $40.7 million in ad valorem tax collection during the Project's development. Once complete, the Project is estimated to generate an average of $8.8 million annually in ad valorem tax revenues.

Table 1. Summary of North River Village Fiscal Benefits.

	Total	Present Value*
Total Operating Revenue	$177,754,709	$52,615,988
Total Operating Cost	$145,743,088	$44,628,651
Net Operating Benefit	**$32,011,621**	**$7,987,337**
Net Operating Benefit (Revenues @ 95%)	**$30,385,962**	**$7,567,815**
Total Capital Revenue	$21,297,525	$12,148,516
Total Capital Cost	$23,518,408	$13,371,839
Net Capital Benefit	**-$2,220,883**	**-$1,223,323**
Net Total Benefit (Revenues @ 95%)	**$28,165,079**	**$6,344,492**

(20 years @ 10% discount rate)

There is also a substantial economic benefit to be derived from the Project's development. The economic benefits are measured in terms of direct benefits, indirect benefits and total benefits. Direct benefits include employment, payroll, and revenue generated by services and good sold at the Project. Indirect benefits are what residents and employees of the Project spend outside of the Project (in the local and regional economy, e.g., in hotels and restaurants) as a result of their being a resident or employee at the Project. Total benefits are a total of the direct and indirect benefits.

Through direct and indirect benefits, the Project is forecasted to average 3,451 jobs annually over 20 years. Direct and indirect total output or sales within the area is expected to average $238.31 million each year over 20 years. Direct and indirect employee earnings are forecasted to average $94.7 million over 20 years.

Table 2. North River Village 20- year Average Annual Economic Benefits including build out.

Economic Benefits	Direct Benefits	Indirect Benefits	Total Benefits
Jobs	2,900	551	3,451
Output/Total Sales	$200,527,825	$37,783,629	$238,311,454
Earnings	$81,482,060	$13,224,270	$94,706,330

These are very substantial fiscal and economic contributions to the local economy that will benefit the County in a positive way. The bottom line is that the Project will be a revenue generator to the County for many years to come by increasing the overall taxable property base and providing an economic stimulus for the area in terms of creating jobs and generating respectable incomes.

The North River Village plan will produce $1.5 million in hazard tax funds to Lee County over 20 years. The Project will also produce $10.9 million in capital improvement taxes and $8.3 million in library taxes over 20 years. Those totals are included in the overall ad valorem tax revenue mentioned above and are reflected in Table 3 below.

Table 3. Breakdown of a portion of North River Village Ad Valorem Taxes

Lee County Hazards Tax	$1,512,118
Lee County Capital Improvements Tax	$10,909,945
Lee County Library Tax	$8,274,102

North River Village Commercial Analysis

The North River Village is proposing 75,000 square feet of neighborhood/community serving retail development. The space will be developed from 2010 to 2021. The primary trade area for the retail space is comprised of the residential component of the North River Village. The secondary trade area for the retail space is comprised of households within a 20-minute drive time for the community serving space and within a 10-minute drive time for the neighborhood serving space.

The residential component of the North River Village will generate demand for neighborhood, community and regional serving retail needs. The development is planned so that the neighborhood and community needs may be met onsite through the proposed retail space. The demand for neighborhood and community retail space through 2021 (buildout) is expected to reach 165,883 square feet for the 2,500 households based on an average annual household income of $59,900 as shown in Table 4 below. Given this figure, there is sufficient internally generated demand within the proposed development to support the 75,000 square feet of proposed retail space. The retail demand generated by the North River Village, but not satisfied by the proposed onsite space, is expected to be met by future surrounding commercial space.

Table 4. North River Village Retail Demand Summary

NRV Households	2,500
Average HH Income	$59,900
Retail Demand (sqft)	165,883
Proposed Retail Space	75,000
Surplus Demand	90,883

Source: Fishkind & Associates, Inc.

To determine retail demand, the household profile and expenditure characteristics were matched with supportable square footage by tenant type and shopping center type through a matrix based, proprietary retail demand model developed by Fishkind & Associates, Inc. Data sources employed in this model include the U.S Department of Labor Consumer Expenditure Survey and the Urban Land Institute's Dollar and Cents of Shopping Centers.

Market Demand for North River Village

Table 5 summarizes the County-wide demand for various land uses over the proposed 2010-2021 build out for the North River Village. Additionally, the table shows the portion of the demand that would be accommodated by the development of the Project. A detailed overview is provided below. These figures were derived from the most recent University of Florida Bureau of Economic and Business Research (BEBR) population projection for Lee County, ECONOCAST – Fishkind's annual forecast for the State of Florida which includes Lee County, and the proposed development plan for the North River Village.

Table 5. Lee County Land Use Needs

	2010-2021
Lee County Perm. Population Growth	231,073
NRV Perm. Population Growth	5,870
Project % of County	**2.54%**
Lee County Retail Need (sqft)	12,408,775
NRV Retail Space (sqft)	75,000
Project % of County	**0.60%**
Lee County Office Need (sqft)	6,730,561
NRV Office Space (sqft)	20,000
Project % of County	**0.30%**

Table 5 demonstrates that the North River Village would accommodate a very small portion of the County-wide need for various land uses. These capture rates are likely given the structural shift in the growth components of the County.

The coastal regions of the County have nearly reached buildout resulting in a series of cascading development pressures.

First, as the primary coastal core regions of the County have depleted their inventory of raw undeveloped land, population growth is forecasted to expand to secondary and tertiary areas that surround those core urban locations.

Second, as raw land availability is depleted and growth moves eastward, there is increasing demand for self sustainable, mixed-use compact rural developments. This type of development seeks to prevent urban sprawl and accommodate growth in the rural lands in an effective, meaningful fashion.

Table 6 on the next page shows the Lee County population projection through the build out of the proposed North River Village (2010-2021). These figures were released in March of 2008 by the University of Florida's Bureau of Economic and Business Research (BEBR). The projection serves as the basis for determining the demand for various land uses.

Table 6 Population Projection for Lee County (2010-2021)

Year	Lee County Population	Lee County Pop. Growth/Year
2010	654,600	13,218
2011	673,854	19,254
2012	693,673	19,820
2013	714,076	20,403
2014	735,079	21,003
2015	756,700	21,621
2016	774,867	18,167
2017	793,469	18,603
2018	812,518	19,049
2019	832,025	19,507
2020	852,000	19,975
2021	872,454	20,454

Source: Bureau of Economic and Business Research, v41 Bulletin 150

Residential Demand Analysis

Population is forecast to increase by over 231,000 people in Lee County between 2010 and 2021. The North River Village is estimated to contain a permanent population of over 5,800 people at build out in 2021. Therefore, approximately 2.54% of the County-wide growth over this period would be accommodated by the North River Village. Table 7 below shows these estimates.

Table 7. Residential Capture (2012-2021)

	2010-2021
Lee County Perm. Population Growth	231,073
NRV Perm. Population Growth	5,870
Project % of County	2.54%

Fishkind believes this capture is reasonable and indeed likely as there has been a structural shift in the growth components of Lee County. The coastal regions of the County have nearly reached relative buildout resulting in less in-migration and sustained out migration from those areas. Relative build out in the coastal urban and metropolitan area of Lee County is evidenced by traffic congestion, water shortages, hurricane vulnerability, crammed classrooms, high property values/taxes/insurance and lack of affordable workforce housing close to job centers. It is almost impossible to rectify the results of relative build out situations due to the major infrastructure investment (back log and expense to place infrastructure within constrained r/w, etc.) that would be required.

As the primary core regions of the County reach their relative build out stage, population growth will be forced to expand to secondary and tertiary areas of the County adjacent to and beyond the core urban locations. This growth to the eastern lands within the County will create a demand for self sustainable, rural developments like the North River Village. This style of growth seeks to prevent urban sprawl and accommodate growth in the rural lands in an effective and sustainable economic and fiscal fashion.

Retail Demand Analysis

The North River Village is proposing 75,000 square feet of retail space to be developed from 2010 to 2021. Table 8 below shows historic levels of retail development and associated population growth for Lee County. These estimates are part of ECONOCAST, Fishkind's forecast for all of the Counties in the State of Florida. These figures show that in Lee County, on average, there is a per capita demand for 53.70 square feet of retail space.

Table 8. Lee County Retail and Population Growth (2000-2007)

	2000	2001	2002	2003	2004	2005	2006	2007	Total
Population	440,888	454,918	475,073	495,088	521,253	549,442	585,608	615,741	
Population Growth	---	14,030	20,155	20,015	26,165	28,189	36,166	30,133	174,853
Retail Growth	---	958,959	1,719,618	1,320,603	1,275,620	1,751,282	1,624,681	738,978	9,389,741
	===	===	===	===	===	===	===	===	===
Retail Per Capita	---	68.35	85.32	65.98	48.75	62.13	44.92	24.52	53.70

Source: ECONOCAST, Fishkind & Associates' forecast for the State of Florida

By applying the per capita need to the forecasted increase Lee County's population between 2010 to 2021 (231,073), we determine there will be a demand for over 12.4-million additional square feet of retail space required to serve the future population growth in the County. Therefore, 0.60% of the County-wide retail demand over this period would be accommodated by the North River Village. This is shown in Table 9.

Table 9. Retail Capture (2010-2021)

	2010-2021
Lee County Retail Need (sqft)	12,408,775
NRV Retail Space (sqft)	75,000
Project % of County	**0.60%**

Office Demand Analysis

The North River Village is proposing 20,000 square feet of office space to be developed from 2010 to 2021. Table 10 below shows historic levels of office development and associated population growth for Lee County. These estimates are part of ECONOCAST, Fishkind's forecast for all of the counties in the State of Florida. These figures show that in Lee County, on average, there is a per capita need for 29.13 square feet of office space.

Table 10. Lee County Office and Population Growth (2000-2007)

	2000	2001	2002	2003	2004	2005	2006	2007	Total
Population	440,888	454,918	475,073	495,088	521,253	549,442	585,608	615,741	
Population Growth	---	14,030	20,155	20,015	26,165	28,189	36,166	30,133	174,853
Office Growth	---	519,737	891,022	905,923	987,954	530,025	905,822	352,543	5,093,027
	===	===	===	===	===	===	===	===	===
Retail Per Capita	---	37.04	44.21	45.26	37.76	18.80	25.05	11.70	29.13

Source: ECONOCAST, Fishkind & Associates' forecast for the State of Florida

By again applying the per capita need to the forecasted increase Lee County's population between 2010 to 2021 (231,073), Fishkind has forecasted a demand for over 6.7-million additional square feet of office space. Therefore, 0.30% of the County-wide office demand over this period would be accommodated by the North River Village. This is shown in Table 11.

Table 11. Office Capture (2010-2021)

	2010-2021
Lee County Office Need (sqft)	6,730,561
NRV Office Space (sqft)	20,000
Project % of County	**0.30%**

North River Village Demographic and Employment Information

It is anticipated that the North River Village build out population will be 6,450 people of which just over 500 will be school age children and another 1,500 plus will be over the age of 65. Table 12 on the next page reflects those numbers and how they were calculated.

Table 12. North River Village Demographic Information

	Total Dwelling Units			Persons Per Household (1)	Total Population (2)	Students per Household (3)		Total School Age Children	Elderly per Household (4)	Total Elderly
	SF	MF	TOTAL			SFD	MF			
Phase 1 2010-2021	990	1,510	2,500	2.58	6,450	0.316	0.125	502	0.625	1,562
TOTAL	990	1,510	2,500	2.58	6,450	0.316	0.125	502	0.625	1,562

(1) HH Size Lee Plan, Alva Planning District Allocation Table
(2) Reflects Combined Population from Occupied & Vacant Households (91%/9%)
Lee Plan, Alva Planning District Allocation Table
(3) Student Generation provided by Lee School District Impact Fee Study
(4) 2007 Florida Population Studies, Population by Age, BEBR; US Census

Fishkind & Associates, Inc. has estimated the expected employment from the North River Village. We have further distributed this employment based on expected salary ranges and the 2007 ES-202 wage and employment data for Lee County.

Table 13 below shows the expected employment for the North River Village. Table 14 shows the average wage based on 2007 ES-202 data. Table 15 on the next page shows the Fishkind & Associates, Inc. estimate of employment by income group. Table 16 on the next page shows the Fishkind & Associates, Inc. estimate of employment by job type.

Table 13. Total Employment at the North River Village

	Retail 44-45		Office (52 - 54, 561, 6211, & 3216)	
	Sq. Ft.	Emp.	Sq. Ft.	Emp.
Phase 1 2010-2021	75,000	125	20,000	57
TOTAL	75,000	125	20,000	57

Source: Fishkind and Associates, Inc.

Table 14. Lee County Average Income

Wages by NAICS	Mean Wage
Retail by NAICS Code: 44-45	$27,604
Office by NAICS Code: (52-54, 561, 6211, & 3216)	$46,168

Source: US Census ES-202 Data

Table 15. North River Village Expected Employment by Income Group

	Low	High	Median	Retail	Office
Very Low	$14,123	$17,499	$15,811	3	0
Very Low	$17,500	$19,999	$18,750	5	0
Very Low	$20,000	$22,499	$21,250	11	0
Very Low	$22,500	$24,999	$23,750	18	0
Very Low	$25,000	$27,499	$26,250	24	0
Very Low	$27,500	$29,949	$28,725	24	1
Low	$29,950	$32,499	$31,225	19	1
Low	$32,500	$34,999	$33,750	12	2
Low	$35,000	$37,499	$36,250	6	3
Low	$37,500	$39,999	$38,750	2	5
Low	$40,000	$42,499	$41,250	1	6
Low	$42,500	$44,999	$43,750	0	7
Low	$45,000	$47,919	$46,460	0	9
Moderate	$47,920	$49,999	$48,960	0	6
Moderate	$50,000	$52,499	$51,250	0	6
Moderate	$52,500	$54,999	$53,750	0	5
Moderate	$55,000	$57,499	$56,250	0	3
Moderate	$57,500	$59,999	$58,750	0	2
Moderate	$60,000	$62,499	$61,250	0	1
Moderate	$62,500	$64,999	$63,750	0	0
Moderate	$65,000	$67,499	$66,250	0	0
Moderate	$67,500	$71,879	$69,690	0	0

Source: Fishkind and Associates, Inc.

Table 16. North River Village Expected Employment by Job Type

	Under 10,000	$10,000 - $14,999	$15,000 - $19,999	$20,000- $24,999	$25,000- $29,999	$30,000 - $34,999	$35,000 - $39,999	Over $40,000	Total
Non-Construction									
Retail	0	0	8	29	48	31	8	1	125
Office	0	0	0	0	1	3	8	45	57
Construction									
Residential	0	0	183	546	675	343	66	21	1,834
Non-residential	0	0	7	38	85	78	28	4	240

Source: Fishkind and Associates, Inc.

Appendix Table 1.

North River Village

Fiscal Impact Analysis Model Assumptions.

Input Assumptions

Taxable Assessment Ratio	**78%**	*Collected June 2006 (Property Appraiser (GIS department SWFRPC)*
Homestead Exemption	$50,000	
% Single-Family with Homestead	**62%**	*Collected June 2006 (Property Appraiser (GIS department SWFRPC)*
% Multifamily with Homestead	**29%**	*Collected June 2006 (Property Appraiser (GIS department SWFRPC)*
Current Year Tax Base	$0	(this is the taxable value of the City or County for the base year)
Special Tax District - Base Assessed Value	$0	(this is the taxable value of the property at the base year of the tax increment financing)

Property Tax Ad Valorem Millage

Lee County	**3.6506** Mills	Lee County Budget or Tax Collector - 2007	
Unincorporated & All Hazards	**0.9091** Mills	Lee County Budget or Tax Collector - 2007	Hazzard is .0693
Capital Improvements	**0.5000** Mills	Lee County Budget or Tax Collector - 2007	
Library	**0.3792** Mills	Lee County Budget or Tax Collector - 2007	
Debt Millage	Mills		

Population (total)	**585,608**	(FI Population Studies, 2006)		
		Equivalent Factor	**Full-Time Equivalent**	
Population-Working Residents	208,378	0.7619	158,763	= everything except the 40 hour work week
Population-Non-Working Residents	377,230	1.0000	377,230	
Population- Seasonal	106,861	0.3750	40,073	= 4.5 months occupancy
Population (peak season)	**692,469**		576,066	
County Employment (total)	**224,062**	0.2381	53,349	= 40 hour work week
(AWI QCEW Average Annual Employment 2006)				
City Labor Force Participation Rate	**93.00%**	Journey to Work County to County Worker Flow files - US Census, includes unemployment @2.2% per Moji		
County Population (unincorporated) (FI Population Studies, 2006)	***308,667***	*1.0000*	*308,667*	

	2010	2011	2012	2013	2014	2015	2016	2017
Persons per Household - Single Family	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Persons per Household - Multifamily	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58
LeePlan for Alva								
Persons per Household - Seasonal	**2.58**							
Total Households County		Not necessary as impact fee study used for students/hh						

Allocation of Population

Permanent Residents	**91.0%**	(Traffic Study)
Seasonal Residents	**9.0%**	(Traffic Study)
Seasonal Rentals		(U.S. Census Bureau, 2000)
Seasonal Length of Stay (weeks)	**24**	Dave estimate, SWFRPC Model

Seasonal Units (not rentals) **41,419** (US Census, 2000)

Employment Assumptions	**Project**		Existing Employment	Model Defaults	Suggested Ranges	
Office 1-Story	350	sq. ft. per employee	100	300	275-450	sq. ft. per employee
Office Class A	350	sq. ft. per employee	100	350	275-450	sq. ft. per employee
Office Medical	350	sq. ft. per employee	100	250	225-275	sq. ft. per employee
Retail - Neighborhood	598	sq. ft. per employee	100	598	450-650	sq. ft. per employee
Retail - Community	598	sq. ft. per employee	100	598	450-650	sq. ft. per employee
Retail - Regional	598	sq. ft. per employee	100	598	450-650	sq. ft. per employee
Restaurant-Sit Down	450	sq. ft. per employee	100	450	450	sq. ft. per employee
Restaurant-Fast Food	100	sq. ft. per employee	100	100	100	sq. ft. per employee
Hotel	0.5	employees per room	100	0.5	0.5-1.0	employees per room
Industrial	650	sq. ft. per employee	100	2,500	10,000	sq. ft. per employee
Warehouse	5,000	sq. ft. per employee	100	5,000	1,000-7,500	sq. ft. per employee
Golf Course	40	per 18-hole course	100	40	35-45	per 18-hole course
Clubhouse	800	sq. ft. per employee	100	800	800-1,000	sq. ft. per employee
Specialty Recreation	10	per unit	100			per unit
ACLF/Nursing Home beds	1	per bed	100	1	1	per bed
Institutional/Government (sq ft)	300	sq. ft. per employee	100	300	225-1,000	sq. ft. per employee
Hospital (per bed)	3		100	3	2-4	
Agriculture/Forestry	25	per 1,000 acres	100	25	25	per 1,000 acres

Input for Development in the **URBAN CORE / ACTIVITY CENTER** or other dense, urban place

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential Units												
Vacant Acreage	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Single-Family - Low Range	0	0	0	0	0	0	0	0	0	0	0	0
Single-Family - Mid Range	46	67	86	105	113	117	115	97	89	73	49	33
Single-Family - High Range	0	0	0	0	0	0	0	0	0	0	0	0
Single-Family - Special	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily-For Sale Condo	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily-For Sale Townhouse	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily-For Sale Other	30	70	105	142	176	195	195	191	171	130	80	25
Multifamily-Rental Apartments/TH	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily-ACLF/Nursing Home beds	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily-Rental Other	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Homes	0	0	0	0	0	0	0	0	0	0	0	0
Non-Residential												
Vacant Commercial Acres	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Office Non Professional (sq.ft.)	0	10,000	0	0	0	10,000	0	0	0	0	0	0
Office Class A (sq.ft.)	0	0	0	0	0	0	0	0	0	0	0	0
Office Medical/Professional (sq.ft.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Office (sq.ft.)	0	10,000	0	0	0	10,000	0	0	0	0	0	0
Retail - Neighborhood (sq.ft.)	0	40,000	0	0	0	35,000	0	0	0	0	0	0
Retail - Community (sq.ft.)	0	0	0	0	0	0	0	0	0	0	0	0
Retail - Regional (sq.ft.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Retail (sq.ft.)	0	40,000	0	0	0	35,000	0	0	0	0	0	0

Model Inflation Assumptions	2011		2012
Annual Inflation of Real Property Value	3.0%		
Annual Inflation of Real Property Value	3.0%		6.0%
Maximum Annual Inflation Rate-Budget	110.0%	of long-term total aver	
Minimum Annual Inflation Rate-Budget	50.0%	of long-term total aver	
Maximum Difference in Inflation Rates-Budget	2.50%	Average rate for costs	

Input Property Sales Value Assumptions for New Units:

	Project Data		[
Vacant Acreage	$75,000	(Developer)	
Single-Family - Low Range	$200,000	(Developer)	
Single-Family - Mid Range	**$685,591**	(Developer)	
Single-Family - High Range	$350,000	(Developer)	
Single-Family - Special	$500,000	(Developer)	
Multifamily-For Sale Condo	$195,000	(Developer)	
Multifamily-For Sale Townhouse	$225,000	(Developer)	
Multifamily-For Sale Other	**$491,161**	(Developer)	
Multifamily-Rental Apartments/TH	$200,000	(Developer)	
Multifamily-ACLF/Nursing Home beds	$75,000	(Developer)	
Multifamily-Rental Other	$100,000	(Developer)	
Mobile Homes	$30,000	(Developer)	
Non-Residential			
Vacant Commercial Acres	$100,000	(Developer)	
Office Non Professional (sq.ft.)	**$200**	(Developer)	
Office Class A (sq.ft.)	$200	(Developer)	
Office Medical/Professional (sq.ft.)	$155	(Developer)	
Retail - Neighborhood (sq.ft.)	**$225**	(Developer)	
Retail - Community (sq.ft.)	$225	(Developer)	
Retail - Regional (sq.ft.)	$200	(Developer)	
Restaurant - Sit Down (sq.ft.)	$130	(Developer)	
Restaurant - Fast Food/Drive thru	$200	(Developer)	
Institutional/Government (sq ft)	$0	(Developer)	
Hotel (rooms)	$100,000	(Developer)	
Vacant Industrial Acres	$100,000	(Developer)	
Industrial (sq ft)	$90	(Developer)	
Warehouse (sq ft)	$80	(Developer)	
Golf Course (acres) Model not set up for acres	$50,000	(Developer)	
Golf Course (holes) Model set up to generate costs frc	$333,333	(Developer)	
Golf/Swim/Tennis Club (sq.ft.)	$125	(Developer)	
Specialty Recreation per unit (theater, marina, bowling	$0	(Developer)	
Agriculture/Forestry (acres)	$5,000	(Developer)	
Mobile Home/RV Park, Parking Lot (acres)	$5,000	(Developer)	

	Operating Revenues and Expenditures	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Revenues											
311000	Ad Valorem Taxes-Property Value Taxes (1)	$19,177	$191,765	$604,113	$1,107,499	$1,779,038	$2,588,515	$3,558,995	$4,503,770	$5,419,808	$6,296,008	$7,043,562
312100	Local Option Tourist Development Taxes (4)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3123-5	Local Option Fuel Taxes (1)	$3,472	$10,912	$21,591	$36,605	$55,675	$78,602	$102,874	$127,645	$152,274	$174,321	$191,909
312600	Local Option Sales Taxes (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
313500	Franchise Fees- Cable TV, Solid Waste (1)	$2,334	$7,334	$14,511	$24,602	$37,419	$52,827	$69,140	$85,789	$102,341	$117,159	$128,980
314100	Utility Taxes (1)	$2,514	$7,901	$15,633	$26,504	$40,311	$56,911	$74,485	$92,420	$110,252	$126,215	$138,950
321000	Occupational Licenses (1)	$316	$993	$1,964	$3,330	$5,064	$7,150	$9,358	$11,611	$13,851	$15,856	$17,456
322000	Building Permits (1)	$4,501	$14,144	$27,988	$47,450	$72,169	$101,887	$133,350	$165,460	$197,385	$225,963	$248,762
331200	Federal Grants (1)	$5,933	$19,425	$39,791	$69,489	$108,434	$156,557	$208,993	$263,915	$319,825	$371,348	$414,083
334200	State Grants (1)	$834	$2,504	$4,752	$7,754	$11,383	$15,551	$19,741	$23,807	$27,655	$30,879	$33,206
335120	State Revenue Sharing Proceeds (2)	$6,788	$19,459	$37,737	$62,142	$91,656	$124,643	$158,706	$191,759	$223,032	$249,230	$268,133
335180	Sales Tax - Half Cent	$13,487	$40,495	$76,853	$125,388	$184,071	$251,477	$319,238	$384,992	$447,211	$499,343	$536,983
335400	Gas Tax - Constitutional & County	$3,084	$9,259	$17,572	$28,669	$42,086	$57,498	$72,991	$88,025	$102,250	$114,170	$122,776
338300	Gas Tax - One Cent Voted	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
341100	Charges for Services (1)	$23,455	$71,560	$137,871	$228,159	$339,468	$469,706	$603,483	$736,162	$864,475	$975,281	$1,059,185
348110	Court Related Revenues (3)	$6,054	$18,702	$36,448	$60,954	$91,575	$127,852	$165,642	$203,630	$240,860	$273,578	$299,005
351000	Judgments, Fines and Forfeitures (3)	$542	$1,675	$3,264	$5,459	$8,202	$11,451	$14,836	$18,238	$21,573	$24,503	$26,780
361000	Interest and Other Earnings (1)	$7,867	$23,815	$45,552	$74,874	$110,695	$152,250	$194,517	$236,022	$275,773	$309,647	$334,775
362000	Rents and Royalties (1)	$95	$287	$549	$902	$1,334	$1,835	$2,344	$2,844	$3,323	$3,731	$4,034
364000	Miscellaneous Revenues (1)	$7,253	$21,956	$41,997	$69,030	$102,055	$140,367	$179,335	$217,601	$254,249	$285,479	$308,646
381000	Interfund Transfers (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
384000	Debt Proceeds & Other Sources (1)	$6,622	$19,438	$36,081	$57,604	$82,786	$110,774	$137,786	$162,882	$185,537	$203,226	$214,467
390000	Depreciation on Fixed Assets (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Balancing Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Revenues	**$114,325**	**$481,624**	**$1,164,268**	**$2,036,413**	**$3,163,422**	**$4,505,851**	**$6,025,824**	**$7,516,571**	**$8,961,674**	**$10,295,938**	**$11,391,693**
	Expenditures											
511	Legislative-General (1)	$306	$941	$1,830	$3,053	$4,577	$6,378	$8,249	$10,124	$11,957	$13,562	$14,803
512	Executive-General (1)	$3,968	$12,225	$23,765	$39,653	$59,449	$82,839	$107,135	$131,489	$155,292	$176,138	$192,254
513	Financial and Administrative (1)	$17,379	$53,542	$104,081	$173,665	$260,362	$362,802	$469,207	$575,867	$680,116	$771,410	$841,994
514	Legal Counsel (1)	$906	$2,790	$5,424	$9,051	$13,569	$18,908	$24,454	$30,013	$35,446	$40,204	$43,883
515	Comprehensive Planning (1)	$1,895	$5,839	$11,350	$18,939	$28,393	$39,565	$51,169	$62,800	$74,169	$84,125	$91,823
517	Debt Service Payments (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
519	Other General Government (1)	$8,165	$25,155	$48,900	$81,592	$122,324	$170,452	$220,444	$270,555	$319,533	$362,425	$395,587
521	Law Enforcement (1)	$23,440	$71,040	$136,022	$223,797	$331,170	$455,890	$582,933	$707,867	$827,700	$930,023	$1,008,170
522	Fire Control (1)	$229	$695	$1,330	$2,188	$3,238	$4,458	$5,700	$6,922	$8,093	$9,094	$9,838
523	Detention/Corrections (1)	$10,635	$32,231	$61,714	$101,538	$150,253	$206,840	$264,479	$321,163	$375,531	$421,956	$456,504
524	Protective Inspections (1)	$3,912	$11,857	$22,703	$37,354	$55,275	$76,092	$97,297	$118,150	$138,151	$155,229	$167,939
525	Emergency and Disaster Relief (1)	$863	$2,616	$5,010	$8,242	$12,197	$16,790	$21,469	$26,070	$30,483	$34,252	$37,056
527	Medical Examiners, Other Public Safety (1)	$10,127	$30,693	$58,769	$96,693	$143,085	$196,971	$251,861	$305,840	$357,615	$401,824	$434,724
534	Garbage/Solid Waste (1)	$2,590	$8,209	$16,365	$27,924	$42,715	$60,612	$79,693	$99,290	$118,891	$136,568	$150,815
536	Water/Sewer Services (1)	$41	$132	$262	$447	$684	$971	$1,277	$1,591	$1,905	$2,188	$2,416
537	Conservation/Resource Management (1)	$3,030	$9,603	$19,143	$32,665	$49,968	$70,904	$93,224	$116,150	$139,079	$159,757	$176,423
538	Flood Control/Stormwater Control (1)	$13	$41	$82	$139	$213	$302	$397	$495	$593	$681	$752
539	Other Physical Environment (1)	$479	$1,519	$3,029	$5,168	$7,906	$11,219	$14,750	$18,378	$22,005	$25,277	$27,914
541	Road/Street Facilities (1)	$11,629	$36,857	$73,470	$125,366	$191,771	$272,123	$357,786	$445,771	$533,770	$613,132	$677,094
544	Mass Transit (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
549	Other Transportation (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
552	Industry Development (1)	$3,539	$10,438	$19,469	$31,231	$45,099	$60,632	$75,773	$89,994	$102,991	$113,335	$120,158
553	Veterans Services (2)	$28	$79	$151	$244	$354	$473	$593	$706	$809	$891	$945
554	Housing and Urban Development (2)	$2,094	$5,897	$11,240	$18,198	$26,402	$35,332	$44,288	$52,700	$60,388	$66,506	$70,541
559	Other Economic Development (1)	$154	$455	$849	$1,362	$1,967	$2,645	$3,305	$3,925	$4,492	$4,943	$5,241
562	Health (2)	$3,824	$11,106	$21,801	$36,318	$54,157	$74,417	$95,693	$116,712	$136,965	$154,363	$167,429
563	Mental Health (2)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
564	Public Assistance (2)	$1,136	$3,300	$6,478	$10,792	$16,092	$22,112	$28,434	$34,680	$40,698	$45,867	$49,749
565	Developmental Disabilities (2)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
569	Other Human Services (2)	$1,137	$3,303	$6,485	$10,803	$16,109	$22,135	$28,464	$34,716	$40,740	$45,915	$49,801
572	Parks/Recreation (2)	$16,910	$51,175	$104,236	$179,521	$275,904	$389,708	$513,931	$641,532	$769,153	$884,214	$976,881
573	Cultural Services (2)	$376	$1,137	$2,315	$3,988	$6,129	$8,657	$11,416	$14,251	$17,085	$19,641	$21,700
581	Interfund Transfers Out (1)	$88,411	$259,504	$481,695	$769,031	$1,105,226	$1,478,870	$1,839,494	$2,174,526	$2,476,985	$2,713,136	$2,863,202
590	Other Non-Operating Disbursements (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
602	Clerk of Court & Court Administration (3)	$6,562	$20,217	$39,301	$65,576	$98,313	$136,994	$177,173	$217,448	$256,812	$291,285	$317,937
	Balancing Expenditure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Expenditures	**$223,782**	**$672,599**	**$1,287,269**	**$2,114,539**	**$3,122,901**	**$4,286,092**	**$5,470,087**	**$6,629,724**	**$7,737,448**	**$8,677,942**	**$9,371,573**
	Net Operating Fiscal Impact	**-$109,457**	**-$190,975**	**-$123,002**	**-$78,126**	**$40,521**	**$219,760**	**$555,737**	**$886,848**	**$1,224,226**	**$1,617,996**	**$2,020,120**

