LEE COUNTY, FLORIDA
DEPARTMENT OF COMMUNITY DEVELOPMENT
ZONING DIVISION
STAFF REPORT

TYPE OF CASE: **DEVELOPMENT OF REGIONAL IMPACT, DRI**
CASE NUMBER: **DRI2014-00001**
HEARING DATE: **May 7, 2014**

Applicant: Palmas del Sol Condo Association, Inc. in reference to Rivers Edge Yacht/Country Club

Request: Amendment/Notice of Proposed Change [Non-Substantial Deviation per Fla. Stat. §380.08(19)(e)] to the River's Edge Yacht and Racket Club (a/k/a Gulf Harbour) (State DRI #12-8182-21) to revise the trimming practices for red mangroves and reduce the minimum height of the mangrove and other preserved tree trimming from 32-feet NGVD, to 20-feet NGVD in the approximately 10.17 acre Conservation Easement adjacent to the Palmas Del Sol Condominium, and to extend that environmental monitoring for an additional 5 years.

Location: The subject property is located within the Gulf Harbour Yacht & Country Club, McGregor Boulevard, Iona/McGregor Planning Community, Lee County, FL. (District #3)
The current STRAP number is: 30-45-24-13-0000A.0000

Future Land Use Designation: Suburban and Wetlands

Current Zoning: PUD

Current Use: Residential, golf course and amenities, and conservation areas.

RECOMMENDATION:
Staff recommends DENIAL of the request to reduce the trim height from 32' NGVD to 20' NGVD, remove the specific trimming requirements for red mangroves, and allow biennial trimming events.

Staff provides the following findings, which are discussed in greater detail in the ES staff report found as Attachment 3 to this report:

- The 10.2 acres mangrove preserve is required indigenous vegetation as per Land Development Code (LDC) Section 10-415 Open Space requirements; and therefore, the requests is not in compliance with LDC Section 10-421(c) pruning requirements because the requested 40% reduction in mangrove height is not pruning to promote healthy, uniform, natural growth of the vegetation and the requested height reduction is not necessary to promote health, safety, and welfare of the Palmas Del Sol Condominium residents; and

- The proposed trimming of the mangrove habitat is inconsistent with Lee Plan Objectives and Policies 104.1, 107.2, 107.2.4, 107.2.10, 107.2.13, 107.4, 107.4.2, 108.1.2, 113.1, 113.1.1, 113.1.2, and 113.1.5 because Lee County is required to protect and conserve wetland mangrove stands, particularly those located with the coastal planning area, for improved water quality and wildlife diversity.

Staff recommends APPROVAL of the following revisions to the DRI DO Condition II.G.5.d.:

- (1) to add "including other preserved trees" in order to include buttonwood (Conocarpus erectus) in the allowed trimming practices; and
- (1)(c)(iv) to add "and other preserved" to include buttonwood trees; and
- (1)(e) to add "bi-annual" to timing of maintenance trimming events which allows maintenance trimming to potentially occur twice a year; and
- (1)(e)(vii) to add "have been" to indicate the monitoring requirements, as currently conditioned, have been met.

BACKGROUND INFORMATION AND ANALYSIS:

Request and Decision-making

In summary, the applicant has requested the following changes to the DRI Development Order:

- revise the trimming practices for red mangroves;
- reduce the minimum height of the mangrove and other preserved tree trimming from 32-feet NGVD, to 20-feet NGVD; and
- extend environmental monitoring for an additional 5 years.

Florida Statute 380.06(19)(f)(5) provides the following:

> At the public hearing, the local government shall determine whether the proposed change requires further development-of-regional-impact review. The provisions of paragraphs (a) and (e), the thresholds set forth in paragraph (b), and the presumptions set forth in paragraphs (c) and (d) and subparagraph (e)3. shall be applicable in determining whether further development-of-regional-impact review is required. The local government may also deny the proposed change based on matters relating to local issues, such as if the land on which the change is sought is plat restricted in a way that would be incompatible with the proposed change, and the local government does not wish to change the plat restriction as part of the proposed change.

Introduction/Synopsis

The applicant has filed this case in accordance with Florida Statute 380.06(19)(e)2.k. The request seeks to change Condition II.G.5.d.(1)(c)(iv) of the DRI Development Order for River's Edge Yacht and Country Club (A/K/A Gulf Harbour) (State DRI #12-8182-21). Condition II.G.5.d.(1)(c) currently reads:

> (c) All mangrove trimming must be conducted as permitted by the Florida Department of Environmental Protection (FDEP) General Mangrove Permit File No. 36-0152741-0003, which includes but not limited to the following conditions:

(i) Mangrove Trimming must be supervised or conducted exclusively by a Professional Mangrove Trimmer.

(ii) No herbicide or other chemical may be used for the purpose of removing leaves of a mangrove.

(iii) Trimming must be conducted in stages so that no more than 25% of the foliage is removed annually, and the height and configuration of the mangroves trimmed under these general permits may be maintained.

(iv) The final height of trimmed mangroves to be maintained is 32' NGVD (approximately 30'+ from substrate). Only the mangroves within the mangrove trimming areas shown in Exhibit G may be trimmed. Because many of the trees in the mangrove trimming areas are less than 32' NGVD in height (as of June 2002), approximately thirty percent of the area will not be initially trimmed. Trees less than 32' NGVD in the mangrove trimming area will only be trimmed as they exceed 32' NGVD in the future to maintain the required elevation.

The applicant is seeking to change (iv) above to reduce the final height of the mangrove trimming from 32 feet NGVD, to 20 feet NGVD.

Other changes sought include revising the trimming practices for red mangroves and extend environmental monitoring for an additional 5 years.

Staff Analysis and Recommendation:
Attachment C to this report is a complete report with attachments from Environmental Sciences (ES). ES finds in the Conclusion (found at the end of the report) that the 10.2 acres mangrove preserve is required indigenous native vegetation as per LDC Section 10-415 requirements and therefore the proposed trimming to 20’ NGVD (18’ from substrate) is not in compliance with LDC Section 10-421(c) Pruning requirements and is not consistent with the above referenced Lee Plan Goals, Objectives, and Policies. Therefore, ES staff recommends DENIAL of the request to reduce the trim height from 32’ NGVD to 20’ NGVD, remove the specific trimming requirements for red mangroves, and allow biennial trimming events.

ES staff concurs that the required monitoring reports have been provided and ES staff recommends in order to address the applicant’s concern with re-growth of the vegetation, the conditions could be revised to specify “other preserved trees” to include buttonwood species and allow bi-annual maintenance of the vegetation. Therefore, ES staff recommends Approval of the following revisions to the DRI DO Condition II.G.5.d.:

- (1) to add “including other preserved trees” in order to include buttonwood (Conocarpus erectus) in the allowed trimming practices; and
- (1)(c)(iv) to add “and other preserved” to include buttonwood trees; and

- (1)(e) to add “bi-annual” to timing of maintenance trimming events which allows maintenance trimming to potentially occur twice a year; and
- (1)(e)(vii) to add “have been” to indicate the monitoring requirements, as currently conditioned, have been met.

If the Board of County Commissioners should not agree with Staff’s findings and recommendation and chooses to also move forward with an approval of the reduced trimming height, removing specific trimming practices for red mangroves, and allowing biennial trimming events; ES staff recommends that conditions as indicated in ES Staff Exhibit 1 be adopted as part of the final zoning resolution. These conditions as recommended by ES staff will replace Z-02-020 DRI DO Exhibit D with the correct Preservation Line Map dated 1-3-94; ensure all applicable resolution exhibits, conservation easement, and required state and/or federal permits are amended to reflect new trim heights and practices; and add conditions to enhance monitoring requirements to assist ES staff with obtaining relevant information to accurately assess the effects of the permitted trimming activity.

Surrounding Zoning and Land Use:
The specific change being sought is located on a parcel in the northwest corner of the project along the Caloosahatchee River. To the north is the River. To the east and south is existing development within River’s Edge/Gulf Harbour. Single family residential is located to the east off of Longwater Chase Court. Multiple family residential is located to the south within the Palmas del Sol Condominium.

To the west is an adjoining development named Peppertree Point. The zoning of the property is RM-2 and the immediate adjoining parcel is within a conservation easement. Further west are 6 to 8 story, multiple family residential buildings.

Florida Statute (FS) 380.06(19)(e).
The applicant has requested the above changes based on FS 380.06(19)(e)2(k). This section provides the changes listed in this Section of Florida Statutes, individually or cumulatively, are not substantial deviations.

Sub-section (k) provides: Changes that do not increase the number of external peak hour trips and do not reduce open space and conserved areas within the project except as otherwise permitted by sub-subparagraph j.

The reduced height of mangrove trimming does not increase the external peak trips. The additional trimming does not reduce open space, nor would it reduce conserved areas. Therefore, this application to amend the DRI Development Order language reducing the height of mangrove trimming can proceed directly to the Board of County Commissioners for consideration of approval or denial.

DRI Project History
The River’s Edge Yacht & Country Club was originally approved on May 5, 1982 allowing development of up to 4,380 dwelling units.

The project was amended on March 16, 1992 to decrease the density from 4,380 dwelling units to 2,071; relocate 6 golf holes, the golf course club house, tennis courts, marina basin

and marina village; reduce the number of boat slips from 250 to 190 slips; and extend the buildout date 4 years and 11 months to May 4, 1998.

The second amendment was adopted on March 21, 1994 to modify the location and design of the marina facility.

The third amendment was adopted on March 19, 2001 to (1) reduce the number of dwelling units from 2,071 to 1,987; (2) eliminate 200 hotel units; (3) replace the 65,000 square feet of commercial with a 5,000 square foot ship's store and 30,000 square foot club house; (4) eliminate the 250 seat restaurant; and (5) extend the buildout date an additional 7 years to May 4, 2005.

The fourth amendment was adopted on October 7, 2002, to allow construction of a boardwalk with observation platform and mangrove trimming within the established Mangrove Preservation Area (Tract E).

The fifth amendment was adopted on October 31, 2005 extending the build-out date by three years.

The sixth, and final, amendment was adopted on September 11, 2007 granting a three year extension of all phase, buildout, and expiration dates as provided for in HB7203.

ATTACHMENTS

1. Zoning Map, Future Land Use Map, and aerial photograph
2. Applicant's NOPC application
3. Environmental Sciences report

cc: Applicant
County Attorney
Zoning File

DRI2014-00001

2014 Aerial Map

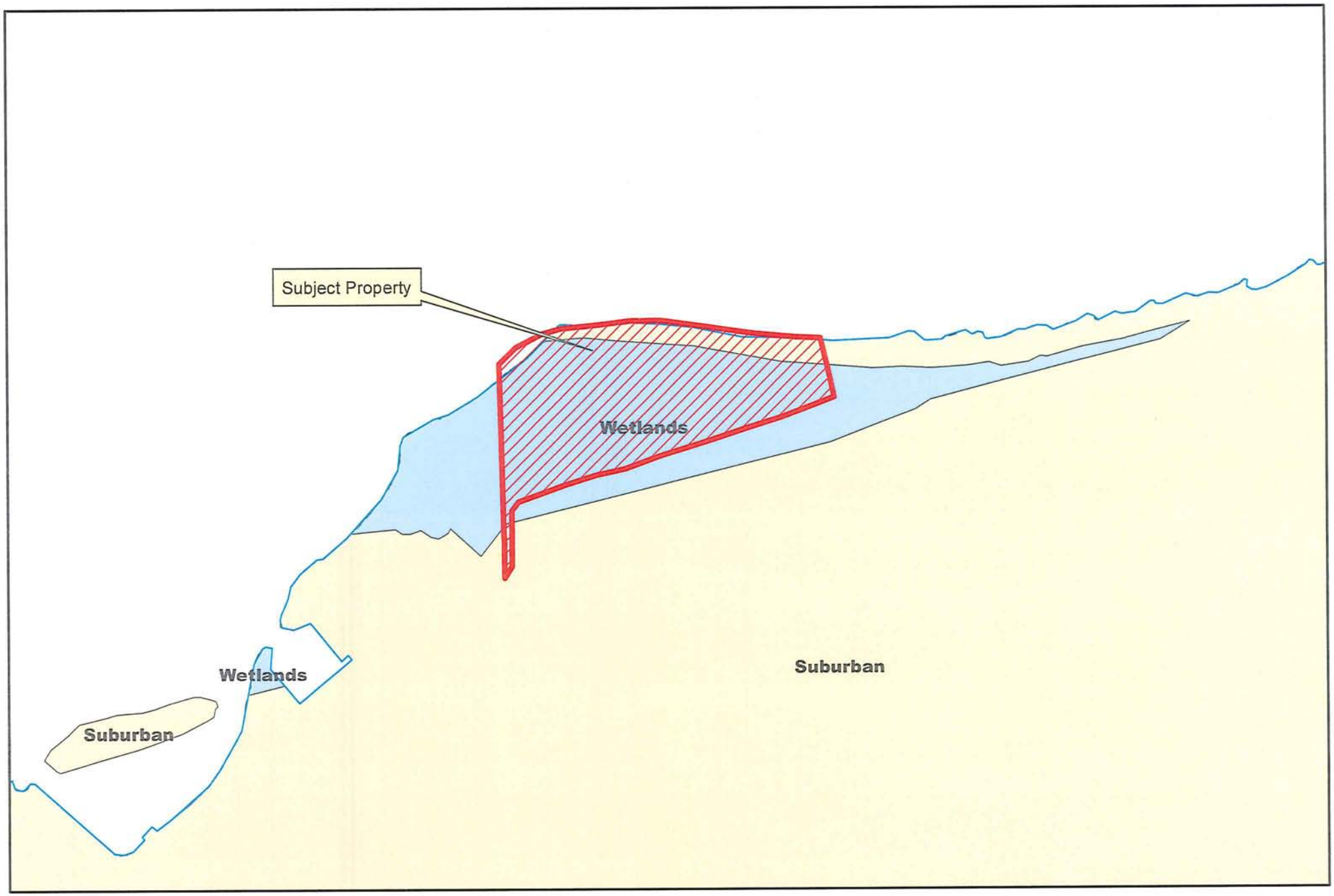


ATTACHMENT 1

0 250 500 Feet

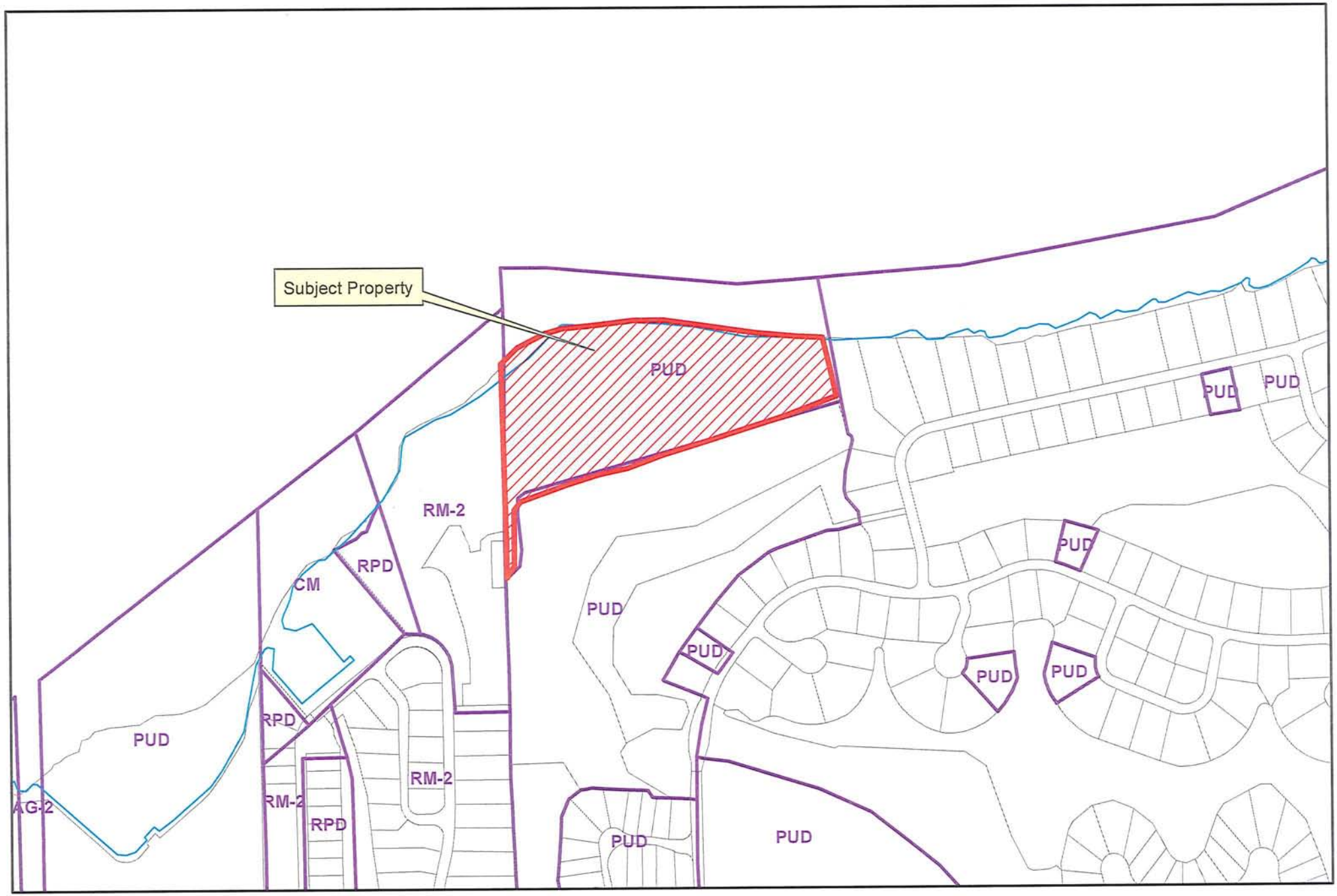
DRI2014-00001

Future Land Use Map



DRI2014-00001

Zoning Map



FORM DEO-BCP-PROPCHANGE-1
Rule 73C-40.010, FAC. Effective 11-20-90
(Renumbered 10-01-11)

STATE OF FLORIDA
DEPARTMENT OF ECONOMIC OPPORTUNITY
DIVISION OF COMMUNITY PLANNING & DEVELOPMENT
The Caldwell Building, MSC 160
107 East Madison Street
Tallahassee, Florida 32399

NOTIFICATION OF A PROPOSED CHANGE TO A PREVIOUSLY APPROVED DEVELOPMENT OF REGIONAL IMPACT (DRI) SUBSECTION 380.06(19), FLORIDA STATUTES

Subsection 380.06(19), Florida Statutes, requires that submittal of a proposed change to a previously approved DRI be made to the local government, the regional planning agency, and the state land planning agency according to this form.

1. I, Steven C. Hartsell, , the authorized representative

of Palmas Del Sol Condominium Association, Inc., hereby give notice of a proposed change to a
(developer)

previously approved Development of Regional Impact in accordance with Subsection

380.06(19), Florida Statutes. In support thereof, I submit the following information concerning

the River's Edge Yacht and Country Club DRI (A/K/A Gulf Harbour) development, which
(original & current project names)

information is true and correct to the best of my knowledge. I have submitted today, under

separate cover, copies of this completed notification to Lee County, to the Southwest Florida
(local government)

Regional Planning Council and to the Bureau of Community Planning, Department of Economic

Opportunity.

2-6-2014
Date

Signature

RECEIVED
FEB 07 2014
COMMUNITY DEVELOPMENT

DRI 2014-00001

ATTACHMENT 2

2. **Applicant (name, address, phone).**

Palmas Del Sol Condominium Association, Inc.
11660 Court of Palms
Fort Myers, Florida 33908-6552
239-738-4679

3. **Authorized Agents (name, address, phone).**

Steven C. Hartsell, Esq.
Pavese Law Firm
PO Drawer 1507
Fort Myers, Florida 33902-1507
239-336-6244
stevehartsell@paveselaw.com

4. **Location (City, County, Township/Range/Section) of approved DRI and proposed change.**

Fort Myers, Lee County
Township 45S
Range 24E
Sections 29, 30, and 31

5. **Provide a complete description of the proposed change. Include any proposed changes to the plan of development, phasing, additional lands, commencement date, build-out date, development order conditions and requirements, or to the representations contained in either the development order or the Application for Development Approval.**

Indicate such changes on the project master site plan, supplementing with other detailed maps, as appropriate. Additional information may be requested by the Department or any reviewing agency to clarify the nature of the change or the resulting impacts.

The Palmas Del Sol Condominium is a three building condominium (six to eight residential living stories over two stories of parking) located on the Caloosahatchee River in the River's Edge Yacht and Country Club DRI (A/K/A Gulf Harbour). It is adjacent to a 10-acre mangrove preserve which is governed by a 2003 Conservation Easement to Lee County which was put in place at the time of the DRI approval, as well as mangrove trimming conditions incorporated into the Fourth Amended Development Order for River's Edge Yacht and Country Club (A/K/A Gulf Harbour), a Development of Regional Impact [State DRI #12-8182-21; County Case #81-09-08-DRI(c)]. A copy of the Conservation Easement and the Fourth Amended Development

Order are attached for your reference. Although the Florida Department of Environmental Protection (FDEP) is included in the easement, it did not participate in the creation of the Conservation Easement, and has recently filed a release of that easement as it relates to FDEP (Instr. #2013000225345, Official Records of Lee County, FL.).

The purposes of the Conservation Easement and the mangrove trimming DRI conditions were not only to set aside the 10 acre area for mangrove preservation, but to protect views to the river for the condominium owners and to provide for construction of a boardwalk to the river with an observation deck. In Section 4 of the easement and Section G.5.d(1) of the Fourth Amended Development Order mangrove trimming is limited to 32' NGVD in height. That condition has unexpectedly caused a pressing problem that the Palmas Del Sol owners are hoping to resolve. Due to the distance of the conservation area extending from the condominium buildings out to the river, and due to the height of the trees in the conservation area, shortly after trimming them to 32' any views of the river are effectively blocked for residents of the first living floor (sitting on top of two stories of parking). As the trees grow taller until the next trimming (annually) the views are blocked even more. The residents have noted that this has a negative impact on both their views and their property values.

Accordingly, the Applicant is requesting to reduce the minimum height of the mangrove trimming to 20' NGVD. To support this request, the Applicant has engaged Parke Lewis, Biologist for Dex Bender & Associates, who prepared the enclosed biological analysis which shows that the height of the trees can be safely trimmed to 20' NGVD (in stages) without adversely affecting the health or integrity of the individual trees or of the overall conservation area. Since the primary purpose of the conservation area will remain intact (preservation of the ten acres with a healthy and functional mangrove system), the secondary goals of protecting the residents' views and the associated property values can also be maintained at the same time by allowing the reduction in the minimum trim height.

Furthermore, any trimming may be done only after obtaining the necessary review and mangrove trimming permit approval from the FDEP. The Applicant has had preliminary meetings with FDEP that lead the Applicant to believe that such a permit is reasonably possible.

Consequently, the Applicant requests that the River's Edge Yacht and Country Club DRI conditions be amended to allow the Applicant to apply to FDEP to lower the trimming height (within the previously defined view corridors extending from each building) from 32' NGVD down to a height of 20' NGVD. This will allow the views to the river to be preserved for all of the residents as originally expected when the DRI and Conservation Easement were put into place while still maintaining the mangrove system protection and preservation. The amendment also clarifies that trees other than mangroves may be trimmed to the same height.

6. **Complete the attached Substantial Deviation Determination Chart for all land use types approved in the development. If no change is proposed or has occurred, indicate no change.**

No change.

7. **List all the dates and resolution numbers (or other appropriate identification numbers) of all modifications or amendments to the originally approved DRI development order that have been adopted by the local government, and provide a brief description of the previous changes (i.e., any information not already addressed in the Substantial Deviation Determination Chart). Has there been a change in local government jurisdiction for any portion of the development since the last approval or development order was issued? If so, has the annexing local government adopted a new DRI development order for the project?**

The River's Edge Yacht and Country Club DRI (A/K/A Gulf Harbour) was amended on March 16, 1992 (Resolution #Z-91-032A) to (1) remove a cap on the area of impervious surfaces; (2) provide that selective clearing for limited pedestrian access to the river via boardwalks or decks shall not involve any dredge or fill activities; and (3) provide for minimal disturbance to native vegetation.

A second amendment was adopted on March 21, 1994 (Resolution #Z-94-005) to modify the location and design of the marina facility.

A third amendment was adopted on March 19, 2001 (Resolution #Z-00-057A) to (1) reduce the number of dwelling units from 2,071 to 1,987; (2) eliminate 200 hotel units; (3) replace the 65,000 square feet of commercial with a 5,000 square foot ship's store and 30,000 square foot club house; (4) eliminate the 250 seat restaurant; and (5) extend the buildout date an additional 7 years to May 4, 2005.

A fourth amendment was adopted on October 7, 2002 (Resolution #Z-02-020) to allow construction of a boardwalk with observation platform and mangrove trimming within the established Mangrove Preservation Area (Tract E) and was subsequently approved as the Fourth Amended Development Order for River's Edge Yacht and Country Club (A/K/A Gulf Harbour), a Development of Regional Impact [State DRI #12-8182-21; County Case #81-09-08-DRI(c)].

There has not been a change in local government jurisdiction for any portion of the development since the last development order was issued.

8. **Describe any lands purchased or optioned within 1/4 mile of the original DRI site subsequent to the original approval or issuance of the DRI development order. Identify such land, its size, intended use, and adjacent non-project land uses within**

½ mile on a project master site plan or other map.

N/A

9. **Indicate if the proposed change is less than 40% (cumulatively with other previous changes) of any of the criteria listed in Paragraph 380.06(19)(b), Florida Statutes.**

Do you believe this notification of change proposes a change which meets the criteria of Subparagraph 380.06(19)(e)2., F.S. YES __X__ NO _____

10. **Does the proposed change result in a change to the buildout date or any phasing date of the project? If so, indicate the proposed new buildout or phasing dates.**

N/A

11. **Will the proposed change require an amendment to the local government comprehensive plan?**

N/A

Provide the following for incorporation into such an amended development order, pursuant to Subsections 380.06 (15), F.S., and 73-40.025, Florida Administrative Code:

12. **An updated master site plan or other map of the development portraying and distinguishing the proposed changes to the previously approved DRI or development order conditions.**

N/A

13. **Pursuant to Subsection 380.06(19)(f), F.S., include the precise language that is being proposed to be deleted or added as an amendment to the development order. This language should address and quantify:**

    a. **All proposed specific changes to the nature, phasing, and build-out date of the development; to development order conditions and requirements; to commitments and representations in the Application for Development Approval; to the acreage attributable to each described proposed change of land use, open space, areas for preservation, green belts; to structures or to other improvements including locations, square footage, number of units; and other major characteristics or components of the proposed change;**

The proposed amended language to the Fourth Amended Development Order is as follows (additions underlined; deletions ~~crosshatched~~):

Section G. WATER SUPPLY, WATER QUALITY AND WILDLIFE HABITAT

...

5. For the riverfront lots the following vegetation management and maintenance guidelines apply:

...

d. Selective trimming of native vegetation, one boardwalk with an observation deck, and one access walkover is allowed on the property described in Exhibit F, which is a portion of Tract E, per the following conditions:

(1) Mangrove (including other preserved trees) Trimming

...

(c) All mangrove trimming must be conducted as permitted by the Florida Department of Environmental Protection (FDEP) General Mangrove Permit File No. 36-0152741-0003 which includes but is not limited to the following conditions:

...

(iv) The final height of trimmed mangroves and other preserve trees to be maintained is 20' ~~32~~' NGVD (approximately 18 ~~30~~'+ from substrate). Only the mangroves within the mangrove trimming areas shown in Exhibit G may be trimmed. Because many of the trees in the mangrove trimming areas are less than 32' NGVD in height (as of June 2002), approximately thirty percent of the area will not be initially trimmed. Trees less than 20' ~~32~~' NGVD in the mangrove trimming area will only be trimmed as they exceed 20' ~~32~~' NGVD in the future to maintain the required elevation.

(d) Red mangroves ~~trimming is limited on the main trunk to branches above 32' NGVD with a diameter of 1" or less. All other branches above 32' NGVD~~ will be trimmed in compliance with the FDEP Permit.

(e) Once the final configuration and height (~~32'~~ 20' NGVD) is achieved, the trimming corridors will be maintained by annual or biennial trimming events.

...