	Operating Revenues and Expenditures	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Revenues												
311000	Ad Valorem Taxes-Property Value Taxes (1)	$7,597,976	$7,960,490	$8,136,089	$8,311,688	$8,487,287	$8,662,886	$8,838,485	$9,014,084	$9,189,683	$9,365,282	$9,540,881	$9,716,480
312100	Local Option Tourist Development Taxes (4)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3123-5	Local Option Fuel Taxes (1)	$204,565	$212,698	$220,832	$228,965	$237,098	$245,232	$253,365	$261,498	$269,632	$277,765	$285,899	$294,032
312600	Local Option Sales Taxes (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
313500	Franchise Fees- Cable TV, Solid Waste (1)	$137,485	$142,952	$148,418	$153,884	$159,351	$164,817	$170,283	$175,750	$181,216	$186,682	$192,149	$197,615
314100	Utility Taxes (1)	$148,113	$154,002	$159,890	$165,779	$171,668	$177,557	$183,446	$189,335	$195,224	$201,113	$207,001	$212,890
321000	Occupational Licenses (1)	$18,608	$19,347	$20,087	$20,827	$21,567	$22,307	$23,046	$23,786	$24,526	$25,266	$26,006	$26,746
322000	Building Permits (1)	$265,167	$275,709	$286,252	$296,795	$307,338	$317,881	$328,424	$338,967	$349,509	$360,052	$370,595	$381,138
331200	Federal Grants (1)	$448,560	$469,278	$491,997	$514,715	$537,434	$560,152	$582,871	$605,589	$628,308	$651,026	$673,745	$696,464
334200	State Grants (1)	$34,623	$35,258	$35,892	$36,526	$37,160	$37,795	$38,429	$39,063	$39,698	$40,332	$40,966	$41,601
335120	State Revenue Sharing Proceeds (2)	$279,625	$284,747	$289,870	$294,993	$300,116	$305,239	$310,361	$315,484	$320,607	$325,730	$330,853	$335,975
335180	Sales Tax - Half Cent	$559,895	$570,152	$580,410	$590,667	$600,925	$611,182	$621,439	$631,697	$641,954	$652,212	$662,469	$672,727
335400	Gas Tax - Constitutional & County	$128,015	$130,360	$132,705	$135,050	$137,396	$139,741	$142,086	$144,431	$146,777	$149,122	$151,467	$153,812
336300	Gas Tax - One Cent Voted	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
341100	Charges for Services (1)	$1,114,810	$1,145,476	$1,176,141	$1,206,807	$1,237,473	$1,268,138	$1,298,804	$1,329,470	$1,360,135	$1,390,801	$1,421,467	$1,452,132
348110	Court Related Revenues (3)	$316,589	$327,126	$337,664	$348,202	$358,739	$369,277	$379,815	$390,352	$400,890	$411,428	$421,965	$432,503
351000	Judgments, Fines and Forfeitures (3)	$28,355	$29,299	$30,243	$31,187	$32,131	$33,074	$34,018	$34,962	$35,906	$36,850	$37,793	$38,737
361000	Interest and Other Earnings (1)	$350,854	$359,044	$367,234	$375,424	$383,614	$391,804	$399,994	$408,184	$416,375	$424,565	$432,755	$440,945
362000	Rents and Royalties (1)	$4,228	$4,327	$4,425	$4,524	$4,623	$4,722	$4,820	$4,919	$5,018	$5,116	$5,215	$5,314
364000	Miscellaneous Revenues (1)	$323,470	$331,021	$338,572	$346,123	$353,674	$361,225	$368,775	$376,326	$383,877	$391,428	$398,979	$406,530
381000	Interfund Transfers (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
384000	Debt Proceeds & Other Sources (1)	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520	$219,520
390000	Depreciation on Fixed Assets (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Balancing Revenue	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Revenues	**$12,178,458**	**$12,670,808**	**$12,976,243**	**$13,281,678**	**$13,587,113**	**$13,892,549**	**$14,197,984**	**$14,503,419**	**$14,808,854**	**$15,114,289**	**$15,419,725**	**$15,725,160**
	Expenditures												
511	Legislative-General (1)	$15,654	$16,157	$16,659	$17,162	$17,664	$18,166	$18,669	$19,171	$19,673	$20,176	$20,678	$21,181
512	Executive-General (1)	$203,309	$209,834	$216,358	$222,883	$229,407	$235,932	$242,456	$248,980	$255,505	$262,029	$268,554	$275,078
513	Financial and Administrative (1)	$890,410	$918,984	$947,559	$976,133	$1,004,708	$1,033,282	$1,061,856	$1,090,431	$1,119,005	$1,147,579	$1,176,154	$1,204,728
514	Legal Counsel (1)	$46,406	$47,895	$49,384	$50,874	$52,363	$53,852	$55,341	$56,830	$58,320	$59,809	$61,298	$62,787
515	Comprehensive Planning (1)	$97,103	$100,219	$103,335	$106,451	$109,567	$112,683	$115,800	$118,916	$122,032	$125,148	$128,264	$131,380
517	Debt Service Payments (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
519	Other General Government (1)	$418,334	$431,759	$445,184	$458,609	$472,033	$485,458	$498,883	$512,308	$525,733	$539,158	$552,583	$566,007
521	Law Enforcement (1)	$1,055,169	$1,080,458	$1,105,746	$1,131,035	$1,156,324	$1,181,613	$1,206,901	$1,232,190	$1,257,479	$1,282,767	$1,308,056	$1,333,345
522	Fire Control (1)	$10,317	$10,565	$10,812	$11,059	$11,306	$11,554	$11,801	$12,048	$12,296	$12,543	$12,790	$13,037
523	Detention/Corrections (1)	$478,735	$490,209	$501,682	$513,156	$524,629	$536,103	$547,577	$559,050	$570,524	$581,997	$593,471	$604,945
524	Protective Inspections (1)	$176,117	$180,338	$184,559	$188,780	$193,001	$197,222	$201,443	$205,664	$209,885	$214,106	$218,326	$222,547
525	Emergency and Disaster Relief (1)	$38,851	$39,792	$40,723	$41,655	$42,586	$43,517	$44,449	$45,380	$46,311	$47,243	$48,174	$49,105
527	Medical Examiners, Other Public Safety (1)	$455,894	$466,821	$477,747	$488,673	$499,599	$510,525	$521,451	$532,378	$543,304	$554,230	$565,156	$576,082
534	Garbage/Solid Waste (1)	$161,219	$168,070	$174,921	$181,772	$188,622	$195,473	$202,324	$209,174	$216,025	$222,876	$229,726	$236,577
536	Water/Sewer Services (1)	$2,583	$2,692	$2,802	$2,912	$3,022	$3,131	$3,241	$3,351	$3,460	$3,570	$3,680	$3,790
537	Conservation/Resource Management (1)	$188,594	$196,608	$204,622	$212,636	$220,650	$228,664	$236,678	$244,692	$252,706	$260,720	$268,734	$276,748
538	Flood Control/Stormwater Control (1)	$804	$838	$872	$907	$941	$975	$1,009	$1,043	$1,077	$1,112	$1,146	$1,180
539	Other Physical Environment (1)	$29,840	$31,108	$32,376	$33,644	$34,912	$36,180	$37,448	$38,716	$39,984	$41,252	$42,520	$43,788
541	Road/Street Facilities (1)	$723,807	$754,563	$785,320	$816,077	$846,833	$877,590	$908,347	$939,104	$969,860	$1,000,617	$1,031,374	$1,062,131
544	Mass Transit (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
549	Other Transportation (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
552	Industry Development (1)	$123,557	$124,124	$124,691	$125,258	$125,826	$126,393	$126,960	$127,527	$128,095	$128,662	$129,229	$129,796
553	Veterans Services (2)	$972	$977	$981	$986	$990	$994	$999	$1,003	$1,008	$1,012	$1,017	$1,021
554	Housing and Urban Development (2)	$72,549	$72,882	$73,215	$73,548	$73,881	$74,214	$74,547	$74,880	$75,214	$75,547	$75,880	$76,213
559	Other Economic Development (1)	$5,389	$5,414	$5,439	$5,463	$5,488	$5,513	$5,538	$5,562	$5,587	$5,612	$5,637	$5,661
562	Health (2)	$175,967	$180,529	$185,091	$189,653	$194,215	$198,777	$203,338	$207,900	$212,462	$217,024	$221,586	$226,148
563	Mental Health (2)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
564	Public Assistance (2)	$52,286	$53,642	$54,997	$56,353	$57,708	$59,064	$60,419	$61,775	$63,130	$64,486	$65,841	$67,197
565	Developmental Disabilities (2)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
569	Other Human Services (2)	$52,341	$53,698	$55,055	$56,412	$57,769	$59,126	$60,483	$61,839	$63,196	$64,553	$65,910	$67,267
572	Parks/Recreation (2)	$1,044,466	$1,088,848	$1,133,231	$1,177,614	$1,221,996	$1,266,379	$1,310,761	$1,355,144	$1,399,526	$1,443,909	$1,488,291	$1,532,674
573	Cultural Services (2)	$23,201	$24,187	$25,173	$26,159	$27,145	$28,131	$29,116	$30,102	$31,088	$32,074	$33,060	$34,046
581	Interfund Transfers Out (1)	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673	$2,930,673
590	Other Non-Operating Disbursements (1)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
602	Clerk of Court & Court Administration (3)	$336,219	$347,009	$357,799	$368,588	$379,378	$390,168	$400,958	$411,747	$422,537	$433,327	$444,116	$454,906
	Balancing Expenditure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total Expenditures	**$9,810,778**	**$10,028,893**	**$10,247,007**	**$10,465,122**	**$10,683,237**	**$10,901,352**	**$11,119,466**	**$11,337,581**	**$11,555,696**	**$11,773,811**	**$11,991,925**	**$12,210,040**
	Net Operating Fiscal Impact	**$2,367,680**	**$2,641,915**	**$2,729,235**	**$2,816,556**	**$2,903,876**	**$2,991,197**	**$3,078,517**	**$3,165,838**	**$3,253,158**	**$3,340,479**	**$3,427,799**	**$3,515,120**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Capital Revenues													
Roads (impact fees + developer payment)	$601,806	$1,748,712	$1,433,121	$1,836,654	$2,122,560	$2,905,452	$2,260,155	$2,073,399	$1,875,651	$1,473,858	$943,584	$453,633	$0
Law Enforcement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fire	$34,980	$77,410	$65,360	$79,600	$85,880	$112,445	$87,400	$73,720	$67,640	$55,480	$37,240	$25,080	$0
EMS	$4,324	$12,478	$8,084	$9,870	$10,622	$16,488	$10,810	$9,118	$8,366	$6,862	$4,606	$3,102	$0
Parks (impact fees + developer payment)	$68,034	$99,093	$127,194	$155,295	$167,127	$173,043	$170,085	$143,463	$131,631	$107,967	$72,471	$48,807	$0
Library	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Public Buildings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water													
Sewer													
Solid Waste													
Development Payments - Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Impact Fee Revenue	$674,164	$1,860,283	$1,568,399	$2,001,819	$2,300,309	$3,094,983	$2,441,050	$2,225,980	$2,015,648	$1,588,687	$1,020,661	$505,542	$0
Capital Expenditures													
Roads (Set Equal to Revenue - Prop Share)	$601,806	$1,748,712	$1,433,121	$1,836,654	$2,122,560	$2,905,452	$2,260,155	$2,073,399	$1,875,651	$1,473,858	$943,584	$453,633	$0
Law Enforcement	$1,674	$4,340	$3,924	$5,015	$5,774	$7,496	$6,134	$5,605	$5,074	$3,995	$2,564	$1,257	$0
Fire	$166,976	$376,298	$403,967	$519,119	$602,174	$721,800	$642,643	$591,828	$535,046	$419,606	$268,028	$126,315	$0
EMS	$6,784	$18,311	$16,315	$20,945	$24,262	$31,823	$25,872	$23,792	$21,514	$16,885	$10,794	$5,125	$0
Parks	$106,765	$186,254	$256,781	$329,646	$381,859	$410,304	$407,187	$374,456	$338,608	$265,743	$169,888	$80,658	$0
Library	$6,275	$11,311	$15,769	$20,392	$23,860	$25,759	$25,594	$23,777	$21,466	$16,760	$10,650	$4,788	$0
Public Buildings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sewer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Solid Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Capital Cost	$723,303	$1,968,928	$1,725,910	$2,212,652	$2,558,316	$3,380,834	$2,724,941	$2,501,029	$2,262,313	$1,777,240	$1,137,481	$545,462	$0
Net Capital Impact													
Roads (Set Equal to Revenue - Prop Share)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Law Enforcement	-$1,674	-$4,340	-$3,924	-$5,015	-$5,774	-$7,496	-$6,134	-$5,605	-$5,074	-$3,995	-$2,564	-$1,257	$0
Fire	-$132,016	-$298,888	-$338,607	-$439,319	-$516,294	-$609,355	-$555,243	-$518,108	-$467,406	-$364,126	-$230,788	-$101,235	$0
EMS	-$2,460	-$5,833	-$8,231	-$11,075	-$13,640	-$15,335	-$15,062	-$14,674	-$13,148	-$10,023	-$6,188	-$2,023	$0
Parks	-$38,731	-$87,161	-$129,587	-$174,351	-$214,732	-$237,261	-$237,102	-$230,993	-$206,977	-$157,776	-$97,417	-$31,851	$0
Library	-$6,275	-$11,311	-$15,769	-$20,392	-$23,860	-$25,759	-$25,594	-$23,777	-$21,466	-$16,760	-$10,650	-$4,788	$0
Public Buildings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sewer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Solid Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Development Payments - Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Capital Impact	-$49,139	-$108,645	-$157,511	-$210,833	-$258,007	-$285,851	-$283,891	-$275,049	-$246,665	-$188,553	-$116,820	-$39,920	$0

Appendix Table 2.

North River Village

Fiscal Impact Analysis Model Methodology.

3.0 Fiscal Methodology

3.1 Introduction

The Consultant has developed a Fiscal Impact Analysis Model (FIAM) under contract with the Florida Department of Community Affairs ("DCA"). FIAM is designed to serve as the prototype fiscal and economic assessment tool for local governments in Florida. DCA has continued contracting with the Consultant to further refine and develop FIAM. Currently, FIAM Version 7.0 is available for use in Florida. Recently an Urban Land Institute Panel ("ULI") provided a peer review of FIAM on behalf of DCA. The ULI panel was very complimentary, made recommendations for further improvements, and endorsed FIAM for use in Florida. DCA is continuing its contracting with the Consultant for FIAM and DCA is planning for the implementation of FIAM statewide.

FIAM provides estimates of the costs and revenues to local governments associated with their land use decisions. FIAM examines both the long range and near term impacts and it provides estimates for the effects of land use decisions on both the operating budget and the capital budget of the local government. FIAM is suitable for conducting analysis of individual projects, development corridors, and entire comprehensive plans. FIAM has been used for fiscal impact analysis in thirty-six Florida communities.

3.2 Fiscal Impact Analysis Model Calibration

The FIAM model used in the development scenario has been calibrated based on the latest adopted budget and demographics for the County. In this way, FIAM is properly calibrated to reflect the specific environment of the County with its unique budget and characteristics. Furthermore, FIAM also includes ten years of budgetary history for the County. This provides the base for FIAM to project inflation rates over the long term.

3.3 Modified Per Capita Method

Local governments receive revenues from the land, development and the activities of their populations of residents, workers and visitors. The major portion of these revenues is in the form of taxes (Property Tax, Sales Tax, Gas Taxes, Utility Taxes, Resort Tax, etc.) and fees, assessments and charges for service (permits, impact fees, waste collection and lighting assessments, etc.).

Local governments also render services to all residents, to all who are working in the County, and to all visitors to the County. Therefore, on the cost side of the equation, cities incur costs to provide services to residents, those employed in the County, and to visitors. At some point during a 24-hour period, a resident may become a person employed in the County, and then later in the day may be a resident again. To such an individual, the County has rendered services for a full 24 hours. Other residents may leave the County to work in another County. In this case, the County only provides services to that person when they are physically in the town. For those workers that do not live in the County, services are only provided to those workers when they are in the County. Finally, visitors receive service during the whole time period of their visit, but obviously not when they leave.

To properly measure the services provided to each of these groups, a weighting procedure is needed that reflects the duration of time each group is resident in the County. This calculation provides us with the full-time equivalent (FTE) population, employees and visitors. For both residents and workers, a working period assumption of 2,000 hours per year is applied. In this way, the fiscal impact of the FTE residents, employees and visitors can be properly identified.

A variety of methods exist for quantifying the revenue and cost impacts flowing from a development opportunity such as the one presented here. The approach used in this FIAM is the modified per capita approach. When possible, the revenues and expenditures that can be identified from the subject population(s) are directly estimated or calculated. For this project, ad valorem and impact fee revenues were calculated using current millages and fees. The remaining cost and revenue categories were estimated based on modified per capita estimates.

The modified per capita approach involves the calculation of revenues using the latest published budgets for the appropriate population basis (i.e. per person, per employee, per tourist, per student). From an economic perspective, this is equivalent to assuming that average revenue generation applies to the particular situation being evaluated. This is a reasonable assumption in most cases for two reasons. First, local governments must run balanced budgets, so that current costs and current revenues balance and are appropriate for current circumstances. Second, using long run averages also means that any excess capital is maintained in the various systems and not allocated to the project. Furthermore, there is nothing peculiar about the location or the type of this particular project that indicates that per capita parameters estimated from the latest budgets would not be reflective of actual costs and revenues.

The numerator for each cost or revenue item is the cost or revenue shown in the County's budget. The denominator depends upon the type of cost or revenue. Each category of cost and revenue was examined to determine the impact of employment (businesses). Then each category was divided by FTE employment to yield the average per capita revenues and expenditures for all budget categories. The arithmetic is shown below.

$$\frac{\text{Revenue}}{\text{FTE Employees}} = \text{Per Capita}$$

3.4 Fiscal Impact Calculations

The annual budget, with projected revenues by source and expenditures detail by function for the County, were used to generate the FIAM results. Property taxes were calculated using the increase in taxable property value applied to the appropriate millage rates. Most of the other budget revenues and expenditures were calculated using the per capita methodology. The per capita numbers used are the full-time equivalent employees calculated using The University of Florida data and Fishkind estimates of employment. The revenues and expenditures are calculated by multiplying the FTE employees by the per capita revenue and expenditure amounts from the budget. The County averages were used to maintain a conservative methodology.

The per capita calculations for the County's budget were calculated using revenues and expenditures from the budget's General and Special Revenue Funds. The revenues and expenditures from these funds were divided by the County FTE Population plus the County time. Any voted taxes are assumed to be reaffirmed once their current FTE employment to provide the per capita amount. Human Services and Parks and Recreation typically have only the population as the denominator. These Budget per capita amounts are then multiplied by the number of new FTE employees in order to generate projected revenues and expenditures.

Certain non-revenues and non-expenditure items are not included as they are not applicable to the incremental change in population.

North River Village
Green Programs Summary

1. **Energy Star:** Energy Star is a voluntary partnership between the US EPA and more than 8,000 organizations, including 3,500 of the nation's home builders. The goal is to increase energy efficiency, decrease utility bills, and help to prevent greenhouse gas emissions. The Energy Star symbol identifies more than 50 types of products such as appliances, lighting, home office equipment, consumer electronics, and heating and cooling equipment that are energy efficient. The Energy Star symbol also identifies new homes that include additional energy saving features such as effective insulation, high-performance windows, tight construction and ducts, efficient heating and cooling equipment, and many of the efficient products listed above that have third –party evaluation to verify their energy efficiency measures.

2. **Florida Power & Lights (FP&L) Build Smart:** FPL's energy efficient home certification program offers energy efficient options for homes to certify they are built to a higher standard then Florida code requires. FP&L experts review the house plans, identify options that can save money for years to come, provide information and personal advice on a flexible set of efficiency improvements and options, calculate future energy savings to ensure the home is 30% more energy efficient than Florida's building codes, inspect every home, and then certify the home as an energy efficient Build Smart home.

3. **Florida Green Building Coalition, Inc. Green Development Designation Standards (Version 5.0):** A voluntary Florida green designation administered by the Florida Green Building Coalition, Inc. (FGBC). FGBC's Green Development Standard is a tool that will guide you and your design team through the process of selecting green features that benefit the environment while providing long term value to the project. FGBC has Green Home, Green Commercial Buildings, and Green Municipalities standards.

4. **University of Florida Build Green Program and Green Advantage Certification:** Green Advantage is an environmental certification for building related practitioners – primarily contractors, subcontractors, and trades people. Certified individuals must pass an examination for Commercial, Residential, and/or Commercial/Residential Certification that demonstrates their knowledge in green building principles, materials, and techniques. Re-certification is required every three years.

5. **Florida Yards & Neighborhoods (FY&N):** This voluntary program is a partnership of the University of Florida/ Institute of Food and Agricultural Sciences (UF/IFAS) and provides education and outreach activities in the community to help residents reduce pollution, conserve water, and enhance their environment by improving home and landscape management. This integrated approach to landscaping emphasizes nine interrelated principles: a) right Plant, right place, b) water efficiently, c) fertilize appropriately, d) mulch, e) attract wildlife, f) manage yard pests responsibly, g) recycle yard waste, h) reduce storm water runoff, and i) protect the waterfront.

6. **Firewise Communities & Wildfire Hazard Assessment Guide for Florida Homeowners:** Firewise Communities USA is a project of the National Wildfire Coordinating Groups (NWCG) Wildland/Urban Interface Fire Working Team. The program recognizes those communities that determine if a wildfire hazard exists in a community, evaluate the risk, and implement Firewise principles to mitigate the risk. The program is administered in Florida by the Division of Forestry.

7. **National Wildlife Federation (NWF) Backyard Wildlife Habitat Program:** This program is administered by the National Wildlife Federation. The goal of the program is to educate home owners and certify individual backyards that enhance habitat for wildlife.

8. **U.S. Green Building Council Leadership in Energy & Environmental Design (LEED) certification:** LEED is a green building rating system that was developed by the US Green Building Council. LEED is a pint based system where projects earn LEED points for satisfying specific green building criteria in six categories which include sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design. The number of LEED points the project earns determines the level of certification. The certification levels are Certified, Silver, Gold, and Platinum. LEED certification offers third party validation of projects green features and verifies that the building is operating the way to was designed to.

9. **Clean Marina Program:** This program administered by the Department of Environmental Protection provides pollution prevention educational information and designation to marinas and boat yard owners. Clean Marinas implement a Clean Marina Action Plan (CMAP) focusing on waste management and pollution prevention. Owners self assess their facility on an annual basis to maintain their designation as a Clean Marina.

10. **Crime Prevention through Environmental Design (CPTED):** CPTED is the proper design and effective use of the built environment which may lead to a reduction of fear and incidence of crime, and an improvement of the quality of life. The four strategies of CPTED are:

a. Natural Surveillance – A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out onto streets and parking areas; pedestrian friendly sidewalks and streets; front porches; adequate nighttime lighting.
b. Territorial Reinforcement – Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control are discouraged. Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, and gateway treatments.
c. Natural Access Control – A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, buildings entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.
d. Target Hardening – Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges.

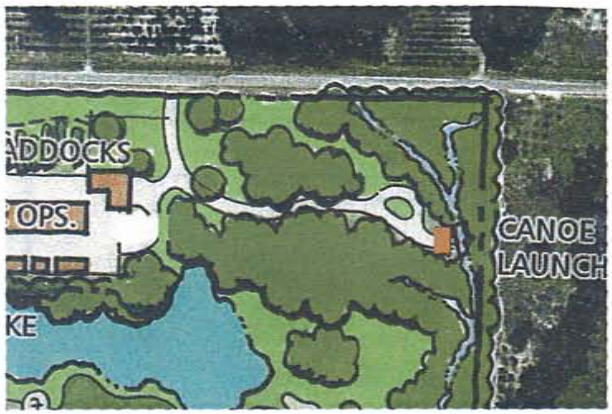
11. **Audubon International (AI):** The Audubon International Programs are education and certification programs that provide comprehensive environmental planning assistance to new development and golf courses. The programs aim to integrate environmental protection and improvement - focusing on wildlife, water, waste, energy, and pollution prevention with the economic and social objectives of new developments. There are three programs that must meet general minimum requirements – including preparing and implementing a Natural Resource Management Plan (NRMP). The difference between the three programs are:
    a. Gold Program: Staff of Audubon Environmental Services prepares the NRMP and lead the design, construction, and management of the project.
    b. Silver Program: Staff of Audubon Environmental Services prepares the NRMP and assist the manager or owner of the development with educational support and on-site technical advice.
    c. Bronze Program: An education, review, and audit based program. Staff of Audubon Environmental Services comments on the NRMP developed by the manager or owner and provides educational support. This program is often utilized by existing developments.

12. **Florida Department of Environmental Protection (FDEP) Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses (January 2007):** This document provides the golf course superintendent/operator with sound management strategies to maintain a golf course in a positive manner with respect to environmental protection, water quality protection, and conservation. It also provides regulators, developers, and others with an overview of golf course management practices and how they relate to environmental issues. Many BMP's are discussed and their feasibility is

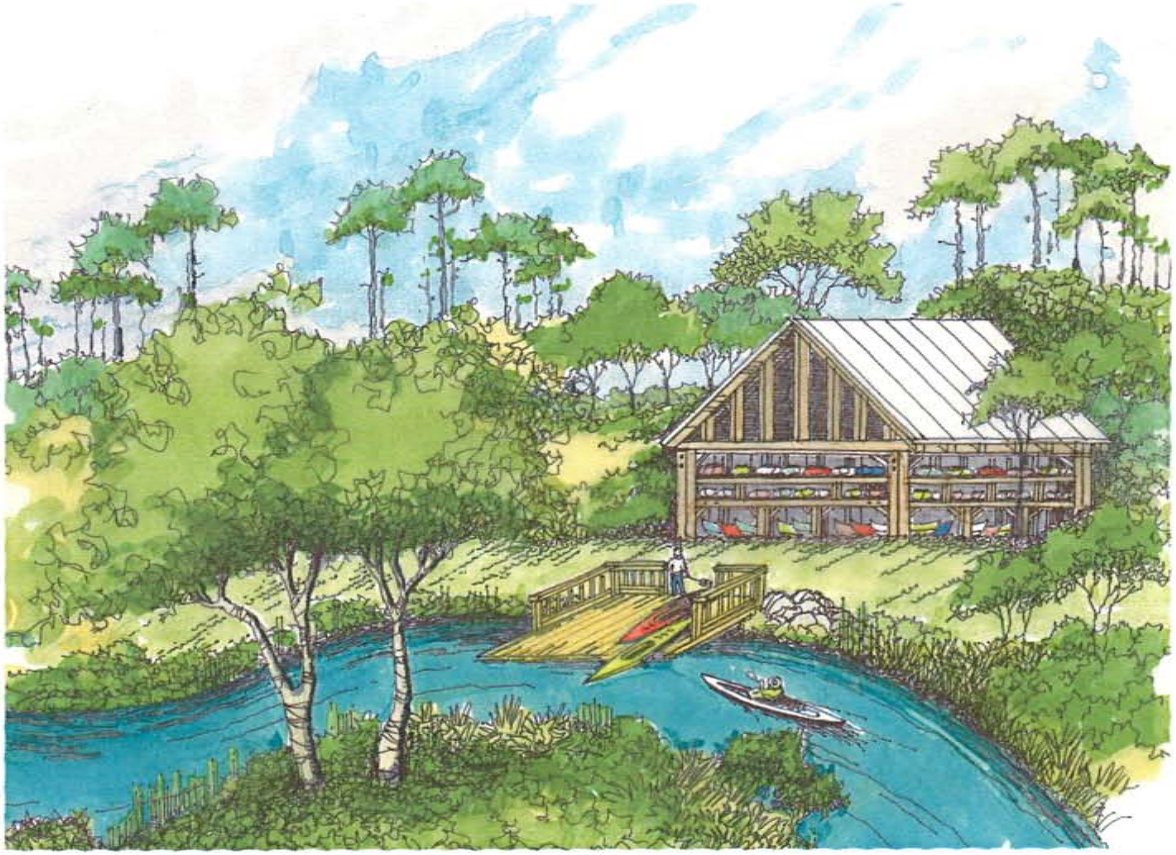
based on physical and technical limitations, operational and management limitations, pollution reduction/water conservation effects, profitability/cost considerations, other benefits or disadvantages, and public acceptance.

13. **FDEP Best Management Practices for Golf Course Maintenance Facilities (May 1995):** This document describes a number of Best Management Practices", or BMP's, which can be put into practice through proper design and operation of the golf course maintenance facilities and equipment. Proper management of the maintenance area is an important part of responsible chemical and pesticide use to protect soil, surface water, and ground water.

Kayak and Canoe
Barn and Launching Area



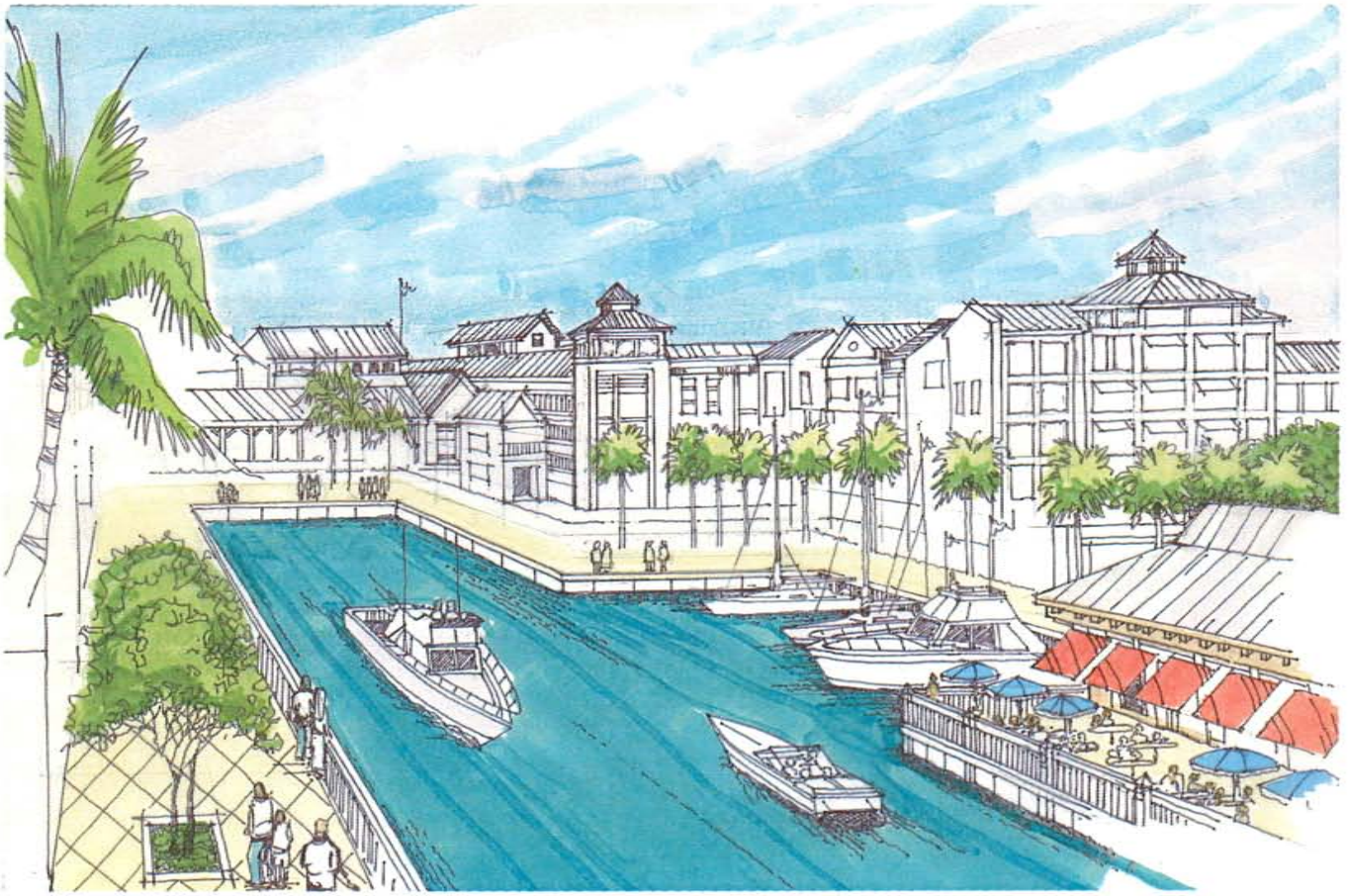
Plan View



Character Sketch

Marina Village

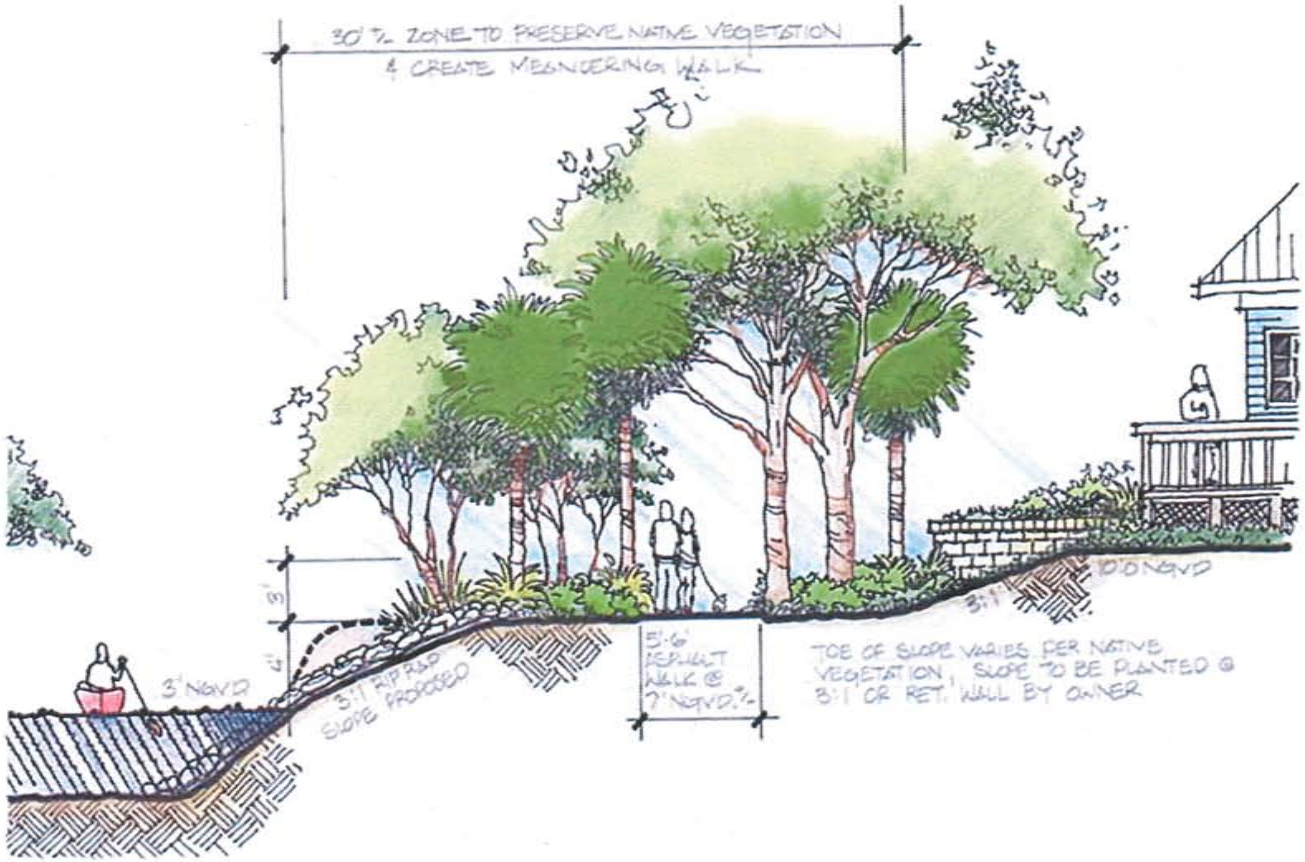
Plan View



Character Sketch

Public Waterfront Promenade
and Blueway trail access

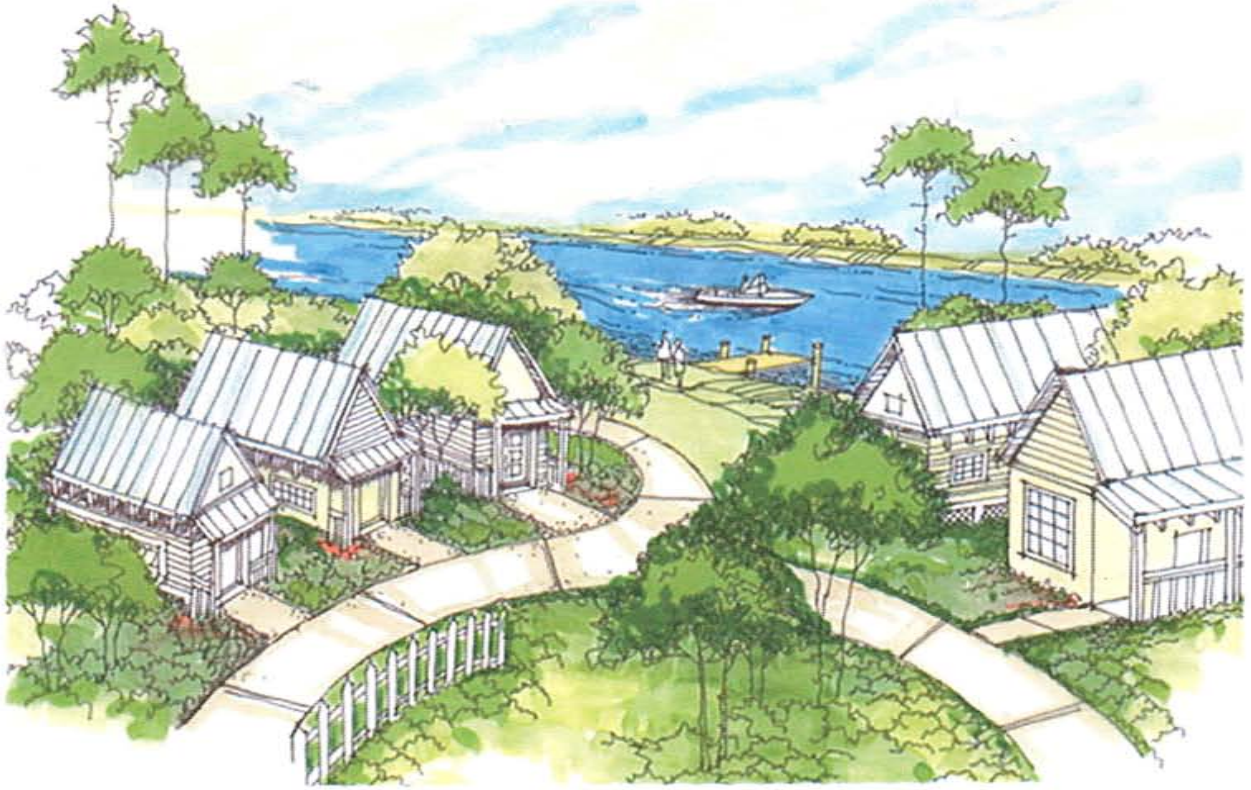
Plan View



Character Sketch

Williams Island
Cottages

Plan View



Character Sketch

CR 78 aka North River Road
Buffer and Public access

Plan View

Character Sketch

Duke Highway
Buffer

Plan View

Character Sketch

September 10, 2007

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

Mr. Brent Cunningham
Senior Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

Re: North River Village Large Scale Plan Amendement
CPA2006-12

Dear Mr. Cunningham:

In response to the comment letter dated June 27, 2007 in regard to the above referenced project, please find the following responses in order as received. In addition, to responding to your letter, the applicant has revised the proposed amendment significantly since the original submittal. Revision have been made in direct response to the literally dozens of people that we have met with including county staff and area residents. The revised language for the River Village land use category represents the input of these various interest groups as the Bonita Bay Group continues to strive to create an amendment that enhances the surrounding community. We look forward to continuing our work with staff and the community to come up with a land use category that achieves these goals.

PART I OF THE APPLICATION

Comment

Planning staff needs clarification regarding the owners of records for several parcels. According to the Lee County Property appraiser property detail information included in section two (Property Owners) of the application materials, there are several properties that have outdated property owners. For example: parcel formerly owned by Thirty Nine Preserve Inc. (18-43-26-00-00001.0000), parcel formerly owned by Michael & Tracey Greenwell (18-43-26-00-00001.0010), parcels formerly owned by Talon Ventures LLC (18-43-26-00-00002.0020, 18-43-26-00-00002.000, 19-43-26-00002.1020), parcel formerly owned by George Thompson (20-43-26-00-0001.0070), parcel formerly owned by Alfredo & Patricia Savigne (20-43-26-00-00001.0080), parcels formerly owned by Riverhaven Trust (19-43-26-00-00005.0030, 19-43-26-00-00006.0010, 19-43-26-00-00006.0040, 19-43-26-00-00006.0060, 19-43-26-00-00006.0050, 19-43-26-00-00006.0070 & 19-43-26-00-00006.0030). Recently North River LLC has purchased these properties. Please provide updated deeds reflecting these purchases.

Response

Please see the attached revised deeds and STRAP numbers.

PART IV OF THE APPLICATION

A.1.

Comment

Please provide a Future Urban Area Descriptor Policy for this proposed plan amendment request.

Response

Please see the attached revised text amendment.

Comment

Planning staff introduced a Floor Area Ratio (FAR) of 1 as an index of intensity that was included in the newly adopted Commercial Land Use category (CPA2005-00039). The FAR method sets a maximum floor area making development consistent throughout the land use category. FAR is calculated by dividing the total floor area (square feet) of the building by the total area (square feet) of the lot. Planning staff believes that DCA will require this of all new land use categories. Please include Policy language that discusses FAR for the proposed plan amendment request.

Response

Please see the attached revised text amendment. The revised text amendment proposes a FAR of 1.0 "over the entire development area for commercial uses". The reason why this language was added is because the commercial area in North River Village is intended to be designed as a mixed use town, where the FAR for individual commercial lots may be greater then 1.0 where there is use of a common water management system, joint use of parking facilities and mixed use buildings that are more then one story. The entire development area including parking, open space and water management will not exceed a FAR of 1.0. The proposed amendment also contains a new land use category of "Inner Islands" to be applied to Williams Island. The same F.A.R language is included in that category as well.

A.6.

Comment

Please submit all updated deeds for the subject amendment parcels.

Response

Please see the attached deeds.

B.1. Long Range 20-Year Horizon

B.1.a.

Comment

Please identify the Traffic Analysis Zones (TAZs) for this proposed plan amendment request.

Response

As explained on page 4 of the North River Village Comprehensive Plan Amendment Traffic Study (September 17, 2006), the assumed development parameters associated with the CPA were input into the Lee County travel model as new TAZ 316, which is located in the southeast quadrant of the SR 31/CR 78 intersection and has access connections (centroid connectors) to both of these roads.

There were no other changes to the model TAZ structure.

B.1.b.

Comment

Please determine whether the requested change requires a modification to the socioeconomic data forecasts for the host zone or zones. The land uses for the proposed change should be expressed in the same format as the socioeconomic forecasts (number of units by type/number of employees by type/etc.).

Response

The background TAZ's in the area did not include substantial numbers of units or employees. So, the land use assumptions were not modified from what were provided by the MPO, except for the addition of TAZ 316 to represent the CPA, as explained above.

The format of the input data is the same for TAZ 316 and all other zones in the system, with residential units and hotel rooms in ZDATA1 and employees in ZDATA2.

The travel model assignments were updated for this sufficiency response utilizing the latest MPO zonal data available off the internet. Otherwise, the background zonal data remains as before.

Comment

Please provide an existing and future conditions analysis for sanitary sewer and potable water, that includes (but is not limited to) the following:

- ***Franchise Area, Basin, or District in which the property is located;***

The property is currently not located within a franchise district. This amendment proposes to add the property to the Lee County Utilities Franchise area for potable water. According to the proposed text amendment and Policy 1.10.12, new development will be required to provide or connect to central sewer facilities as well.

- ***Current LOS, and LOS standard of facilities serving the site;***

  The property currently is not served by either central water or sewer. However, According to the proposed text amendment and Policy 1.10.12, new development will be required to provide or connect to central water and sewer facilities.

- ***Projected 2020 LOS under existing designation;***

  The property is not currently projected to be served by either central water or sewer. However, According to the proposed text amendment and Policy 1.10.12, new development will be required to provide or connect to central water and sewer facilities.

- ***Projected 2020 LOS under proposed designation;***

  According to the proposed text amendment, the property would need to extend utilities to the property. The total projected demand for both water and sewer would be approximately 650,500 gallons per day.

- ***Improvements/expansions currently programmed in 5 year CIP, 6 - 10 year CIP, long range improvements and***

  There are no improvements currently scheduled.

- ***Anticipated revisions to the Community Facilities and Services Element and/or Capital Improvements Element (state if these revisions are included in this amendment).***

  Sufficient capacity exists for potable water. It would be the developer's responsibility to extend transmission lines to the property. Therefore no revisions will be necessary to the CIE for potable water. We are continuing discussion with Lee County Utilities on Waste Water service to the property, but have not yet concluded those discussions.

Comment

The applicant did not indicate if an amendment is proposed for Future Water Service Areas (Map 6) and Future Sewer Areas (Map 7) for the amendment request. In addition, the applicant stated that North Fort Myers Utilities will be providing wastewater service and Lee County utilities will be providing water service to the subject amendment parcels. Is an amendment proposed to Map 6 and Map 7 for the proposed project? How will potable water and sanitary sewer service be provided to the site? Is the applicant proposing a facility on site? Please clarify.

Response

The applicant has met with Lee County Utilities on several occasions to establish whether or not Lee County Utilities will be able to serve the area with potable water and sewer. It appears from the attached letter that Lee County Utilities will be able to service the project and the area for its potable water needs, however, we are continuing discussions with Lee County Utilities on Waste Water service to the property, but have not yet concluded those discussions.

Comment

Lee County Utilities provided an email dated June 20, 2007, including the following comments:

> ***We intend to provide wastewater service to the project. The applicant should provide a location for a regional wastewater plant.***

Please address the Lee County Utilities statement.

Response

Please the response above.

Comment

The applicant in a recent meeting held on June 14, 2007 with Matt Noble, Brent Cunningham, Daniel DeLisi, Margaret Emblidge stated that a golf course is proposed for the North River Village Area. If a golf course is proposed, please provide Policy language that includes the design, construction, management and certification in accordance with the Audubon International Signature Program standard.

Response

Please see that attached revised text amendment which includes several policies on golf course design, construction, management and certification. The requirements included in Policy 1.10.18 are taken directly from recent golf course requirements (Renaissance) that Lee County has used to ensure that a high level of environmental protection is included in future golf courses.

B.3. Lee County Division of Transportation, March 20, 2007

Comment

The property is located within TAZ 1289 in Lee County MPO 2030 FSUTMS model. For the analysis, a new TAZ (TAZ316) was created by the applicant to analyze the proposed change would have on the 2030 Financially Feasible Plan as adopted by the Lee Plan County MPO. 1,470 single family dwelling units, 630 multi-family dwelling units and 900 condominium hotel units were added in zdata 1 of TAZ, 316,300 commercial employees and 110 service employees were added in zdata 2 and rerun 2030 FSTUMS model by

applicant. It is reported that the projected 2030 traffic conditions under the 2030 Financially-Feasible plan without and with the proposed CPA indicate the 4 lane segment of SR 80 between SR 31 and Tropic Ave are expected to exceed the adopted LOS standard. The section of SR 90 west of SR 31 also exceeds the adopted LOS standard without and with the CPA. The section of SR 31 between SR 78 and the proposed project entrance is expected to exceed the adopted LOS standard with the proposed CPA.

Response

The assumed development parameters associated with the CPA have been changed for this sufficiency response.

The base scenario (A) now includes only 2,500 residential units, with an assumption of 1,500 single-family units and 1,000 multifamily units. In addition, it is assumed that there will be 100 hotel rooms, 150,000 sq. ft. of commercial space, the existing marina, and an 18-hole golf course. It is our intent to limit the residential units and commercial floor area through the MPD process or through this comprehensive plan amendment process. Based on the on site constraints this is a maximum development scenario.

An alternative scenario (B) includes 2,200 residential units, with all being single-family units. The non-residential uses remain the same as in Scenario A: 100 hotel rooms, 150,000 sq. ft. of commercial space, the existing marina, and an 18-hole golf course. This reason for this alternative scenario is explained below.

In the original CPA traffic study, two comparative travel model assignments were run under the MPO 2030 Financially-Feasible Plan: 2030 Traffic Conditions Without the CPA and 2030 Traffic Conditions with the CPA. The same approach was used for this first sufficiency response, except that both Scenario A and Scenario B were evaluated separately for the 2030 Traffic Conditions with the CPA. As mentioned previously, the model assignments were re-run with the latest MPO data and with the revised CPA scenarios.

The results of the travel model assignments for 2030 Traffic Conditions without the CPA, 2030 Traffic Conditions with the CPA (Scenario A), and 2030 Traffic Conditions with the CPA (Scenario B) are provided in Exhibit 2 Revised, Exhibit 3A Revised and Exhibit 3B Revised, respectively. The results are comparable to those reported previously, with one exception: the six-lane segment of SR 80 between I-75 and SR 31 now operates at an acceptable level of service under all three scenarios.

Finally, DPA's estimates of the anticipated road impact fees that would be collected from the assumed development parameters have been updated to reflect new Scenarios A and B. They are provided in Exhibits 4A Revised and 4B Revised.

Comment

The above findings of the applicants traffic study are not based on a worse case condition. Since single family has a higher trip generation rate than mutli-family and condominium and the applicant requests to allow for 3,000 units, a worse case of assuming 3,000 single family units shall be conducted for the traffic study.

Response

DPA has been advised that the developable land associated with this CPA will not accommodate 2,500 or more single-family units. For this reason, Scenario A includes a 60% SF and 40% MF mix of residential units.

To be responsive to the staff's concern, however, a scenario with a reduced number of total units, but all single-family, was tested. DPA has found that Scenario B, with 2,200 single-family units, produces comparable traffic generation and impacts to Scenario A.

It is the Applicant's intent that language be included in the text amendment (Policy 1.10.24) to limit the number of residential units to either 2,500 residential units (with 1,500 SF and 1,000 MF units), 2,200 residential units (all SF), or some other mix of single-family and multifamily units that produces the same or fewer external trips.

Comment

Additionally, the traffic information on SR 31 north of SR 80 is associated with Permanent Station #5, which is located on SR 80 west of SR 31. However, the applicant used the data of Permanent Station #4 (on Bayshore Road west of Williamsburg) for SR 31 north of SR 80. The traffic study shall be revised to study a worse case and the data of Permanent Station #5 shall be used for SR 31 north of SR 80.

Response

DPA used the K and D adjustment factors for PCS #4 for SR 31 north of SR 80, because we concluded that they more closely matched the directional splits observed on this section of SR 31. The County uses the adjustment factors from PCS #5 on SR 80 for this section of SR 31, even though they reflect the high directional splits associated with commuter traffic to and from Ft. Myers Shores and other development along SR 80.

However, as requested by the staff, DPA has revised our level of service spreadsheets to use the adjustment factors preferred by the Lee County DOT. The adjustment factors have also been updated based on the latest data from the Lee County 2006 Traffic Count Report. These changes are included in Exhibit 2 Revised, Exhibit 3A Revised and Exhibit 3B Revised.

B.3. Lee County Department of Smart Growth

Comment

The CR 78 corridor and SR 31 corridor should not be defined by applicant initiated amendments but instead by a master plan. The current Lee Plan is the county wide master plan, and the opportunity exists for community and subcommunity based plans to be developed as further detailed evaluation of the Countywide approach. For this area, such a plan should define the capacity of the roads as area, and as can be expanded

without violating their effectiveness; that defines the watershed and the water budget that must be maintained by land alterations, and the pollution load reduction expected of most watershed, as well as any groundwater storage targets; and, as addresses similar system driven components of public infrastructure.

Response

The applicant is working with the community and all stakeholders to address transportation, utility and water quality issues. Furthermore, the applicant has had repeated meetings with local residents to address those issues that would ordinarily be part of a community or sub-community plan, like community vision and character. The attached text amendment was written specifically to address both infrastructure needs and community vision comments.

In meeting with Mr. Daltry, he indicated that this comment was meant to promote additional connectivity on the local road network. The applicant is willing to provide for that connectivity through an additional public access corridor that will connect State Road 31 with County Road 78. Furthermore, the applicant has had several meetings with the residents along Duke Highway to explore possibilities of providing them more direct access to improve their access to State Road 31 and help relieve traffic on County Road 78.

Comment

The population forecasts of the County are presumed to be accommodated by the approved developments in the different planning districts. I am unaware of any outside analysis that indicate a shortcoming in the planning district this is within that would require additional population. Without such analysis the CIP response is likely to suffer additional delays, since this is not a small project. (This concern reinforces point 1 above). I note the applicant is raising issues that the forecasts used by the County are inappropriate, but the place to challenge these forecasts would be in a particular plan section, not in a land use map change that doesn't' include a change of the forecast in the appropriate section of the Plan.

Response

The applicant does not disagree with the population projections that are being used to calculate density or the allocation of population for the Alva Planning community in the 2030 Allocation Table. The submittal was done prior to the adoption of the new 2030 allocation table. However, the applicant does believe that the shift of density from that will take place when making the future land use change from Rural to North River Village is justifiable based on settlement patterns of the east Lee County area.

The attached amendment to the Lee County 2030 allocation table shows how the project proposes to shift land area allocations and the effect that has on population. This shift is justifiable for the following reasons:

1. *The applicant agrees with the staff assumptions in CPA 2005-00026 that development trends are moving to the east and north parts of Lee County. In response to this, staff increased the allocation in the Alva Planning Community*

primarily in the Rural land use category by over 400 acres. Within the Alva Planning community locating that density in the most urban section, at the intersection of two state roads, across the river from urban land uses and in close proximity to public and commercial services should be the priority location for the construction of new units. The proposed amendment is to shift land area from the Rural land use category to the River Village land use category.

2. *The allocation table shows 520 acres of development in the Urban Community land use category being accommodated in the year 2030. The assumption in the table is that the Urban Community Land Use Category is in the Alva Planning Community will accommodate much of the projected population. However, settlement patterns show that the actual density of the Urban Community area in Alva is at a very low density. Current densities in the Urban Community area are closer to 1 du/acre. Furthermore, utility infrastructure for development in the eastern parts of Alva and the Urban Community area of Alva is very unlikely. The location of the proposed development is the most likely location for the extension of utilities and urban services and the most in line with Lee Plan Objectives 2.1 and 2.2, which promote compact development forms where utilities can be extended.*
3. *The use of population allocations was meant to prevent premature development or to direct development to the areas of each community that are most able to provide for infrastructure. By increasing the allocation for the North River land use category, allocations should decrease for other categories, including a significant area of the Rural land use category, the DR/GR land use category and reallocating population from nearby planning communities where population is unlikely to go. For instance, CPA 2005-00026 attempted to reallocate population from the Buckingham community, some of which was allocated to the Central Urban portion of the Fort Myers Shores Planning Community, where staff has acknowledged it is unlikely that new residential development will occur.*

The proposed amendment will shift that population to an area that is closer to public infrastructure, at the intersection of two State Roads, in a location where utility service can and will be extended, and where development can happen in a more planned manner. There are sufficient acres available on the 2030 allocation table to accommodate the proposed commercial areas.

Comment

The proposed change seems to create a new future land use category that is apparently application to just this site. The proposal underlines the problem previously faced by other projects that have their own category. The greater problem is the need for a land use category wherein the subsequent processes of land use change, zoning, site design, building form, and building review/Cos are integrated to achieve a particular vision. The somewhat jury rigging of the DRI process has promoted that in the past, and land use reviews did promote some flexibility. If the issues in points 1 and 2 above are resolved, then the need to have projects such as this "covered" by an integrated program is required. Rather than the developer initiated category "category", a more inclusive approach should be developed and provided. The current "Mixed Use" concept should be assessed to see if the "Village" basic theme is met by such an approach.

Response

The idea for a site specific plan amendment came about through discussions with staff. It has nothing to do with avoiding the DRI process. Preliminary site plans show that it is very difficult and unrealistic to do DRI level development on this property. Our revised analysis is based on 2,500 units, the maximum that we think can be built on this property given environmental constraints including restoration areas.

The applicant has created a non-site specific land use category for which this property can use. With input from staff, it is our belief that a new category that could address specific land preservation, development and community character goals, a new category can be more effective then the current "Rural Land Use Category" in both preserving the character of the surrounding riverfront and rural communities and improving quality of life.

Comment

Integration of land uses with adjacent parcels. This point emphasizes part of the issue 1 above. The project is one that has been assembled from diverse ownerships. The resulting geometric has "outparcels" and somewhat angular interfaces with adjacent properties. There needs to be adequate mobility access and natural system continuation regardless of ownerships to ensure system performance.

Response

The applicant agrees. The revised text amendment attempts to achieve this goal by providing language that requires development along Duke Highway to be consistent with the existing development (i.e. single family uses facing the road). Furthermore, the flowway restoration and environmental features of the property will be designed to create environmental interconnects with surrounding areas.

B.3.a.

Comment

Please provide a letter from the Bayshore Fire & Rescue and North Fort Myers Fire Department determining the adequacy/provision of existing or proposed support facilities.

Response

Please see the attached letter from the Bayshore Fire District.

B.3.b.

Comment

Lee County Division of Public Safety Emergency Management Program provided a memo dated January 29, 2007, including the following comment:

Emergency Management reviewed the documents for the above referenced amendment. This request appears to allow a density increase from 997 dwelling units (under current) to 3,000 dwelling units (under proposed). Most of this property is located in a Tropical Storm surge zone.

Lee County Public Safety and Emergency Management remain fundamentally opposed to increasing density in the Coastal High Hazard Area. Increased density in the Coastal High Hazard Area places more people at risk and increases demand on already strained shelters and evacuation routes.

POLICY 5.1.2: Prohibits residential development where physical constraints or hazards exist, or requires the density and design to be adjusted accordingly. This request to increase density in the Coastal High Hazard Area is inconsistent with Policy 5.1.2.

POLICY 105.1.4: Through the Lee Plan amendment process, land use designations of undeveloped areas within coastal high hazard areas will be considered for reduced density categories (or assignment of minimum allowable densities where density ranges area permitted) in order to limit the future population exposed to coastal flooding. This request to increase density in the Coastal High Hazard Area is inconsistent with Policy 105.1.4.

Response

The applicant is in the process of working with the Lee County Division of Public Safety Emergency Management to come up with a mitigation package that off sets concerns of development within the Coastal High Hazard Area. Mitigation can include the generation of fees to assist in the widening of State Road 78 to I-75, a central choke point for evacuation traffic and or the provision of a shelter in a Category 4/5 zone.

Comment

Please provide a letter from the Lee County Emergency Medical Services (EMS) determining the adequacy/provision of existing or proposed support facilities.

Response

The letter from Lee County EMS is forthcoming.

Comment

Lee County Transit provided a memo dated September 25, 2006, including the following comments:

We currently do not provide transit service to this area north of the Caloosahatchee River, nor have we identified the capacity with which to do so in the future. The nearest transit service is approximately 2 miles south on Palm Beach Boulevard, SR 80.

Transit service on SR 31 north of the river has not been identified as a need in either the Lee County Transit Development Plan or in the Lee County Long Range Transportation Plan. However, with the pace of growth projected for Lee County and the potential the SR 31 corridor has for becoming a transit corridor in the future, we request the design and development of North River Village to include "transit ready" features. Such features should include pedestrian walkways and bike ways internal to the project that will connect with the SR 31 corridor for the future transit passenger amenities. Such items will facilitate easier access to public transportation and will allow for ease of implementation of such services in the future.

Response

The applicant has revised the proposed text amendment to specifically include a policy that requires pedestrian walkways and bike ways internal to the project that will connect with the SR 31, County Road 78 and local roads for the future transit passenger amenities. Policy 1.1.3.8 and Policy 1.1.3.11 require the project to be designed to accommodate a strong pedestrian orientation to the community and accessibility to future transit opportunities.

B.3.e.

Comment

Please provide a letter from the Lee County School Board determining the adequacy/provision of existing or proposed support facilities.

Response

Please see the attached letter from the Lee County School Board.

C.1.

Comment

Lee County Division of Environmental Sciences provided an email dated June 15, 2007, including the following comments

- ***Policy 1.10.3 should require the public access for canoes and kayaks. The way the policy is currently written, a promenade in conjunction with say a public restaurant may meet the requirements.***

  Policy 1.10.3 was revised to reference the design elements. Please refer to Policy 1.10.6 which has been revised to include public access for canoes and kayaks in addition to other forms of public access.

- ***Policy 1.10.6 should be revised to established minimum buffers areas along the creeks and restoration of native plant communities. The placement of any buildings within the creek buffer area should be prohibited. There may be some structures such as a pervious path or boardwalk that may be appropriate, but we***

will need to discuss further. After the BOCC meeting last week, I would recommend a 50-foot wide natural waterway buffer. We will need some help from natural Resources staff to determine the most appropriate width of no impacts (e.g. filling or grading) from a flood protections standpoint. There should also be a minimum 20-foot building, pool, accessory structure, and pavement setback from the natural waterway buffer as well.

Policy 1.10.6 was revised to reference public access. Please refer to Policy 10.10.16 which was added to include a minimum 50 foot buffer along natural waterways. Buffer areas may contain passive recreational uses, including boardwalks, and river oriented recreation uses such as a canoe/kayak launch with an ancillary building, and necessary community infrastructure crossing points. Residential dwelling units will not be constructed within 50 feet of the mean high water line (MHWL) of natural water bodies. Water dependent uses may be permitted with a zero foot setback.

- ***Policy 1.10.7 should be revised to include listed species.***

Policy 1.10.7 was revised to reference water quality improvement systems for degraded water bodies directly connected to the property. Please refer to Policy 1.10.19 which has been added to promote the preservation of listed species habitat.

- ***Policy 1.10.8 should be revised to establish clustering criteria and how functional common open space will be included in the design.***

Please see the attached revised policies.

- ***There should be a policy added that addresses the use of a large roadway buffer that utilizes 100% native species to NE Lee County; prohibits the use of berm, wall or fence; and includes a multi-use trail or path.***

Policy 1.10.9 addresses the rural edge protection area which promotes the preservation of the surrounding community character. A minimum 100 foot edge protection area will be incorporated into the development and 50 feet along adjacent properties under separate ownership. The rural edge protection area will contain one or more elements that are representative of rural character including groves, livestock grazing, pervious recreational areas or open space, preserves, equestrian facilities, lakes, or other elements of rural character. The existing rural elements located within the proposed comprehensive plan amendment will provide an excellent landscape buffer adjacent to roadways and adjacent properties while preserving and promoting rural community character and allowing for the efficient use of land.

Berms and walls that are intended to provide a visual barrier will not be permitted along County maintained arterial roads and are discouraged along the remaining perimeter, unless specifically requested by the adjoining property owner. The use of perimeter fencing including, but not limited to, horse fences and picket fences will be encouraged. This policy is not intended to preclude any berms required to meet the requirements of the South Florida Water Management District. The requirement for 100

percent native landscaping would, in this case, conflict with the goal of preserving some of the grove area within the rural buffer area.

- ***There should be a policy added that addresses an enlarged natural waterway buffer along the Caloosahatchee River.***

  Please see Policy 1.10.16 in the revised text amendment.

- ***There should be a policy added limiting the amount o flake excavation to the minimum necessary to provide surface water management, and maximizing the best management practices such as filter marsh and created flow-ways (i.e. meandering naturalized swales) to lower the amount of lake excavation required.***

  The Best Management Practices in Policy 1.10.15 - 1.10.18 aim to implement the goal of improving water quality.

- ***There should be a policy added to require a higher percentage of native vegetation than is required by the LDC for required landscaping, as well as committing to a limitation on the use of non-native vegetation to non-invasive, low water, and low fertilizer plants.***

  Please see the commitments listed under 1.10.13 and 1.10.18 in the revised text amendment.

- ***There should be a policy added regarding limitations on lawns. Whether the percentage of the lot or a limitation on the type of a sod used.***

  We agree. Please see the commitments listed under 1.10.13 in the revised text amendment.

- ***The proposed future land use map should delineate the large tracts of proposed conservation area including the preserved or restored flow-ways.***

  Policy 1.10.20 attempts to accomplish this goal by changing those areas subsequent to MPD approval for development.

Comment

Is the applicant proposing to place environmentally sensitive areas of the subject amendment site into the Conservation Lands Wetlands Future Land Use category? Please clarify.

Response

Policy 1.10.20 attempts to accomplish this goal by changing those areas subsequent to MPD approval for development.

D.1.

Comment

Please provide a map of any historic districts and/or sites, listed on the Florida Master Site File, which are located on the subject property or adjacent properties.

Response

Please see the attached letter from the Florida Department of the State Division of Historical Resources (DHR) dated October 6, 2006 recommending a systematic, professional archaeological and historical survey. We are in the process of finishing a survey of historic and archeological resources and will provide the information to the county when complete.

D.2.

Comment

Please provide a map showing the subject property location on the archeological sensitivity map for Lee County.

Response

Please see the attached Archeological Sensitivity Map for Lee County.

E.1.

Comment

Please address the 2030 allocations for commercial and residential uses in the Alva Planning community per CPA2005-00026 revised Table 1(b).

Response

Please see the response above on pages 8 and 9 with regard to the 2030 allocations.

E.2.

Comment

Please list all goals and objectives of the Lee Plan that are affected by the proposed amendment.

This analysis should include an evaluation of all relevant policies under each goal and objective.

Response

Please see the attached revised Lee Plan analysis.

Comment

According to the proposed Policy 1.10.5, development within the North River Village will be required to accept reuse water if the utility is prepared to supply reuse water and a sufficient supply is available to meet all or a portion of the irrigation needs of the proposed development. In response to the state objectives in Section 373.250 and Section 403.064, Florida Statutes (F.S.), of "encouraging and promoting uses," the Florida Department of Environmental Protection has developed a comprehensive reuse program. The Department has created extensive rules dealing with water reuse which are contained in Chapter 52-610, Florida Administrative code. In addition, there are water reuse requirements per Policy 54.1.6 and Chapter 10 of the Land Development code. Will the water reuse system meet these requirements? Please clarify.

Response

Yes. The reuse system will meet these requirements.

E.3.

Comment

Please describe how the proposal affects adjacent local governments and their comprehensive plans.

Response

The applicant does not believe that the proposed amendment will have any effect on adjacent local governments or their comprehensive plans. The proposed amendment is a significant distance away from any adjacent governmental entity. The closest adjacent county is Charlotte County, which projects the development of the Babcock Ranch Community. According to our traffic analysis, we do not project more then 1 % of our trips from going north across the County line. Therefore, although the proposed comprehensive plan amendment would in many ways be consistent with Babcock, there is projected to be very little interaction between developments across county lines.

Comment

According to the application the applicant is proposing 3,000 dwelling units. But according to recent submitted text amendment language (Policy 1.10,10), development within the North River Village property will be limited to 2,500 residential units. Please clarify the number of dwelling units that are proposed for the project.

Response

The amendment proposes to limit residential development to a maximum of 2,500 dwelling units, which will be done through the MPD process. Given environmental constraints, including restoration of environmental areas, 2,500 units is the maximum that could be built on this property.

F.1.a.

Comment

The application provides no measure of intensity or FAR for the proposed commercial component of this plan amendment. According to the application, 150,000 square feet of commercial is proposed but there is no measure of intensity language provided in the text amendment. Planning staff needs this information to determine the impacts the proposed development will generate. Please provide language that discusses measure of intensity for the proposed commercial component of this amendment. In addition, please state whether the site is accessible to arterial roadways, rail lines, and cargo airport terminals.

Response

Please see the attached revised text amendment. The revised text amendment proposes a FAR of 1.0 "over the entire development area for commercial uses". The reason why this language was added is because the commercial area in North River Village is intended to be designed as a mixed use town, where the FAR for individual commercial lots may be greater then 1.0 where there is use of a common water management system, joint use of parking facilities and mixed use buildings that are more then one story. The entire development area including parking, open space and water management will not exceed a FAR of 1.0.

The proposed plan amendment is accessible to two arterial roadways, State Road 31 and County Road 78. The property is also within two miles of State Road 80, and within five miles of I-75. The proposed plan amendment is not directly accessible to rail lines. The closest cargo airport terminals are located at either Page Field or the Southwest Florida International Airport, approximately 15 miles from the subject property.

F.1.b.

Comment

Please provide data and analysis required by Policy 2.4.4 of the Lee Plan.

Response

Policy 2.4.4 states the following:

Lee Plan amendment applications to expand the Lee Plan's employment centers, which include light industrial, commercial retail and office land uses, will be evaluated by the Board of County Commissioners in light of the locations and cumulative totals already designated for such uses, including the 1994 addition of 1,400 acres to the Tradeport category just south of the Southwest Florida International Airport.

The proposed amendment will contain commercial development only to the extent to accommodate two county goals. The first is to provide for uses that are water dependant in nature, in accordance with the Water Dependant Overlay and Policy 1.7.5. The second goal is to provide for retail development that would create a sense of place for North Olga and provide for some of the retail needs of the surrounding community without having to access the surrounding road network.

F.2.a.

Comment

How does this justify the proposed plan amendment request being in compliance with Objective 2.2: Development Location & Timing of the Lee Plan? Please clarify.

Response

Please see the revised Growth Management Analysis that was submitted with the original application.

Comment

Please demonstrate why the proposed change does not constitute Urban Sprawl. In addition, please supply data and analysis specifically addressing the urban sprawl criteria listed in FAC Rule 9J 5.006(5)(g), (h), (i), and (j).

Response

Please see the revised Growth Management Analysis that was submitted with the original application.

G.

Comment

It may be to the applicant's advantage to provide a conceptual site design due to the size and scope of this proposed plan amendment request that affects 1,263 +/- acres of land.

Response

We are now in the process of preparing exhibits to visualize the goal of the proposed amendment.

Comment

Most residential, commercial, industrial, and public development is expected to occur within the designated Future Urban Areas on the Future Land Use Map per Policy 2.1.1 of the Lee Plan. New growth should be directed 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 per Objective 2.2: Development Timing of the Lee Plan, GOAL 11, Policy 39.1.6, Policy 43.1.6, and Objective 43.2. In addition to the above mentioned items, staff has concerns with the premature nature of the request, and questions whether the request could be approved as proposed.

Response

It is our hope that we can and are crafting a proposal that can mitigate for staff's concerns. The current land use category still allows for development of up to 1 dwelling units per acre, but without the requirement to extend urban services or include extra water quality measures that well exceed county, state and federal standards. The proposed amendment also requires public benefits such as water access and amenities and workforce housing, two very important aspects of maintaining and enhancing quality of life in Lee County, benefits which are not currently provided for under the current land use category. The proposed amendment, while in the Rural land use category, is located geographically at the intersection of two arterial roads, in an area where services do exist. The Lee County Civic Center is in close proximity, as are urban amenities such as shopping centers, restaurants, recreational facilities and government services, all within a few miles of the property. As proposed, it is our belief that not only will population be accommodated in a more compact form of development, but in an area where service can be provided and under requirements to add significant environmental benefits to the community.