(vii) The trimming corridors ~~must be~~ have been monitored annually for a period of ten (10) years from the date of the initial trimming, and will continue to be monitored for another five (5) years from the 2014 date of the next trimming below 32' NGVD. Annual reports will be submitted to Lee County Environmental Sciences that analyze tree health, canopy coverage, plant species present and wildlife observed.

b. An updated legal description of the property, if any project acreage is/has been added or deleted to the previously approved plan of development;

N/A

c. A proposed amended development order deadline for commencing physical development of the proposed changes, if applicable;

N/A

d. A proposed amended development order termination date that reasonably reflects the time required to complete the development;

N/A

e. A proposed amended development order date until which the local government agrees that the changes to the DRI shall not be subject to down-zoning, unit density reduction, or intensity reduction, if applicable; and

N/A

f. Proposed amended development order specifications for the annual report, including the date of submission, contents, and parties to whom the report is submitted as specified in Subsection 73C-40.025 (7), F.A.C.

N/A

SUBSTANTIAL DEVIATION DETERMINATION CHART

** [NOTE: No change is proposed or has occurred.]*

TYPE OF LAND USE	CHANGE CATEGORY	PROPOSED PLAN	ORIGINAL PLAN	PREVIOUS D.O. CHANGE & DATE OF CHANGE
Attraction/Recreation	# Parking Spaces			
	# Spectators			
	# Seats			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	External Vehicle Trips			
	D.O. Conditions			
	ADA Representations			
Airports	Runway (length)			
	Runway (strength)			
	Terminal (gross square feet)			
	# Parking Spaces			
	# Gates			
	Apron Area (gross square feet)			
	Site locational changes			
	Airport Acreage, including drainage, ROW, easements, etc.			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Airports (cont.)	# External Vehicle Trips			
	D.O. Conditions			
	ADA representations			
Hospitals	# Beds			
	# Parking Spaces			
	Building (gross square feet)			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	External Vehicle Trips			
	D.O. conditions			
	ADA representations			
Industrial	Acreage, including drainage, ROW, easements, etc.			
	# Parking spaces			
	Building (gross square feet)			
	# Employees			
	chemical storage (barrels and pounds)			
	Site locational changes			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Industrial (cont.)	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Mining Operations	Acreage mined (year)			
	Water withdrawal (gal/day)			
	Size of mine (acres), including drainage, ROW, easements, etc.			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Office	Acreage, including drainage, ROW, easements, etc.			
	Building (gross square feet)			
	# Parking Spaces			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Office (cont.)	ADA representations			
Petroleum/Chemical Storage	Storage Capacity (barrels and/or pounds)			
	Distance to Navigable Waters (feet)			
	Site locations changes			
	Facility Acreage, including drainage, ROW, easements, ect.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
Ports (Marinas)	# Boats, wet storage			
	# Boats, dry storage			
	Dredge and fill (cu. yds.)			
	Petroleum storage (gals.)			
	Site locational changes			
	Port Acreage, including drainage, ROW, easements, etc.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Residential	# Dwelling units			
	Type of dwelling units			
	# of lots			
	Acreage, including drainage, ROW, easements, etc.			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
Wholesale, Retail, Service	Acreage, including drainage, ROW, easements, etc.			
	Floor Space (gross square feet)			
	# Parking Spaces			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Hotel/Motel	# Rental Units			
	Floor space (gross square feet)			
	# Parking Places			
	# Employees			
	Site locational changes			
	Acreage, including drainage, ROW, easements, etc.			
	# External vehicle trips			
	D.O. Conditions			
	ADA representations			
R.V. Park	Acreage, including drainage, ROW, easements, etc.			
	# Parking Spaces			
	Buildings (gross square feet)			
	# Employees			
	Site locational changes			
	# External vehicle trips			
	D.O. conditions			
	ADA representations			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

SUBSTANTIAL DEVIATION DETERMINATION CHART

Open Space (All natural and vegetated non-impervious surfaces)	Acreage			
	Site locational changes			
	Type of open space			
	D.O. Conditions			
	ADA representations			
Preservation, Buffer or Special Protection Areas Preservation (cont.)	Acreage			
	Site locational changes			
	Development of site proposed			
	D.O. Conditions			
	ADA representations			

Note: If a response is to be more than one sentence, attach a detailed description of each proposed change and copies of the proposed modified site plan drawings. The Bureau may request additional information from the developer or his agent.

STAFF REPORT
FROM
DEPARTMENT OF COMMUNITY DEVELOPMENT
DIVISION OF ENVIRONMENTAL SCIENCES

Date:	**August 4, 2014**
To:	**Alvin Block, Principal Planner**
From:	**Susie Derheimer, Environmental Planner**
	Phone: (239) 533-8158
	E-mail: sderheimer@leegov.com
Project:	**Rivers Edge Yacht and Country Club DRI (a.k.a Gulf Harbour)**
Case:	**DRI2014-00001**
STRAP:	**30-45-24-13-0000A.0000**

The Division of Environmental Sciences (ES) staff has reviewed the proposed application for Amendment/Notice of Proposed Change [Non-Substantial Deviation per F.S. §380.08(19)(e)] to the River's Edge Yacht and Racket Club (a/k/a Gulf Harbour) State Development of Regional Impact (DRI) #12-8182-21 to revise the trimming practices for red mangroves; to reduce the minimum height of the mangroves and other preserved tree trimming from 32-feet NGVD (30-feet at substrate), to 20-feet NGVD (18-feet at substrate) in the approximately 10.17 acre Conservation Easement adjacent to the Palmas Del Sol Condominium; and to extend that monitoring for an additional 5 years. ES staff recommends DENIAL of the request to reduce the trim height from 32' NGVD to 20' NGVD and to remove the specific trimming requirements for red mangroves based on the following findings which are discussed in greater detail within the Site History and Analysis Sections below:

- The 10.2 acres mangrove preserve is required indigenous vegetation as per Land Development Code (LDC) Section 10-415 Open Space requirements; and therefore, the requests is not in compliance with LDC Section 10-421(c) pruning requirements because the requested 40% reduction in mangrove height is not pruning to promote healthy, uniform, natural growth of the vegetation and the requested height reduction is not necessary to promote health, safety, and welfare of the Palmas Del Sol Condominium residents; and

- The proposed trimming of the mangrove habitat is inconsistent with Lee Plan Objectives and Policies 104.1, 107.2, 107.2.4, 107.2.10, 107.2.13, 107.4, 107.4.2, 108.1.2, 113.1,

ATTACHMENT 3

113.1.1, 113.1.2, and 113.1.5 because Lee County is required to protect and conserve wetland mangrove stands, particularly those located with the coastal planning area, for improved water quality and wildlife diversity.

SITE HISTORY:
The following is an ES staff summary of the zoning history and other relevant actions taken on the mangrove wetland preserve (the area subject to this zoning application):

Zoning Resolution Z-82-112 required the preservation of the mangrove wetland along the Caloosahatchee River shoreline. ES staff notes that the original approved Master Development Plan depicts that the golf course was proposed to abut the mangrove wetland preserve which provided a distance buffer between the residential development pods and the preserve area. (See ES Attachment A: Zoning Resolution Z-82-112)

Zoning Resolution Z-91-032 amended the approved 1982 Master Development Plan (now labeled Master Site Plan) to relocate the golf course internal to the project and relocate the multi-family development pods and single family residential lots to abut the required mangrove preserve area. In addition, Preservation Line Exhibit D was added to delineate the revised acreage and boundary of the required preserve. The exhibit illustrates that the mangrove wetland preserve area width was increased where the preserve abuts the multi-story buildings, lake, and westernmost single family lots. DRI DO Condition C.1.e. was amended to indicate the revised preserve and open space acreages and Condition C.2.g. was amended to established criteria for preservation of the unique vegetation and wildlife habitat within the required preserve. Condition language was also included to address visual access to the river from the rear of relocated riverfront residential lots. ES staff notes that Condition C.2.g.5.c.(6) indicates that "no trimming of vegetation shall be allowed west of a north-south line running through marker RP-44" (which includes the 10.2 acre Mangrove Preserve Area subject to this application). ES staff notes that this condition prohibited trimming of vegetation in the mangrove wetland preserve and thus the multi-family development and single family lots located abutting the preserve at this location were not guaranteed visual access to the river. (See ES Attachment B: Zoning Resolution Z-91-032A)

Zoning Resolution Z-94-005 amended the 1991 approved Master Site Plan (now labeled Master Concept Plan) to revise the location and design of the marina. The Preservation Line Map Exhibit D was also replaced with Preservation Line Map Attachment B stamped received 1-3-94 to increase the acreage and refine the boundaries of the preserve. DRI DO Condition C.1.e. was amended to reflect the increase and refinement to the preserve acreage and Condition C.~~2.g~~ 8.~~5.~~e. was amended to reflect the replaced preservation map line exhibit. ES notes that the prohibition on trimming within the mangrove preserved remained in place. (See ES Attachment C: Zoning Resolution Z-94-005)

Zoning Resolution Z-00-057A amended the approved 1994 Master Concept Plan (now labeled Map H). There were no relevant changes to mangrove preserve.

Zoning Resolution Z-02-020 amended the approved 2000 Map H (now labeled Master Concept Plan/Map H) to depict the location of a proposed boardwalk with observation deck, rip rap shoreline, and selective mangrove trimming area to 30' from substrate all within the 10.2 acre mangrove wetland preserve adjacent to the Palmas Del Sol condominiums. The Preservation Line Map was replaced with a sketch stamped "Received Nov 6 2001". ES staff notes there is no analysis provided for the replaced document and the DRI DO Condition II.G.5.a. still references the previously approved Map stamped received 1-3-94. In addition, DRI DO Conditions II.G.5.a. and G.5.c.(4) were revised to exclude the 10.2 acre mangrove preserve area adjacent to the Palmas Del Sol Condominium from the prohibited vegetation trimming language; Planned Development Conditions 1-7 and DRI DO Conditions G.5.d.- G.5.d.(1)(e)(viii) were added to specifically condition the construction of the boardwalk, observation deck and rip rap shoreline and the scope of mangrove trimming and to indicate the additional requirements needed to mitigate for the proposed 25±% (40'± average natural height to 30' from substrate trim height) reduction in mangrove height. Mitigation requirements for the proposed trimming activity included the 10.2 acre mangrove preserve to be recorded in a conservation easement (CE) dedicated to Lee County and the Florida Department of Environmental Protection (FDEP), the donation of an 11 acre parcel (strap #27-45-23-00-00005.0000) deeded to Lee County or the State of Florida, the removal of all invasive exotic vegetation to include the nuisance plant Moon vine (*Ipomoea* sp.) from the 10.2 acre mangrove preserve, ES staff to receive prior notification to commencement of any mangrove trimming and invasive exotic removal, and monitoring reports for a period of ten years from the date of initial mangrove trimming. (See ES Attachment D: Zoning Resolution Z-02-020 and ES Attachment E: Palmas Del Sol Project Narrative dated July 2002 stamped Applicant's Exhibit #8 DRI2001-00005)

Administrative Amendment ADD2002-00175 approved February 4, 2003, as amended July 10, 2003, revised Z-02-020 Condition 3 to move the location of the proposed boardwalk and revised Condition 6 to extend the timeframes for which the applicant must install the rip rap shoreline, record the CE, and execute the donation of the 11 acre parcel. ES staff notes first mangrove trimming event took place February 2003; the dock and shoreline permit DSH2003-01075 for the rip rap shoreline received Certificate of Compliance on May, 24, 2007; the CE was recorded April 7, 2003 (Instrument #5773553), and donation of the 11 acre parcel was executed on August 28, 2003 (OR BK 4043 PG 1924). (See ES Attachment F: Zoning Resolution ADD2002-00175, as amended and ES Attachment G: recorded Conservation Easement)

Environmental Violation ENV2009-00034 cites a violation for the trimming of mangroves within the 10.2 acres mangrove preserve/conservation easement (CE) below the required 32' NGVD/30' from substrate (See ES Attachment H: Notice of Violation dated June 12, 2009 and ES Attachment I: Hearing Examiner Order). ES staff notes information provided within the required monitoring plans indicates the following actions were taken to abate the violation as stipulated in the Official Notice of Code Violation B.: 1. Annual trimming events ceased in 2010 and 2011 to allow re-growth of mangroves to the required 30' height from substrate. Annual trimming events were conducted in 2012, 2013, and 2014. The 2012 and 2013 events focused on buttonwood (*Conocarpus erectus*) which exceeded the 30' height with only a few mangroves exceeding the

required height to trim. The 2014 event focused on buttonwoods and mangroves, primarily white mangroves which reached adequate height to trim; 2. ES staff received notification by email prior to the 2012 and 2013 annual trimming events. No notification was provided prior to the 2014 trimming event; 3. ES staff observed the initial exotic removal September 9, 2009 and annual monitoring reports document the continued invasive exotic removal; 4. ES staff observed the staking of the limits of trimming corridors in the field by surveyors on July 6, 2009; 5. A revised 7th Annual Monitoring Report dated September 2009 was submitted by the applicant; 6. The revised 7th Annual Monitoring Report included an aerial of the 10.2 acre preserve with 42 data points at which existing conditions (trees species, cut status, cut height, current height, and exotic species presence) were measured. Subsequent annual monitoring reports have been submitted (2010-2014) which provide a sample set of nine (9) points giving the current height of trees located within a general area of the original 2009 data point; 7. Although there has been a small amount of death to the native vegetation as observed by ES staff, it cannot be attributed specifically to the trimming events; 8. Since the 2009 violation there has been no documentation of trimming practices not in compliance with the approved Z-02-020 conditions.

Environmental Monitoring ENM2013-00019 documents monitoring data required as per Resolution Z-02-020 and environmental violation ENV2009-00034 HEX Order requirements. In order to evaluate the affect of the trimming on the mangrove habitat, a condition of the Z-02-020 approvals requires the property association of Palmas Del Sol to provide Lee County Environmental Sciences with annual monitoring reports of the trimming corridors for a period of ten (10) years from the date of initial trimming. The annual reports were required to analyze tree health, canopy coverage, plant species presence and wildlife observed. As result of the environmental violation cited in 2009, the HEX Order required the property association of Palmas Del Sol to provide an additional two (2) years of monitoring in order to obtain five years of data after the violation occurred. (See ES Attachment J: 12th Annual Monitoring Reports dated 2014) which provided existing conditions data and a table illustrating vegetation coverage over the course of the 10 years of monitoring data)

ES staff notes that although there was not any die back of native vegetation attributed to the trimming events, the monitoring data shows a significant change in the species occurrence after the 2009 trimming violation when the mangroves heights were trimmed from 30'+ to 15-22' at substrate. The data for Transects 1 and 2 illustrate that the five years after the document trimming violation there was a reduction in mangrove canopy coverage and a dramatic increase in buttonwood cover. In addition, some areas within these transects also saw a dramatic increase in leather fern (*Acrostichum* sp.) understory.