If you should require any additional information, please contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.

Daniel DeLisi, AICP
Principal

DD/vd

Project No.: 21023

October 31, 2007

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

Mr. Brent Cunningham
Senior Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

Re: North River Village Large Scale Plan Amendement
CPA2006-12

Dear Mr. Cunningham:

In response to the meeting on North River Village that was held on October 5, 2007, please find the attached additional information that staff requested. Based on our notes, we have listed the comments that were identified in the meeting in bold, with our additional information below in italics and attached.

1. **Delete last sentence in policy 1.1.16.**

   We have made this change. Please see the attached revise policies. Policy 1.1.16 has been renumbered to 1.1.17.

2. **Policy 1.14.4 add language to describe that the water quality improvements are for offsite water and is for the benefit of the public.**

   We have removed the language stating that we would receive 100% credit for lakes that are used for off-site water quality enhancements. Please see the attached revised policy 1.10.4.

3. **Add that we will meet the standards of the Audubon Silver program. Also address the 35' vs. 50' setback request.**

   Please see the attached revised policy 1.10.19. It is our belief that meeting the standards of the Audubon Silver program address the issue of concern that staff has with the setback from preserve areas for the golf course. Our understanding is that staff is concerned with die off of vegetation due to pesticide and fertilizer run off. In addition to committing to the standards of the Audubon Silver program, the applicant can, through the design of the water management system, commit to requiring that all golf course run off will go into detention areas for treatment prior to discharge into wetlands, which is a requirement of the Audubon program. .

4. **Add in the Golf Course policies the location of Fertigation storage tanks will be a minimum setback of 100' from RS and will be fully screened and will have adequate access to allow trucks to maneuver around the tank.**

   Please see the attached revised policies. We have added this requirement under Policy 1.10.19(14).

5. **Please provide a percentage of native vegetation, not drought tolerant**

   We have revised Policy 1.10.14 to state that the requirement is for 70% Native vegetation and 70% drought tolerant vegetation in common areas. This will address both concerns stated by staff of using a high percentage of native vegetation and using a high percentage of draught tolerant vegetation as a water conservation measure.

6. **Please lower the requested density to up to 2 du/acre.**

   We have revised the density request down to 2 DU/per acre. In doing this we have changed the proposed Policy 1.1.10 and amended Table 1a in the Lee Plan. Consistent with all other urban designation, we allow for a transfer off of contiguous freshwater wetland areas with the provision that the total gross density for upland areas will not exceed 2.5 du/acre. This is consistent with the approach taken by Lee County in evaluating other land use categories.

7. **Create a Build/No build exhibit to adopt with Comp Plan.**

   Please see the attached map for the Conservation land use category. We have also added policy 10.1.22 to the text amendment to describe how lands in the conservation land use category will be handled. We have attempted to propose text consistent with our previous conversations about not losing the density from those areas and allowing for passive recreational uses, related facilities and road crossings in certain locations. The exhibit is a draft for discussion purpose. It is our intent to reflect this exhibit on the Future Land Use Map when we have received comments from staff on the locations of the Conservation areas.

8. **Need to address the public facilities entities' comments. The entities include the School Board, Lee County Utilities/North FTM Utilities, Fire station, Sheriff.**

   The various public facilities providers have all issued standard letters stating what would need to be done in order to have available services at the time of development. The service providers all recognize that the developer will not be starting development for at least 2-3 years, and therefore certain things will need to take place in that time period to make sure that capacity is available at the time of development in accordance with the county's concurrency management system. It is important to

recognize that there are existing public facilities in close proximity or currently servicing this property, as it is adjacent to existing urban designations and urban uses. The proposed comprehensive plan amendment therefore represents a logical extension of utilities and not leap frog development and will be able to extend services that are currently not available to the property.

Facility providers such as solid waste, have stated that capacity is currently available. The School District stated that we will be required to pay impact fees at the time of development and requested that in lieu of impact fees, locating a property for a new school is something that they would be interested in. It is important to note that the request for new school sites is a standard request even for rezoning applications and the letter makes clear that the alternative of providing a school site is to pay impact fees in accordance with the impact fee ordinance.

The letters from the Sheriff's office and the Fire district indicated that certain things will need to be done at the time of site development to ensure that adequate facilities are in place. For the Fire district, fire hydrants or their equivalent will need to be installed at the time of development. The Sheriff's office will only be able to evaluate service availability based on a detailed site plan and stated that a study of Crime Prevention Through Environmental Design (CPTED) will be needed. In order to minimize impacts to service, Policy 1.10.3(6) addresses this by requiring that development in the River Village land use category use CPTED principles in the site design.

For utility service several meetings have been held with Lee County Utilities to determine their ability to serve the project with water and sewer. A letter was subsequently issued by Lee County Utilities on August 15th which summarized Lee County Utilities' ability to provide water and sewer service. The letter stated that water is available for connection along Bayshore Road but that sewer would only be available within a set of conditions that would require extensive upgrades to the Lee County Utilities system and reservation of a site within the project for construction of a regional wastewater treatment plant. In response to the letter, a meeting was held with Dough Meurer and Jim Lavendar on October 17th in which it was explained that the project would connect to the Lee County Utilities system for water, but the conditions for connecting to the Lee County Utilities sewer system are cost prohibitive to the development. Therefore, it was agreed by all parties that the project would connect to the North Fort Myers Utility sewer system along Bayshore Road just west of SR 31. This type of service arrangement is typical for developments north of the Caloosahatchee River with North Fort Myers Utility providing sewer service and Lee County Utilities providing water service. The arrangement is also the most cost effective way of extending sewer services to the area. The applicant will get a letter of service availability from North Fort Myers Utilities.

9. **Need Hurricane Mitigation Plan and justification for the Coastal High Hazard issue.**

The subject property is located within the Tropical, Category 1 and Category 2 Storm Surge Zones (attached Map). According to Section 2-485 of the Land Development Code, all units built within the Coastal High Hazard Area must provide for mitigation, which come in the form of evacuation efficiency improvements, hurricane shelter space or a fee in lieu. The applicant understands that this type of mitigation will be required. In addition that the already required mitigation, the applicant is proposing to create a policy that requires mitigation above and beyond the requirements of LDC Section 2-485.

In evaluating options for hurricane evacuation/mitigation and meeting with involved staffers at Lee County and the Regional Planning Council, we have prepared a mitigation plan that will provide for a regional hurricane evacuation shelter to alleviate a transportation choke point for evacuating traffic. The attached e-mail from Dan Trescott confirms that providing a regional shelter in a Category 4/5 zone in Western Hendry County, west of SR 29, would provide a significant benefit to evacuees from Lee County. Our proposal would be to include this as a form or mitigation over and above the mitigation that is currently required by code. We have added Policy 1.10.9 to the proposed text amendment, which directs an applicant for a River Village to provide mitigation in excess of the mitigation that is currently required by code.

In addition to the changes that have been made in response to staff comments, the applicant has also made a very significant change in response to meetings with community leaders. Policy 1.10.20(3) will require the developer to certify all single family units as a Green Building by the Florida Green Building Coalition. These standards are a step above all existing development in Lee County and mark a very significant commitment from the developer toward promoting green building. Although this commitment will be difficult and expensive to implement and will require significant builder education, the applicant believes that it is consistent with the goal of creating a community that truly exceeds expectation for environmental preservation.

If you should require any additional information, please contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.

Daniel DeLisi, AICP
Principal

Project No.: 21023

December 14, 2007

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

Mr. Matt Noble
Principal Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

Re: North River Village Large Scale Plan Amendement
CPA2006-12

Dear Mr. Noble:

In response to the meetings on North River Village that were held on November 29 and 30, 2007, please find the attached additional information that staff requested. Per staff request, we have enclosed the following:

1. Four copies of the Archeological Study

2. A narrative on how the proposed project fits into the nearby rural communities

3. Community outreach synopsis

4. Revised Build/No Build Map

5. Discussion of nearby eagle nests and on site Gopher Tortoises

6. Changes to the Text Amendment to provide for timing of hurricane evacuation mitigation and road crossings of the Conservation areas.

In addition, in our meeting on November 30th, staff asked us to provide the estimated acreage of upland area and wetland area that is being included in the Conservation land use area. The following estimated acreages are based on aerial maps and have not been surveyed. The overall Conservation area is approximately 265 acres, which includes approximately 200 acres of wetlands, 65 acres of uplands. The actual acres will be determined by survey during the final site planning process.

Also shown on the map in blue is the general location where a historic flow way will be restored. The flow way will not be designated as Conservation but will be incorporated in the zoning master concept plan. This historic flow way which has been impacted by the ACOE spoil cell will be restored by reshaping and expanding the existing ditch that currently conveys surface water from the small offsite upstream drainage area to Trout Creek. The ditch will be widened to provide a broader and shallower cross section than the existing ditch with meandering shape and width to mimic a more natural system. The bottom of the proposed flow way will gradually slope downhill from the small cypress slough that is north of the site to a wetland that is along the east side of Trout Creek. A portion of the southern boundary of the proposed flow way will share a common boundary with an existing

cypress head. The flow way is not proposed to go through the cypress head due to ground elevations being equal to or greater than the upstream cypress slough. The flow way will contain marsh habitat with periodic deeper pools that will serve as wading bird foraging areas. Where possible, the flow way will also contain vegetated tree buffers to provide additional habitat. The flow way restoration project will increase foraging habitat for wading birds, mimic a more natural hydrology, and provide additional water quality treatment.

If you should require any additional information, please do not hesitate to contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.

Daniel DeLisi, AICP
Principal

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

March 6, 2008

Mr. Matt Noble
Principal Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

Re: North River Village Large Scale Plan Amendement
CPA2006-12

Dear Mr. Noble:

In response to our continued discussions on North River, please find the attached additional information that staff requested.

Since the time of initial submittal of the North River Village comprehensive plan amendment in September 2006, Bonita Bay Group has worked diligently with Lee County staff and the surrounding residents to create a proposal that not only addresses all areas of concern, but raises the bar for development in Lee County. The commitments that are being made by Bonita Bay Group through a text amendment to the comprehensive plan span pages of specifics dealing with energy and water conservation, improvements to water quality, environmental lands restoration and preservation, preservation of community character and creation of a destination point for the residents of North Olga. In short, the goal has been to create an economic incentive by increasing densities so developers can implement environmental and community character goals that far exceed current provisions of the Rural land use category and other requirements of the comprehensive plan.

Attached, please find the following:

1. A response summary, highlighting the solutions to the four issues that remain of some concern to staff and the community - Density/Rural Character, Population Accommodation, Development in the Coastal High Hazard Area and Transportation.
2. The revised Conservation Map with approximate acreages of upland and wetland areas.
3. The revised Text Amendment. Please note that we have altered Policy 1.10.2 based on our conversations with community leaders, have refined the Village Center language to better reflect the intent of the area, added language to require the restoration of hydrologically significant flowways, and added an amendment to Policy 36.1.1 and a footnote to Table 1 A per your meetings with the applicant and transportation planning staff.

4. The Revised FLUM that includes the colors for both the Wetland Conservation and the Upland Conservation areas.

If you should require any additional information, please do not hesitate to contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.

Daniel DeLisi, AICP
Principal

DeLisi Fitzgerald, Inc.
Planning – Engineering – Project Management

March 17, 2008

Mr. Matt Noble
Principal Planner
Lee County Department of Community Development
Division of Planning
PO Box 398
Fort Myers, FL 33902-0398

Re: North River Village Large Scale Plan Amendement
CPA2006-12

Dear Mr. Noble:

Per our prior conversations, please see the attached population accommodation summary prepared by DeLisi Fitzgerald and technical analysis from Fishkind and Associates.

If you should require any additional information, please do not hesitate to contact our office.

Sincerely,
DeLisi Fitzgerald, Inc.

Daniel DeLisi, AICP
Principal

1500 Royal Palm Square Blvd., Suite 101 · Fort Myers, FL 33919 · 239-418-0691 · 239-418-0692 fax

SCALE: 1" = 600'

0 600' 1200'

LEGEND

P.O.C.		POINT OF COMMENCEMENT
P.O.B.		POINT OF BEGINNING
F.C.M.	⊟	FOUND CONCRETE MONUMENT (ID AS SHOWN)
FN&D	●	FOUND NAIL AND DISC (ID AS SHOWN)
F.I.R.	○	FOUND IRON ROD (ID AS SHOWN)
F.I.P.	○	FOUND IRON PIPE (ID AS SHOWN)
S.I.R.	●	SET IRON ROD LB #6753
RR SP	⊕	RAILROAD SPIKE
SFWMD		SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ACOE		ARMY CORPS OF ENGINEERS
FDEP		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JAX		JACKSONVILLE
LCEC		LEE COUNTY ELECTRIC CO-OP
N.A.V.D. 88		NORTH AMERICAN VERTICAL DATUM 1988
N.G.V.D. 29		NATIONAL GEODETIC VERTICAL DATUM 1929
F.I.R.M.		FLOOD INSURANCE RATE MAP
L.B.		LICENSED BUSINESS
L.S.		LICENSED SURVEYOR
F.A.C.		FLORIDA ADMINISTRATIVE CODE
INSTR. #		INSTRUMENT NUMBER
O.R.		OFFICIAL RECORD BOOK
P.B.		PLAT BOOK
PG.		PAGE
SEC.		SECTION
TWP.		TOWNSHIP
RNG.		RANGE
C.R.		COUNTY ROAD
R.O.W.		RIGHT-OF-WAY
S.R.		STATE ROAD
(C)		CALCULATED
(M)		MEASURED
(L)		LEGAL DESCRIPTION
(SFWMD)		PER SFWMD ROW MAP
(LCDOT)		PER LEE COUNTY DOT ROW MAP
(DOT)		DEPARTMENT OF TRANSPORTATION
M.H.W.		MEAN HIGH WATER
O/S		OFFSET
RCP		REINFORCED CONCRETE PIPE
CMP		CORRUGATED METAL PIPE
CONC.		CONCRETE
BLDG.		BUILDING
(TYP)		TYPICAL
FOSW		FACE OF SEAWALL
L&E		LESS AND EXCEPT
OHP		OVERHEAD POWER
		BARBED WIRE FENCE
		WOOD FENCE
		SIGN
		WOOD POWER POLE
		GUY ANCHOR
		HAND HOLE-UTILITY BOX
		TELEPHONE SERVICE
		FIBER OPTIC CABLE MARKER
		GRAVEL-DIRT ROAD
		PAVEMENT
		CONCRETE
		WOOD DECKING

LINE TABLE

LINE	BEARING	DISTANCE
L1	S00°02'49"W	30.00
L2	S66°57'30"E	51.84
L3	N62°42'59"W	34.22
L4	N71°07'07"W	40.46
L5	N75°05'44"W	54.64
L6	N53°48'26"W	60.20
L7	N40°53'39"W	33.01
L8	N45°59'51"W	43.84
L9	N32°06'08"W	30.67
L10	N28°20'46"W	39.90
L11	N12°43'52"W	39.18
L12	N08°54'45"W	28.95
L13	N06°50'11"W	34.61
L14	N03°48'12"W	29.62
L15	N24°12'11"W	91.43
L16	N47°23'44"W	64.61
L17	N17°16'30"W	22.73
L18	S13°28'44"E	177.41
L19	S24°50'50"W	318.05
L20	S29°52'10"E	128.59
L21	S44°37'10"E	466.55
L22	N15°00'10"W	53.03
L23	N74°59'50"E	18.55
L24	N15°00'10"W	137.17
L25	N28°49'50"E	219.46
L26	N37°56'50"E	235.27
L27	N48°53'50"E	266.81
L28	N44°50'41"E	140.42
L29	N03°40'10"W	86.00
L30	N42°11'10"W	184.68
L31	N48°06'50"E	270.39
L32	S89°23'44"W	96.74
L33	N20°29'19"E	11.60
L34	S00°23'49"W	140.91
L35	N89°50'47"W	134.38
L36	S15°01'01"E	86.67

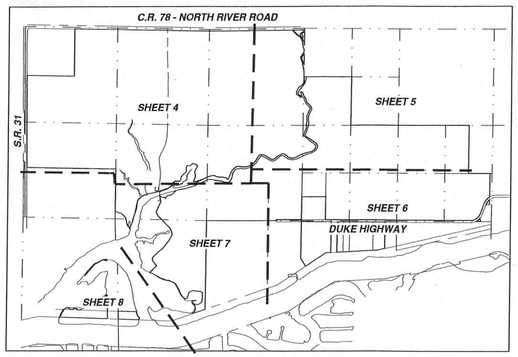
CURVE TABLE

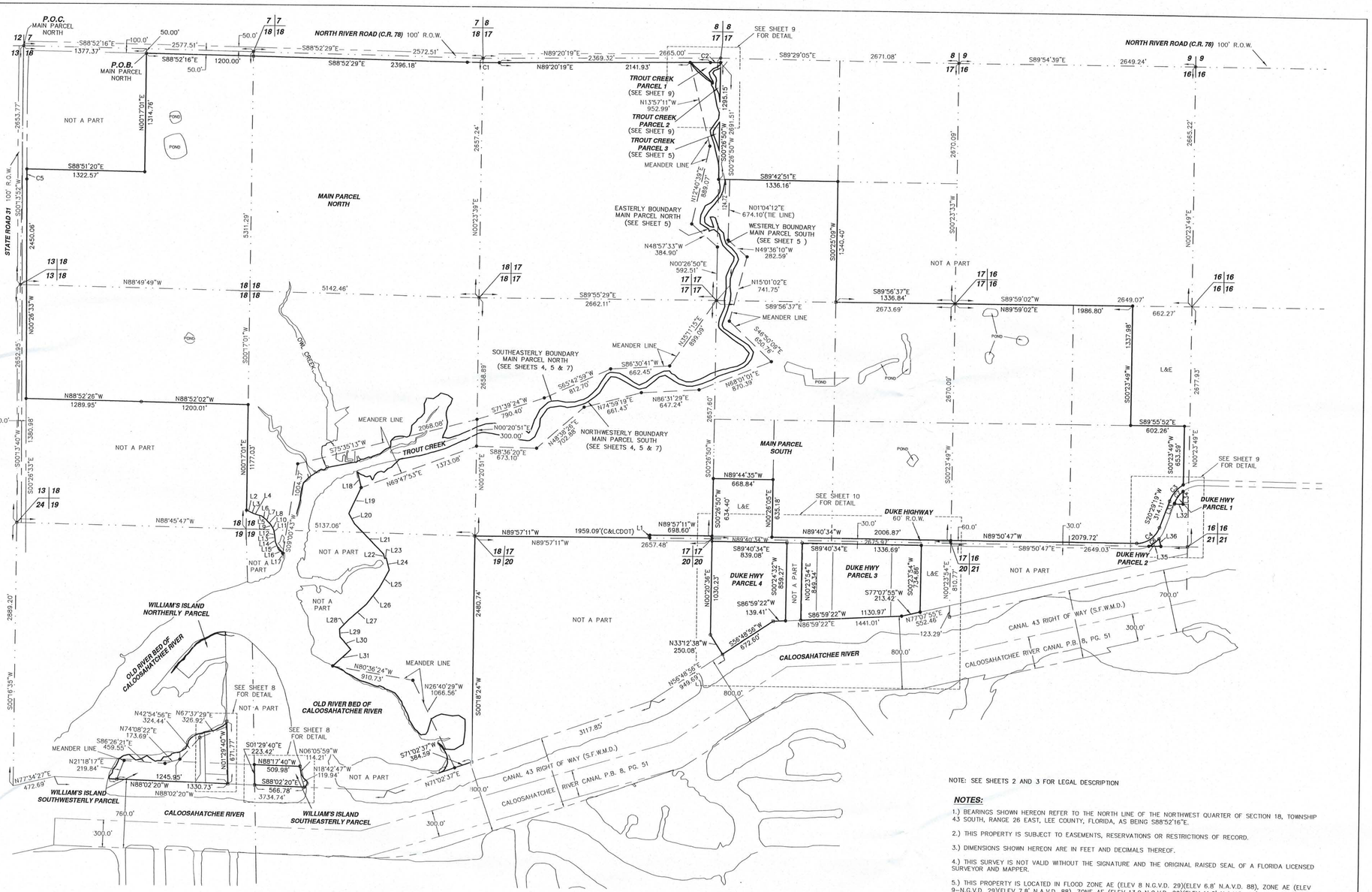
CURVE	RADIUS	DELTA	CHORD	CHORD BEARING	LENGTH
C1	11509.16	1°47'00"	358.21	S89°46'54"E	358.22
C2	11409.16	0°34'14"	113.60	N89°38'22"E	113.61
C3	370.00	37°28'59"	237.76	S39°13'49"W	242.06
C4	270.00	69°39'29"	308.41	N55°19'03"E	328.26
C5	68704.96	0°05'37"	112.20	S00°30'56"E	112.20
C6	330.00	24°24'48"	139.55	N53°19'37"E	140.51
C7	310.00	30°07'05"	161.09	N35°32'53"E	162.95

ACREAGE BREAKDOWN

MAIN PARCEL NORTH	676.268 ACRES+/-
MAIN PARCEL SOUTH	496.167 ACRES+/-
TROUT CREEK PARCEL 1	0.676 ACRE+/-
TROUT CREEK PARCEL 2	0.330 ACRE+/-
TROUT CREEK PARCEL 3	0.267 ACRE+/-
DUKE HWY PARCEL 1	0.188 ACRE+/-
DUKE HWY PARCEL 2	0.113 ACRE+/-
DUKE HWY PARCEL 3	24.781 ACRES+/-
DUKE HWY PARCEL 4	19.922 ACRES+/-
WILLIAM'S ISLAND SE PARCEL	2.817 ACRES+/-
WILLIAM'S ISLAND SW PARCEL	10.766 ACRES+/-
WILLIAM'S ISLAND NORTH PARCEL	0.160 ACRE+/-
TOTAL ACREAGE	1,232.455 ACRES+/-

KEY MAP NOT TO SCALE





NOTE: SEE SHEETS 2 AND 3 FOR LEGAL DESCRIPTION

NOTES:

1.) BEARINGS SHOWN HEREON REFER TO THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, AS BEING S88°52'16"E.

2.) THIS PROPERTY IS SUBJECT TO EASEMENTS, RESERVATIONS OR RESTRICTIONS OF RECORD.

3.) DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF.

4.) THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

5.) THIS PROPERTY IS LOCATED IN FLOOD ZONE AE (ELEV 8 N.G.V.D. 29)(ELEV 6.8' N.A.V.D. 88), ZONE AE (ELEV 9-N.G.V.D. 29)(ELEV 7.8' N.A.V.D. 88), ZONE AE (ELEV 13.0 N.G.V.D. 29)(ELEV 11.8' N.A.V.D. 88), ZONE X (AREA OF 500 YEAR FLOOD) AND ZONE X (AREA OUTSIDE OF 500 YEAR FLOOD, PER F.I.R.M # 125124 0225C, DATED MARCH 15, 1994 AND ZONE A7 (ELEV 8 N.G.V.D. 29)(ELEV 6.8' N.A.V.D. 88), ZONE B (AREA BETWEEN THE LIMIT OF 100 YEAR AND 500 YEAR FLOOD) AND ZONE C (AREA OF MINIMAL FLOODING), PER F.I.R.M 125124 0250B, DATED SEPTEMBER 19, 1984.

6.) THE TOTAL AREA OF THE PROPERTY SURVEYED IS 1,232.455 ACRES, MORE OR LESS.

7.) IMPROVEMENTS CONSISTING OF BUILDING STRUCTURES, PERIMETER FENCES, PAVING AND ABOVE GROUND VISIBLE UTILITIES LOCATED ON AND ADJACENT TO THE PROPERTY HAVE BEEN LOCATED HEREON AS SHOWN. INTERIOR FENCES HAVE NOT BEEN LOCATED WITHIN THE SCOPE OF THIS SURVEY.

8.) THE LEGAL DESCRIPTION DESCRIBED HEREIN HAS BEEN PREPARED FROM PROPERTY DESCRIPTIONS PROVIDED BY CLIENT AND SUPPLEMENTED WITH PROPERTY DESCRIPTIONS OBTAINED FROM THE LEE COUNTY PROPERTY APPRAISER'S OFFICE. PROPERTY BOUNDARIES LOCATED ADJACENT TO PORTIONS OF TROUT CREEK AND THE CALOOSAHATCHEE RIVER HAVE BEEN LOCATED AND DESCRIBED RELATIVE TO THE MEAN HIGH WATER LINE WITH SAID MEAN HIGH WATER LINE BEING LOCATED AS PRESCRIBED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

9.) THE ELEVATION OF THE MEAN HIGH WATER LINE ALONG TROUT CREEK HAS BEEN DETERMINED TO BE 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988) AS BASED UPON A MEAN HIGH WATER TIDAL STUDY PERFORMED SEPTEMBER 5, 2007 THROUGH SEPTEMBER 7, 2007. THIS STUDY WAS BASED UPON 1983-2001 TIDAL EPOCH AND WAS APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

10.) THE ELEVATION OF THE MEAN HIGH WATER LINE IN THE CALOOSAHATCHEE RIVER ADJACENT TO WILLIAM'S ISLAND HAS BEEN DETERMINED TO BE 0.23' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988) AS BASED UPON TIDE INTERPOLATION POINT 1214 AS OBTAINED FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

CERTIFIED TO:

1. THE BONITA BAY GROUP

CERTIFICATION:

I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY OF THE HEREON DESCRIBED PROPERTY WAS SURVEYED UNDER MY RESPONSIBLE CHARGE ON 04/21/08. THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61G17-6, F.A.C. PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

5/21/08

THOMAS J. GARRIS, STATE OF FLORIDA, (L.S. #3741)
BBLS SURVEYORS & MAPPERS INC. (L.B. #5753)

EASEMENTS:

EASEMENTS IDENTIFIED IN THE PARCEL DESCRIPTIONS AND TITLE DOCUMENTS PROVIDED BY CLIENT HAVE BEEN LOCATED HEREON AS FOLLOWS:

GREENWELL PARCELS

1.) THE L.C.E.C. EASEMENT RECORDED IN O.R. 2546 AT PAGE 54 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS BLANKET IN NATURE AND APPLIES TO GREENWELL PARCEL 1 OVER ANY OVERHEAD OR UNDERGROUND POWER LINE LOCATION, WITH THE EASEMENT ROUTE BEING 10 FEET IN WIDTH. (NOT SHOWN)

2.) THE CONSERVATION EASEMENT RECORDED IN O.R. 3046 AT PAGE 3578, O.R. 4295 AT PAGE 3423 AND O.R. 4295 AT PAGE 3454, AS EFFECTED BY A PARTIAL RELEASE OF CONSERVATION EASEMENT 10/23/06 AND RECORDED AS INSTRUMENT #2006000412915, ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER THAT PORTION OF GREENWELL PARCEL 1 AS SHOWN HEREON (SHEET 3). (THE CONSERVATION EASEMENT REMAINS OVER ALL OF GREENWELL PARCEL 1 EXCEPT AS RELEASED IN O.R. 4295 AT PAGE 3423 AND O.R. 4295 AT PAGE 3454).

3.) THE EASEMENT FOR FLORIDA GAS TRANSMISSION COMPANY RECORDED IN O.R. 3215 AT PAGE 3698 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER THE WESTERLY PORTION OF PARCEL 2 AS SHOWN HEREON (SHEET 3).

4.) THE DEED OF CONSERVATION EASEMENT RECORDED IN O.R. 4295 AT PAGE 3454 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA IS LOCATED OVER A PORTION OF GREENWELL PARCEL 1 AS SHOWN HEREON. (SHEET 3). (THIS EASEMENT WAS RELEASED BY A PARTIAL RELEASE OF CONSERVATION EASEMENT RECORDED AS INSTRUMENT #2006000412915 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA).

5.) THE DEED OF CONSERVATION EASEMENT RECORDED IN O.R. 4295 AT PAGE 3423 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA AS LOCATED OVER A PORTION OF GREENWELL PARCEL 1, WAS RELEASED BY THE PARTIAL RELEASE OF CONSERVATION EASEMENT RECORDED IN INSTRUMENT #2006000412915 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

6.) THE L.C.E.C. EASEMENT RECORDED AS INSTRUMENT #2006000328925 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS BLANKET IN NATURE AND APPLIES TO GREENWELL PARCEL 1 OVER ANY OVERHEAD OR UNDERGROUND POWER LINE LOCATIONS WITH THE EASEMENT ROUTE BEING 16 FEET IN WIDTH. (NOT SHOWN)

7.) THE CONSERVATION EASEMENTS C-1 AND C-2 RECORDED IN INSTRUMENT #2005000092690 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, ARE LOCATED ON GREENWELL PARCEL 2 AS SHOWN HEREON. (SHEET 3).

EASEMENTS (CONTINUED)

OWL CREEK

1.) THE 30 FOOT WIDE ROADWAY EASEMENT RECORDED AS EXHIBIT B IN O.R. 1100 AT PAGE 645 AND O.R. 3348 AT PAGE 2582 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER ULRICH PARCEL 1 AS SHOWN HEREON. (SHEET 3)

ULRICH

1.) THE 30 FOOT WIDE ROADWAY EASEMENT RECORDED IN O.R. 1087 AT PAGE 233 AND CORRECTED IN O.R. 1100 AT PAGE 642, ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER ULRICH PARCEL 1 AS SHOWN HEREON. (SHEET 3)

2.) THE L.C.E.C. EASEMENTS RECORDED IN O.R. 1928 AT PAGE 2582 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, ARE LOCATED OVER PORTIONS OF ULRICH PARCEL 1 AS SHOWN HEREON. (SHEET 3)

3.) THE EASEMENT FOR INGRESS AND EGRESS OVER THE PAVED DRIVE REFERENCED IN THE WARRANTY DEED RECORDED IN O.R. 2037 AT PAGE 4776 IS LOCATED WESTERLY OF ULRICH PARCEL 2 AS SHOWN HEREON. (SHEET 6) THIS EASEMENT IS NOT LOCATED ON THE HEREON DESCRIBED PROPERTY.

4.) EASEMENT No. 1 (60.0 FEET WIDE) AS RECORDED IN THE SPECIAL WARRANTY DEED RECORDED AS INSTRUMENT #2006000405365 IS THE SAME AS EASEMENT 1 RECORDED IN O.R. 2619 AT PAGE 3907; EASEMENT 1 RECORDED IN O.R. 2841 AT PAGE 1222; EASEMENT 1 RECORDED IN O.R. 2941 AT PAGE 3561; EASEMENT 1 RECORDED IN O.R. 3136 AT PAGE 1849; EASEMENT 1 RECORDED IN O.R. 3136 AT PAGE 1847; EASEMENT 1 RECORDED IN O.R. 2841 AT PAGE 1219, ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND IS LOCATED ON AND ADJACENT TO THE WESTERLY BOUNDARY OF ULRICH PARCEL 2 AS SHOWN HEREON. (SHEET 6)

5.) EASEMENT No. 2 (60.0 FEET WIDE) AS RECORDED IN THE SPECIAL WARRANTY DEED RECORDED AS INSTRUMENT #2006000405365 IS THE SAME AS EASEMENT 2 RECORDED IN O.R. 2437 AT PAGE 2976; SCHEDULE A RECORDED IN O.R. 2464 AT PAGE 1973; EASEMENT 2 RECORDED IN O.R. 2619 AT PAGE 3907; EASEMENT 2 RECORDED IN O.R. 2841 AT PAGE 1222; EASEMENT 2 RECORDED IN O.R. 2941 AT PAGE 3561; EASEMENT 2 AS RECORDED IN O.R. 3136 AT PAGE 1849; EASEMENT 2 RECORDED IN O.R. 3136 AT PAGE 1847; EASEMENT 2 RECORDED IN O.R. 2841 AT PAGE 1219, ALL OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND IS LOCATED OVER PORTIONS OF ULRICH PARCEL 1 AS SHOWN HEREON. (SHEET 3)

6.) THE 30 FOOT WIDE ROADWAY EASEMENT RECORDED AS EXHIBIT B IN O.R. 1100 AT PAGE 645 AND O.R. 3348 AT PAGE 2582 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER ULRICH PARCEL 1 AS SHOWN HEREON. (SHEET 3)

EASEMENTS: (CONTINUED)

CAREY

1.) THE L.C.E.C. EASEMENT (6.0 FEET WIDE) RECORDED IN O.R. 474 AT PAGE 799 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER THE NORTHERLY 6.0 FEET OF THE CAREY PARCEL 3-A, 3-B AND 4, AND OVER THE NORTHERLY 6.0 FEET OF THE SAVIGNE PARCEL AND THE STANS FOUNDATION PARCEL AS SHOWN HEREON (SHEET 9)

2.) DUKE HIGHWAY, A 60.0 FOOT RIGHT OF WAY, HAS BEEN LOCATED AS SHOWN ON THE RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, PREPARED BY THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING, DATED MAY 1988. (SHEET 9)

3.) THE OVERHEAD UTILITY LINES CROSSING CAREY PARCEL 2A HAVE BEEN LOCATED HEREON AS SHOWN. (SHEET 4)

STANS FOUNDATION

1.) THE L.C.E.C. EASEMENT (8.0 FEET WIDE) RECORDED IN O.R. 3364 AT PAGE 35 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED ALONG THE NORTHERLY AND WESTERLY BOUNDARIES OF THIS PARCEL AS SHOWN HEREON. (SHEET 9)

SAVIGNE

1.) THE L.C.E.C. EASEMENT (6.0 FEET WIDE) RECORDED IN O.R. 474 AT PAGE 799 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, IS LOCATED OVER THE NORTHERLY 6.0 FEET OF THE CAREY PARCEL 3-A, 3-B AND 4, AND OVER THE NORTHERLY 6.0 FEET OF THE SAVIGNE PARCEL AND THE STANS FOUNDATION PARCEL AS SHOWN HEREON. (SHEET 9)

BOUNDARY SURVEY

NORTH RIVER VILLAGE

A PORTION OF SECTIONS 16, 17, 19, 20 AND 21, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE:	5/02/08
F.B./PG:	427/15-20
DRAWN BY:	BUD
APPROVED:	TJG
SCALE:	1" = 600'

Z:\PROJECTS\2007\NORTH RIVER\dwg\MHW SURVEY 0508.dwg 5/21/2008 10:52:46 AM EDT

LEGAL DESCRIPTION

MAIN PARCEL NORTH

A PORTION OF SECTIONS 17, 18, AND 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SECTION 18, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.88°52'16"E., ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 18, FOR A DISTANCE OF 1377.37 FEET; THENCE RUN S.00°17'01"W., FOR A DISTANCE OF 50.00 FEET, TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 78, A 100.0 FOOT RIGHT-OF-WAY, AS THE SAME IS SHOWN ON THE STATE OF FLORIDA STATE ROAD DEPARTMENT RIGHT-OF-WAY MAP FOR STATE ROAD S-78, SECTION 12560-2604, SHEET 2, DATED NOVEMBER 1, 1965, AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN S.88°52'16"E., ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 78, FOR A DISTANCE OF 1200.00 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 18; THENCE RUN S.88°52'29"E., ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 78, FOR A DISTANCE OF 2,396.18 FEET TO A POINT ON A CIRCULAR CURVE, CONCAVE TO THE NORTH, FROM WHICH THE RADIUS POINT BEARS N.01°06'36"E., A DISTANCE OF 11,509.16 FEET THEREFROM; THENCE RUN EASTERLY, ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 78 AND ALONG THE ARC OF SAID CURVE TO THE LEFT, HAVING A RADIUS OF 11,509.16 FEET, THROUGH A CENTRAL ANGLE OF 01°47'00", SUBTENDED BY A CHORD OF 358.21 FEET AT A BEARING OF S.89°46'54"E., FOR A DISTANCE OF 358.22 FEET TO THE END OF SAID CURVE; THENCE RUN N.89°20'19"E., ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF COUNTY ROAD 78, FOR A DISTANCE OF 2,141.93 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE WESTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN SOUTHERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. S.36°10'09"E. FOR A DISTANCE OF 53.81 FEET;
2. THENCE RUN S.43°06'55"E. FOR A DISTANCE OF 67.65 FEET;
3. THENCE RUN S.48°29'31"E. FOR A DISTANCE OF 70.71 FEET;
4. THENCE RUN S.51°50'02"E. FOR A DISTANCE OF 75.94 FEET;
5. THENCE RUN S.56°12'53"E. FOR A DISTANCE OF 57.50 FEET;
6. THENCE RUN S.05°54'57"E. FOR A DISTANCE OF 30.73 FEET;
7. THENCE RUN S.32°24'39"E. FOR A DISTANCE OF 41.09 FEET;
8. THENCE RUN S.10°10'54"E. FOR A DISTANCE OF 34.12 FEET;
9. THENCE RUN S.17°31'27"E. FOR A DISTANCE OF 34.28 FEET;
10. THENCE RUN S.11°06'57"E. FOR A DISTANCE OF 134.65 FEET;
11. THENCE RUN S.20°34'42"E. FOR A DISTANCE OF 74.05 FEET;
12. THENCE RUN S.06°29'37"W. FOR A DISTANCE OF 66.42 FEET;
13. THENCE RUN S.35°27'58"W. FOR A DISTANCE OF 43.42 FEET;
14. THENCE RUN S.34°32'07"W. FOR A DISTANCE OF 116.58 FEET;
15. THENCE RUN S.19°36'55"W. FOR A DISTANCE OF 2.94 FEET;
16. THENCE RUN S.09°42'59"E. FOR A DISTANCE OF 46.32 FEET;
17. THENCE RUN S.19°18'04"E. FOR A DISTANCE OF 117.18 FEET;
18. THENCE RUN S.12°10'24"E. FOR A DISTANCE OF 53.57 FEET;
19. THENCE RUN S.13°33'27"E. FOR A DISTANCE OF 137.76 FEET;
20. THENCE RUN S.10°23'04"E. FOR A DISTANCE OF 35.93 FEET;
21. THENCE RUN S.03°40'39"E. FOR A DISTANCE OF 46.26 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 116.00 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17; THENCE RUN S.89°42'51"E., ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 1,324.22 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE WESTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN SOUTHERLY AND WESTERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. THENCE RUN S.00°16'30"E. FOR A DISTANCE OF 33.56 FEET;
2. THENCE RUN S.08°52'37"E. FOR A DISTANCE OF 45.96 FEET;
3. THENCE RUN S.00°43'10"W. FOR A DISTANCE OF 52.94 FEET;
4. THENCE RUN S.12°51'54"W. FOR A DISTANCE OF 20.90 FEET;
5. THENCE RUN S.36°40'02"W. FOR A DISTANCE OF 65.35 FEET;
6. THENCE RUN S.41°45'33"W. FOR A DISTANCE OF 71.75 FEET;
7. THENCE RUN S.61°28'52"W. FOR A DISTANCE OF 78.30 FEET;
8. THENCE RUN S.24°57'19"W. FOR A DISTANCE OF 76.83 FEET;
9. THENCE RUN S.26°34'38"W. FOR A DISTANCE OF 37.67 FEET;
10. THENCE RUN S.08°44'01"W. FOR A DISTANCE OF 42.77 FEET;
11. THENCE RUN S.02°33'28"W. FOR A DISTANCE OF 36.32 FEET;
12. THENCE RUN S.01°02'32"E. FOR A DISTANCE OF 17.82 FEET;
13. THENCE RUN S.58°44'04"E. FOR A DISTANCE OF 111.11 FEET;
14. THENCE RUN S.13°28'43"E. FOR A DISTANCE OF 26.47 FEET;
15. THENCE RUN N.60°51'56"E. FOR A DISTANCE OF 19.30 FEET;
16. THENCE RUN N.74°57'23"E. FOR A DISTANCE OF 39.94 FEET;
17. THENCE RUN S.53°28'24"E. FOR A DISTANCE OF 45.18 FEET;
18. THENCE RUN S.44°37'53"E. FOR A DISTANCE OF 34.26 FEET;
19. THENCE RUN S.12°54'49"E. FOR A DISTANCE OF 47.86 FEET;
20. THENCE RUN S.18°37'11"E. FOR A DISTANCE OF 33.50 FEET;
21. THENCE RUN S.21°16'36"E. FOR A DISTANCE OF 45.69 FEET;
22. THENCE RUN S.43°28'01"E. FOR A DISTANCE OF 67.85 FEET;
23. THENCE RUN S.46°55'16"E. FOR A DISTANCE OF 68.00 FEET;
24. THENCE RUN S.43°52'08"E. FOR A DISTANCE OF 45.84 FEET;
25. THENCE RUN S.05°18'27"W. FOR A DISTANCE OF 45.55 FEET;
26. THENCE RUN S.28°01'18"W. FOR A DISTANCE OF 89.73 FEET;
27. THENCE RUN S.22°36'55"W. FOR A DISTANCE OF 106.24 FEET;
28. THENCE RUN S.00°42'48"E. FOR A DISTANCE OF 79.90 FEET;
29. THENCE RUN S.02°37'39"E. FOR A DISTANCE OF 35.35 FEET;
30. THENCE RUN S.04°29'33"W. FOR A DISTANCE OF 62.07 FEET;
31. THENCE RUN S.11°04'14"W. FOR A DISTANCE OF 74.28 FEET;
32. THENCE RUN S.03°56'59"E. FOR A DISTANCE OF 82.01 FEET;
33. THENCE RUN S.21°31'49"W. FOR A DISTANCE OF 53.37 FEET;
34. THENCE RUN S.22°27'51"W. FOR A DISTANCE OF 30.19 FEET;
35. THENCE RUN S.23°44'59"W. FOR A DISTANCE OF 63.95 FEET;
36. THENCE RUN S.11°47'51"W. FOR A DISTANCE OF 46.49 FEET;
37. THENCE RUN S.01°17'40"W. FOR A DISTANCE OF 35.96 FEET;
38. THENCE RUN S.21°38'25"E. FOR A DISTANCE OF 19.13 FEET;
39. THENCE RUN S.43°48'46"E. FOR A DISTANCE OF 34.41 FEET;
40. THENCE RUN S.51°46'52"E. FOR A DISTANCE OF 35.96 FEET;
41. THENCE RUN S.53°03'15"E. FOR A DISTANCE OF 35.61 FEET;
42. THENCE RUN S.51°47'44"E. FOR A DISTANCE OF 93.56 FEET;
43. THENCE RUN S.56°21'50"E. FOR A DISTANCE OF 70.66 FEET;
44. THENCE RUN S.57°58'41"E. FOR A DISTANCE OF 66.80 FEET;
45. THENCE RUN S.34°49'25"E. FOR A DISTANCE OF 8.46 FEET;
46. THENCE RUN S.42°59'42"E. FOR A DISTANCE OF 93.49 FEET;
47. THENCE RUN S.16°19'19"W. FOR A DISTANCE OF 17.14 FEET;
48. THENCE RUN S.25°52'42"W. FOR A DISTANCE OF 85.43 FEET;
49. THENCE RUN S.49°18'53"W. FOR A DISTANCE OF 26.38 FEET;
50. THENCE RUN S.58°09'54"W. FOR A DISTANCE OF 27.39 FEET;
51. THENCE RUN S.62°40'17"W. FOR A DISTANCE OF 55.43 FEET;
52. THENCE RUN S.77°32'06"W. FOR A DISTANCE OF 79.64 FEET;
53. THENCE RUN S.70°12'43"W. FOR A DISTANCE OF 56.19 FEET;
54. THENCE RUN N.82°07'16"W. FOR A DISTANCE OF 15.14 FEET;
55. THENCE RUN S.72°38'43"W. FOR A DISTANCE OF 76.61 FEET;
56. THENCE RUN S.69°11'41"W. FOR A DISTANCE OF 80.39 FEET;
57. THENCE RUN S.60°24'53"W. FOR A DISTANCE OF 60.63 FEET;
58. THENCE RUN S.63°08'30"W. FOR A DISTANCE OF 75.85 FEET;
59. THENCE RUN S.71°00'36"W. FOR A DISTANCE OF 95.53 FEET;
60. THENCE RUN N.89°35'55"W. FOR A DISTANCE OF 63.89 FEET;
61. THENCE RUN N.68°42'04"W. FOR A DISTANCE OF 92.24 FEET;
62. THENCE RUN N.46°34'30"W. FOR A DISTANCE OF 61.36 FEET;
63. THENCE RUN N.67°43'16"W. FOR A DISTANCE OF 36.09 FEET;
64. THENCE RUN N.36°15'19"W. FOR A DISTANCE OF 38.30 FEET;
65. THENCE RUN S.86°32'47"W. FOR A DISTANCE OF 64.26 FEET;
66. THENCE RUN S.63°54'07"W. FOR A DISTANCE OF 128.56 FEET;
67. THENCE RUN S.50°53'18"W. FOR A DISTANCE OF 105.01 FEET;
68. THENCE RUN S.65°36'47"W. FOR A DISTANCE OF 86.01 FEET;
69. THENCE RUN S.61°50'28"W. FOR A DISTANCE OF 64.22 FEET;
70. THENCE RUN N.59°33'44"W. FOR A DISTANCE OF 103.31 FEET;
71. THENCE RUN N.61°54'46"W. FOR A DISTANCE OF 92.43 FEET;
72. THENCE RUN N.85°40'28"W. FOR A DISTANCE OF 102.13 FEET;
73. THENCE RUN S.61°25'39"W. FOR A DISTANCE OF 46.74 FEET;
74. THENCE RUN S.34°18'28"W. FOR A DISTANCE OF 99.33 FEET;
75. THENCE RUN S.30°38'22"W. FOR A DISTANCE OF 82.82 FEET;
76. THENCE RUN S.42°40'26"W. FOR A DISTANCE OF 88.85 FEET;
77. THENCE RUN S.48°12'09"W. FOR A DISTANCE OF 64.28 FEET;
78. THENCE RUN S.62°27'52"W. FOR A DISTANCE OF 58.29 FEET;
79. THENCE RUN S.78°22'21"W. FOR A DISTANCE OF 25.97 FEET;
80. THENCE RUN S.72°00'29"W. FOR A DISTANCE OF 73.23 FEET;
81. THENCE RUN S.87°31'05"W. FOR A DISTANCE OF 100.11 FEET;
82. THENCE RUN N.79°08'09"W. FOR A DISTANCE OF 90.57 FEET;
83. THENCE RUN S.84°57'21"W. FOR A DISTANCE OF 73.22 FEET;
84. THENCE RUN S.72°09'05"W. FOR A DISTANCE OF 37.57 FEET;
85. THENCE RUN S.46°59'01"W. FOR A DISTANCE OF 125.71 FEET;
86. THENCE RUN S.26°17'56"W. FOR A DISTANCE OF 95.71 FEET;
87. THENCE RUN S.30°34'38"W. FOR A DISTANCE OF 31.22 FEET;
88. THENCE RUN S.17°56'28"W. FOR A DISTANCE OF 102.10 FEET;
89. THENCE RUN S.29°14'51"W. FOR A DISTANCE OF 52.68 FEET;
90. THENCE RUN S.39°49'36"W. FOR A DISTANCE OF 12.34 FEET;
91. THENCE RUN N.47°39'02"W. FOR A DISTANCE OF 85.05 FEET;
92. THENCE RUN S.75°09'36"W. FOR A DISTANCE OF 43.70 FEET;
93. THENCE RUN N.58°58'18"W. FOR A DISTANCE OF 49.76 FEET;
94. THENCE RUN S.81°10'11"W. FOR A DISTANCE OF 62.60 FEET;
95. THENCE RUN N.79°26'54"W. FOR A DISTANCE OF 70.80 FEET;
96. THENCE RUN N.82°24'00"W. FOR A DISTANCE OF 60.20 FEET;
97. THENCE RUN N.55°08'40"W. FOR A DISTANCE OF 46.06 FEET;
98. THENCE RUN S.84°12'49"W. FOR A DISTANCE OF 104.51 FEET;
99. THENCE RUN S.71°05'32"W. FOR A DISTANCE OF 105.04 FEET;
100. THENCE RUN S.62°08'17"W. FOR A DISTANCE OF 67.02 FEET;
101. THENCE RUN S.67°41'25"W. FOR A DISTANCE OF 63.88 FEET;
102. THENCE RUN S.65°12'54"W. FOR A DISTANCE OF 42.04 FEET;
103. THENCE RUN S.66°13'26"W. FOR A DISTANCE OF 54.32 FEET;
104. THENCE RUN S.75°59'09"W. FOR A DISTANCE OF 29.68 FEET;
105. THENCE RUN S.71°28'03"W. FOR A DISTANCE OF 48.27 FEET;
106. THENCE RUN S.72°23'04"W. FOR A DISTANCE OF 26.44 FEET;
107. THENCE RUN S.85°21'17"W. FOR A DISTANCE OF 23.99 FEET;
108. THENCE RUN N.75°49'37"W. FOR A DISTANCE OF 33.11 FEET;
109. THENCE RUN S.75°16'14"W. FOR A DISTANCE OF 22.22 FEET;
110. THENCE RUN N.12°52'51"E. FOR A DISTANCE OF 28.50 FEET;
111. THENCE RUN N.28°56'37"E. FOR A DISTANCE OF 24.27 FEET;
112. THENCE RUN N.21°22'40"E. FOR A DISTANCE OF 23.80 FEET;
113. THENCE RUN N.28°25'39"E. FOR A DISTANCE OF 34.34 FEET;
114. THENCE RUN N.06°57'10"E. FOR A DISTANCE OF 76.76 FEET;
115. THENCE RUN N.13°28'15"W. FOR A DISTANCE OF 38.30 FEET;
116. THENCE RUN N.08°39'14"W. FOR A DISTANCE OF 38.54 FEET;
117. THENCE RUN N.00°16'27"E. FOR A DISTANCE OF 34.92 FEET;
118. THENCE RUN N.18°34'53"E. FOR A DISTANCE OF 63.15 FEET;
119. THENCE RUN N.39°54'02"E. FOR A DISTANCE OF 44.70 FEET;
120. THENCE RUN N.18°34'53"E. FOR A DISTANCE OF 63.15 FEET;
121. THENCE RUN N.52°36'40"E. FOR A DISTANCE OF 36.61 FEET;
122. THENCE RUN N.74°00'42"W. FOR A DISTANCE OF 81.06 FEET;
123. THENCE RUN S.47°11'24"W. FOR A DISTANCE OF 44.93 FEET;
124. THENCE RUN S.56°55'47"W. FOR A DISTANCE OF 60.22 FEET;
125. THENCE RUN N.85°08'24"W. FOR A DISTANCE OF 74.22 FEET;
126. THENCE RUN S.23°13'08"W. FOR A DISTANCE OF 54.30 FEET;
127. THENCE RUN S.30°08'07"W. FOR A DISTANCE OF 18.19 FEET;
128. THENCE RUN S.04°15'46"E. FOR A DISTANCE OF 55.28 FEET;
129. THENCE RUN S.00°54'46"W. FOR A DISTANCE OF 49.18 FEET;
130. THENCE RUN S.37°36'43"W. FOR A DISTANCE OF 51.79 FEET;
131. THENCE RUN S.55°46'37"W. FOR A DISTANCE OF 49.29 FEET;
132. THENCE RUN S.33°10'49"W. FOR A DISTANCE OF 35.30 FEET;
133. THENCE RUN S.46°22'21"W. FOR A DISTANCE OF 65.91 FEET;
134. THENCE RUN S.05°25'59"W. FOR A DISTANCE OF 22.96 FEET;
135. THENCE RUN S.03°12'27"W. FOR A DISTANCE OF 29.13 FEET;
136. THENCE RUN S.13°17'50"W. FOR A DISTANCE OF 30.36 FEET;
137. THENCE RUN S.22°44'33"W. FOR A DISTANCE OF 39.04 FEET;
138. THENCE RUN S.66°39'28"W. FOR A DISTANCE OF 31.56 FEET;
139. THENCE RUN N.78°15'49"W. FOR A DISTANCE OF 42.32 FEET;
140. THENCE RUN N.88°38'12"W. FOR A DISTANCE OF 39.12 FEET;
141. THENCE RUN S.80°47'16"W. FOR A DISTANCE OF 49.09 FEET;
142. THENCE RUN S.50°38'17"W. FOR A DISTANCE OF 21.44 FEET;
143. THENCE RUN S.45°42'19"W. FOR A DISTANCE OF 27.32 FEET;
144. THENCE RUN S.36°53'04"W. FOR A DISTANCE OF 23.27 FEET;
145. THENCE RUN S.03°22'04"E. FOR A DISTANCE OF 27.73 FEET;
146. THENCE RUN S.05°02'54"W. FOR A DISTANCE OF 30.08 FEET;
147. THENCE RUN S.57°35'13"W. FOR A DISTANCE OF 27.90 FEET;
148. THENCE RUN S.68°40'32"W. FOR A DISTANCE OF 22.60 FEET;
149. THENCE RUN S.54°20'25"W. FOR A DISTANCE OF 27.17 FEET;
150. THENCE RUN S.50°09'23"W. FOR A DISTANCE OF 65.54 FEET;
151. THENCE RUN S.73°16'33"W. FOR A DISTANCE OF 34.34 FEET;
152. THENCE RUN S.66°13'34"W. FOR A DISTANCE OF 23.80 FEET;
153. THENCE RUN S.73°47'30"W. FOR A DISTANCE OF 24.27 FEET;
154. THENCE RUN S.57°43'45"W. FOR A DISTANCE OF 28.50 FEET;
155. THENCE RUN N.80°35'16"W. FOR A DISTANCE OF 26.03 FEET;
156. THENCE RUN S.64°20'44"W. FOR A DISTANCE OF 27.66 FEET;
157. THENCE RUN S.67°59'16"W. FOR A DISTANCE OF 34.14 FEET;
158. THENCE RUN S.84°22'39"W. FOR A DISTANCE OF 22.64 FEET;
159. THENCE RUN S.61°36'34"W. FOR A DISTANCE OF 54.51 FEET;
160. THENCE RUN S.38°23'32"W. FOR A DISTANCE OF 10.59 FEET;
161. THENCE RUN N.89°16'27"W. FOR A DISTANCE OF 20.26 FEET TO A POINT AT THE MOUTH OF OWL CREEK; THENCE RUN S.78°48'07"W., ALONG THE WATERS OF TROUT CREEK, CROSSING THE MOUTH OF OWL CREEK, FOR A DISTANCE OF 322.10 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE NORTHWESTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN SOUTHWESTERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. THENCE RUN S.38°49'39"W. FOR A DISTANCE OF 25.77 FEET;
2. THENCE RUN S.77°21'20"W. FOR A DISTANCE OF 19.54 FEET;
3. THENCE RUN N.72°22'06"W. FOR A DISTANCE OF 24.27 FEET;
4. THENCE RUN S.60°33'03"W. FOR A DISTANCE OF 36.82 FEET;
5. THENCE RUN S.51°52'41"W. FOR A DISTANCE OF 25.98 FEET TO A POINT AT THE MOUTH OF AN UNNAMED TRIBUTARY FROM TROUT CREEK; THENCE RUN S.55°25'15"W., ALONG THE WATERS OF TROUT CREEK, CROSSING THE MOUTH OF SAID TRIBUTARY, FOR A DISTANCE OF 105.88 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE NORTHWESTERLY BANK OF TROUT CREEK, HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN SOUTHWESTERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. THENCE RUN S.41°29'04"W. FOR A DISTANCE OF 17.67 FEET;
2. THENCE RUN S.44°35'57"W. FOR A DISTANCE OF 63.36 FEET;
3. THENCE RUN S.17°51'39"W. FOR A DISTANCE OF 64.26 FEET;
4. THENCE RUN S.09°10'03"W. FOR A DISTANCE OF 72.96 FEET;
5. THENCE RUN S.04°23'39"W. FOR A DISTANCE OF 26.59 FEET;
6. THENCE RUN S.04°50'52"E. FOR A DISTANCE OF 13.59 FEET;
7. THENCE RUN S.10°42'03"W. FOR A DISTANCE OF 28.89 FEET;
8. THENCE RUN S.11°57'24"W. FOR A DISTANCE OF 50.36 FEET;
9. THENCE RUN S.16°00'12"W. FOR A DISTANCE OF 33.43 FEET;
10. THENCE RUN S.19°03'59"W. FOR A DISTANCE OF 20.90 FEET;
11. THENCE RUN S.14°12'59"W. FOR A DISTANCE OF 28.58 FEET;
12. THENCE RUN S.11°40'12"W. FOR A DISTANCE OF 28.88 FEET;
13. THENCE RUN S.14°22'04"W. FOR A DISTANCE OF 24.31 FEET;
14. THENCE RUN S.22°28'18"W. FOR A DISTANCE OF 31.24 FEET;
15. THENCE RUN S.18°12'44"W. FOR A DISTANCE OF 36.03 FEET;
16. THENCE RUN S.14°07'55"W. FOR A DISTANCE OF 19.02 FEET;
17. THENCE RUN S.19°18'50"W. FOR A DISTANCE OF 16.08 FEET;
18. THENCE RUN S.19°07'38"W. FOR A DISTANCE OF 59.80 FEET;
19. THENCE RUN S.06°32'49"W. FOR A DISTANCE OF 53.56 FEET;
20. THENCE RUN S.22°49'39"W. FOR A DISTANCE OF 61.99 FEET;
21. THENCE RUN S.16°30'59"W. FOR A DISTANCE OF 30.36 FEET TO A POINT AT THE MOUTH OF AN UNNAMED TRIBUTARY FROM TROUT CREEK; THENCE RUN S.20°49'04"W., ALONG THE WATERS OF TROUT CREEK, CROSSING THE MOUTH OF SAID TRIBUTARY, FOR A DISTANCE OF 116.82 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE WESTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN S.05°06'07"W., ALONG SAID MEAN HIGH WATER LINE, FOR A DISTANCE OF 18.58 FEET TO A POINT OF THE APPROXIMATE TOP OF BANK OF AN APPARENT MAN-MADE DITCH AS DESCRIBED IN INSTRUMENT NUMBER 2006000047705 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN NORTHWESTERLY, ALONG SAID APPROXIMATE TOP OF BANK, THE FOLLOWING COURSES:

1. N.17°16'30"W. FOR A DISTANCE OF 22.73 FEET;
2. THENCE RUN N.47°23'44"W. FOR A DISTANCE OF 64.61 FEET;
3. THENCE RUN N.24°12'11"W. FOR A DISTANCE OF 91.43 FEET;
4. THENCE RUN N.03°48'12"W. FOR A DISTANCE OF 29.62 FEET;
5. THENCE RUN N.06°50'11"W. FOR A DISTANCE OF 34.61 FEET;
6. THENCE RUN N.08°54'45"W. FOR A DISTANCE OF 28.95 FEET;
7. THENCE RUN N.12°43'52"W. FOR A DISTANCE OF 39.18 FEET;
8. THENCE RUN N.28°20'46"W. FOR A DISTANCE OF 39.90 FEET;
9. THENCE RUN N.02°05'08"E. FOR A DISTANCE OF 30.67 FEET;
10. THENCE RUN N.45°59'51"W. FOR A DISTANCE OF 43.84 FEET;
11. THENCE RUN N.40°53'39"W. FOR A DISTANCE OF 33.01 FEET;
12. THENCE RUN N.53°48'26"W. FOR A DISTANCE OF 60.20 FEET;
13. THENCE RUN N.75°05'44"W. FOR A DISTANCE OF 54.64 FEET;
14. THENCE RUN N.71°07'07"W. FOR A DISTANCE OF 40.46 FEET;
15. THENCE RUN N.62°42'59"W. FOR A DISTANCE OF 34.22 FEET;
16. THENCE RUN N.66°53'00"W. FOR A DISTANCE OF 51.84 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 18; THENCE RUN N.00°17'01"E., ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 18, FOR A DISTANCE OF 1,177.03 FEET TO THE SOUTHEAST CORNER OF PARCEL 1 AS DESCRIBED IN INSTRUMENT # 2006000467701 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN N.88°52'26"W., ALONG THE SOUTH LINE OF SAID PARCEL 1, FOR A DISTANCE OF 1,200.01 FEET TO THE SOUTHEAST CORNER OF PARCEL 2 AS DESCRIBED IN SAID INSTRUMENT # 2006000467701; THENCE RUN N.88°52'26"W., ALONG THE SOUTH LINE OF SAID PARCEL 2, FOR A DISTANCE OF 1,289.59 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF STATE ROAD 31 AS THE SAME IS SHOWN ON THE STATE OF FLORIDA STATE ROAD DEPARTMENT RIGHT-OF-WAY MAP, SECTION No. 12620-2150, DATED DECEMBER 2, 1958; THENCE RUN N.00°26'33"W., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR A DISTANCE OF 2,450.06 FEET TO A POINT ON A CIRCULAR CURVE, CONCAVE TO THE EAST, FROM WHICH THE RADIUS POINT BEARS N.89°26'15"E., A DISTANCE OF 68,704.96 FEET THEREFROM; THENCE RUN NORTHERLY, ALONG SAID EASTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 68,704.96 FEET, THROUGH A CENTRAL ANGLE OF 00°05'33", SUBTENDED BY A CHORD OF 112.20 FEET AT A BEARING OF N.00°30'56"W., FOR A DISTANCE OF 112.20 FEET TO THE SOUTHWEST CORNER OF THE PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 3129 AT PAGE 192 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN S.88°51'20"E., ALONG THE SOUTHERLY BOUNDARY OF SAID PARCEL, FOR A DISTANCE OF 1,322.57 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL; THENCE RUN N.00°17'01"E., ALONG THE EAST BOUNDARY OF SAID PARCEL, FOR A DISTANCE OF 1,314.76 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 676.268 ACRES, MORE OR LESS.

AND

MAIN PARCEL SOUTH

A PORTION OF SECTIONS 16, 17, 18, AND 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 1345.75 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17; THENCE RUN S.89°42'51"E., ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 681 FEET TO THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE S.89°42'51"E., ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 1268.06 FEET TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17; THENCE RUN S.00°25'09"W., ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 1,340.40 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 17; THENCE RUN S.89°56'37"E., ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 1,336.84 FEET TO THE WEST QUARTER CORNER OF SECTION 16, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN N.89°59'02"E., ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 1,986.81 FEET TO THE NORTHWEST CORNER OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 16; THENCE RUN S.00°23'46"W., ALONG THE WEST LINE OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 1,337.98 FEET TO THE SOUTHWEST CORNER OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 16;

THENCE RUN S.89°55'52"E., ALONG THE SOUTH LINE OF THE EAST HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 602.28 FEET TO A POINT 60.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16; THENCE RUN S.00°23'49"W., PARALLEL WITH THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 653.59 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF DUKE HIGHWAY, AS THE SAME IS SHOWN ON THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, DATED MAY OF 1988, AND A POINT ON A CIRCULAR CURVE, CONCAVE TO THE SOUTHEAST, FROM WHICH THE RADIUS POINT BEARS S.32°01'41"E., A DISTANCE OF 370.00 FEET THEREFROM; THENCE RUN SOUTHWESTERLY, ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY AND ALONG THE ARC OF SAID CURVE TO THE LEFT, HAVING A RADIUS OF 370.00 FEET, THROUGH A CENTRAL ANGLE OF 37°28'59", SUBTENDED BY A CHORD OF 237.76 FEET AT A BEARING OF S.39°13'49"W., FOR A DISTANCE OF 242.06 FEET TO THE END OF SAID CURVE; THENCE RUN S.20°29'19"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY FOR A DISTANCE OF 314.11 FEET TO THE BEGINNING OF A TANGENTIAL CIRCULAR CURVE, CONCAVE TO THE NORTHWEST; THENCE RUN SOUTHWESTERLY, ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY AND ALONG THE ARC OF SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 270.00 FEET, THROUGH A CENTRAL ANGLE OF 69°39'29", SUBTENDED BY A CHORD OF 308.41 FEET AT A BEARING OF S.55°19'03"W., FOR A DISTANCE OF 328.26 FEET TO THE END OF SAID CURVE; THENCE RUN N.89°50'47"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY, FOR A DISTANCE OF 2,079.72 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16; THENCE RUN N.89°40'34"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY FOR A DISTANCE OF 2,006.87 FEET TO A POINT ON THE EAST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 17; THENCE RUN N.00°26'05"E., ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 635.18 FEET TO THE NORTH EAST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 17; THENCE RUN N.89°44'35"W., ALONG TH

TROUT CREEK PARCEL 2

A PORTION OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 110.80 FEET TO THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 375.10 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE EASTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN NORTHWESTERLY AND NORTHEASTERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. N.07°00'16"W. FOR A DISTANCE OF 13.94 FEET;
2. THENCE RUN N.08°53'41"W. FOR A DISTANCE OF 74.68 FEET;
3. THENCE RUN N.27°03'42"W. FOR A DISTANCE OF 78.27 FEET;
4. THENCE RUN N.01°16'08"E. FOR A DISTANCE OF 49.57 FEET;
5. THENCE RUN N.14°47'17"E. FOR A DISTANCE OF 26.08 FEET;
6. THENCE RUN N.07°01'06"W. FOR A DISTANCE OF 34.84 FEET;
7. THENCE RUN N.36°01'53"W. FOR A DISTANCE OF 63.76 FEET;
8. THENCE RUN N.32°34'33"E. FOR A DISTANCE OF 30.76 FEET;
9. THENCE RUN N.69°47'09"E. FOR A DISTANCE OF 50.01 FEET;
10. THENCE RUN N.58°34'46"E. FOR A DISTANCE OF 26.23 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 0.330 ACRES, MORE OR LESS.

AND

TROUT CREEK PARCEL 3

A PORTION OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 709.29 FEET TO THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE S.00°26'50"W., ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 17, FOR A DISTANCE OF 315.27 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE EASTERLY BANK OF TROUT CREEK HAVING ELEVATION 0.03' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988); THENCE RUN NORTHWESTERLY AND NORTHEASTERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. N.18°32'19"W. FOR A DISTANCE OF 19.22 FEET;
2. THENCE RUN N.18°24'10"W. FOR A DISTANCE OF 59.45 FEET;
3. THENCE RUN N.21°57'41"W. FOR A DISTANCE OF 115.15 FEET;
4. THENCE RUN N.05°14'54"E. FOR A DISTANCE OF 36.20 FEET;
5. THENCE RUN N.34°58'19"E. FOR A DISTANCE OF 113.52 FEET;
6. THENCE RUN N.23°05'56"E. FOR A DISTANCE OF 5.17 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 0.267 ACRES, MORE OR LESS.

AND

DUKE HIGHWAY PARCEL 1

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 43 SOUTH, RANGE 26 EAST; THENCE RUN N.00°23'49"E., ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 471.06 FEET TO THE NORTHEAST CORNER OF THAT PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 3180 AT PAGE 219 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE RUN S.89°23'44"W., ALONG THE NORTHERLY BOUNDARY OF SAID PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3180 AT PAGE 219, FOR A DISTANCE OF 60.01 FEET TO A POINT THAT IS 60.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16 AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE S.89°23'44"W. ALONG THE NORTHERLY BOUNDARY OF SAID PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3180, AT PAGE 219, FOR A DISTANCE OF 96.74 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF DUKE HIGHWAY, AS THE SAME IS SHOWN ON THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, DATED MAY 1988; THENCE RUN N.20°29'19"E., ALONG SAID EASTERLY RIGHT-OF-WAY LINE, FOR A DISTANCE OF 11.60 FEET TO THE BEGINNING OF A TANGENTIAL CIRCULAR CURVE, CONCAVE TO THE SOUTHEAST; THENCE RUN NORTHEASTERLY, ALONG SAID EASTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 310.00 FEET, THROUGH A CENTRAL ANGLE OF 30°07'05", SUBTENDED BY A CHORD OF 161.09 FEET AT A BEARING OF N.35°32'53"E., FOR A DISTANCE OF 162.95 FEET TO A POINT 60.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16; THENCE RUN S.00°23'49"W., PARALLEL WITH THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 140.91 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 0.183 ACRE, MORE OR LESS.

AND

DUKE HIGHWAY PARCEL 2

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 43 SOUTH, RANGE 26 EAST; THENCE RUN N.89°50'47"W., ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 297.43 FEET TO A POINT ON THE WESTERLY BOUNDARY OF THAT PARCEL OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 3180 AT PAGE 219 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE N.89°50'47"W., ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, FOR A DISTANCE OF 134.38 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF DUKE HIGHWAY, AS THE SAME IS SHOWN ON THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, DATED MAY 1988, THE SAME BEING A POINT ON A CIRCULAR CURVE, CONCAVE TO THE NORTHWEST, FROM WHICH THE RADIUS POINT BEARS N.24°27'59"W., A DISTANCE OF 330.00 FEET THEREFROM; THENCE RUN NORTHEASTERLY, ALONG SAID EASTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE TO THE LEFT, HAVING A RADIUS OF 330.00 FEET, THROUGH A CENTRAL ANGLE OF 24°24'48", SUBTENDED BY A CHORD OF 139.55 FEET AT A BEARING OF N.53°19'37"E., FOR A DISTANCE OF 140.61 FEET TO A POINT ON THE WESTERLY BOUNDARY OF SAID PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3180 AT PAGE 219; THENCE RUN S.15°01'01"E., ALONG THE WESTERLY BOUNDARY OF SAID PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3180 AT PAGE 219, FOR A DISTANCE OF 86.67 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 0.113 ACRE, MORE OR LESS.