REQUEST:

The current application requests the following revisions to DRI Development Order (DO) Condition II.G.5.d.:

- (1) to add "including other preserved trees" in order to include buttonwood (*Conocarpus*

erectus) in the allowed trimming practices; and

- (1)(c)(iv) to add "and other preserved" to include buttonwood trees and revise the current approved trim height from 32' NGVD (30'+ from substrate) to 20' NGVD (18'+ substrate); and
- (1)(d) to remove "trimming is limited on the main trunk to branches above 32' NGVD with a diameter of 1" or less. All other branches above 32' NGVD" to allow all branches of the red mangroves to be trimmed in compliance with the FDEP permit; and
- (1)(e) to revise height from 32' to 20' NGVD and add "biennial" to timing of maintenance trimming events which allows maintenance trimming to potentially occur every other year; and
- (1)(e)(vii) to add "have been" to indicate the monitoring requirements as currently conditioned have been met and "will continue to be monitored for another five years from the 2014 date of the next trimming below 32' NGVD" to add additional monitoring requirements.

During the sufficiency review process the applicant submitted a narrative to provide supporting documentation for their request (See ES Attachment K: Mangrove Trimming Plan Narrative and Analysis Document for Palmas Del Sol, dated May 2014). The narrative indicates that (1) the request is being made in order to provide visual access to the river as described in the DRI DO Section II.G.5.a., (2) the proposed trimming to 18' at substrate is consistent with Florida Department of Environmental Protection (FDEP) General Permit to Trim mangroves guidelines, and (3) the proposed trimming meets conditions as required under Florida Statue F.S. 403.9327(1)(a). The narrative also includes a brief explanation of why the decrease in trim height from 30' to 18' from substrate is being requested. The explanation indicates that there is a limited view of the Caloosahatchee River from the first floor residence immediately after the annual trimming event but after 3-4'± of vertical re-growth of the vegetation, depending on species, the view deteriorates over the course of the year between the trimming events. The explanation finds that a minimum trim height of 18' from substrate will allow for a 12' (30'- 18') vertical reduction in height which will provide an adequate view of the river even after the re-growth of the vegetation.

The narrative also provides three examples of other developments where the FDEP has permitted trimming of mangroves in a matter similar to this proposed project. ES staff notes that the mangroves located within the boundary of these projects were not preserves required by DRI DO conditions and monitoring of these mangrove habitats were not required by Lee County and/or the FDEP. In addition, evaluations of these mangrove habitats prior to or after trimming events were not provided to ES staff by the applicant. Therefore, ES staff finds that given the projects do not have similar development approval requirements and I am unable to verify the overall health of the mangroves and affects of the trimming activity on these mangroves habitats; these project should not be used as a comparison.

ANALYSIS:
The River's Edge DRI is a Planned Unit Development (PUD) and LDC Section 10-415(a) requires Planned Developments must provide open space as required in chapter 34 and per the approved master concept plan (MCP) and resolution. The approved MCP (see previously referenced Z-02-020 MCP) requires 250.7 acres of open space to include the 10.2 acre mangrove preserve; therefore, this preserve area is considered code required indigenous native vegetation. Thus, ES staff finds that LDC Section 10-421(c) Pruning applies which indicates vegetation required by this code may only be pruned to promote healthy, uniform, natural growth of the vegetation (except where necessary to promote health, safety, and welfare) and ...Trees must not be severely pruned to permanently maintain growth at a reduced height or spread. Pruning must not interfere with the design intent of the original installation. Severely pruned trees must be replaced by the property owner. Replacement trees must meet the tree size requirements of LDC Section 10-420. A plant's growth habit must be considered in advance of conflicts which might arise (i.e. views, signage, overhead power lines, lighting, circulation, sidewalks, buildings, and similar conflicts).

As documented above, when the DRI DO was amended in 1991 to relocate the multi-family residential development to abut the mangrove preserve specific conditions were added to prohibit mangrove trimming within the preserve at this location. ES staff notes Palmas Del Sol did not obtain building permits for the multi-story buildings until 2000-2001; therefore, the developer should have been aware of the adjacent mangrove preserve's limitations on trimming. Instead of designing the building to provide views for the first and second floors over the required mangrove preserve, an amendment to the DRI DO (Z-202-020) was requested to allow trimming of the mangrove preserve to create views. ES staff notes that the request to trim the mangroves from the average 40'± to a 30' at substrate mangrove height (25% reduction in height) was initially recommended for denial by ES staff on the basis of LDC Section 10-415 and 10-421(c) requirements (See ES Attachment L: Staff Report From Department Of Community Development Division Of Environmental Sciences dated January 16, 2002). Prior to the case going to hearing, off-site mitigation was proposed by the applicant in the form of an 11 acre comparable mangrove habitat parcel to be donated to Lee County. The staff report was then revised to approve the proposed trimming of the mangroves to 32' NGVD/30' at substrate with conditions. ES staff finds the mitigation was provided in order to offset impacts in the proposed 25% reduction in mangrove height. This point is documented in the previously referenced Palmas Del Sol Project Narrative dated July 2002 stamped Applicant's Exhibit #8 DRI2001-00005 page 5 Offsite Mitigation section which states "To further compensate for any minimal impacts to mangroves as a result of the proposed trimming, an 11 acre parcel consisting of pristine mangroves shall be purchased and deeded to Lee County or the State of Florida."

ES staff (Susie Derheimer) conducted a site inspection of the 10.2 acre preserve area subject to the current application request on March 14, 2014 and July 9, 2014. During the site inspections ES staff observed views from the first and upper floor residential units of the Palmas Del Sol Condominiums and the condition of the mangrove habitat along the entire south and west edge and within the central and western view corridors of the preserve.

ES staff concurs that views from the first floor residential units are consistent with the photos provided by the applicant in the previously referenced Mangrove Trimming Plan Narrative and Analysis Document for Palmas Del Sol, dated May 2014. ES staff finds that the previously approved trim height to 32' NGVD/30' at substrate does provide a view of the Caloosahatchee River. ES staff notes that this trim height was analyzed during the 2002 amendment application and found to be the minimum height necessary to achieve both views from the first floor unit and to minimize impacts to the existing mangrove preserve (See ES Attachment M: Typical Cross Section/Typical Profile Exhibit stamped "Received May 08 2002 Zoning Counter" and previously referenced Palmas Del Sol Project Narrative dated July 2002 stamped Applicant's Exhibit #8 DRI2001-00005 page 1 Existing Site Conditions Section). The Typical Cross Section and Profile illustrates that the trim height was set just below the first floor unit base elevation of 33.5' and the Existing Conditions Section indicates that 50±% of the mangroves were less than 32' NGVD in height. Thus at the approved minimum trim height of 32' NGVD the vegetation within the view corridors would be trimmed below the first floor to allow those standing on the balconies to have a view over the top of the mangroves and that not all mangroves would be trimmed which would minimize the overall "hedging" of the preserve. ES staff finds that this is represented in the photos provided by the applicant. ES staff notes that recent site inspections occurred shortly after the annual trim event; therefore, staff did not observe the situation where 3-4'± of vertical re-growth deteriorates the view, as indicated by the applicant. In addition, the applicant did not provide photos that demonstrate this point.

ES staff also has a concern with the applicant's request to include the ability to perform biennial, every other year, trimming events. ES staff finds that the requested trim height of 18' at substrate is what would allow the biennial trim events to occur (i.e. 18' with 3-4' of annual re-growth is 24'-26'in height after 2 years). ES staff notes that The Florida Department of Environmental Protection recommends that "once mangroves have been trimmed to the allowed height, it is a good idea to maintain that configuration through regular (i.e. six-month to one-year intervals) maintenance trimming" and that "regular trimming will reduce stress to the tree" (See ES Attachment N: Mangrove Trimming Guidelines For Homeowners Trimming For Healthy Plants Section-Timing page 4). Therefore, ES staff finds that the previously approved trim height of 30' at substrate which does provide views of the Caloosahatchee River should be maintained by bi-annual, every 6 months, trimming events to reduce the stress to the trees and address the applicant's concern with re-growth of the vegetation and the deterioration of views over time.

ES staff also reviewed the request for consistency with the following Lee Plan Comprehensive Goals, Objectives, and Policies:

Goal 104: Coastal Resource Protection. To protect the natural resources of the coastal planning area from damage caused by inappropriate development.

Objective 104.1: Environmentally Critical Areas. Within the coastal planning area, the county will manage and regulate, on an ongoing basis, environmentally critical areas to conserve and enhance their natural functions. Environmentally critical areas include wetlands (as defined in Goal 114) and Rare and Unique upland habitats…

The 10.2 acres mangrove preserve is an environmental critical wetland located within the coastal planning area. As stated on page 3-536/7 Management Section of the US Fish and Wildlife (FWS) Multi-Species Recovery Plan for mangroves "Natural mangrove ecosystems do not require management other than being left alone. Mature mangrove systems are self-renewing and respond to perturbation of the natural cycles of freeze, flood, and storm without the need for significant human intervention." And page 3-539 Trimming Section states "Mangrove trimming does not match natural, seasonally timed, physiologically mediated leaf drop... There is no existing evidence in the literature or from field observation that mangrove trimming enhances the habitat value of mangroves for any native species." (See ES Attachment O: US Fish and Wildlife Multi-Species Recovery Plan)

ES staff finds that the proposed 40% (30' to 18' at substrate) reduction in the mangrove height does not conserve and enhance the natural function of the mangrove preserve.

Goal 107: Resource Protection. To manage the county's wetland and upland ecosystems so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.
Objective 107.2: Plant Communities. Lee County will maintain and routinely update an inventory of natural plant communities and will protect at various suitable locations remnant tracts of all important and representative natural plant communities occurring within Lee County.
Policy 107.2.4: Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.
Policy 107.2.10: Development adjacent to aquatic and other nature preserves, wildlife refuges, and recreation areas must protect the natural character and public benefit of these areas including, but not limited to, scenic values for the benefit of future generations.
Policy 107.2.13: Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning.

Based upon the historically heights (40'±), habitat description (all three species of mangroves-red, black, and white), and location of the preserve (within floodplains and along embankment of tidal Caloosahatchee River flooded daily by tides), page 3-524 Community Types Section of the FWS Multi Species Recovery Plan identifies this preserve as a riverine mangrove forest which is found to have higher levels of productivity than the other mangrove community types as a result of increased nutrient availability, litter fall, and tidal flushing. Pages 3-525 through 3-532 also identify the wildlife diversity and ecological value of this mangrove forest system and states "Mangrove ecosystems are important habitat for at least 1,300 species of animals including 628 species of mammals, birds, reptiles, fish and amphibians. They provide areas for breeding, nesting, foraging, and shelter (Odum *et al.* 1982, Beever 1989, Day *et al.* 1989, Odum and Mcivor 1990)."

ES staff finds that a 40% reduction in mangrove height does not protect this high quality productive mangrove system. Trimming of the mangroves in the proposed configuration is not only a loss of natural character and scenic value of the Caloosahatchee River but also a loss of

breeding, nesting, foraging, and shelter habitat to promote floral and faunal species diversity. Thus, ES staff recommends maintaining the mangrove preserve height at the current approved 30' at substrate with bi-annual trimming events as an optimal condition rather than trimming to 18' at substrate with biennial trimming events.

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.
Policy 107.4.2: Conserve critical habitat of rare and endangered plant and animal species through development review, regulation, incentives, and acquisition.

The preserved mangrove system is a mature forest which provides dense canopy and detrital food source along the Caloosahatchee River. Pages 3-527 through 3-531 Wildlife Species of Concern Section of the FWS Multi Species Recovery Plan identify numerous listed species found in Lee County which could utilize the existing canopy of a mangrove forest for loafing area, roosting, nesting, and foraging purposes and utilize the detritus matter provided by the decomposition of seasonal shed mangrove leaves as a food source. Therefore, ES staff finds a loss of 40% of mangrove canopy does not protect habitats of listed species.

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.
Policy 108.1.2: Development affecting coastal and estuarine water resources must maintain or enhance the biological and economic productivity of these resources.

The FWS Multi Species Recovery Plan page 3-519 documents "Mangroves provide one of the basic food chain resources for arboreal life and near shore marine life through their leaves, wood, roots, and detrital materials. The Biomass Section page 3-534 identifies standing crop as leaves, leaf litter, fruits and flower, and wood; and found that "the standing crop of a short canopy whether young, naturally stunted, or hedged is from 3.6 percent to 8.3 percent that of an untrimmed mature red mangrove fringe." And that "Short canopy mangroves provide only 12-19 percent of the detrital export of a mature untrimmed red mangrove fringe." In addition, page 3-536 Status and Trends Section documents "Smaller, shorter mangrove canopies contribute less to fishery values than taller, natural canopies due to the reduction in net primary production. Utilizing conservative estimators, an evaluation of mangroves in Lee County found that in 1970 dollars, a mature 6 m (20-foot) high canopy of red mangroves contribute $2,041/acre/year in commercial fisheries landings...Where as a 11 m (35-foot) high mangrove canopy contributed $6,514/acre/year. The values do not reflect recreational fisheries values which are six times the primary sales of commercial fisheries (Lewis *et al.* 1985)

ES staff finds that the proposed 40% reduction in the mangrove canopy does not maintain or enhance the biological and economic productivity of the mangrove preserve, but reduces it.

Goal 113: Coastal Planning Areas. To conserve, maintain, and enhance the natural balance of ecological functions in the coastal planning area, with particular emphasis on the protection of beach and dune systems so as to retain their contribution to storm protection, natural resources, and economic development.
Objective 113.1: Coastal Planning Area In General. Lee County will manage the coastal planning area to provide a balance among conservation of resources, public safety capabilities, and development.
Policy 113.1.1: Coastal areas with significant public value for water retention and purification, wildlife habitat, and primary productivity will be protected through the development permitting process and enforcement of appropriate codes and regulations.
Policy 113.1.2: All development within the coastal planning area must be compatible with protection of natural systems.
Policy 113.1.5: Lee County will protect and conserve the following environmentally sensitive coastal areas: wetlands, estuaries, mangrove stands, undeveloped barrier islands, beach and dune systems, aquatic preserves and wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, and marine grass beds.

The 10.2 mangrove preserve is the only remaining indigenous vegetated preserve of the 547.6 acre River's Edge (aka Gulf Harbour) development. ES staff notes that DRI DO Condition B7 requires 18.23 acres of vegetation preservation buffer to be located along the Caloosahatchee River which includes the 10.2 acre mangrove preserve, and an aerial review reveals there has already been significantly impacted to this required vegetation preserve buffer over time (See the previously referenced 2002 Preserve Line Map vs. ES Attachment P: 2014 Lee County GIS aerial).

ES staff finds that required mangrove preserve/vegetation preserve buffer has not been protected through the development permitting process and enforcement of appropriate codes and regulations and the proposed further reduction in the mangrove height to obtain "more of a view" for the first habitat floor of the Palms Del Sol development is not compatible with the protection and conservation of the required mangrove preserve.

CONCLUSION:
ES staff finds that the 10.2 acres mangrove preserve is required indigenous native vegetation as per LDC Section 10-415 requirements and therefore the proposed trimming to 20' NGVD (18' from substrate) is not in compliance with LDC Section 10-421(c) Pruning requirements and is not consistent with the above referenced Lee Plan Goals, Objectives, and Policies. Therefore, ES staff recommends DENIAL of the request to reduce the trim height from 32' NGVD to 20' NGVD, remove the specific trimming requirements for red mangroves, and allow biennial trimming events.

ES staff concurs that the required monitoring reports have been provided and ES staff recommends in order to address the applicant's concern with re-growth of the vegetation, the conditions could

be revised to specify "other preserved trees" to include buttonwood species and allow bi-annual maintenance of the vegetation. Therefore, ES staff recommends Approval of the following revisions to the DRI DO Condition II.G.5.d.:

- (1) to add "including other preserved trees" in order to include buttonwood (*Conocarpus erectus*) in the allowed trimming practices; and
- (1)(c)(iv) to add "and other preserved" to include buttonwood trees; and
- (1)(e) to add "bi-annual" to timing of maintenance trimming events which allows maintenance trimming to potentially occur twice a year; and
- (1)(e)(vii) to add "have been" to indicate the monitoring requirements, as currently conditioned, have been met.

If the Board of County Commissioners should not agree with Staff's findings and recommendation and chooses to also move forward with an approval of the reduced trimming height, removing specific trimming practices for red mangroves, and allowing biennial trimming events; ES staff recommends that conditions as indicated in ES Staff Exhibit 1 be adopted as part of the final zoning resolution. These conditions as recommended by ES staff will replace Z-02-020 DRI DO Exhibit D with the correct Preservation Line Map dated 1-3-94; ensure all applicable resolution exhibits, conservation easement, and required state and/or federal permits are amended to reflect new trim heights and practices; and add conditions to enhance monitoring requirements to assist ES staff with obtaining relevant information to accurately assess the effects of the permitted trimming activity.

ATTACHMENT A

RESOLUTION NUMBER Z-82-112

The following resolution was adopted by the Lee County Zoning Board upon motion by Zoning Board Member Ross, and seconded by Zoning Board Member Smith, and upon poll of the members present the vote was as follows:

William Spikowski	No	Robert Terrell	Aye
Chuck Ross	Aye	Truman A. Morris	No
Thad Taylor	No	Monty Bishop	Aye
Thomas C. Smith	Aye		

WHEREAS The Ramar Group Companies, Inc. (River's Edge) has requested a change in zoning from AG to PUD.

SUBJECT PROPERTY: Secs. 29, 30 and 31, Township 45 South, Range 24 East, Lee County, Florida.
Tract 1: Government Lots 2, 3 and 4, of Section 30, Township 45 South, Range 24 East and
The east half (E½) of the Northeast quarter (NE¼) of th Northwest quarter (NW¼), and
The Northwest quarter (NW¼) of the Northeast quarter (NE¼) of the Northwest quarter (NW¼), and
All that part of the Northwest quarter (NW¼) of the Northeast quarter (NE¼) of Section 31, Township 45 South, Range 24 Est, lying Northwesterly from McGregor Boulevard.
EXCEPTING THEREFROM the following described parcel:
From the Southwest corner of said Northwest quarter (NW¼) of the Northeast quarter (NE¼) of said Section 31, run North 88° 57' 56" East along the South line of said fraction of a section for 542.85 feet; thence run North 01° 07' 16" West for 28.29 feet to a steel pin and the point of beginning. From said point of beginning continue North 01° 07' 16" West for 190.44 feet to a concrete monument; thence run North 65° 11' 10" East for 162.71 feet to a concrete monument; thence run South 40° 34' 21" East for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867); thence run South 49° 25' 39" West for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road; thence run South 88° 54' 23" West along said Northerly line for 159.21 feet to the point of beginning; SUBJECT TO the right of way for Iona Road.

Tract 2: All that part of the West Half (W½) of the West Half (W½) of Section 29, Township 45 South, Range 24 East, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard, LESS the North 100 feet thereof;

Government Lot 1, of Section 30, Township 45 South, Range 24 East, LESS the North 100 feet thereof;

That part of the East Half (E½) of the Southeast quarter (SE¼), of Section 30, Township 45 South, Range 24 East, located Northwesterly of McGregor Boulevard;

All that part of the Northeast Quarter (NE¼) of the Northeast Quarter (NE¼) of Section 31, Township 45 South, Range 24 East, lying Northwesterly of McGregor Boulevard.

WHEREAS, A Public Hearing of the Lee County Zoning Board was duly advertised and held, as required by law, and after hearing interested parties, and upon due and proper consideration having been given to the matter,

NOW THEREFORE BE IT RESOLVED by the Lee County Zoning Board, Lee County, Florida, that the petition be approved as to the change in zoning from AG to PUD.

UPON APPEAL, the following resolution was offered by Commissioner Rodda, and seconded by Commissioner Scaffe, and upon poll of the members present the vote as as follows:

Mike Roeder	Aye
Harry Rodda	Aye
Roland Q. Roberts	No
Wade H. Scaffe	Aye
Ernie Averill	No

WHEREAS, an appeal was filed by The Division of Community Development and a Public Hearing of the Lee County Commissioners was duly advertised and held, as required by law, this Board after reviewing the records and the motion made by the Zoning Board and having given an opportunity to interested persons to be heard, and upon due and proper consideration having been given to this matter,

NOW THEREFORE BE IT RESOLVED by the Board of County Commissioners, Lee County, Florida, that the motion of the Zoning Board be set aside and the following Development Order, as amended, be adopted, and that the Board adopt Lee County Ordinance No. 82-14 entitled: "AN ORDINANCE AMENDING THE ZONING REGULATIONS FOR THE UNINCORPORATED AREA OF LEE COUNTY, FLORIDA, BY CHANGING THE ZONING DISTRICT CLASSIFICATION OF THE REAL PROPERTY DESCRIBED IN THIS ORDINANCE TO A PLANNED UNIT DEVELOPMENT (PUD), AND PROVIDING AN EFFECTIVE DATE" AS ATTACHED AND INCORPORATED WITHIN THIS RESOLUTION AS IF FULLY SET FORTH HEREIN.

PASSED AND ADOPTED THIS 23d DAY OF MARCH, 1982 by the Lee County Zoning Board.

PASSED AND ADOPTED THIS 5th DAY OF MAY, 1982 by the Lee County Commissioners.

RESOLUTION NUMBER Z-82-112 HEARING NUMBER 81-9-8(DRI)
(State #DRI 82-12-81-82-21)

(152A-F-3,4)

APPROVED AS
TO FORM.
BY _____
COUNTY ATTORNEY

LEE COUNTY ORDINANCE NO. 82-14

AN ORDINANCE AMENDING THE ZONING REGULATIONS FOR THE UNINCORPORATED AREA OF LEE COUNTY, FLORIDA, BY CHANGING THE ZONING DISTRICT CLASSIFICATION OF THE REAL PROPERTY DESCRIBED IN THIS ORDINANCE TO A PLANNED UNIT DEVELOPMENT (PUD), AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Ramar Group Companies, Inc., the Developers of RIVER'S EDGE YACHT AND COUNTRY CLUB, has filed an application with the Board of County Commissioners of Lee County, Florida, to change the zoning district classification of the real property described herein; and

WHEREAS, the application and its supporting material submitted by the applicant have been extensively reviewed by the Board of County Commissioners of Lee County and its staff; and

WHEREAS, the Board of County Commissioners of Lee County, Florida, has been granted authority pursuant to Chapter 125, Laws of Florida, to adopt zoning regulations for the unincorporated areas of Lee County; and

WHEREAS, the purpose and intent of a planned unit development is to provide an alternative to a conventional zoning approach in conformance with the Lee County Comprehensive Plan through the use of flexible land use and design regulations; and

WHEREAS, public hearings have been held in accordance with all applicable laws; and

WHEREAS, after due proper notice was given of said public hearings, all interested parties were given an opportunity to be heard.

NOW, THEREFORE, be it ordained by the Board of County Commissioners of Lee County, Florida:

SECTION "A":

1. The zoning classification of the property described in Section 1.03 is hereby changed to a planned unit development (PUD) and is subject to all conditions as hereinafter described.

2. This planned unit development (PUD) shall serve as the official zoning ordinance for the development. The primary function of this ordinance is to provide the applicant, Ramar Group Companies, Inc., maximum latitude in designing the PUD, as well as to insure that the applicant, future owners, and Lee County are afforded full information regarding the manner in which the project is to be developed.

3. This ordinance shall be known and cited as the RIVER'S EDGE YACHT AND COUNTRY CLUB PUD ORDINANCE.

4. The approved Development Orders shall be incorporated by reference as fully set forth herein.

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STATEMENT OF COMPLIANCE

The development of approximately 548 acres of property located in Sections 29, 30 and 31, Township 45 South, Range 24 East, Lee County, Florida, as a Planned Unit Development to be known as RIVER'S EDGE YACHT AND COUNTRY CLUB, will comply with the planning and development objectives of Lee County. These objectives are set forth in the Comprehensive Plan which defines the Growth Policies which were adopted by the Board of County Commissioners. RIVER'S EDGE YACHT AND COUNTRY CLUB will meet the planning and development objectives for the following reasons:

1. The project site is located in a developed area of Lee County.

2. An arterial roadway is in existence along the project's easterly boundary.

3. The project meets all applicable regulations and procedures governing its Planned Unit Development (PUD) zoning classification.

4. The proposed land use is compatible with and complimentary to the surrounding uses.

5. The project will have adequate community facilities and services for the residential density and permitted uses of the proposed plan and therefore, is not leapfrog growth.

6. The project development will result in an efficient and economical extension of community facilities and services.

7. The project development shall utilize natural systems for water management in accordance with their natural functions and capabilities.

8. If the provisions of this PUD ordinance directly conflict with the provisions contained in any general zoning or subdivision regulations, the provisions contained herein shall control and apply. To the extent not addressed in this PUD ordinance, applicable subdivision and development codes, as well as other County and State laws dealing with platting and subdividing of property in effect at the time the permits and/or plats are requested, shall be followed and complied with by the developers in RIVER'S EDGE YACHT AND COUNTRY CLUB.

9. The project shall be in compliance with the applicable Lee County development policies and codes.

10. At the time of site plan review, all development within the project shall be reviewed for and be in compliance with the Development Order, this PUD Ordinance, the Master Plan, and all other applicable County Ordinances which are not in direct conflict with this PUD Ordinance.

SECTION I

PROPERTY OWNERSHIP & LEGAL DESCRIPTION

1.01 INTRODUCTION AND PURPOSE

It is the intent of Ramar Group Companies, Inc. (hereinafter called "applicant" or "developer") to establish and develop a Planned Unit Development (PUD) on approximately 548 acres of property located in Lee County, Florida. This property is generally bounded on the West by the Caloosahatchee River; on the East by McGregor Boulevard (SR 865); on the North by Griffin Boulevard, and on the South by Iona Road. It is the purpose of this document to provide the required standards and to set forth guidelines for the future development of the property.

1.02 NAME

The PUD development shall be known as RIVER'S EDGE YACHT AND COUNTRY CLUB.

1.03 LEGAL DESCRIPTION

Government Lots 2, 3 and 4, of Section 30, Township 45 South, Range 24 East, Lee County, Florida,

and

The East half (E½) of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida,

and

The Northwest quarter (NW¼) of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida,

and

All that part of the Northwest quarter (NW¼) of the Northeast quarter (NE¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida lying Northwesterly from McGregor Boulevard, EXCEPTING THEREFROM the following described parcel:

1. From the Southwest corner of said Northwest quarter (NW¼) of the Northeast quarter (NE¼) of said Section 31, run North 88°57'56" East along the South line of said fraction of a section for 542.85 feet; thence run North 01°07'16" West for 28.29 feet to a steel pin and the point of beginning.

2. From said point of beginning continue North 01°07'16" West for 190.44 feet to a concrete monument; thence run North 65°11'10" East for 162.71 feet to a concrete monument; thence run South 40°34'21" East for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867); thence run South 49°25'39" West for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road; thence run South 88°54'23" West along said Northerly line for 159.21 feet to the point of beginning;

3. SUBJECT TO the right-of-way for Iona Road.

and

All that part of the West half (W½) of the West half (W½) of Section 29, Township 45 South, Range 24 East, Lee County, Florida, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard, LESS the North 100 feet thereof; Lee County, Florida;

and

Government Lot 1, of Section 30, Township 45 South, Range 24 East, Lee County, Florida, LESS the North 100 feet thereof;

and

That part of the East half (E½) of the Southeast quarter (SE¼), of Section 30, Township 45 South, Range 24 East, Lee County, Florida, located Northwesterly of McGregor Boulevard;

and

All that part of the Northeast quarter (NE¼) of the Northeast (NE¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida, lying Northwesterly of McGregor Boulevard.

1.04 TITLE TO PROPERTY

The real property within this development is under the unified control of Ramar Group Companies, Inc., whose present address is P.O. Box 5979, 5255 South Tamiami Trail, Sarasota, Florida 33579, and compliance with this ordinance shall be maintained and enforced by Ramar through covenants that run with the land.

1.05 DEFINITIONS

CLUSTER DEVELOPMENT
A development design technique that concentrates buildings in specific areas on the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features.

CONTRIBUTE
Same as "Participate." See Definition of Participate.