AND

DUKE HIGHWAY PARCEL 3

A PORTION OF GOVERNMENT LOT 1 OF SECTION 20, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°23'54"W., ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 20, FOR A DISTANCE OF 30.00 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF DUKE HIGHWAY AS THE SAME IS SHOWN ON THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, DATED MAY OF 1988; THENCE RUN N.89 40'34"W., ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, PARALLEL WITH AND 30.00 FEET SOUTH OF THE NORTH LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20, FOR A DISTANCE OF 1,350.00 FEET TO A POINT 1350.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE EAST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20 AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN S.00°23'54"W., PARALLEL WITH THE EAST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20, FOR A DISTANCE OF 734.86 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF CANAL 43, AS THE SAME IS SHOWN ON THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT RIGHT-OF-WAY MAP FOR CANAL 43, HAVING DRAWING No. C-43-76, SHEET 6, DATED DECEMBER 12, 1980; THENCE RUN S.77°07'55"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 213.42 FEET; THENCE RUN S.86°59'22"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 1,130.97 FEET TO A POINT 1666.69 FEET WEST OF, AS MEASURED AT RIGHT ANGLES TO, THE EAST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20; THENCE RUN N.00°23'54"E., PARALLEL WITH THE EAST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20, FOR A DISTANCE OF 849.34 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID DUKE HIGHWAY; THENCE RUN S.89°40'34"E., ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, FOR A DISTANCE OF 1,336.69 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 24.781 ACRES, MORE OR LESS.

AND

DUKE HIGHWAY PARCEL 4

A PORTION OF GOVERNMENT LOT 1 OF SECTION 20, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF GOVERNMENT LOT 1 OF SECTION 20, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN S.00°20'36"W., ALONG THE WEST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20, FOR A DISTANCE OF 30.00 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF DUKE HIGHWAY AS THE SAME IS SHOWN ON THE LEE COUNTY DEPARTMENT OF TRANSPORTATION AND ENGINEERING RIGHT-OF-WAY MAP FOR DUKE HIGHWAY, DATED MAY OF 1988, AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN S.89°40'34"E., ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, FOR A DISTANCE OF 839.08 FEET; THENCE RUN S.00°24'32"W. FOR A DISTANCE OF 859.27 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF CANAL 43, AS THE SAME IS SHOWN ON THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT RIGHT-OF-WAY MAP FOR CANAL 43, HAVING DRAWING No. C-43-76, DATED DECEMBER 12, 1980; THENCE RUN S.86°59'22"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 139.41 FEET. THENCE RUN S.56°48'56"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 672.60 FEET; THENCE RUN N.33°12'38"W. FOR A DISTANCE OF 250.08 FEET TO A POINT ON THE WEST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20; THENCE RUN N.00°20'36"E., ALONG THE WEST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 20, FOR A DISTANCE OF 1,030.23 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 19.922 ACRES, MORE OR LESS.

AND

WILLIAM'S ISLAND SOUTHEASTERLY PARCEL

A PORTION OF GOVERNMENT LOT 8 OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN N.01°29'40"W., ALONG THE QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 1,099.34 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF CANAL 43, AS SHOWN ON THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT RIGHT-OF-WAY MAP FOR CANAL 43, HAVING DRAWING No. C-43-76, SHEET 5, DATED DECEMBER 12, 1980; THENCE CONTINUE N.01°29'40"W., ALONG THE QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 223.42 FEET TO THE NORTHWEST CORNER OF GOVERNMENT LOT 8 OF SAID SECTION 19; THENCE RUN S.88°17'40"E. ALONG THE NORTH LINE OF SAID GOVERNMENT LOT 8, FOR A DISTANCE OF 509.98 FEET TO A POINT ON THE MEAN HIGH WATER OF THE OLD RIVER BED OF THE CALOOSAHATCHEE RIVER, HAVING AN ELEVATION 0.23' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988), AS LOCATED OCTOBER OF 2007; THENCE RUN SOUTHERLY, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. S.07°39'58"E. FOR A DISTANCE OF 11.67 FEET;
2. THENCE RUN S.12°19'31"E. FOR A DISTANCE OF 34.29 FEET;
3. THENCE RUN S.09°37'41"E. FOR A DISTANCE OF 33.67 FEET;
4. THENCE RUN S.27°02'16"E. FOR A DISTANCE OF 41.73 FEET;
5. THENCE RUN S.38°09'18"E. FOR A DISTANCE OF 27.38 FEET;
6. THENCE RUN S.56°11'00"E. FOR A DISTANCE OF 16.78 FEET;
7. THENCE RUN S.47°30'40"E. FOR A DISTANCE OF 19.86 FEET;
8. THENCE RUN S.13°24'25"E. FOR A DISTANCE OF 26.45 FEET;
9. THENCE RUN S.26°21'44"W. FOR A DISTANCE OF 24.86 FEET;
10. THENCE RUN S.30°11'50"W. FOR A DISTANCE OF 22.95 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43;

THENCE RUN N.88°02'20"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 566.78 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 2.817 ACRES, MORE OR LESS.

AND

WILLIAM'S ISLAND SOUTHWESTERLY PARCEL

A PORTION OF GOVERNMENT LOTS 6 AND 7 OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN N.01°29'40"W., ALONG THE QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 1,099.34 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF CANAL 43, AS THE SAME IS SHOWN ON THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT RIGHT-OF-WAY MAP FOR CANAL 43, HAVING DRAWING No. C-43-76, SHEET 5, DATED DECEMBER 12, 1980; THENCE RUN N.88°02'20"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 300.55 FEET TO A POINT 300.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE QUARTER SECTION LINE OF SAID SECTION 19 AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE CONTINUE N.88°02'20"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 1,330.73 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE OLD RIVER BED OF THE CALOOSAHATCHEE RIVER HAVING AN ELEVATION 0.23' NAVD '88 (NORTH AMERICAN VERTICAL DATUM OF 1988), AS LOCATED OCTOBER OF 2007; THENCE RUN NORTHERLY AND EASTERLY ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. N.15°58'10"W. FOR A DISTANCE OF 7.94 FEET;
2. THENCE RUN N.01°41'18"E. FOR A DISTANCE OF 17.89 FEET;
3. THENCE RUN N.40°32'22"E. FOR A DISTANCE OF 23.76 FEET;
4. THENCE RUN N.44°09'58"E. FOR A DISTANCE OF 26.63 FEET;
5. THENCE RUN N.08°49'38"E. FOR A DISTANCE OF 28.89 FEET;
6. THENCE RUN N.27°15'31"E. FOR A DISTANCE OF 28.33 FEET;
7. THENCE RUN N.43°36'36"E. FOR A DISTANCE OF 29.66 FEET;
8. THENCE RUN N.29°49'37"E. FOR A DISTANCE OF 29.29 FEET;
9. THENCE RUN N.23°56'50"E. FOR A DISTANCE OF 32.05 FEET;
10. THENCE RUN N.14°54'49"E. FOR A DISTANCE OF 20.81 FEET;
11. THENCE RUN N.48°43'12"E. FOR A DISTANCE OF 47.25 FEET;
12. THENCE RUN N.58°40'27"E. FOR A DISTANCE OF 18.60 FEET;
13. THENCE RUN N.76°41'42"E. FOR A DISTANCE OF 66.72 FEET;
14. THENCE RUN S.50°31'58"E. FOR A DISTANCE OF 26.11 FEET;
15. THENCE RUN S.51°14'01"E. FOR A DISTANCE OF 24.09 FEET;
16. THENCE RUN S.47°38'56"E. FOR A DISTANCE OF 26.92 FEET;
17. THENCE RUN S.54°53'49"E. FOR A DISTANCE OF 19.34 FEET;
18. THENCE RUN N.85°21'54"E. FOR A DISTANCE OF 16.74 FEET;
19. THENCE RUN N.74°00'57"E. FOR A DISTANCE OF 48.02 FEET;
20. THENCE RUN N.61°51'01"E. FOR A DISTANCE OF 72.57 FEET;
21. THENCE RUN S.55°38'59"E. FOR A DISTANCE OF 77.54 FEET;
22. THENCE RUN S.59°31'52"E. FOR A DISTANCE OF 33.99 FEET;
23. THENCE RUN N.76°03'42"E. FOR A DISTANCE OF 27.37 FEET;
24. THENCE RUN N.87°50'27"E. FOR A DISTANCE OF 36.13 FEET;
25. THENCE RUN N.36°05'12"E. FOR A DISTANCE OF 50.66 FEET;
26. THENCE RUN N.88°36'39"E. FOR A DISTANCE OF 35.39 FEET;
27. THENCE RUN N.70°21'57"E. FOR A DISTANCE OF 49.72 FEET;
28. THENCE RUN N.26°55'40"E. FOR A DISTANCE OF 17.31 FEET;
29. THENCE RUN N.70°37'41"E. FOR A DISTANCE OF 39.73 FEET;
30. THENCE RUN N.80°02'38"E. FOR A DISTANCE OF 28.96 FEET;
31. THENCE RUN N.79°21'36"E. FOR A DISTANCE OF 26.29 FEET;
32. THENCE RUN N.60°35'14"E. FOR A DISTANCE OF 56.67 FEET;
33. THENCE RUN N.55°05'27"E. FOR A DISTANCE OF_???4ISTANCE OF 20.76 FEET;
34. THENCE RUN N.23°52'13"E. FOR A DISTANCE OF 23.90 FEET;
35. THENCE RUN N.26°22'36"E. FOR A DISTANCE OF 27.78 FEET;
36. THENCE RUN N.11°17'15"E. FOR A DISTANCE OF 32.93 FEET;
37. THENCE RUN N.40°12'30"E. FOR A DISTANCE OF 44.39 FEET;
38. THENCE RUN N.55°04'30"E. FOR A DISTANCE OF 42.13 FEET;
39. THENCE RUN N.64°29'28"E. FOR A DISTANCE OF 61.62 FEET;
40. THENCE RUN S.83°16'04"E. FOR A DISTANCE OF 28.59 FEET;
41. THENCE RUN N.64°50'23"E. FOR A DISTANCE OF 33.85 FEET;
42. THENCE RUN N.78°22'01"E. FOR A DISTANCE OF 82.47 FEET;
43. THENCE RUN N.75°43'09"E. FOR A DISTANCE OF 37.09 FEET;
44. THENCE RUN N.60°31'22"E. FOR A DISTANCE OF 39.83 FEET;
45. THENCE RUN N.63°16'34"E. FOR A DISTANCE OF 62.80 FEET;
46. THENCE RUN N.49°25'12"E. FOR A DISTANCE OF 57.39 FEET TO A POINT ON A LINE LOCATED 300.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO THE NORTH-SOUTH QUARTER SECTION LINE OF SAID SECTION 19;

THENCE RUN S.01°29'40"E., PARALLEL WITH THE NORTH-SOUTH QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 671.77 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 10.766 ACRES, MORE OR LESS.

AND

WILLIAM'S ISLAND NORTHERLY PARCEL

A PORTION OF GOVERNMENT LOT 6 OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 19, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE RUN N.01°29'40"W., ALONG THE QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 1,099.34 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF CANAL 43, AS THE SAME IS SHOWN ON THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT RIGHT-OF-WAY MAP FOR CANAL 43, HAVING DRAWING No. C-43-76, SHEET 5, DATED DECEMBER 12, 1980; THENCE RUN N.88°02'20"W., ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID CANAL 43, FOR A DISTANCE OF 300.55 FEET TO A POINT 300.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE QUARTER SECTION LINE OF SAID SECTION 19; THENCE RUN N.01°29'40"W., PARALLEL WITH THE QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 1,626.16 FEET TO A POINT ON THE MEAN HIGH WATER LINE OF THE OLD RIVER BED OF THE CALOOSAHATCHEE RIVER HAVING ELEVATION 0.23' NAVD '88 (NORTH AMERICAN DATUM 1988) AND THE **POINT OF BEGINNING** OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN, ALONG SAID MEAN HIGH WATER LINE, FOR THE FOLLOWING COURSES:

1. S.67°11'49"W. FOR A DISTANCE OF 8.19 FEET;
2. THENCE RUN N.81°04'31"W. FOR A DISTANCE OF 36.37 FEET;
3. THENCE RUN N.72°22'16"W. FOR A DISTANCE OF 53.77 FEET;
4. THENCE RUN S.70°43'07"W. FOR A DISTANCE OF 32.56 FEET;
5. THENCE RUN S.68°12'27"W. FOR A DISTANCE OF 32.86 FEET;
6. THENCE RUN S.58°28'14"W. FOR A DISTANCE OF 73.97 FEET;
7. THENCE RUN S.67°31'54"W. FOR A DISTANCE OF 54.34 FEET;
8. THENCE RUN S.55°31'31"W. FOR A DISTANCE OF 29.18 FEET;
9. THENCE RUN S.60°37'55"W. FOR A DISTANCE OF 30.71 FEET;
10. THENCE RUN S.44°55'12"W. FOR A DISTANCE OF 77.54 FEET;
11. THENCE RUN S.34°30'17"W. FOR A DISTANCE OF 33.61 FEET;
12. THENCE RUN S.41°10'53"W. FOR A DISTANCE OF 46.49 FEET;
13. THENCE RUN S.54°19'31"W. FOR A DISTANCE OF 20.40 FEET;
14. THENCE RUN S.23°28'13"W. FOR A DISTANCE OF 48.08 FEET;
15. THENCE RUN S.61°28'41"W. FOR A DISTANCE OF 43.49 FEET;
16. THENCE RUN S.41°15'42"W. FOR A DISTANCE OF 32.21 FEET;
17. THENCE RUN S.34°58'19"W. FOR A DISTANCE OF 33.67 FEET;
18. THENCE RUN S.39°45'05"W. FOR A DISTANCE OF 55.04 FEET;
19. THENCE RUN S.40°43'08"W. FOR A DISTANCE OF 42.99 FEET;
20. THENCE RUN N.33°38'57"E. FOR A DISTANCE OF 44.00 FEET;
21. THENCE RUN N.31°33'27"E. FOR A DISTANCE OF 35.62 FEET;
22. THENCE RUN N.46°33'15"E. FOR A DISTANCE OF 21.41 FEET;
23. THENCE RUN N.33°23'31"E. FOR A DISTANCE OF 33.52 FEET;
24. THENCE RUN N.53°54'14"E. FOR A DISTANCE OF 32.46 FEET;
25. THENCE RUN N.45°16'00"E. FOR A DISTANCE OF 43.47 FEET;
26. THENCE RUN N.35°54'23"E. FOR A DISTANCE OF 41.10 FEET;
27. THENCE RUN N.52°22'04"E. FOR A DISTANCE OF 21.42 FEET;
28. THENCE RUN N.42°11'29"E. FOR A DISTANCE OF 46.78 FEET;
29. THENCE RUN N.32°18'28"E. FOR A DISTANCE OF 34.55 FEET;
30. THENCE RUN N.48°07'11"E. FOR A DISTANCE OF 37.55 FEET;
31. THENCE RUN N.38°39'40"E. FOR A DISTANCE OF 41.16 FEET;
32. THENCE RUN N.59°11'18"E. FOR A DISTANCE OF 30.98 FEET;
33. THENCE RUN N.55°06'41"E. FOR A DISTANCE OF 29.72 FEET;
34. THENCE RUN N.67°08'56"E. FOR A DISTANCE OF 35.19 FEET;
35. THENCE RUN N.57°57'46"E. FOR A DISTANCE OF 21.91 FEET;
36. THENCE RUN N.64°50'06"E. FOR A DISTANCE OF 32.90 FEET;
37. THENCE RUN N.59°31'35"E. FOR A DISTANCE OF 39.36 FEET;
38. THENCE RUN N.65°02'10"E. FOR A DISTANCE OF 31.63 FEET;
39. THENCE RUN N.71°30'59"E. FOR A DISTANCE OF 36.32 FEET;
40. THENCE RUN N.82°00'53"E. FOR A DISTANCE OF 43.91 FEET;
41. THENCE RUN N.86°42'40"E. FOR A DISTANCE OF 43.63 FEET;
42. THENCE RUN S.82°50'54"E. FOR A DISTANCE OF 6.67 FEET TO A POINT 300.00 FEET WESTERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE NORTH-SOUTH QUARTER SECTION LINE OF SAID SECTION 19;

THENCE RUN S.01°29'40"E., PARALLEL WITH THE NORTH-SOUTH QUARTER SECTION LINE OF SAID SECTION 19, FOR A DISTANCE OF 35.34 FEET TO THE **POINT OF BEGINNING**. PARCEL CONTAINS 0.160 ACRE, MORE OR LESS.

ACREAGE BREAKDOWN

MAIN PARCEL NORTH	676.268 ACRES+/-
MAIN PARCEL SOUTH	496.167 ACRES+/-
TROUT CREEK PARCEL 1	0.676 ACRE+/-
TROUT CREEK PARCEL 2	0.330 ACRE+/-
TROUT CREEK PARCEL 3	0.267 ACRE+/-
DUKE HWY PARCEL 1	0.188 ACRE+/-
DUKE HWY PARCEL 2	0.113 ACRE+/-
DUKE HWY PARCEL 3	24.781 ACRES+/-
DUKE HWY PARCEL 4	19.922 ACRES+/-
WILLIAM'S ISLAND SE PARCEL	2.817 ACRES+/-
WILLIAM'S ISLAND SW PARCEL	10.766 ACRES+/-
WILLIAM'S ISLAND NORTH PARCEL	0.160 ACRE+/-
TOTAL ACREAGE	1,232.455 ACRES+/-

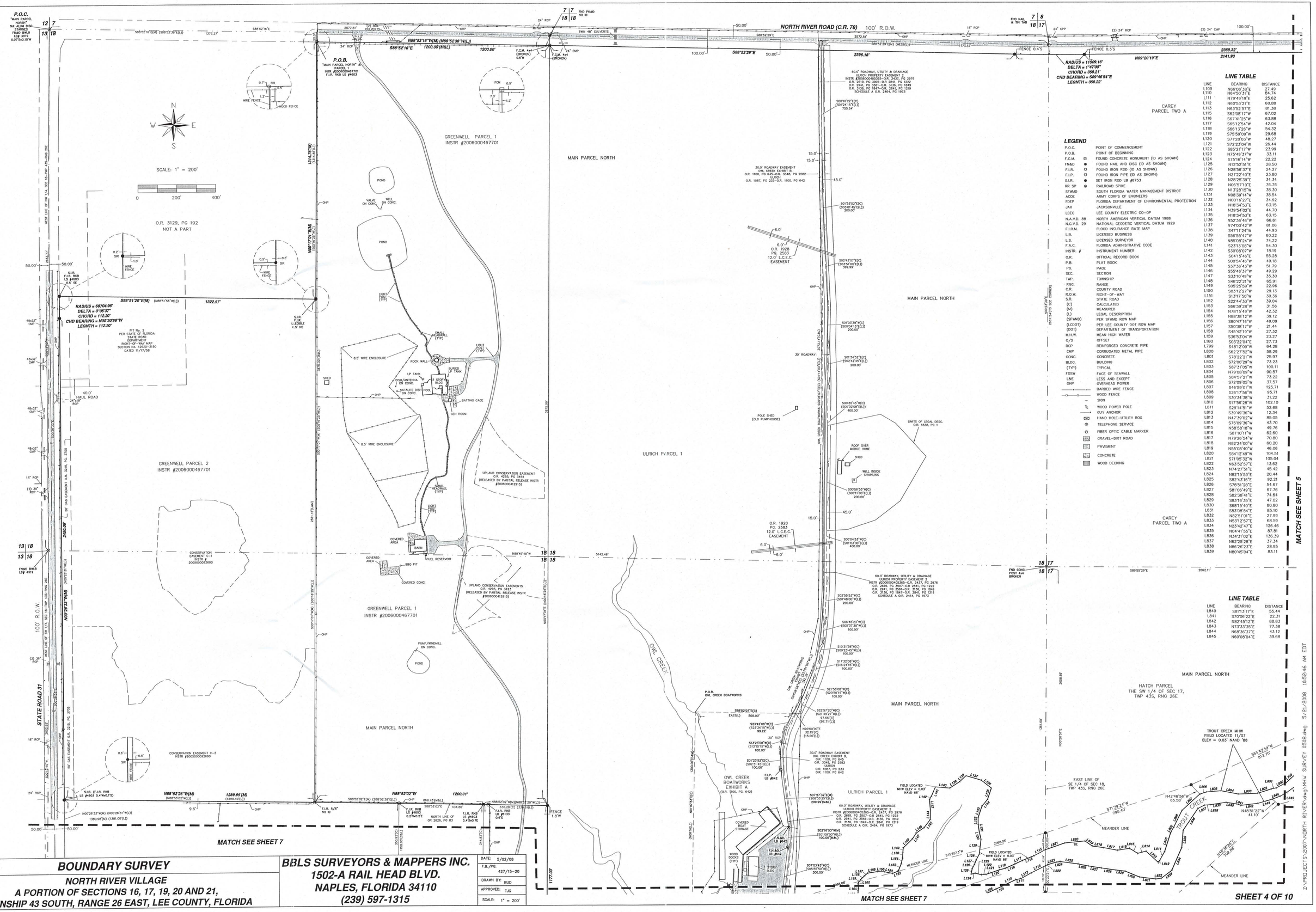
BOUNDARY SURVEY

NORTH RIVER VILLAGE
A PORTION OF SECTIONS 16, 17, 19, 20 AND 21,
TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE: 5/02/08
F.B./PG. 427/15-20
DRAWN BY: BJD
APPROVED: TJG
SCALE: NO SCALE

Z:\PROJECTS\2007\NORTH RIVER\dwg\MHV SURVEY 0508.dwg 5/21/2008 10:52:46 AM EDT



LEGEND

P.O.C.		POINT OF COMMENCEMENT
P.O.B.		POINT OF BEGINNING
F.C.M.	⊟	FOUND CONCRETE MONUMENT (ID AS SHOWN)
FN&O	●	FOUND NAIL AND DISC (ID AS SHOWN)
F.I.R.	O	FOUND IRON ROD (ID AS SHOWN)
F.I.P.	O	FOUND IRON PIPE (ID AS SHOWN)
S.I.R.	●	SET IRON ROD LB #6753
RR SP	⊗	RAILROAD SPIKE
SFWMD		SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ACOE		ARMY CORPS OF ENGINEERS
FDEP		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JAX		JACKSONVILLE
LCEC		LEE COUNTY ELECTRIC CO-OP
N.A.V.D. 88		NORTH AMERICAN VERTICAL DATUM 1988
N.G.V.D. 29		NATIONAL GEODETIC VERTICAL DATUM 1929
F.I.R.M.		FLOOD INSURANCE RATE MAP
L.B.		LICENSED BUSINESS
L.S.		LICENSED SURVEYOR
F.A.C.		FLORIDA ADMINISTRATIVE CODE
INSTR. #		INSTRUMENT NUMBER
O.R.		OFFICIAL RECORD BOOK
P.B.		PLAT BOOK
PG.		PAGE
SEC.		SECTION
TWP.		TOWNSHIP
RNG.		RANGE
C.R.		COUNTY ROAD
R.O.W.		RIGHT-OF-WAY
S.R.		STATE ROAD
(C)		CALCULATED
(M)		MEASURED
(L)		LEGAL DESCRIPTION
(SFWMD)		PER SFWMD ROW MAP
(LCDOT)		PER LEE COUNTY DOT ROW MAP
(DOT)		DEPARTMENT OF TRANSPORTATION
M.H.W.		MEAN HIGH WATER
O/S		OFFSET
RCP		REINFORCED CONCRETE PIPE
CMP		CORRUGATED METAL PIPE
CONC.		CONCRETE
BLDG.		BUILDING
(TYP)		TYPICAL
FOSW		FACE OF SEAWALL
L&E		LESS AND EXCEPT
OHP		OVERHEAD POWER
		BARBED WIRE FENCE
		WOOD FENCE
		SIGN
		WOOD POWER POLE
		GUY ANCHOR
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		TELEPHONE SERVICE
		FIBER OPTIC CABLE MARKER
		GRAVEL-DIRT ROAD
		PAVEMENT
		CONCRETE
		WOOD DECKING

LINE TABLE

LINE	BEARING	DISTANCE
L109	N66°06'38"E	27.49
L110	N64°50'31"E	84.74
L111	N79°49'19"E	25.62
L112	N60°53'21"E	60.88
L113	N63°52'57"E	81.38
L115	S62°08'17"W	67.02
L116	S67°41'25"W	63.88
L117	S65°12'54"W	42.04
L118	S66°13'26"W	54.32
L119	S75°59'09"W	29.68
L120	S71°28'03"W	48.27
L121	S72°23'04"W	26.44
L122	S85°21'17"W	23.99
L123	N75°49'37"W	33.11
L124	S75°16'14"W	22.22
L125	N12°52'51"E	28.50
L126	N28°56'37"E	24.27
L127	N21°22'40"E	23.80
L128	N28°25'39"E	34.34
L129	N06°57'10"E	76.76
L130	N13°28'15"W	38.30
L131	N08°39'14"W	38.54
L132	N00°16'27"E	34.92
L133	N18°34'53"E	63.15
L134	N39°54'02"E	44.70
L135	N18°34'53"E	63.15
L136	N52°36'46"W	66.61
L137	N74°00'42"W	81.06
L138	S47°11'24"W	44.93
L139	S56°55'47"W	60.22
L140	N85°08'24"W	74.22
L141	S23°13'08"W	54.30
L142	S30°08'07"W	18.19
L143	S04°15'46"E	55.28
L144	S00°54'46"W	49.18
L145	S37°36'43"W	51.79
L146	S55°46'37"W	49.29
L147	S33°10'49"W	35.30
L148	S46°22'21"W	65.91
L149	S05°25'59"W	22.96
L150	S03°12'27"W	29.13
L151	S13°17'50"W	30.36
L152	S22°44'33"W	39.04
L153	S66°39'28"W	31.56
L154	N78°15'49"W	42.32
L155	N88°38'12"W	39.12
L156	S80°47'16"W	49.09
L157	S50°38'17"W	21.44
L158	S45°42'19"W	27.32
L159	S36°53'04"W	23.27
L160	S03°22'04"E	27.73
L799	S48°12'09"W	64.28
L800	S62°27'52"W	58.29
L801	S78°22'21"W	25.97
L802	S72°00'29"W	73.23
L803	S87°31'05"W	100.11
L804	N79°08'09"W	90.57
L805	S84°57'21"W	73.22
L806	S72°09'05"W	37.57
L807	S46°59'01"W	125.71
L808	S26°17'56"W	95.71
L809	S30°34'38"W	31.22
L810	S17°56'28"W	102.10
L811	S29°14'51"W	52.68
L812	S39°49'36"W	12.34
L813	N47°39'02"W	85.05
L814	S75°09'36"W	43.70
L815	N58°58'18"W	49.76
L816	S81°10'11"W	62.60
L817	N79°26'54"W	70.80
L818	N82°24'05"W	60.20
L819	N55°08'40"W	46.06
L820	S84°12'49"W	104.51
L821	S71°05'32"W	105.04
L822	N6.3°52'57"E	13.62
L823	N74°27'51"E	45.42
L824	N82°15'53"E	20.44
L825	S82°43'16"E	92.21
L826	S78°51'28"E	54.67
L827	S81°06'49"E	67.76
L828	S82°38'41"E	74.64
L829	S83°16'35"E	47.02
L830	S68°15'40"E	80.80
L831	S83°08'54"E	85.10
L832	N82°51'01"E	27.99
L833	N53°12'57"E	68.59
L834	N23°42'47"E	126.46
L835	N04°41'55"E	87.81
L836	N34°31'02"E	136.39
L837	N62°25'28"E	37.34
L838	N86°26'23"E	28.95
L839	N80°45'04"E	83.11

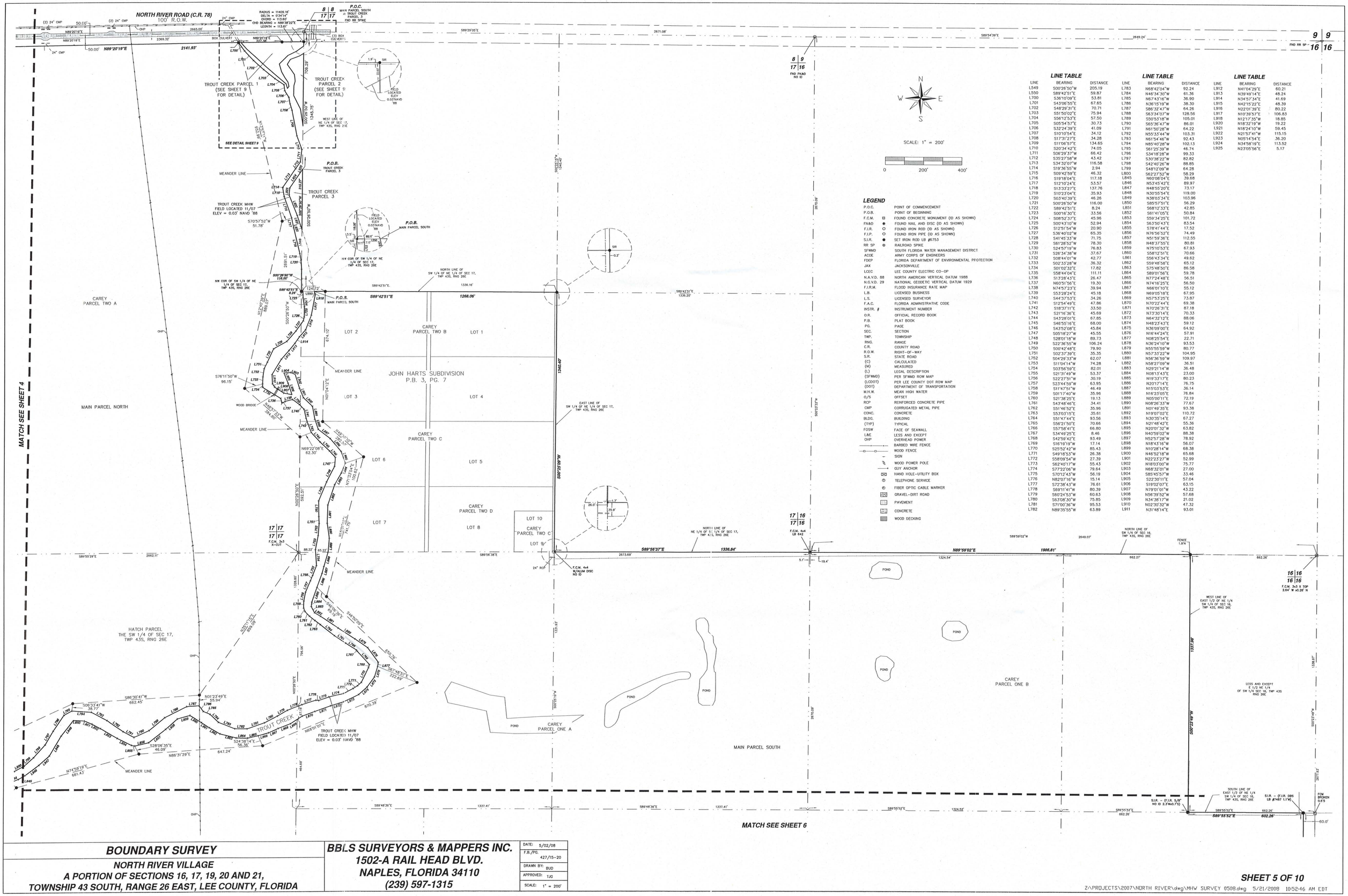
LINE TABLE

LINE	BEARING	DISTANCE
L840	S81°13'17"E	55.44
L841	S70°06'22"E	22.31
L842	N82°45'12"E	88.83
L843	N73°33'35"E	77.38
L844	N68°36'37"E	43.12
L845	N60°08'04"E	39.68

BOUNDARY SURVEY
NORTH RIVER VILLAGE
A PORTION OF SECTIONS 16, 17, 19, 20 AND 21,
TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE:	5/02/08
F.B./PG.	427/15-20
DRAWN BY:	BJD
APPROVED:	TJG
SCALE:	1" = 200'



LINE TABLE

LINE	BEARING	DISTANCE
L549	S00°26'50"W	205.19
L550	S89°42'51"E	59.87
L700	S36°10'09"E	53.81
L701	S43°06'55"E	67.65
L702	S48°29'31"E	70.71
L703	S51°50'02"E	75.94
L704	S56°12'53"E	57.50
L705	S05°54'57"E	30.73
L706	S32°24'39"E	41.09
L707	S10°10'54"E	34.12
L708	S17°31'27"E	34.28
L709	S11°06'57"E	134.65
L710	S20°34'42"E	74.05
L711	S06°29'37"W	66.42
L712	S35°27'58"W	43.42
L713	S34°32'07"W	116.58
L714	S19°36'55"W	2.94
L715	S09°42'59"E	46.32
L716	S19°18'04"E	117.18
L717	S12°10'24"E	53.57
L718	S13°33'27"E	137.76
L719	S10°23'04"E	35.93
L720	S03°40'39"E	46.26
L721	S00°26'50"W	116.00
L722	S89°42'51"E	8.24
L723	S00°18'30"E	33.56
L724	S08°52'37"E	45.96
L725	S00°43'10"W	52.94
L726	S12°51'54"W	20.90
L727	S36°40'02"W	65.35
L728	S41°45'33"W	71.75
L729	S61°28'52"W	78.30
L730	S24°57'19"W	76.83
L731	S26°34'38"W	37.67
L732	S08°44'01"W	42.77
L733	S02°33'28"W	36.32
L734	S01°02'32"E	17.82
L735	S58°44'04"E	111.11
L736	S13°28'43"E	26.47
L737	N60°51'56"E	19.30
L738	N74°57'23"E	39.94
L739	S53°28'24"E	45.18
L740	S44°37'53"E	34.26
L741	S12°54'49"E	47.86
L742	S18°37'11"E	33.50
L743	S21°16'36"E	45.69
L744	S43°28'01"E	67.85
L745	S46°55'16"E	68.00
L746	S43°52'08"E	45.84
L747	S05°18'27"W	45.55
L748	S28°01'18"W	89.73
L749	S22°36'55"W	106.24
L750	S00°42'48"E	79.80
L751	S02°37'39"E	35.35
L752	S04°29'33"W	62.07
L753	S11°04'14"W	74.28
L754	S03°56'59"E	82.01
L755	S21°31'49"W	53.37
L756	S22°27'51"W	30.19
L757	S23°44'59"W	63.95
L758	S11°47'51"W	46.49
L759	S01°17'40"W	35.96
L760	S21°38'25"E	19.13
L761	S43°48'46"E	34.41
L762	S51°46'52"E	35.96
L763	S53°03'15"E	35.61
L764	S51°47'44"E	93.56
L765	S56°21'50"E	70.66
L766	S57°58'41"E	66.80
L767	S34°49'25"E	8.46
L768	S42°59'42"E	93.49
L769	S16°19'19"W	17.14
L770	S25°52'42"W	85.43
L771	S49°18'53"W	26.38
L772	S58°09'54"W	27.39
L773	S62°40'17"W	55.43
L774	S77°22'06"W	79.64
L775	S70°12'43"W	56.19
L776	N82°07'16"W	15.14
L777	S72°38'43"W	76.61
L778	S69°11'41"W	80.39
L779	S60°24'53"W	60.63
L780	S63°08'30"W	75.85
L781	S71°00'36"W	95.53
L782	N89°35'55"W	63.89