DIRECTOR
Is the head of the Division of Community Development or his or her designated official.

DEVELOPMENT PLAN
A graphic representation along with supportive information and data depicting the intended development.

PARTICIPATE
The word "Participate" shall mean the proportionate or pro rata share of an area wide funding program established on a fair and equitable basis, which is applied uniformly to all units in the area served.

BUILDING PARCEL
A parcel of land committed to use by a single principal structure and permitted accessory uses.

SECTION II

PROJECT DEVELOPMENT

2.01 PURPOSE

The purpose of this Section is to generally describe the plan of the development and delineate the general conditions that will apply to the project.

2.02 GENERAL PLAN OF DEVELOPMENT

RIVER'S EDGE YACHT AND COUNTRY CLUB is a planned community, which includes a mixture of residential and commercial uses, golf course, open space/parks and preservation areas.

2.03 COMPLIANCE WITH APPLICABLE ORDINANCES

The property shall be in compliance with the applicable Lee County general zoning and subdivision regulations as well as other Lee County Development Codes in effect at the time permits and/or plats are requested.

2.04 FRACTIONALIZATION OF TRACTS

a. When the developer sells an entire tract or a building parcel (fraction of a tract) to a subsequent owner, or proposes development of such property himself, the developer shall provide to the Director for approval or denial, prior to the sale of such property, a boundary drawing showing the tract and the building parcel therein (when applicable) and in the case of a residential area, the number of dwelling units of each residential type assigned to the property being sold.

b. In the event any residential tract or building parcel is sold by any subsequent owner, as identified in Section 2.04(a), in fractional parts to other parties for development, the subsequent owner shall provide to the Director for approval or denial, prior to the sale of a fractional part, a boundary drawing showing his originally purchased tract or building parcel and the fractional parts therein and the number of dwelling units assigned to each of the fractional parts.

   The drawing shall also show the location and size of access to those fractional parts that do not abut a public street.

c. In the event a commercial tract or building parcel is sold by any subsequent owner, as identified in Section 2.04(a), in fractional parts to other parties for development, the subsequent owner shall provide to the Director for approval or denial, prior to the sale of a fractional part, a boundary drawing showing his originally purchased tract or building parcel and the fractional parts therein. The drawing shall also show the location and size of access to those fractional parts that do not abut a public street.

d. In evaluating the fractionalization plans, the Director's decision for approval or denial shall be based on compliance with the criteria and the development intent as set forth in this document, conformance with allowable numbers of residential units and the reasonable accessibility of the fractional parts to public or private roadways, common areas or other means of ingress and egress.

e. The developer of any tract or building parcel must submit, at the time of application for a building permit, a detailed site plan for his tract or parcel. Such site plan shall include, but not be limited to, showing the proposed location of all buildings, access roads, offstreet parking and offstreet loading areas, refuse and service areas, and other open spaces, locations for utilities hook-up, screening and buffering, signs, lighting, landscape plan, other accessory uses and structures and such other items as are necessary at the time of building permit approval.

f. If approval or denial is not issued within ten (10) working days, the submission shall be considered automatically approved.

2.05 SITE PLAN APPROVAL

Final site plan approval for each construction phase shall adhere to the following procedures:

a. A written request for final site plan approval including variances from any development regulations contained herein, shall be submitted to the Director for approval or denial. The request shall include materials necessary to demonstrate that the approval of the site plan will be in harmony with the general intent and purpose of this document. Such material may include, but is not limited to the following, where applicable:

1. Site plans at an appropriate scale showing proposed placement of structures on the property; provisions for ingress and egress, offstreet parking and off-street loading areas, yards and other open spaces.

2. Locations of proposed utilities.

3. Plans for screening and buffering.

4. Plans for proposed signs and lighting.

5. In the case of clustered buildings and/or zero lot line with common architectural theme, required property development regulations may be waived or reduced provided a site plan is approved under this section.

6. If approval or denial is not issued within ten (10) working days of submission, the submission shall be considered automatically approved.

7. If denial is issued, Rivers Edge may appeal the request to the Lee County Board of Commissioners if done within ten (10) working days.

2.06 LAND USES

The arrangement of land use types is shown on Exhibit A, the Master Development Plan. Variations in building location and acreages shall be permitted at the time of final site plan approval. The specific location and size of individual tracts and the assignment of dwelling units thereto shall be submitted to the Director for approval or denial. If approval or denial is not issued within fifteen (15) working days of submission, the submission shall be considered automatically approved.

2.07 PROJECT DENSITY

The total acreage of the RIVER'S EDGE YACHT AND COUNTRY CLUB property is approximately 547.58 acres. The maximum number of dwelling units to be built on the total acreage is 4,380. The number of dwelling units per gross acre is approximately 7.9 units per acre when all on-site activities are included in the acreage base and 8.3 units per acre when commercial acreages are excluded. The density on individual parcels of land throughout the project may vary according to the type of housing placed on each parcel of land.

2.08 DEVELOPMENT SEQUENCE AND SCHEDULE

The construction of RIVER'S EDGE YACHT AND COUNTRY CLUB is estimated to take approximately eleven (11) years and is planned to be developed in six (6) development phases. The estimate may, of course, change depending upon future economic factors. The table attached hereto and marked Exhibit B indicates the estimated absorption of residential units over the estimated development phases.

2.09 PRESERVATION OF NATURAL VEGETATION AND TREE REMOVAL

All clearing, grading, earthwork, and site drainage work shall be performed in accordance with the approved PUD Master Development Plan and and all applicable Lee County Ordinances. Removal activities shall be carried out under proper forestry management principles. Protected trees shall be flagged, clearly marked and/or fenced during periods of construction so as to eliminate or minimize their damage.

2.10 DEFINITIONS

Unless specifically defined herein, by their use herein, or specifically defined by the appropriate Lee County Development Code, words contained in this PUD document shall have their usual and common meanings.

2.11 ESSENTIAL SERVICES

Essential service are hereby defined as services designed and operated to provide water management, fire protection, water, sewer, telephone, electricity, cable television or communications, etc., to the general public. Essential services are permitted in all districts.

2.12 EASEMENTS FOR UTILITIES

Easements shall be provided for utility purposes as may be needed. In areas that must be cleared for utility construction, a reasonable effort shall be made to protect the trees. Said easements and improvements shall be provided in accordance with applicable Lee County Development Code regulations.

2.13 SIGNS

Signs shall be of a uniform design in compliance with all applicable codes governing their sizes and shapes. Community directional and identification signs shall be permitted within rights-of-way.

2.14 CONCEPTUAL DESIGN PLAN

A. Exhibit A, Master Development Plan, illustrates development uses and the location of all facilities.

B. Minor changes in the Master Development Plan shall be administratively allowed subject to their approval by the Director.

2.15 WATER

No residential development shall commence until sufficient water is available to insure adequate fire flow as well as a sufficient quantity of potable water to adequately serve the residential development for which a permit is requested. Evidence of such shall be submitted to the Director for his review and approval.

2.16 No structure of (3) or more stories shall be located closer than 200 feet of the east and/or west property lines.

SECTION III

RESIDENTIAL PORTIONS OF THE PLANNED UNIT DEVELOPMENT DISTRICT

3.01 PURPOSE

The purpose of this Section is to set forth the regulations for the residential portions of the Master Development Plan.

3.02 MAXIMUM DWELLING UNITS

A maximum number for the entire development shall be 4,380 dwelling units.

3.03 PERMITTED USES

The following residential uses shall be permitted within the areas designated for such use on the Master Development Plan:

A. Single family detached dwelling structure.

B. Two (2) family and multi-family dwellings and their customary accessory uses.

C. Garden apartments and townhouses.

D. Multi-story dwelling units and service commercial; however, floors devoted to commercial use shall not exceed ten percent (10%) of the gross residential floor area.

E. Residential accessory uses and including privately owned recreational facilities which are clearly compatable with the land use system of the PUD.

F. Public and private utility services and accessory buildings and structures.

G. Model homes shall be permitted in conjunction with the promotion for the development and signs as permitted by the Lee County Development Code.

H. Temporary construction yards, buildings, trailers.

I. Offices for sales, management and development purposes.

3.04 MINIMUM SETBACKS

1. All structures shall meet the following minimum perimeter setbacks:

   a. As adjacent to collectors/arterials - twenty-five (25) feet.

   b. Adjacent to local streets and parcel boundaries - fifteen (15) feet.

2. Distance between structures shall be as approved at the time of final site plan review.

3. Public water body and preserve area - twenty-five (25) feet.

3.05 OFF-STREET PARKING

Off-street parking spaces shall be provided to each residential use in accordance with the appropriate Lee County regulations in force at the time of permitting.

SECTION IV

COMMERCIAL AND MARINA PORTIONS OF THE PLANNED UNIT DEVELOPMENT DISTRICT

4.01 PURPOSE

The purpose of the Section is to set forth the regulations for the areas designated on the Master Development Plan, Exhibit A, as Commercial/Marina. The commercial areas intended to meet the local neighborhood shopping and personal service needs of the residents of the PUD, the commercial uses permitted are intended to provide the non-residential amenities and services in appropriate proportion to the size and theme of the development.

4.02 PERMITTED USES

The following uses shall be permitted within the areas designated as Commercial/Marina on the approved Master Development Plan.

A. Permitted Principal Uses:

1. Convenience commercial
2. Convenience road and beverage
3. Business offices including banks and financial
4. Institutions
5. Bait and tackle shops
6. Bicycle sales and service
7. Book stores
8. Clothing stores
9. Cocktail lounges
10. Commercial recreation uses
11. Delicatessens
12. Docking facilities, wet and dry storage (Marina complex only)
13. Drug stores
14. Dry cleaning shops
15. Essential services
16. Florist shops
17. Food markets
18. Gasoline service and supply
19. Gift shops
20. Gourmet shops
21. Hardware stores
22. Health food stores
23. Health clubs, health spa
24. Hotel, motels and/or guest lodging facilities (Marina complex only)
25. Ice cream shops
26. Liquor stores and taverns
27. Marine/commercial, provided, however, that boatels shall not be permitted (Marina complex only)
28. Marine supplies
29. Meat markets
30. Movie theaters and amusement centers
31. Nutrition centers
32. Post offices
33. Professional offices
34. Public & private utilities building and uses
35. Radio & television, small appliances, shoe, etc.
36. Repair shops
37. Restaurants, not including drive-ins
38. Restrooms and shower facilities
39. Sales, service, repair and rental facilities for boats, motors and accessories (Marina complex only)

40. Specialty shops
41. Any other commercial use or professional services which is comparable in nature with the foregoing uses and which the Director determines to be compatible in the district.

B. Permitted Accessory Uses And Structures

1. Accessory uses and structures customarily associated with the uses permitted in this district.

2. Signs as permitted by the Lee County Development Code and/or Lee County Zoning Ordinance.

4.03 MINIMUM SETBACKS

1. All structures shall meet the following minimum perimeter setbacks:

a. As adjacent to collectors/arterials - twenty-five (25) feet.

b. Adjacent to local streets and parcel boundaries - fifteen (15) feet.

2. Distance between structures shall be as approved at the time of final site plan review.

3. Public water body and preserve area - twenty-five (25) feet.

4.04 OFF-STREET PARKING

Off-street parking spaces shall be provided for each Marina/Commercial use in accordance with the appropriate Lee County regulations in force at the time of permitting.

SECTION V

PRESERVATION AREA

5.01 PURPOSE

The purpose of this Section is to set forth the regulations for the area designated on Exhibit A as Preservation Area.

5.02 PERMITTED USES

No building or structure, or part thereof, shall be erected, altered, or used or land or water used, in whole or in part, for other than the following:

A. Permitted Principal Uses Requiring Site Plan Approval:

1. Nature and foot trails including boardwalks, decks and gazebos.

2. Other activities for recreaton, conservation, and preservation when approved by the Director.

3. Water Management Facilities.

4. Wildlife Management.

B. Permitted Accessory Uses And Structures

1. Accessory uses and structures customarily associated with the uses permitted in this district.

SECTION VI

RECREATION

6.01 PURPOSE

The purpose of this Section is to set forth the regulations for the areas shown on Exhibit A, Master Development Plan, for recreational use.

6.02 PERMITTED USES

The following uses shall be permitted within areas designated for recreational use:

A. Permitted Principal Uses And Structures

1. Golf Course

2. Golf Clubhouse

3. Tennis and basketball courts, etc.

4. Tennis Clubhouses

5. Water Management Facilities

6. Any other activity which is compatible in nature with the foregoing uses and which the Director determines to be compatible in the district.

B. Permitted Accessory Uses And Structures

1. Pro-shop, practice driving range and other customary accessory uses of golf courses, tennis clubs or other recreational facilities.

2. Commercial establishments, including gift shops, golf and tennis equipment sales, restaurants, cocktail lounges, and similar uses.

3. Shuffleboard courts, swimming pools, and other types of facilities intended for recreation.

4. Signs as permitted in the Lee County Development Code.

5. Maintenance shops and equipment storage.

SECTION VII

GENERAL DESIGN CRITERIA

7.01 Overall site design shall be harmonious in terms of landscaping, enclosure of structures, location of access streets and parking areas, and location and treatment of buffer areas.

7.02 Buildings shall be setback a minimum of twenty-five (25) feet from abutting residential districts and the setback area shall be landscaped and maintained to act as a buffer zone.

7.03 Lighting facilities shall be arranged in a manner which will protect roadways and neighboring properties from direct glare or other interference.

7.04 A site plan shall be provided showing pertinent structure locations.

7.05 Construction shall be in accordance with the approved plans.

7.06 The boundary of the golf course tract may be recorded in the same manner as a subdivision plat.

DULY PASSED AND ADOPTED THIS 5th DAY OF MAY, 1982.