LINE TABLE

LINE	BEARING	DISTANCE
L783	N68°42'04"W	92.24
L784	N46°34'30"W	61.36
L785	N87°43'16"W	36.90
L786	N36°15'19"W	38.30
L787	S86°32'47"W	64.26
L788	S83°34'07"W	128.56
L789	S50°53'18"W	105.01
L790	S65°36'47"W	86.01
L791	N61°50'28"W	64.22
L792	N55°33'44"W	103.31
L793	N61°54'46"W	92.43
L794	N85°40'28"W	102.13
L795	S61°25'39"W	46.74
L796	S34°18'28"W	99.33
L797	S30°38'22"W	82.82
L798	S42°40'26"W	88.85
L799	S48°12'09"W	64.28
L800	S62°27'52"W	58.29
L845	N60°08'04"E	39.68
L846	N53°45'43"E	89.97
L847	N48°55'20"E	73.17
L848	N30°55'54"E	119.00
L849	N38°03'34"E	103.96
L850	S85°57'51"E	56.29
L851	S68°12'33"E	42.85
L852	S61°41'05"E	50.84
L853	S59°34'25"E	101.72
L854	S63°50'43"E	83.54
L855	S78°41'44"E	17.52
L856	N76°56'52"E	74.49
L857	N51°59'36"E	112.55
L858	N48°37'55"E	80.81
L859	N75°10'53"E	67.93
L860	S58°12'51"E	70.66
L861	S56°41'34"E	49.62
L862	S59°48'58"E	65.12
L863	S75°48'50"E	86.58
L864	S89°01'56"E	59.78
L865	N77°24'48"E	56.51
L866	N74°16'25"E	56.50
L867	N66°01'10"E	55.12
L868	N69°05'18"E	67.95
L869	N57°53'25"E	73.87
L870	N70°22'44"E	69.38
L871	N70°26'31"E	87.18
L872	N73°30'14"E	70.33
L873	N64°32'13"E	88.06
L874	N48°23'43"E	59.12
L875	N36°09'00"E	64.92
L876	N16°44'24"E	57.91
L877	N08°25'54"E	22.71
L878	N36°24'10"W	93.53
L879	N55°55'59"W	80.77
L880	N57°33'22"W	104.95
L881	N56°36'59"W	109.97
L882	N58°27'09"W	36.51
L883	N29°21'14"W	36.48
L884	N08°13'43"E	23.00
L885	N19°33'17"E	80.23
L886	N20°17'14"E	76.75
L887	N15°03'53"E	36.14
L888	N16°23'05"E	76.84
L889	N05°00'11"E	72.19
L890	N08°26'33"W	77.67
L891	N01°49'35"E	93.38
L892	N19°07'02"E	110.72
L893	N30°35'14"E	67.27
L894	N21°48'42"E	55.36
L895	N20°01'32"W	63.82
L896	N40°59'02"W	88.38
L897	N52°57'28"W	78.92
L898	N18°43'16"W	56.07
L899	N10°28'14"W	68.38
L900	N46°52'18"W	65.68
L901	N22°23'27"W	52.99
L902	N18°03'00"W	75.77
L903	N68°32'01"W	27.00
L904	S85°45'57"W	33.46
L905	S22°30'11"E	57.04
L906	S19°02'07"E	63.15
L907	N79°01'01"W	43.22
L908	N56°39'52"W	57.68
L909	N34°36'17"W	21.02
L910	N02°30'32"W	47.32
L911	N31°48'14"E	93.01

LINE TABLE

LINE	BEARING	DISTANCE
L912	N41°04'29"E	60.21
L913	N39°49'14"E	48.24
L914	N34°57'34"E	41.69
L915	N42°15'22"E	48.39
L916	N22°01'39"E	80.22
L917	N10°39'57"E	106.83
L918	N12°17'35"W	18.85
L920	N18°32'19"W	19.22
L921	N18°24'10"W	59.45
L922	N21°57'41"W	115.15
L923	N05°14'54"E	36.20
L924	N34°58'19"E	113.52
L925	N23°05'56"E	5.17

LEGEND

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P.O.B.		POINT OF BEGINNING
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S.I.R.	●	SET IRON ROD LB #6753
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		CONCRETE
		WOOD DECKING

BOUNDARY SURVEY

NORTH RIVER VILLAGE
A PORTION OF SECTIONS 16, 17, 19, 20 AND 21,
TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

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F.B./PG.	427/15-20
DRAWN BY:	BJD
APPROVED:	TJG
SCALE:	1" = 200'

Z:\PROJECTS\2007\NORTH RIVER\dwg\MHW SURVEY 0508.dwg 5/21/2008 10:52:46 AM EDT

MATCH SEE SHEET 5

SEE DETAIL SHEET 10

SEE DETAIL SHEET 9

MATCH SEE SHEET 7

SCALE: 1" = 200'

0 200' 400'

HATCH PARCEL
THE SW 1/4 OF SEC 17,
TWP 43S, RNG 26E

CAREY
PARCEL ONE A

MAIN PARCEL SOUTH

CAREY
PARCEL ONE B

POND

DUKE HIGHWAY

60' R.O.W.

DUKE HIGHWAY PARCEL 4
CAREY PARCEL
THREE C

CAREY
PARCEL THREE B
THE EAST 1320'
LAE THE EAST 1/2 OF THE EAST 1320'
OF GOV LOT
SEC 20, TWP 43S, RNG 26E

DUKE HIGHWAY PARCEL 3

CAREY
PARCEL THREE A
THE EAST 1/2 OF THE EAST 1320'
LAE THE EAST 330'
OF GOV LOT 1
SEC 20, TWP 43S, RNG 26E

STANS
FOUNDATION
PARCEL

SAVIGNE
PARCEL

NOT A PART

NOT A PART
LESS AND EXCEPT
SW 1/4 OF SW 1/4
OF SE 1/4 SEC 17, TWP 43S
RNG 26E

NOT A PART
LESS AND EXCEPT
EAST 60' OF SE 1/4
OF SW 1/4 SEC 16,
TWP 43S RNG 26E

LESS AND EXCEPT
EAST 60' OF SE 1/4
OF SW 1/4 SEC 16, TWP
RNG 26E

NORTH LINE OF
SW 1/4 OF SW 1/4
OF SE 1/4 SEC 17,
TWP 43S, RNG 26E

EAST LINE OF
SW 1/4 OF SE 1/4 SEC 17,
TWP 43S, RNG 26E

WEST LINE OF
SW 1/4 OF SW 1/4
OF SE 1/4 SEC 17,
TWP 43S, RNG 26E

EAST LINE OF
SW 1/4 OF SEC 16,
TWP 43S, RNG 26E

WEST LINE OF
SW 1/4 OF SEC 16,
TWP 43S, RNG 26E

EAST LINE OF
SW 1/4 SEC 20,
TWP 43S, RNG 26E

SOUTH LINE OF
SW 1/4 OF SEC 16,
TWP 43S, RNG 26E

EAST LINE OF
GOV LOT 1 OF SEC 20,
TWP 43S, RNG 26E

WEST LINE OF
GOV LOT 1 OF SEC 20,
TWP 43S, RNG 26E

NORTH LINE OF
NW 1/4 OF SEC 20,
TWP 43S, RNG 26E

NORTHERLY BOUNDARY OF PERPETUAL EASEMENT
O.R. 523, PG 429
NORTHERLY R.O.W. LINE CANAL 43
O.R. 222, 784

CANAL 43 RIGHT OF WAY
(S.F.W.M.D.)

CALOOSAHATCHEE RIVER

CALOOSAHATCHEE RIVER CANAL
P.B. 6, PG. 51

O.R. 474
PG. 799
6.0' L.C.E.C.
EASEMENT

O.R. 484
PG 407

O.R. 474
PG. 799
6.0' L.C.E.C.
EASEMENT

LIGHTER WOOD
POST W/TACK

F.I.P. 3/4"
(ILLEGIBLE)

F.C.M. 4x4
NO ID 0.7'S

F.C.M. 4x4
(BROKEN)
4.5'N

F.I.R.
LB #487
1.0'W

F.C.M. 4x4
NO ID
3.0'N±0.5'W

F.C.M. 4x4
(BROKEN)
0.5'W

F.C.M. 4x4
(BROKEN)
3.1'S±0.3'E

F.C.M. 4x4
NO ID
3.1'S±1.7'E

F.C.M. 4x4
(BROKEN)
0.5'W

F.C.M. 4x4
ACOE 1989
2400+92

F.C.M. 4x4
ACOE 1989
2405+99

F.C.M. 4x4
ACOE 1989
2407+31

F.C.M. 4x4
ACOE 1989 3944-86

F.C.M. 3x3
X-CUT
0.28'N

F.C.M. 3x3
X-CUT
0.4'S

F.C.M. 3x3
LB #42

F.C.M. 4x4
(BROKEN)

F.C.M. 4x4
NO ID 0.7'S

F.C.M. 4x4
PLS 2654

F.C.M. 3x3
LB #42

F.I.R. 1/2"
RLS 2239

F.I.R. WITH
PLASTIC CAP
(ILLEGIBLE)
0.7'N±0.2'E

F.I.R. 1/2"
RLS 2239
0.3'E

F.I.R. 1/2"
(ILLEGIBLE)

F.I.R. 1/2"
NO ID

F.I.R. 5/8"
NO ID

F.I.R. 1/2"
PLASTIC CAP
(ILLEGIBLE)

F.I.R.
LB #4603
0.5'S

F.I.R. 5/8"
NO ID
0.2'W±0.3'N

F.I.R.
LB #697

F.I.R. 1/2"
NO ID

F.I.R. 5/8"
NO ID

(2) 72"
RCPs

S.I.R. – (F.I.R. 5/8"
NO ID 2.3'W±0.7'S)

S.I.R. – (F.I.R. DBS
LB #7487 1.1'W)

FCM
BROKEN
0.6'E

WIRE FENCE

CHIP

SIR

24" RCP

12"x18" RCP

FENCE
1.2'S

1.9'

22.0'

11.0'

14.0'

3.8'

0.3'

0.4'

0.6'

1.8'

4.3'

3.6'

STANTEC INC
0.2'E±0.3'S

DUKE HWY
PARCEL 1

DUKE HWY
PARCEL 2

DUKE HWY PARCEL 2
(F.C.M. 3x3
STANTEC 0.5'S±0.3'E)

P.O.B.
DUKE HWY
PARCEL 1
STANTEC
INC

P.O.B.
DUKE HWY PARCEL 2
(F.C.M. 3x3
STANTEC 0.5'S±0.3'E)

P.O.B. DUKE PARCEL 4
F.I.P. 3/4" (ILLEGIBLE)

P.O.B.
STANTEC
LB #42
0.3'E

P.O.B.
STANS
FOUNDATION
F.I.R. 1/2"
RLS 2239
0.3'E

P.O.B. DUKE
PARCEL 5

P.O.B.
SAVIGNE
LB #42
0.3'E

F.C.M. 4x4
X-CUT
0.3'E

F.C.M. 3x3
X-CUT
0.4'S

F.C.M. 3x3
X-CUT
0.28'N

F.C.M. 3x3
LB #42

F.C.M. 4x4
ACOE 1989
3944-86

F.C.M. 4x4
ACOE 1989

F.C.M. 4x4
PLS 2654

F.C.M. 4x4
(BROKEN)
0.5'W

F.C.M. 4x4
NO ID
3.1'S±1.7'E

F.C.M. 4x4
(BROKEN)
3.1'S±0.3'E

F.C.M. 4x4
(BROKEN)
0.5'W

F.C.M. 4x4
NO ID 0.7'S

F.C.M. 4x4
ACOE 1989
2400+92

F.C.M. 4x4
ACOE 1989
2405+99

F.C.M. 4x4
ACOE 1989
2407+31

F.C.M. 4x4
(BROKEN)

F.C.M. 4x4
NO ID
3.0'N±0.5'W

F.C.M. 3x3
X-CUT
0.4'S

F.C.M. 3x3
LB #42

F.C.M. 4x4
ACOE 1989

F.C.M. 4x4
PLS 2654

F.C.M. 4x4
(BROKEN)

F.C.M. 4x4
NO ID 0.7'S

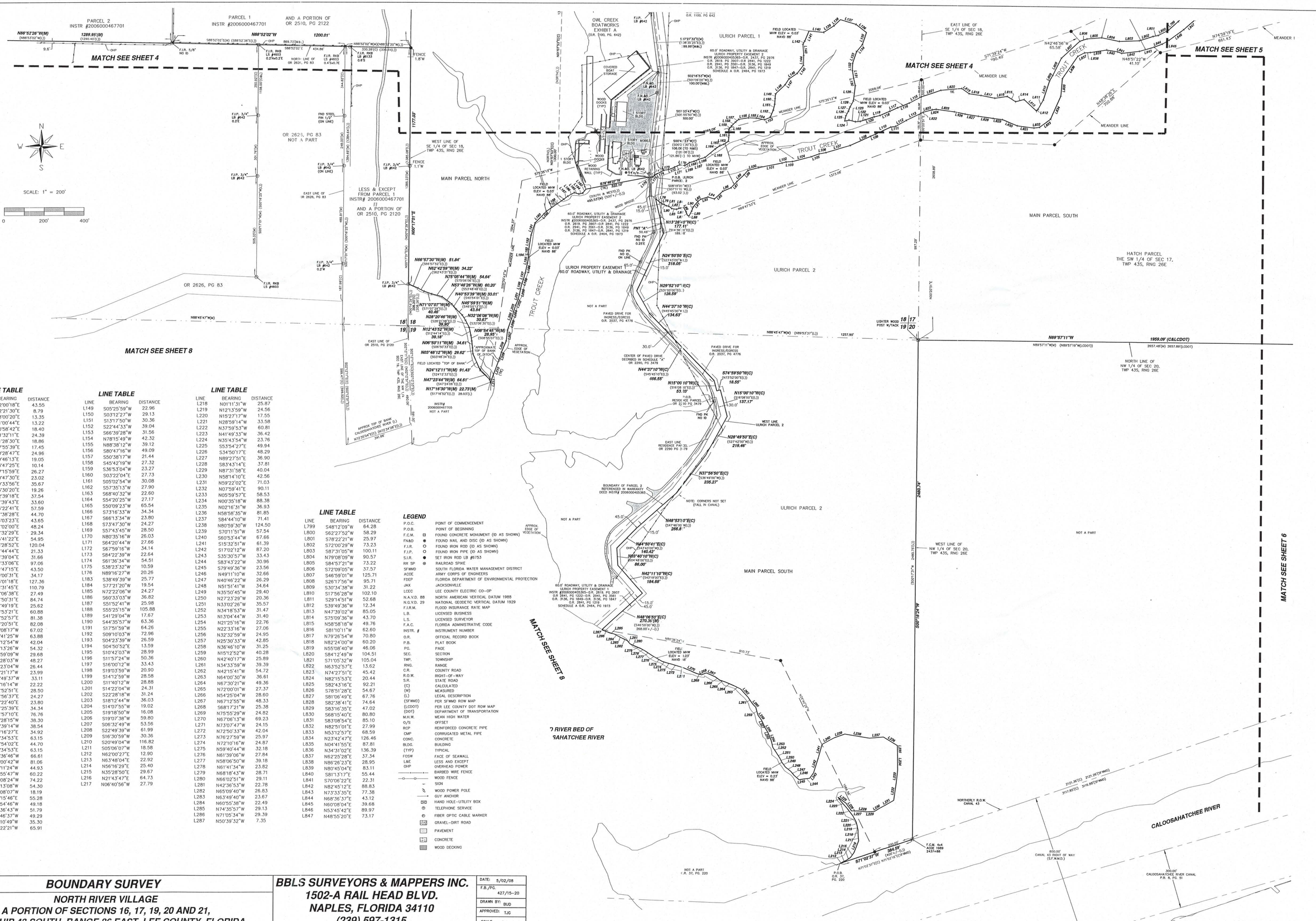
F.C.M. 4x4
ACOE 1989
2400+92

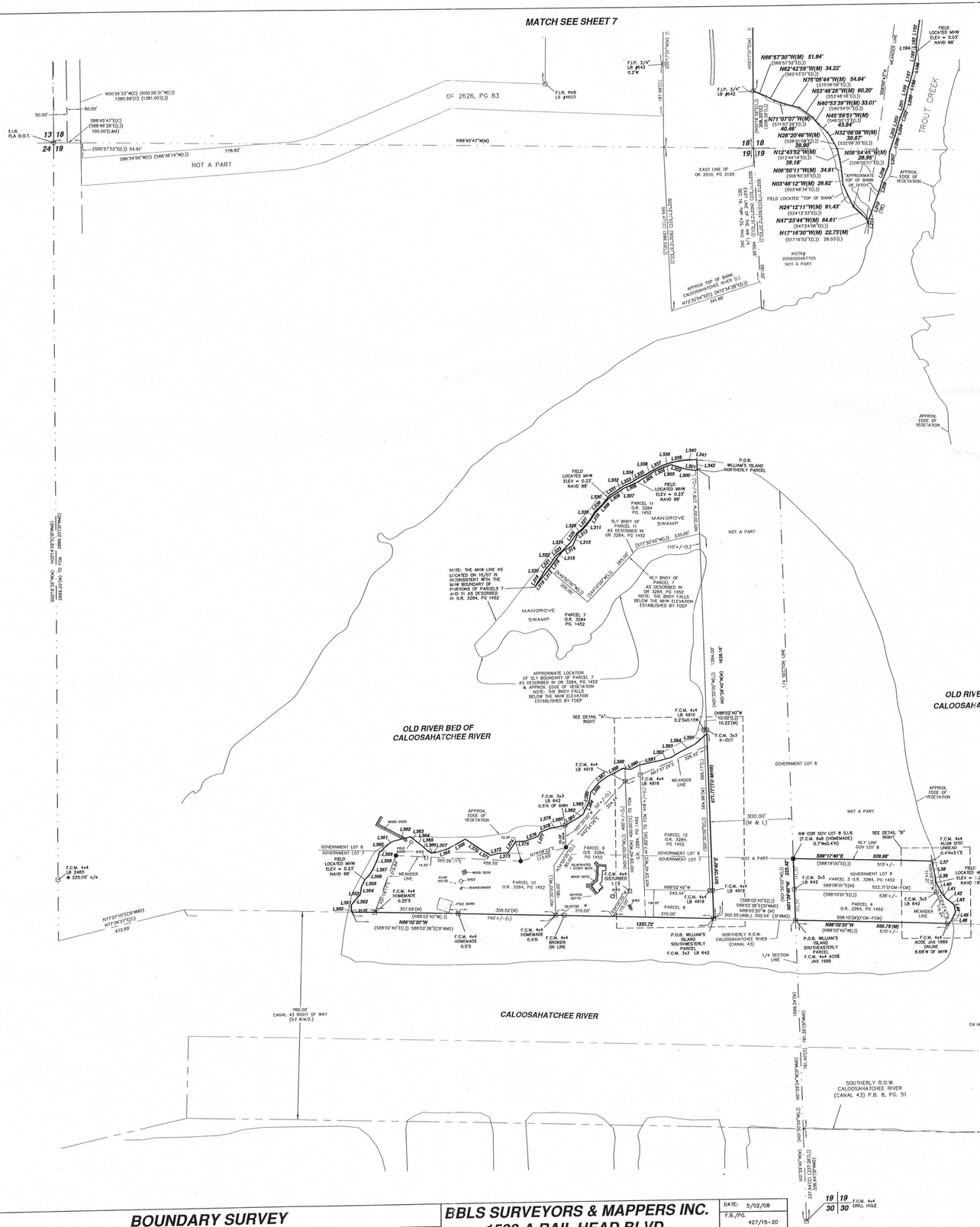
F.C.M. 4x4
ACOE 1989
2405+99

F.C.M. 4x4
ACOE 1989
2407+31

F.C.M. 4x4
ACOE 1989 3944-86

F.C.M. 3x3
X-CUT
0.28'N


PARCEL 2
INSTR #2006000467701
PARCEL 1
INSTR #2006000467701
AND A PORTION OF
OR 2510, PG 2122
N88°52'26"W(M)
1289.95'(M)
1200.01'
MATCH SEE SHEET 4
MATCH SEE SHEET 5
MATCH SEE SHEET 8
MATCH SEE SHEET 6
OR 2625, PG 83
NOT A PART
OR 2626, PG 83
LESS & EXCEPT
FROM PARCEL 1
INSTR # 2006000467701
&
AND A PORTION OF
OR 2510, PG 2120
WEST LINE OF
SE 1/4 OF SEC 18,
TWP 43S, RNG 26E
EAST LINE OF
SE 1/4 OF SEC 18,
TWP 43S, RNG 26E
MAIN PARCEL NORTH
MAIN PARCEL SOUTH
ULRICH PARCEL 1
ULRICH PARCEL 2
OWL CREEK
BOATWORKS
EXHIBIT A
(O.R. 1100, PG. 642)
TROUT CREEK
MEANDER LINE
MEANDER 1
ULRICH PROPERTY EASEMENT
60.0' ROADWAY, UTILITY & DRAINAGE
HATCH PARCEL
THE SW 1/4 OF SEC 17,
TWP 43S, RNG 26E
NORTH LINE OF
NW 1/4 OF SEC 20,
TWP 43S, RNG 26E
WEST LINE OF
NW 1/4 OF SEC 20,
TWP 43S, RNG 26E
CALOOSAHATCHEE RIVER
NORTHERLY R.O.W.
CANAL 43
800.00'
CANAL 43 RIGHT OF WAY
(S.F.W.M.D.)
300.00'
CALOOSAHATCHEE RIVER CANAL
P.B. 8, PG. 51
P.O.B.
O.R. 37,
PG. 220
F.C.M. 4x4
ACOE 1989
2437+88
FND PK
NO ID
ON LINE
FND PK
NO ID
0.25'E
FND PK
NO ID
FND #4 REBAR
LB #642
FND STEEL
PIN 1/2"
(ON LINE)
F.I.P. 3/4"
LB #642
0.2'E
F.I.P. 3/4"
LB #642
(ON LINE)
F.I.P. 3/4"
LB #642
0.3'W
F.I.R. RKB
LS #4603
0.2'W/0.2'E
F.I.R. RKB
LS #4603
0.4'S/0.7'E
F.I.R. RKB
LS #4603
0.6'S
F.I.R. 5/8"
NO ID
F.I.P.
LB #642
F.I.R.
LB #153
0.6'S
F.I.R.
LB #642
F.I.P.
LB #642
F.I.P. 3/4"
LB #642
F.I.P. 3/4"
LB #642
F.I.P. 3/4"

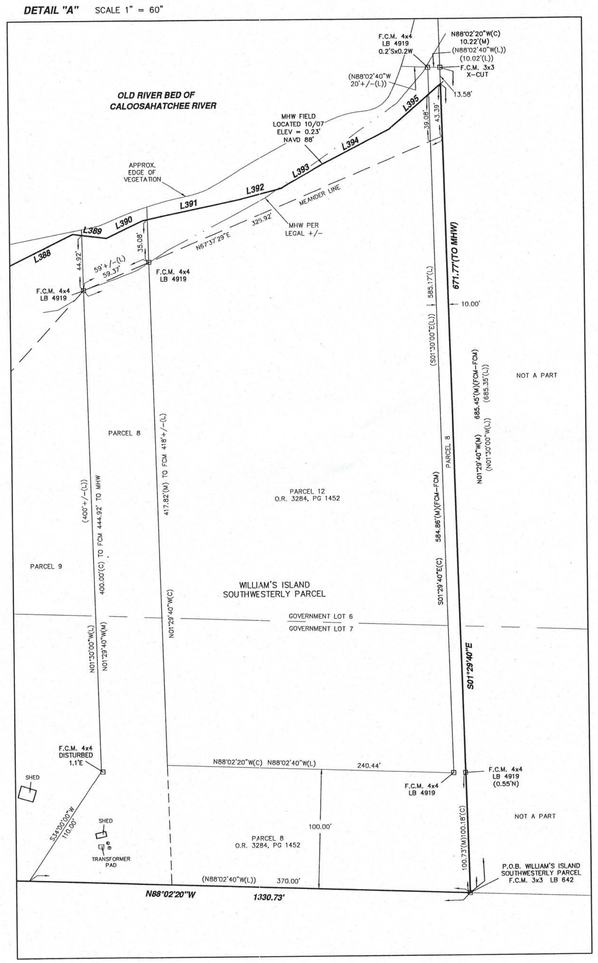


LINE TABLE

LINE	BEARING	DISTANCE
L37	S07°39'58"E	11.67
L38	S12°19'31"E	34.29
L39	S09°37'41"E	33.67
L40	S27°02'16"E	41.73
L41	S38°09'18"E	27.38
L42	S56°11'00"E	16.78
L43	S47°30'40"E	19.86
L44	S13°24'25"E	26.45
L45	S26°21'44"W	24.86
L46	S30°11'50"W	22.95
L300	S67°11'49"W	8.19
L301	N81°04'31"W	36.37
L302	N72°22'21"W	53.77
L303	S70°43'07"W	32.56
L304	S68°12'27"W	32.86
L305	S58°28'14"W	73.97
L306	S67°31'54"W	54.34
L307	S55°31'31"W	29.18
L308	S60°37'55"W	30.71
L309	S44°55'12"W	77.54
L310	S34°30'17"W	33.61
L311	S41°10'53"W	46.49
L312	S54°19'31"W	20.40
L313	S23°28'13"W	48.08
L314	S61°28'41"W	43.49
L315	S41°15'42"W	32.21
L316	S34°58'19"W	33.67
L317	S39°45'05"W	55.04
L318	S40°43'08"W	42.99
L319	N33°38'57"E	44.00
L320	N31°33'27"E	35.62
L321	N46°33'15"E	21.41
L322	N33°23'31"E	33.52
L323	N53°54'14"E	32.46
L324	N45°16'00"E	43.47
L325	N35°54'23"E	41.10
L326	N52°22'04"E	21.42
L327	N42°11'29"E	46.78
L328	N32°18'28"E	34.55
L329	N48°07'11"E	37.55
L330	N38°39'40"E	41.16
L331	N59°11'18"E	30.98
L332	N55°06'41"E	29.72
L333	N67°08'56"E	35.19
L334	N57°57'46"E	21.91
L335	N64°50'06"E	32.90
L336	N59°31'35"E	39.36
L337	N65°02'10"E	31.63
L338	N71°30'59"E	36.32
L339	N82°00'53"E	43.91

LINE TABLE

LINE	BEARING	DISTANCE
L340	N86°42'40"E	43.63
L341	S82°50'54"E	6.67
L342	S01°29'40"E	35.34
L350	N15°58'10"W	7.94
L351	N01°41'18"E	17.89
L352	N40°32'22"E	23.76
L353	N44°09'58"E	26.63
L354	N08°49'38"E	28.89
L355	N27°15'31"E	28.33
L356	N43°36'36"E	29.66
L357	N29°49'37"E	29.29
L358	N23°56'50"E	32.05
L359	N14°54'49"E	20.81
L360	N48°43'12"E	47.25
L361	N58°40'27"E	18.60
L362	N76°41'42"E	66.72
L363	S50°31'58"E	26.11
L364	S51°14'01"E	24.09
L365	S47°38'56"E	26.92
L366	S54°53'49"E	19.34
L367	N85°21'54"E	16.74
L368	N74°00'57"E	48.02
L369	N61°51'01"E	72.57
L370	S55°38'59"E	77.54
L371	S59°31'52"E	33.99
L372	N76°03'42"E	27.37
L373	N87°50'27"E	36.13
L374	N36°05'12"E	50.66
L375	N88°36'39"E	35.39
L376	N70°21'57"E	49.72
L377	N26°55'40"E	17.31
L378	N70°37'41"E	39.73
L379	N80°02'38"E	28.96
L380	N79°21'36"E	26.29
L381	N60°35'14"E	56.67
L382	N55°05'27"E	20.76
L383	N23°52'13"E	23.90
L384	N26°22'36"E	27.78
L385	N11°17'15"E	32.93
L386	N40°12'30"E	44.39
L387	N55°04'30"E	42.13
L388	N64°29'28"E	61.62
L389	S83°16'04"E	28.59
L390	N64°50'23"E	33.85
L391	N78°22'01"E	82.47
L392	N75°43'09"E	37.09
L393	N60°31'22"E	39.83
L394	N63°16'34"E	62.80
L395	N49°25'12"E	57.39

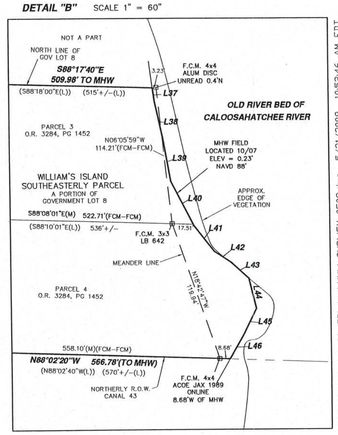


SCALE: 1" = 200'

0 200' 400'

LEGEND

P.O.C.		POINT OF COMMENCEMENT
P.O.B.		POINT OF BEGINNING
F.C.M.	⊡	FOUND CONCRETE MONUMENT (ID AS SHOWN)
FN&D	●	FOUND NAIL AND DISC (ID AS SHOWN)
F.I.R.	O	FOUND IRON ROD (ID AS SHOWN)
F.I.P.	O	FOUND IRON PIPE (ID AS SHOWN)
S.I.R.	●	SET IRON ROD LB #5753
RR SP	⊗	RAILROAD SPIKE
SFWMD		SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ACOE		ARMY CORPS OF ENGINEERS
FDEP		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JAX		JACKSONVILLE
LCEC		LEE COUNTY ELECTRIC CO-OP
N.A.V.D. 88		NORTH AMERICAN VERTICAL DATUM 1988
N.G.V.D. 29		NATIONAL GEODETIC VERTICAL DATUM 1929
F.I.R.M.		FLOOD INSURANCE RATE MAP
L.B.		LICENSED BUSINESS
L.S.		LICENSED SURVEYOR
F.A.C.		FLORIDA ADMINISTRATIVE CODE
INSTR. #		INSTRUMENT NUMBER
O.R.		OFFICIAL RECORD BOOK
P.B.		PLAT BOOK
PG.		PAGE
SEC.		SECTION
TWP.		TOWNSHIP
RNG.		RANGE
C.R.		COUNTY ROAD
R.O.W.		RIGHT-OF-WAY
S.R.		STATE ROAD
(C)		CALCULATED
(M)		MEASURED
(L)		LEGAL DESCRIPTION
(SFWMD)		PER SFWMD ROW MAP
(LCDOT)		PER LEE COUNTY DOT ROW MAP
(DOT)		DEPARTMENT OF TRANSPORTATION
M.H.W.		MEAN HIGH WATER
O/S		OFFSET
RCP		REINFORCED CONCRETE PIPE
CMP		CORRUGATED METAL PIPE
CONC.		CONCRETE
BLDG.		BUILDING
(TYP)		TYPICAL
FOSW		FACE OF SEAWALL
L&E		LESS AND EXCEPT
OHP		OVERHEAD POWER
		BARBED WIRE FENCE
		WOOD FENCE
		SIGN
		WOOD POWER POLE
		GUY ANCHOR
		HAND HOLE-UTILITY BOX
		TELEPHONE SERVICE
		FIBER OPTIC CABLE MARKER
		GRAVEL-DIRT ROAD
		PAVEMENT
		CONCRETE
		WOOD DECKING



DETAIL "B" SCALE 1" = 60'

BOUNDARY SURVEY

NORTH RIVER VILLAGE

A PORTION OF SECTIONS 16, 17, 19, 20 AND 21, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE:	5/02/08
F.B./PG.	427/15-20
DRAWN BY:	BJD
APPROVED:	TJC
SCALE:	1" = 200'