ATTEST:
SAL GERACI, CLERK

BY: _____
DEPUTY CLERK

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
CHAIRMAN

APPROVED AS TO FORM
By _____
OFFICE OF COUNTY ATTORNEY

LIST OF EXHIBITS

EXHIBIT A	Master Development Plan
EXHIBIT B	Construction Phasing Plan
EXHIBIT C	Development Order

EXHIBIT A

MASTER DEVELOPMENT PLAN
(SEE ATTACHED MAP)

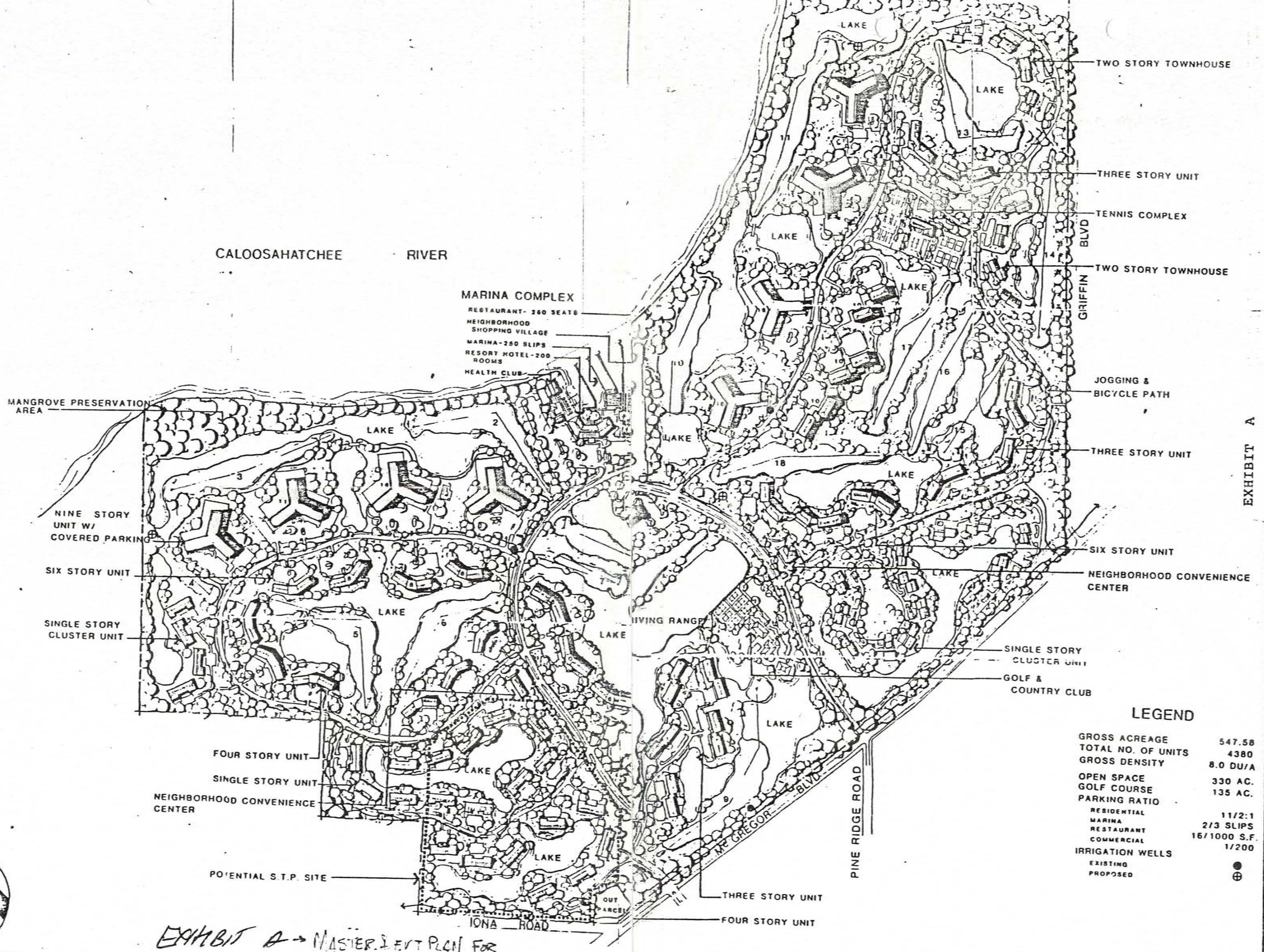


EXHIBIT A → MASTER DEVELOPMENT PLAN FOR

EXHIBIT A

MAP H:
MASTER DEVELOPMENT PLAN

LEGEND

GROSS ACREAGE	547.58
TOTAL NO. OF UNITS	4380
GROSS DENSITY	8.0 DU/A
OPEN SPACE	330 AC.
GOLF COURSE	135 AC.
PARKING RATIO	
RESIDENTIAL	1 1/2:1
MARINA	2/3 SLIPS
RESTAURANT	16/1000 S.F.
COMMERCIAL	1/200
IRRIGATION WELLS	
EXISTING	●
PROPOSED	⊕

Rivers Edge
yacht & country club
A PLANNED UNIT DEVELOPMENT LEE COUNTY FLORIDA

ROBERT A. MORRIS AIA
ARCHITECT - DEVELOPER
P.O. BOX 0000000000 & Fairview Trail Fairbanks, FL 33919

EXHIBIT B

RIVER'S EDGE DRI

CONSTRUCTION PHASING PLAN

PHASE/YEAR	MAJOR PROJECT AMENITIES	RESIDENTIAL UNITS
I/1	Golf Course, Country Club, Sales Office	0
II/2	Marina	512
II/3	Restaurant & 25,000 sq. ft. Commercial	492
III/4	Resort Hotel, Health Club, 12,500 sq. ft. Commercial	440
III/5	Commercial 12,500	498
IV/6	Convenience Commercial Node 7,500 sq. ft.	410
IV/7	-------	384
V/8	Convenience Commercial Node 7,500 sq. ft.	460
V/9	-------	430
VI/10	-------	426
VI/11	-------	328
	TOTAL RESIDENTIAL UNITS	4,380

EXHIBIT C

DEVELOPMENT ORDER
FOR
RIVER'S EDGE YACHT AND COUNTRY CLUB

A DEVELOPMENT OF REGIONAL IMPACT

LET IT BE KNOWN THAT, PURSUANT TO SECTION 380.06, FLORIDA STATUTES, THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, HAS HEARD AT A PUBLIC HEARING HELD ON THE 19th DAY OF APRIL, 1982, THE APPLICATION FOR DEVELOPMENT APPROVAL FOR THE RIVER'S EDGE YACHT AND COUNTRY CLUB, A DEVELOPMENT OF REGIONAL IMPACT, CONSISTING OF APPROXIMATELY FIVE HUNDRED AND FORTY-EIGHT (548) ACRES AS DESCRIBED IN THE APPLICATION FILED BY THE RAMAR GROUP COMPANIES, INC., FOR THE SAID DEVELOPMENT OF REGIONAL IMPACT WHICH IS LOCATED IN LEE COUNTY, FLORIDA.

WHEREAS, the Board of County Commissioners of Lee County, Florida, considered the report and recommendations of the Southwest Florida Regional Planning Council, the Lee County Staff, the Lee County Zoning Board, and the documents and comments upon the record made to the County Commission at the public hearing. After full consideration of the reports, recommendations, and testimony, the Board of County Commissioners of Lee County, Florida, hereby finds and determines:

A. The application is in accordance with Chapter 380, Florida Statutes;

B. The development is not in an area designated as an area of critical state concern pursuant to the provisions of Chapter 380, Florida Statutes;

C. The development is consistent with the Comprehensive Plan for Lee County;

D. The development is consistent with the local land development regulations and with the report and recommendations of the Southwest Florida Regional Planning Council submitted pursuant to Chapter 380, Florida Statutes; and,

WHEREAS, the Board of County Commissioners of Lee County, Florida, has rezoned the subject property to a planned unit development (PUD); and,

WHEREAS, the application for development approval filed by Ramar Group Companies, Inc., is also a part of an overall rezoning application filed by the applicant.

NOW, THEREFORE, be it ordained by the Board of County Commissioners of Lee County, Florida, that:

A. The legal description of the property subject to this Order is as follows:

Government Lots 2, 3, and 4, of Section 30, Township 45 South, Range 24 East, Lee County, Florida,

and

The East half (E½) of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida,

and

The Northwest quarter (NW¼) of the Northeast quarter (NE¼) of the Northwest quarter (NW¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida,

and

All that part of the Northwest quarter (NW¼) of the Northeast quarter (NE¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida, lying Northwesterly from McGregor Boulevard, EXCEPTING THEREFROM the following described parcel:

1. From the Southwest corner of said Northwest quarter (NW¼) of the Northeast quarter (NE¼) of said Section 31, run North 88°57'56" East along the South line of said fraction of a section for 542.85 feet; thence run North 01°07'16" West for 28.29 feet to a steel pin and the point of beginning.

2. From said point of beginning continue North 01°07'16" West for 190.44 feet to a concrete monument; thence run North 65°11'10" East for 162.71 feet to a concrete monument; thence run South 40°34'21" East for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867); thence run South 49°25'39" West for 154.71 feet to a nail marking the intersection of the Northerly line of Iona Road; thence run South 88°54'23" West along said Northerly line for 159.21 feet to the point of beginning;

3. SUBJECT TO the right-of-way for Iona Road.

and

All that part of the West half (W½) of the West half (W½) of Section 29, Township 45 South, Range 24 East, Lee County, Florida, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard, LESS the North 100 feet thereof, Lee County, Florida;

and

Government Lot 1, of Section 30, Township 45 South, Range 24 East, Lee County, Florida, LESS the North 100 feet thereof;

and

That part of the East half (E½) of the Southeast quarter (SE¼) of Section 30, Township 45 South, Range 24 East, Lee County, Florida, located Northwesterly of McGregor Boulevard;

and

All that part of the Northeast quarter (NE¼) of the Northeast quarter (NE¼) of Section 31, Township 45 South, Range 24 East, Lee County, Florida, lying Northwesterly of McGregor Boulevard.

B. This Order addresses the issues raised by the Southwest Florida Regional Planning Council in its report and recommendation to the Lee County Commission dated the 19th day of March, 1982.

C. The application for development approval for the RIVER'S EDGE YACHT AND COUNTRY CLUB is hereby APPROVED, subject to the following conditions:

a. ENERGY

1. The RIVER'S EDGE development shall comply with the Energy Code as adopted and in force at the time of commencement of each phase of the development.

2. RIVER'S EDGE shall construct a jogging and bicycle trail system as described in the Application for Development Approval (hereinafter referred to as the ADA) and the Master Site Plan. That system is to connect all points within the project. Benches and special parking areas are to be provided for bicycles and golf carts at each commercial and recreational area. That portion of the system alongside McGregor Boulevard shall be built in conformance with the Lee County Comprehensive Bicycle Facilities Plan and is to be dedicated to the County.

3. The Developers of RIVER'S EDGE shall design all facilities for optimum energy efficiency utilizing state-of-the-art energy conservation techniques, including but not limited to the following:

   - proper roof and wall insulation
   - glazing
   - energy efficient appliances
   - structure orientation for solar energy and natural ventilation
   - structural shading, e.g., inclusion of porch/patio areas in residential units and utilization of roof overhangs for low-rise buildings
   - proper landscaping throughout the project and planting of native shade trees and understory wherever appropriate for all active and passive recreation areas, streets, and parking areas
   - site design and landscaping to enhance energy conservation

4. RIVER'S EDGE shall cooperate with the Lee County Transit System in locating and providing bus stops and shelters within the development.

5. Alternate energy devices, such as solar collectors, may not be prohibited unless it is determined necessary for the protection of the health, safety, and welfare of the residents of the RIVER'S EDGE YACHT AND COUNTRY CLUB.

b. <u>TRANSPORTATION</u>

1. The RIVER'S EDGE development shall be responsible for development of all roads and bike paths within the RIVER'S EDGE development.

2. During Phase II, the RIVER'S EDGE development shall pay for the cost of improvements at the development's two (2) access points on McGregor Boulevard which are deemed necessary by the Director of the Lee County Division of Transportation to comply with the signalization and turning lane standards of the Florida Department of Transportation. Alignment of these access points shall be in accordance with Lee County Division of Transportation requirements.

3. Prior to commencement of Phase II, a forty (40) foot wide parcel of property along McGregor Boulevard extending the length of the RIVER'S EDGE frontage shall be donated to Lee County for road right-of-way.

4. During the construction of Phase II and prior to obtaining certificates of occupancy for residential units within Phase III, RIVER'S EDGE shall contribute an amount equivalent to the cost of four laning McGregor Boulevard from Gladiolus Drive to Cypress Lake Drive at the elevation of the existing pavement. These costs shall not include the costs of acquiring additional right-of-way, utility relocations or non-paving related costs, but shall include all costs associated with the actual construction of the roadway structure. The costs shall also include intersection improvements at Gladiolus Drive and Cypress Lake Drive to provide the same number of lanes on the far side of the intersections which then will taper to two lanes to join the existing facility.

5. Beginning with Phase II, the County will begin to annually monitor all roads indicated herein as exceeding capacity at level-of-service "C" before project buildout. Upon ultimate determination by the County Engineer that a roadway expansion is necessary, and if the need is prior to any currently planned improvements contained in the 1981-6 TIP or the improvements are not in the 1981-6 TIP, RIVER'S EDGE shall be required to pay its proportional share of the cost through an areawide funding program. This share will be determined by RIVER'S EDGE's share of the traffic to the total volume of the traffic along the roadway. To this end, RIVER'S EDGE shall, (beginning with Phase II), submit an annual monitoring report to the Lee County Engineering Department and the Southwest Florida Regional Planning Council for review. This report shall contain a description of the project's trip generation and all general analysis of the project's origin and destination for that given year.

REQUIRED IMPROVEMENTS
TO MAINTAIN LOS "C"
(Lanes)

McGregor		Gladiolus	
College to Cypress Lake	4/6 Lane	McGregor to 869	4 Lane
Cypress Lake to Gladiolus	6 Lane	869 to 41	4 Lane
Gladiolus South	4 Lane		
Colonial		San Carlos Boulevard	
McGregor to 41	6 Lane	McGregor to 869	4 Lane
		869 South	6 Lane
Cypress Lake		U.S. 41	
McGregor to Winkler	4 Lane	Colonial to College	8 Lane
Winkler to 869	4 Lane	College to Cypress Lake	
869 to 41	6 Lane		
41 to I-75	4 Lane	869	
		Colonial to College	4 Lane
		Colonial to Cypress Lk	4 Lane

6. During the development of Phase III and prior to obtaining certificates of occupancy for residential units within Phase IV, RIVER'S EDGE shall fund the amount necessary for a traffic light at Pine Ridge Road and Gladiolus, if such a traffic signal is warranted, and construction of left turn storage lanes on Pine Ridge Road when warranted.