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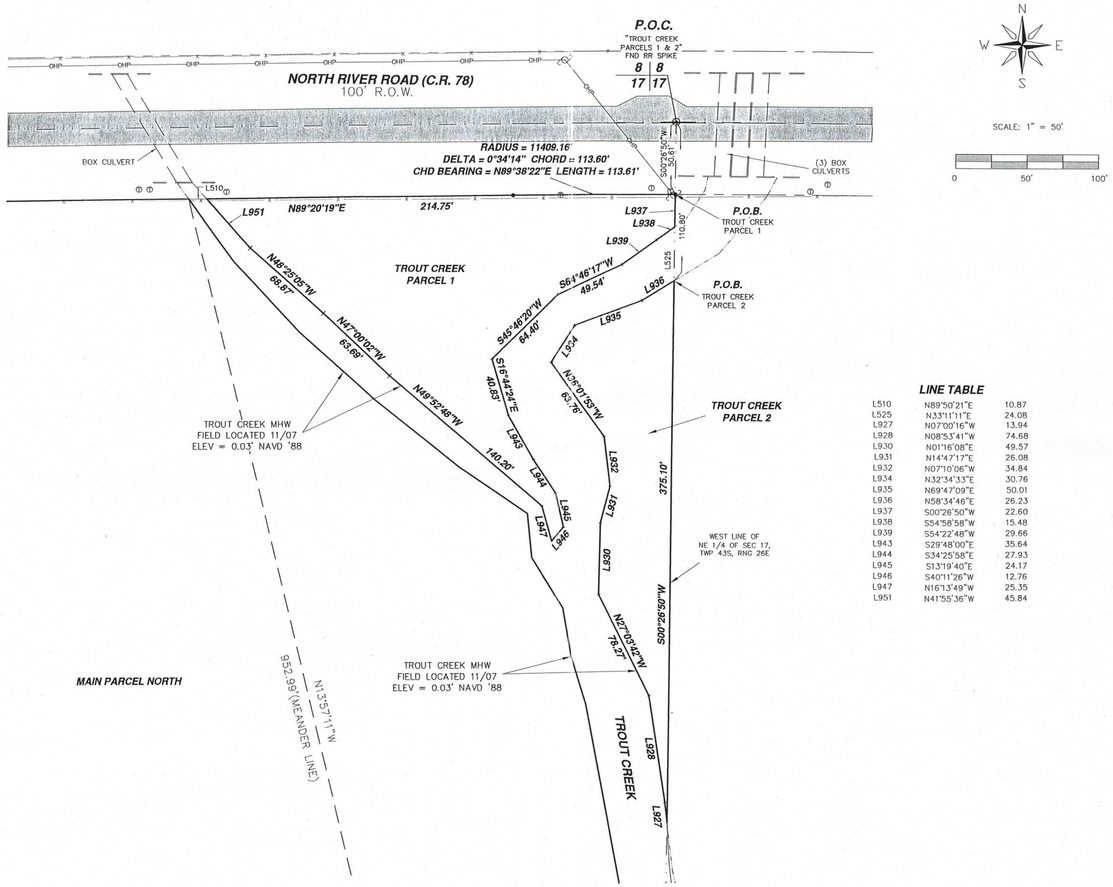
TROUT CREEK PARCEL DETAIL



SCALE: 1" = 50'

0 50' 100'

LINE TABLE

L510	N89°50'21"E	10.87
L525	N3°11'11"E	24.08
L927	N07°00'16"W	13.94
L928	N08°53'41"W	74.68
L930	N01°16'08"E	49.57
L931	N14°47'17"E	26.08
L932	N07°10'06"W	34.84
L934	N32°34'33"E	30.76
L935	N69°47'09"E	50.01
L936	N58°34'46"E	26.23
L937	S00°26'50"W	22.60
L938	S54°58'58"W	15.48
L939	S54°22'48"W	29.66
L943	S29°48'00"E	35.64
L944	S34°25'58"E	27.93
L945	S13°19'40"E	24.17
L946	S40°11'26"W	12.76
L947	N16°13'49"W	25.35
L951	N41°55'36"W	45.84

LEGEND

P.O.C.		POINT OF COMMENCEMENT
P.O.B.		POINT OF BEGINNING
F.C.M.	⊟	FOUND CONCRETE MONUMENT (ID AS SHOWN)
FN&D	✱	FOUND NAIL AND DISC (ID AS SHOWN)
F.I.R.	O	FOUND IRON ROD (ID AS SHOWN)
F.I.P.	O	FOUND IRON PIPE (ID AS SHOWN)
S.I.R.	●	SET IRON ROD LB #6753
RR SP	⊗	RAILROAD SPIKE
SFWMD		SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ACOE		ARMY CORPS OF ENGINEERS
FDEP		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JAX		JACKSONVILLE
LCEC		LEE COUNTY ELECTRIC CO-OP
N.A.V.D. 88		NORTH AMERICAN VERTICAL DATUM 1988
N.G.V.D. 29		NATIONAL GEODETIC VERTICAL DATUM 1929
F.I.R.M.		FLOOD INSURANCE RATE MAP
L.B.		LICENSED BUSINESS
L.S.		LICENSED SURVEYOR
F.A.C.		FLORIDA ADMINISTRATIVE CODE
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O.R.		OFFICIAL RECORD BOOK
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PG.		PAGE
SEC.		SECTION
TWP.		TOWNSHIP
RNG.		RANGE
C.R.		COUNTY ROAD
R.O.W.		RIGHT-OF-WAY
S.R.		STATE ROAD
(C)		CALCULATED
(M)		MEASURED
(L)		LEGAL DESCRIPTION
(SFWMD)		PER SFWMD ROW MAP
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(DOT)		DEPARTMENT OF TRANSPORTATION
M.H.W.		MEAN HIGH WATER
O/S		OFFSET
RCP		REINFORCED CONCRETE PIPE
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BLDG.		BUILDING
(TYP)		TYPICAL
FOSW		FACE OF SEAWALL
L&E		LESS AND EXCEPT
OHP		OVERHEAD POWER
		BARBED WIRE FENCE
		WOOD FENCE
		SIGN
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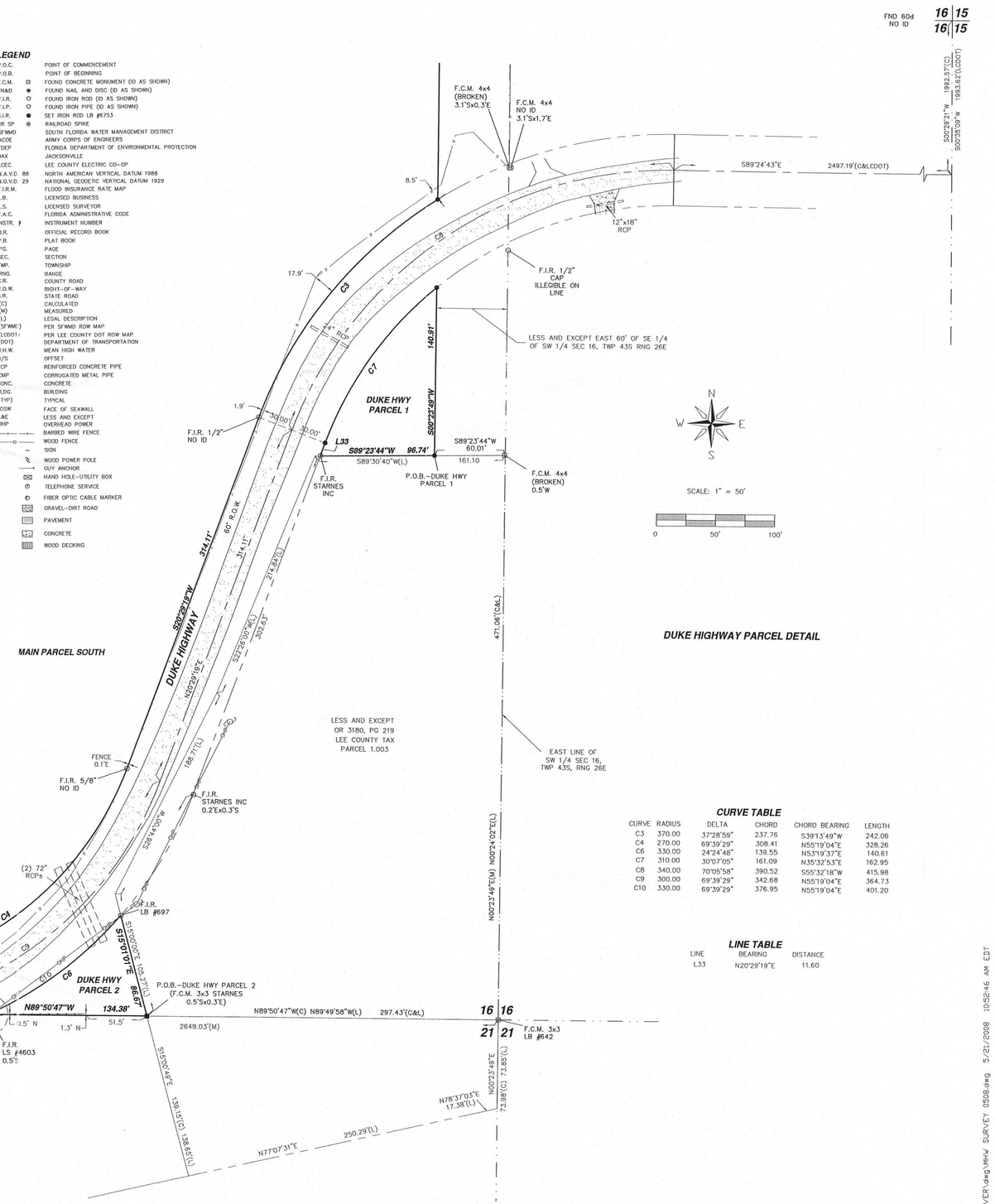
		TELEPHONE SERVICE
		FIBER OPTIC CABLE MARKER
		GRAVEL-DIRT ROAD
		PAVEMENT
		CONCRETE
		WOOD DECKING



SCALE: 1" = 50'

0 50' 100'

DUKE HIGHWAY PARCEL DETAIL

MAIN PARCEL SOUTH

CURVE TABLE

CURVE	RADIUS	DELTA	CHORD	CHORD BEARING	LENGTH
C3	370.00	37°28'59"	237.76	S39°13'49"W	242.06
C4	270.00	69°39'29"	308.41	N55°19'04"E	328.26
C6	330.00	24°24'48"	139.55	N53°19'37"E	140.61
C7	310.00	30°07'05"	161.09	N35°32'53"E	162.95
C8	340.00	70°05'58"	390.52	S55°32'18"W	415.98
C9	300.00	69°39'29"	342.68	N55°19'04"E	364.73
C10	330.00	69°39'29"	376.95	N55°19'04"E	401.20

LINE TABLE

LINE	BEARING	DISTANCE
L33	N20°29'19"E	11.60

REVISE PARCEL BOUNDARY 04/02/08

BOUNDARY SURVEY

NORTH RIVER VILLAGE
A PORTION OF SECTIONS 16, 17, 19, 20 AND 21,
TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE:	5/02/08
F.B./PG.	427/15-20
DRAWN BY:	BUD
APPROVED:	TJG
SCALE:	1" = 50'

Z:\PROJECTS\2007\NORTH RIVER\dwg\MHW SURVEY 0508.dwg 5/21/2008 10:52:46 AM EDT

F.C.M. 4x4
17 | 17 P.O.C. DUKE PARCEL 4
20 | 20 F.I.P. 3/4" (ILLEGIBLE)
668.99'
30.00'
30.00'
P.O.B. DUKE PARCEL 4
F.I.P. 3/4" (ILLEGIBLE)
F.I.P. 3/4" (ILLEGIBLE)
F.C.M. 4x4 NO ID 0.7'S
N89°40'34"W (M) (N89°41'18"W (LCDOT))
S89°40'34"E(M) (S89°41'18"E(L))
839.08'
6.0' L.C.E.C. O.R. 474, PG. 799
170.17'
F.C.M. 4x4 X-CUT 0.3'E
F.I.R. WITH PLASTIC CAP (ILLEGIBLE) 0.7'N x 0.2'E
8.0' L.C.E.C. O.R. 3364 PG. 35
12"x18" RCP
6' L.C.E.C. O.R. 474, PG. 799
8' L.C.E.C. O.R. 3364, PG. 35
FENCE ONLINE
F.C.M. 4x4 X-CUT 0.3'E
N89°40'34"W(M) (N89°41'18"W(L)) 172.31'
P.O.B. STANS FOUNDATION F.I.R. 1/2" RLS 2239 0.3'E
S89°40'34"E
N89°40'34"W(M) (N89°41'18"W(L)) 174.38'(L&M)
P.O.B.–SAVIGNE F.C.M. 3x3 LB #642 0.3'E
N89°40'34"W
60.0'
2006.87'
DUKE HIGHWAY
60' R.O.W.
1236.69'
2675.97'(M) (2675.98'(LCDOT))
660.00'
330.00'
P.O.B. DUKE PARCEL 3
N89°40'34"W(L)
6.0' L.C.E.C. O.R. 474, PG. 799
330.00'
F.C.M. 3x3 LB #642
FENCE 1.2'S
F.C.M. 4x4 (BROKEN) 1.9'S
N89°50'47"W 2079.72'
S89°50'47"E
30.00'
30.00'
12"x18" RCP
2649.03'(M)
16 | 16 F.C.M. 3x3 LB #642
21 | 21
17 | 16
20 | 21
F.I.R. 1/2" PLASTIC CAP (ILLEGIBLE)
FENCE 0.3'N
SR
N
W
E
S
SCALE: 1" = 100'
0
100'
200'
1030.23'(M) (1030.17'(L))
N00°20'06"E(M) (N00°20'40"E(L))
DUKE HIGHWAY PARCEL 4
CAREY PARCEL THREE C
NOT A PART
858.27'(C) (859.10'(L))
S00°24'32"W(C) (S00°23'49"W(L))
849.34'(C)
N00°23'54"E(C) (S00°23'49"W(L))
STANS FOUNDATION PARCEL
SAVIGNE PARCEL
8.39.30'(C) 8.39.06'(L)
N00°23'54"E (N00°23'49"E)
(828.97'(L)) 829.14'(C)
(S00°23'49"W(L)) N00°23'54"E(C)
CAREY PARCEL THREE B
THE EAST 1320' L&E THE EAST 1320' OF GOV LOT 1 SEC 20, TWP 43S, RNG 26E
DUKE HIGHWAY PARCEL 3
N00°23'54"E(C) 790.69'
CAREY PARCEL THREE A
THE EAST 1/2 OF THE EAST 1320' L&E THE EAST 330' OF GOV LOT 1 SEC 20, TWP 43S, RNG 26E
734.86'
S00°23'54"W
NOT A PART
330.00'
330.00'
887.48'(C) 887.56'(SFWMD)
S00°23'54"W(M) (N00°23'49"E)
EAST LINE GOV LOT 1 SEC 20, TWP 43S, RNG 26E
F.C.M. 3x3 X-CUT 0.4'S
339.05' 552.92'(SFWMD) 552.46'(C)
N00°23'54"E(M) 123.29' N00°23'49"(SFWMD)
F.C.M. 4x4 ACOE 1989
WEST LINE GOV LOT 1 SEC 20, TWP 43S, RNG 26E
F.C.M. 4x4 ACOE 1989 2400+92
FENCE 0.8'NW
S86°59'22"W(C) 138.41'(C) (S86°59'37"W(L)) (139.80'(L))
1.5'N
170.63'
FENCE 0.9'N
F.I.R. 1/2" (ILLEGIBLE)
F.I.R. 1/2" RLS 2239
(N86°59'52"E(L)) (172.61'(L))
FENCE 0.2'N
F.C.M. 3x3 X-CUT 0.28'N
(N86°59'52"E(L)) 174.69'(M) (174.67'(L))
F.C.M. 4x4 ACOE 1989 394+86
62.65'(M)
7.6'
661.17'
8.4'
1130.97'
0.8'
S86°59'22"W
(N86°59'52"E N86°59'22"E 1441.04'(SFWMD)) 1441.01'(C)
122.50'
S77°07'55"W 213.42'
FENCE 0.2'S
N77°07'31"E(SFWMD) N77°07'55"E(C)
F.C.M. 4x4 ACOE 1989
F.I.P. 3/4" LB #642
6.1'
N53°12'28"W(M) 250.08'(M) (N52°35'49"W(L)) (250.5'(L))
S56°48'56"W(M) 672.80'(M) (S56°47'07"W(L)) (672.60'(L)) S56°47'25"W(SFWMD) 672.89'(SFWMD)
O.R. 484 PG 407
FENCE 1.2'NW
F.C.M. 4x4 ACOE 1989 2405+99
NORTHERLY BOUNDARY OF PERPETUAL EASEMENT O.R. 523, PG 429
NORTHERLY R.O.W. LINE CANAL 43 O.R. 222, PG 784
CANAL 43 RIGHT OF WAY (S.F.W.M.D.)
800.00'
CALOOSAHATCHEE RIVER
300.00'
CALOOSAHATCHEE RIVER CANAL P.B. 8, PG. 51

LEGEND

P.O.C.		POINT OF COMMENCEMENT
P.O.B.		POINT OF BEGINNING
F.C.M.	⊡	FOUND CONCRETE MONUMENT (ID AS SHOWN)
FN&D	●	FOUND NAIL AND DISC (ID AS SHOWN)
F.I.R.	○	FOUND IRON ROD (ID AS SHOWN)
F.I.P.	○	FOUND IRON PIPE (ID AS SHOWN)
S.I.R.	●	SET IRON ROD LB #6753
RR SP.	⊗	RAILROAD SPIKE
SFWMD		SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ACOE		ARMY CORPS OF ENGINEERS
FDEP		FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
JAX		JACKSONVILLE
LCEC		LEE COUNTY ELECTRIC CO-OP
N.A.V.D. 88		NORTH AMERICAN VERTICAL DATUM 1988
N.G.V.D. 29		NATIONAL GEODETIC VERTICAL DATUM 1929
F.I.R.M.		FLOOD INSURANCE RATE MAP
L.B.		LICENSED BUSINESS
L.S.		LICENSED SURVEYOR
F.A.C.		FLORIDA ADMINISTRATIVE CODE
INSTR. #		INSTRUMENT NUMBER
O.R.		OFFICIAL RECORD BOOK
P.B.		PLAT BOOK
PG.		PAGE
SEC.		SECTION
TWP.		TOWNSHIP
RNG.		RANGE
C.R.		COUNTY ROAD
R.O.W.		RIGHT-OF-WAY
S.R.		STATE ROAD
(C)		CALCULATED
(M)		MEASURED
(L)		LEGAL DESCRIPTION
(SFWMD)		PER SFWMD ROW MAP
(LCDOT)		PER LEE COUNTY DOT ROW MAP
(DOT)		DEPARTMENT OF TRANSPORTATION
M.H.W.		MEAN HIGH WATER
O/S		OFFSET
RCP		REINFORCED CONCRETE PIPE
CMP		CORRUGATED METAL PIPE
CONC.		CONCRETE
BLDG.		BUILDING
(TYP)		TYPICAL
FOSW		FACE OF SEAWALL
L&E		LESS AND EXCEPT
OHP		OVERHEAD POWER
		BARBED WIRE FENCE
		WOOD FENCE
		SIGN
		WOOD POWER POLE
		GUY ANCHOR
		HAND HOLE-UTILITY BOX
		TELEPHONE SERVICE
		FIBER OPTIC CABLE MARKER
		GRAVEL-DIRT ROAD
		PAVEMENT
		CONCRETE
		WOOD DECKING

BOUNDARY SURVEY

NORTH RIVER VILLAGE
A PORTION OF SECTIONS 16, 17, 19, 20 AND 21,
TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA

BBLS SURVEYORS & MAPPERS INC.
1502-A RAIL HEAD BLVD.
NAPLES, FLORIDA 34110
(239) 597-1315

DATE:	5/02/08
F.B./PG.	427/15-20
DRAWN BY:	BJD
APPROVED:	TJG
SCALE:	1" = 100'

Z:\PROJECTS\2007\NORTH RIVER\dwg\MHW SURVEY 0508.dwg 5/21/2008 10:52:46 AM EDT

SCALE: 1" = 500'

LEGEND:

- SFWMD WETLANDS (231.99 Ac.±)
- SFWMD "OTHER SURFACE WATERS" (26.09 Ac.±)
- SURVEYED WETLAND LINE

FLUCFCS CODE	DESCRIPTION	ACREAGE	% OF TOTAL
110	RESIDENTIAL, LOW DENSITY	2.79 Ac.±	0.2%
184	MARINA	3.69 Ac.±	0.3%
200	AGRICULTURE	3.03 Ac.±	0.2%
211	IMPROVED PASTURE	482.47 Ac.±	39.1%
213	WOODLAND PASTURE	47.68 Ac.±	3.9%
221	CITRUS GROVE	129.12 Ac.±	10.5%
262	LOW PASTURE	28.95 Ac.±	2.3%
3219 E2	PALMETTO PRAIRIE, DISTURBED (25-49% EXOTICS)	0.09 Ac.±	0.0%
3219 E3	PALMETTO PRAIRIE, DISTURBED (50-75% EXOTICS)	0.13 Ac.±	0.0%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	17.00 Ac.±	1.4%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	0.48 Ac.±	0.0%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	0.08 Ac.±	0.0%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	0.41 Ac.±	0.0%
4219 E1	XERIC OAK, DISTURBED (0-24% EXOTICS)	2.98 Ac.±	0.2%
422	BRAZILIAN PEPPER	4.29 Ac.±	0.3%
4221	BRAZILIAN PEPPER, HYDRIC	24.82 Ac.±	2.0%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	36.46 Ac.±	3.0%
4279 E2	LIVE OAK, DISTURBED (25-49% EXOTICS)	52.23 Ac.±	4.2%
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	16.67 Ac.±	1.4%
4279 E4	LIVE OAK, DISTURBED (76-100% EXOTICS)	11.88 Ac.±	1.0%
4281 E1	CABBAGE PALM, HYDRIC (0-24% EXOTICS)	4.20 Ac.±	0.3%
4281 E2	CABBAGE PALM, HYDRIC (25-49% EXOTICS)	0.79 Ac.±	0.1%
4281 E4	CABBAGE PALM, HYDRIC (76-100% EXOTICS)	6.92 Ac.±	0.6%
4289 E1	CABBAGE PALM, DISTURBED (0-24% EXOTICS)	2.14 Ac.±	0.2%
4289 E2	CABBAGE PALM, DISTURBED (25-49% EXOTICS)	0.32 Ac.±	0.0%
4289 E3	CABBAGE PALM, DISTURBED (50-75% EXOTICS)	2.44 Ac.±	0.2%
4289 E4	CABBAGE PALM, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
4291 E1	WAX MYRTLE, HYDRIC (0-24% EXOTICS)	0.33 Ac.±	0.0%
4291 E3	WAX MYRTLE, HYDRIC (50-75% EXOTICS)	1.42 Ac.±	0.1%
4291 E4	WAX MYRTLE, HYDRIC (76-100% EXOTICS)	0.14 Ac.±	0.0%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	13.52 Ac.±	1.1%
4349 E2	HARDWOOD/CONIFER MIXED, DISTURBED (25-49% EXOTICS)	15.01 Ac.±	1.2%
4349 E3	HARDWOOD/CONIFER MIXED, DISTURBED (50-75% EXOTICS)	4.60 Ac.±	0.4%
4349 E4	HARDWOOD/CONIFER MIXED, DISTURBED (76-100% EXOTICS)	8.96 Ac.±	0.7%
510	STREAMS AND WATERWAYS	11.55 Ac.±	0.9%
514	DITCH	9.40 Ac.±	0.8%
520	POND	0.13 Ac.±	0.0%
525	CATTLE POND	3.07 Ac.±	0.2%
530	RESERVOIRS	0.73 Ac.±	0.1%
6129 E1	MANGROVE SWAMP, DISTURBED (0-24% EXOTICS)	0.35 Ac.±	0.0%
6129 E2	MANGROVE SWAMP, DISTURBED (25-49% EXOTICS)	0.19 Ac.±	0.0%
6169 E1	HARDWOOD WETLAND-POP ASH, DISTURBED (0-24% EXOTICS)	1.10 Ac.±	0.1%
6189 E1	WILLOW, DISTURBED (0-24% EXOTICS)	2.71 Ac.±	0.2%
6189 E2	WILLOW, DISTURBED (25-49% EXOTICS)	1.11 Ac.±	0.1%
6189 E3	WILLOW, DISTURBED (50-75% EXOTICS)	3.09 Ac.±	0.3%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	8.75 Ac.±	0.7%
6215 E3	CYPRESS, DRAINED (50-75% EXOTICS)	0.96 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	2.78 Ac.±	0.2%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	1.62 Ac.±	0.1%
6219 E3	CYPRESS, DISTURBED (50-75% EXOTICS)	0.66 Ac.±	0.1%
6249 E3	PINE/CYPRESS, DISTURBED (50-75% EXOTICS)	0.36 Ac.±	0.0%
6259 E2	HYDRIC PINE, DISTURBED (25-49% EXOTICS)	2.25 Ac.±	0.2%
6259 E3	HYDRIC PINE, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6309 E1	WETLAND FORESTED MIXED, DISTURBED (0-24% EXOTICS)	9.92 Ac.±	0.8%
6309 E2	WETLAND FORESTED MIXED, DISTURBED (25-49% EXOTICS)	16.22 Ac.±	1.3%
6309 E3	WETLAND FORESTED MIXED, DISTURBED (50-75% EXOTICS)	15.52 Ac.±	1.3%
6309 E4	WETLAND FORESTED MIXED, DISTURBED (76-100% EXOTICS)	68.50 Ac.±	5.6%
6319 E2	WETLAND SHRUB, DISTURBED (25-49% EXOTICS)	2.18 Ac.±	0.2%
6319 E3	WETLAND SHRUB, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6319 E4	WETLAND SHRUB, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	7.64 Ac.±	0.6%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	6.37 Ac.±	0.5%
6419 E3	FRESHWATER MARSH, DISTURBED (50-75% EXOTICS)	5.17 Ac.±	0.4%
6419 E4	FRESHWATER MARSH, DISTURBED (76-100% EXOTICS)	2.39 Ac.±	0.2%
6439 E1	WET PRAIRIE, DISTURBED (0-24% EXOTICS)	1.31 Ac.±	0.1%
740	DISTURBED LAND	105.39 Ac.±	8.5%
7401	DISTURBED LAND, HYDRIC	3.60 Ac.±	0.3%
742	BORROW AREA	1.21 Ac.±	0.1%
743	SPOIL AREAS	0.75 Ac.±	0.1%
747	BERM	3.27 Ac.±	0.3%
814	ROAD	5.56 Ac.±	0.5%
	TOTAL	1232.77 Ac.±	100.0%

NOTES:

PROPERTY BOUNDARY PER BBLS SURVEYORS AND MAPPERS, INC. DRAWING No.6982-Site_to_BBG_070708.DWG DATED JULY 7, 2008.

SURVEYED WETLAND LINES PER BBLS SURVEYORS AND MAPPERS, INC. DRAWING No.20066644 Wetlands ALL.DWG DATED MAY 10, 2007.

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 HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2005\05bbg1393\2008\Environmental Assessment\Exhibit A and B Aerial with FLUCFCS and Wetlands Map.dwg Tab: EXHIBIT A Aug 13, 2008 - 2:24pm Plotted By: PAULF

REVISIONS	DATE

DRAWN BY	J.I.	DATE	8/6/08
DESIGNED BY	A.K.	DATE	8/6/08
REVIEWED BY	K.C.P.	DATE	8/6/08

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

Passarella & Associates, Inc.
Consulting Ecologists

NORTH RIVER VILLAGE
FLUCFCS AND WETLANDS MAP

DRAWING No. 05BBG1393

SHEET No. EXHIBIT A

FLUCFCS CODE	DESCRIPTION	ACREAGE	% OF TOTAL
110	RESIDENTIAL, LOW DENSITY	2.79 Ac.±	0.2%
184	MARINA	3.59 Ac.±	0.3%
200	AGRICULTURE	3.03 Ac.±	0.2%
211	IMPROVED PASTURE	482.47 Ac.±	39.1%
213	WOODLAND PASTURE	47.68 Ac.±	3.9%
221	CITRUS GROVE	129.12 Ac.±	10.5%
262	LOW PASTURE	28.95 Ac.±	2.3%
3219 E2	PALMETTO PRAIRIE, DISTURBED (25-49% EXOTICS)	0.09 Ac.±	0.0%
3219 E3	PALMETTO PRAIRIE, DISTURBED (50-75% EXOTICS)	0.13 Ac.±	0.0%
4119 E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	17.00 Ac.±	1.4%
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	0.48 Ac.±	0.0%
4119 E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	0.08 Ac.±	0.0%
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	0.41 Ac.±	0.0%
4219 E1	XERIC OAK, DISTURBED (0-24% EXOTICS)	2.98 Ac.±	0.2%
422	BRAZILIAN PEPPER	4.29 Ac.±	0.3%
4221	BRAZILIAN PEPPER, HYDRIC	24.82 Ac.±	2.0%
4279 E1	LIVE OAK, DISTURBED (0-24% EXOTICS)	36.46 Ac.±	3.0%
4279 E2	LIVE OAK, DISTURBED (25-49% EXOTICS)	52.23 Ac.±	4.2%
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	16.67 Ac.±	1.4%
4279 E4	LIVE OAK, DISTURBED (76-100% EXOTICS)	11.88 Ac.±	1.0%
4281 E1	CABBAGE PALM, HYDRIC (0-24% EXOTICS)	4.20 Ac.±	0.3%
4281 E2	CABBAGE PALM, HYDRIC (25-49% EXOTICS)	0.79 Ac.±	0.1%
4281 E4	CABBAGE PALM, HYDRIC (76-100% EXOTICS)	6.92 Ac.±	0.6%
4289 E1	CABBAGE PALM, DISTURBED (0-24% EXOTICS)	2.14 Ac.±	0.2%
4289 E2	CABBAGE PALM, DISTURBED (25-49% EXOTICS)	0.32 Ac.±	0.0%
4289 E3	CABBAGE PALM, DISTURBED (50-75% EXOTICS)	2.44 Ac.±	0.2%
4289 E4	CABBAGE PALM, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
4291 E1	WAX MYRTLE, HYDRIC (0-24% EXOTICS)	0.33 Ac.±	0.0%
4291 E3	WAX MYRTLE, HYDRIC (50-75% EXOTICS)	1.42 Ac.±	0.1%
4291 E4	WAX MYRTLE, HYDRIC (76-100% EXOTICS)	0.14 Ac.±	0.0%
4349 E1	HARDWOOD/CONIFER MIXED, DISTURBED (0-24% EXOTICS)	13.52 Ac.±	1.1%
4349 E2	HARDWOOD/CONIFER MIXED, DISTURBED (25-49% EXOTICS)	15.01 Ac.±	1.2%
4349 E3	HARDWOOD/CONIFER MIXED, DISTURBED (50-75% EXOTICS)	4.60 Ac.±	0.4%
4349 E4	HARDWOOD/CONIFER MIXED, DISTURBED (76-100% EXOTICS)	8.96 Ac.±	0.7%
510	STREAMS AND WATERWAYS	11.55 Ac.±	0.9%
514	DITCH	9.40 Ac.±	0.8%
520	POND	0.13 Ac.±	0.0%
525	CATTLE POND	3.07 Ac.±	0.2%
530	RESERVOIRS	0.73 Ac.±	0.1%
6129 E1	MANGROVE SWAMP, DISTURBED (0-24% EXOTICS)	0.35 Ac.±	0.0%
6129 E2	MANGROVE SWAMP, DISTURBED (25-49% EXOTICS)	0.19 Ac.±	0.0%
6169 E1	HARDWOOD WETLAND-POP ASH, DISTURBED (0-24% EXOTICS)	1.10 Ac.±	0.1%
6189 E1	WILLOW, DISTURBED (0-24% EXOTICS)	2.71 Ac.±	0.2%
6189 E2	WILLOW, DISTURBED (25-49% EXOTICS)	1.11 Ac.±	0.1%
6189 E3	WILLOW, DISTURBED (50-75% EXOTICS)	3.09 Ac.±	0.3%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	8.75 Ac.±	0.7%
6215 E3	CYPRESS, DRAINED (50-75% EXOTICS)	0.96 Ac.±	0.1%
6219 E1	CYPRESS, DISTURBED (0-24% EXOTICS)	2.78 Ac.±	0.2%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	1.62 Ac.±	0.1%
6219 E3	CYPRESS, DISTURBED (50-75% EXOTICS)	0.66 Ac.±	0.1%
6249 E3	PINE/CYPRESS, DISTURBED (50-75% EXOTICS)	0.36 Ac.±	0.0%
6259 E2	HYDRIC PINE, DISTURBED (25-49% EXOTICS)	2.25 Ac.±	0.2%
6259 E3	HYDRIC PINE, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6309 E1	WETLAND FORESTED MIXED, DISTURBED (0-24% EXOTICS)	9.92 Ac.±	0.8%
6309 E2	WETLAND FORESTED MIXED, DISTURBED (25-49% EXOTICS)	16.22 Ac.±	1.3%
6309 E3	WETLAND FORESTED MIXED, DISTURBED (50-75% EXOTICS)	15.52 Ac.±	1.3%
6309 E4	WETLAND FORESTED MIXED, DISTURBED (76-100% EXOTICS)	68.50 Ac.±	5.6%
6319 E2	WETLAND SHRUB, DISTURBED (25-49% EXOTICS)	2.18 Ac.±	0.2%
6319 E3	WETLAND SHRUB, DISTURBED (50-75% EXOTICS)	0.12 Ac.±	0.0%
6319 E4	WETLAND SHRUB, DISTURBED (76-100% EXOTICS)	0.39 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	7.64 Ac.±	0.6%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	6.37 Ac.±	0.5%
6419 E3	FRESHWATER MARSH, DISTURBED (50-75% EXOTICS)	5.17 Ac.±	0.4%
6419 E4	FRESHWATER MARSH, DISTURBED (76-100% EXOTICS)	2.39 Ac.±	0.2%
6439 E1	WET PRAIRIE, DISTURBED (0-24% EXOTICS)	1.31 Ac.±	0.1%
740	DISTURBED LAND	105.39 Ac.±	8.5%
7401	DISTURBED LAND, HYDRIC	3.60 Ac.±	0.3%
742	BORROW AREA	1.21 Ac.±	0.1%
743	SPOIL AREAS	0.75 Ac.±	0.1%
747	BERM	3.27 Ac.±	0.3%
814	ROAD	5.56 Ac.±	0.5%
	TOTAL	1232.77 Ac.±	100.0%

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF AUGUST - NOVEMBER 2007.

PROPERTY BOUNDARY PER BBLS SURVEYORS AND MAPPERS, INC. DRAWING No.6982-SITE_TO_BBG_070708.DWG DATED JULY 7, 2008.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

REVISIONS	DATE

	DATE
DRAWN BY: J.I.	8/6/08
DESIGNED BY: A.K.	8/6/08
REVIEWED BY: K.C.P.	8/6/08

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PASSARELLA & ASSOCIATES INC
Consulting Ecologists

NORTH RIVER VILLAGE
AERIAL WITH FLUCFCS MAP

DRAWING No. 05BBG1393

SHEET No. EXHIBIT B

J:\2005\05bbg1393\2008\ENVIRONMENTAL ASSESSMENT\EXHIBIT A AND B AERIAL WITH FLUCFCS AND WETLANDS MAP.DWG TAB: EXHIBIT B AUG 13, 2008 - 2:25PM PLOTTED BY: PAULF