7. The RIVER'S EDGE development recognizes Lee County is presently pursuing the formulation of an "impact fee" ordinance which will be applicable to all new construction within the unincorporated areas of Lee County, Florida. Should such an impact fee ordinance be adopted, the RIVER'S EDGE development shall be subject to this ordinance and pay its pro-rata share. Any external (off-site) improvements already paid for by RIVER'S EDGE at the time of adoption of the impact fee ordinance should be credited towards the corresponding fee charged RIVER'S EDGE.

c. AIR QUALITY

The RIVER'S EDGE development shall comply with all applicable codes and apply for all required permits relative to air quality.

d. FIRE PROTECTION

1. The RIVER'S EDGE development shall identify and make available to the Iona/McGregor Fire Protection and Rescue Service District a parcel of property acceptable to the fire district containing approximately three-fourths (3/4) acre of land for a fire station. Dedication shall occur with commencement of construction of Phase III.

2. The RIVER'S EDGE development will aid in the construction of a fire station on the site to be located within the project by contributing an amount of seventy-five thousand dollars ($75,000.00) for the actual construction of the fire station. This contribution shall occur prior to commencement of construction of Phase III.

e. PARKS

RIVER'S EDGE shall assist Lee County in obtaining additional recreational land by paying a fee-in-lieu of dedication of five (5) acres of parklands. Payment at fair market value shall occur with the commencement of Phase III of the development and shall be in accordance with standards and schedules established by the Lee County Division of Community Services. The requirements of this Section will not be applicable if an impact fee ordinance is adopted by Lee County and the RIVER'S EDGE development pays its pro rata share pursuant to the impact fee ordinance.

f. SCHOOLS

RIVER'S EDGE shall provide off-street school bus loading zones for each development phase as deemed necessary by the Lee County School Board.

g. WATER SUPPLY

1. No residential development shall commence until sufficient water is available through a public water system to insure adequate fire flow, as well as a sufficient quantity of potable water, to adequately serve the residential development for which a building permit is requested.

2. During Phase I, RIVER'S EDGE shall plug all existing on-site wells in accordance with Lee

County Division of Protective Services and South Florida Water Management District standards.

3. The RIVER'S EDGE development shall comply with the best management practices as defined by the South Florida Water Management District (SFWMD) with regard to the use of excavated areas and of wetlands acting as polishing and buffer areas and grassed swales for drainage purposes.

4. Direct discharge of water/effluent by RIVER'S EDGE into the Caloosahatchee River shall be prohibited.

h. STORM REFUGE

RIVER'S EDGE shall provide sufficient storm refuge space during the construction of the first 512 residential units to accommodate at least 24% of that population. Such refuge space shall meet the following conditions:

1. Located at least 16' above MSL.

2. No structures located within 150' of the shoreline shall be utilized as refuge space.

3. Designated refuge space shall be located in the interior hallways and similar areas with no openings leading directly to the exterior.

4. Refuge space shall be provided at a ratio of twenty (20) square feet per person.

5. A homeowners association shall be established to coordinate and educate the development's residents as to the availability of refuge areas and procedures to follow during a storm event.

6. Structures which provide refuge space shall be constructed to withstand 140 mph wind velocities and a professional engineer licensed and registered by the State of Florida shall so certify.

7. Subsequent to construction of the shelter, RIVER'S EDGE will provide comparative information and other data to assist Lee County in developing adequate on site storm shelter standards which may be included within the Lee County Building Codes.

i. COMPLIANCE/MONITORING

1. The Director of the Division of Community Development, or his designee, shall be the local official responsible for assuring compliance with this Development Order.

2. The RIVER'S EDGE development shall submit an annual report on the development to the Board of County Commissioners of Lee County, the Regional Planning Council, and the State Land Planning Agency. This annual report shall be submitted beginning one (1) year from the date construction of Phase I is commenced. The contents of the annual report shall be as required by the rules legally adopted by the Florida State Land Planning Agency.

3. This Development Order shall be deemed rendered as of this date for the purpose of computing the thirty (30) day appeal period.

4. Certified copies of this Development Order are to be forwarded to the Southwest Florida Regional Planning Council, the applicant, and appropriate state agencies. Notice of the adoption of the Development Order shall be recorded as provided in Chapter 380, Florida Statutes.

DULY PASSED AND ADOPTED this 5th day of May, 1982.

ATTEST:
SAL GERACI, CLERK

BY: Lois Kurz
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: Ernest Russell
Chairman

(182-A)

OFFICE OF COUNTY ATTORNEY

FLORIDA DEPARTMENT OF STATE
George Firestone
Secretary of State

May 18, 1982

Honorable Sal Geraci
Clerk of Courts
Post Office Box 2469
Fort Myers, Florida 33902

Attention: Lois Kurtz

Dear Mr. Geraci:
Pursuant to the provisions of Section 125.66, Florida Statutes, this will acknowledge:

✓ 1. Receipt of your letter/s of May 13
and certified copy/ies of Lee
County Ordinance/s No./s 82-14

2. Receipt of _____ County Ordinance/s relative to:
(a) _____
which we have numbered _____
(b) _____
which we have numbered _____

✓ 3. We have filed this/these Ordinance/s in this office on May 18 1982.

4. The original/duplicate copy/ies showing the filing date is/are being returned for your records.

Cordially,

Nancy Kavanaugh

(Mrs.) Nancy Kavanaugh
Chief, Bureau of Laws

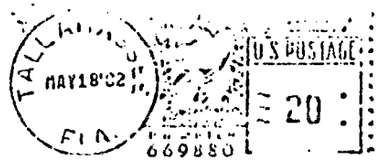
NK/

FLORIDA-State of the Arts

FLORIDA DEPARTMENT OF STATE
George Firestone
Secretary of State

The Capitol
Tallahassee, Florida 32301
(904) 488-3680

FLORIDA
STATE OF
THE ARTS



Honorable Sal Geraci
Clerk of Courts
Post Office Box 2469
Fort Myers, Florida 33902

Rec'd
5-20-82
8:25 a.m.
By: M.C. Palmer D.C.

FLORIDA-State of the Arts

ORDINANCE 84-30

AN ORDINANCE AMENDING LEE COUNTY ORDINANCE NO. 82-14 WHICH CHANGED THE ZONING DISTRICT CLASSIFICATION TO PLANNED UNIT DEVELOPMENT FOR THE RIVER'S EDGE YACHT AND COUNTRY CLUB, RELATING TO ORDINANCE NO. 84-16 WHICH PROVIDED FOR A REVISED MASTER DEVELOPMENT PLAN; ESTABLISHING MINIMUM SETBACK AND DESIGN CRITERIA FOR WATER RETENTION AREAS; ESTABLISHING MINIMUM SETBACKS FROM SECTION AND QUARTER SECTION LINES; PROVIDING LOCAL APPROVAL FOR A NAVIGATION CHANNEL; PROVIDING SEVERABILITY AND AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners of Lee County has previously adopted Ordinance No. 82-14 establishing a Planned Unit Development district and appropriate regulations for the River's Edge Yacht and Country Club; and

WHEREAS, the Board of County Commissioners of Lee County has previously adopted Ordinance No. 84-16 amending the Master Development Plan for the River's Edge Yacht and Country Club; and

WHEREAS, the Master Development Plan for the River's Edge Yacht and Country Club contains certain provisions which may conflict with other adopted Lee County Zoning and/or development regulations; and

WHEREAS, these provisions require certain amendments to be made to Lee County Ordinance No. 82-14; and

WHEREAS, due proper notice of public hearings has been given in accordance with all applicable laws; and

WHEREAS, public hearings have been held and all interested persons were given an opportunity to be heard; and

WHEREAS, after public hearings the Board of County Commissioners of Lee County, Florida deems it necessary to adopt the following amendments to Ordinance 82-14.

NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, THAT:

SECTION ONE

Section 2.03 of Lee County Ordinance No. 82-14 is hereby amended by adding the underscored portions as follows:

2.03 COMPLIANCE WITH APPLICABLE ORDINANCES

The property shall be in compliance with the applicable Lee County general zoning and subdivision regulations as well as other Lee County Development Codes in effect at the time permits and/or plats are

requested / ⊥ except as specifically mentioned herein:

A. Section and Quarter Section Line Setbacks

The minimum setback from section and quarter - section lines required by the Lee County Zoning Regulations is hereby waived and no minimum setback from the section and quarter - section lines shall be required provided development occurs in substantial compliance with the requirements of Ordinance 82-14 and the approved (revised) Master Development Plan.

B. Navigation Channel

The proposed navigable channel connecting the marina with the main navigation channel of the Caloosahatchee River shall be in compliance with all applicable State and Federal Regulations. Minor deviations from the location of the proposed channel depicted on the Master Development Plan may be approved by the Director without Public Hearing PROVIDED:

a. The final location of the channel is in substantial compliance with the location depicted on the Master Development Plan; and

b. The location complies with all applicable State and Federal Regulations.

C Water Retention Areas - Design Criteria

Manmade water retention areas are a permitted use in the development. All manmade water bodies shall comply with the following design criteria.

1) Bulkheads shall be permitted at locations indicated on the Master Development Plan provided the location is approved by the South Florida Water Management District.

2) Maximum depth of any man-made body of water shall be twenty (20) feet below the lake control elevation.

3) Side slopes shall not exceed one (1) foot vertical for every four (4) feet horizontal to a depth at least two (2) feet below the lake control elevation.

4) Side slopes shall not exceed one (1) foot vertical for every two (2) feet horizontal from a depth of two (2) feet below the lake control elevation to the permitted depth of the lake or water body.

5) Littoral shelves shall be constructed at random locations along lake edges as indicated on the Master Development Plan with a maximum depth of two (2) feet below the lake control elevation, and shall be planted with native wetland vegetation.

SECTION TWO: SEVERABILITY

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason, held to be invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portion thereof.

SECTION THREE: EFFECTIVE DATE

This Ordinance shall become effective upon receipt of the official acknowledgement from the Secretary of State that this Ordinance has been duly filed.

DONE AND ADOPTED THIS 5th day of December, 1984

ATTEST:

CHARLIE GREEN,
CLERK

BY: Chris Thomas
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: [signature]
Chairman

Approved as to form:
[signature]

ATTACHMENT B

RESOLUTION NUMBER Z-91-032A

AMENDED RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS

OF LEE COUNTY, FLORIDA

WHEREAS, Sundial River's Edge, Inc. has properly filed an application for:

a) A proposed revised amendment to the Development of Regional Impact Development Order for River's Edge Yacht and Country Club, specifically: Sections C, C.b, C.g, C.i, ~~C.j,~~ and the Master Site Plan; and

b) A Substantial Deviation Determination. Proposed amendments to the DRI Development Order will be evaluated by the local government to determine whether there is, or is not, a substantial deviation, as that term is utilized in Section 380.06 (19), Florida Statutes and whether the proposed change requires further Development of Regional Impact review; and

WHEREAS, the subject property is located at 14700 Portsmouth Boulevard, described more particularly as:

LEGAL DESCRIPTION: In Sections 29, 30 and 31, Township 45 South, Range 24 East, Lee County, Florida:

All that part of the West Half (W1/2) of the West Half (W1/2) of Section 29, Township 45 South, Range 24 East, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard LESS the North 100 feet thereof:

Government Lot 1, of Section 30, Township 45 South, Range 24 East, LESS the North 100 feet thereof:

That part of the East Half (E1/2) of the Southeast Quarter (SE1/4), of Section 30, Township 45 South, Range 24 East, located Northwesterly of McGregor Boulevard;

All that part of the Northeast Quarter (NE1/4) of the Northeast Quarter (NE1/4) of Section 31, Township 45 South, Range 24 East, lying Northwesterly of McGregor Boulevard.

Government Lots 2, 3 and 4, of Section 30, Township 45 South, Range 24 East; and the East Half (E1/2) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4); and the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4); and

All that part of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of Section 31, Township 45 South, Range 24 East, lying Northwesterly from McGregor Boulevard;

EXCEPTING THEREFROM the following described parcel:

From the Southwest corner of said Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of said Section 31, run N88°57'56"E along the South line of said fraction of a section for 542.85 feet;
THENCE run N01°07'16"W for 28.29 feet to a steel pin and the POINT OF BEGINNING. From said POINT OF BEGINNING continue N01°07'16"W for 190.44 feet to a concrete monument;
THENCE run N65°11'10"E for 162.71 feet to a concrete monument;

continued...

THENCE run S40°34'21"E for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867);
THENCE run S49°25'39"W for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road;
THENCE run S88°54'23"W along said Northerly line for 159.21 feet to the POINT OF BEGINNING.

LESS (RIVER'S EDGE 1, A CONDOMINIUM, PHASES 1, 2 & 3)

COMMENCE AT the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 feet right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet;
THENCE N51°50'16"W, 24.78 feet;
THENCE N01°51'26"E, 22.61 feet;
THENCE N11°09'44"E, 244.44 feet;
THENCE by a curve to the right, radius 175.00 feet, arc 33.64 feet, chord N16°40'08"E, 33.59 feet;
THENCE by a curve to the left, radius 260.00 feet, arc 74.75 feet, chord N13°56'28"E, 74.49 feet for a POINT OF BEGINNING.
THENCE continue by a curve to the left radius 260.00 feet, arc 216.80 feet, chord N18°11'00"W, 210.58 feet;
THENCE by a curve to the right, radius 60.00 feet, arc 99.83 feet, chord N05°35'45"E, 88.71 feet;
THENCE N53°15'47"E, 115.49 feet;
THENCE N20°00'00"E, 64.11 feet;
THENCE N42°00'00"W, 52.87 feet;
THENCE N85°20'16"W, 87.69 feet;
THENCE by a curve to the right, radius 72.00 feet, arc 85.18 feet, chord N51°26'46"W, 80.30 feet;
THENCE N17°33'16"W, 121.40 feet;
THENCE by a curve to the right, radius 102.00 feet, arc 157.55 feet, chord N26°41'44"E, 142.35 feet;
THENCE N70°56'44"E, 32.21 feet;
THENCE N48°00'00"E, 78.10 feet;
THENCE East 45.69 feet;
THENCE S68°02'00"E, 124.00 feet;
THENCE S31°30'00"E, 72.86 feet;
THENCE South 80.00 feet;
THENCE S68°27'08"E, 51.00 feet;
THENCE S42°00'00"E, 86.60 feet;
THENCE S56°10'00"E, 69.99 feet;
THENCE S42°00'00"E, 91.93 feet;
THENCE S19°20'31"W, 330.95 feet;
THENCE S88°30'00"W, 160.81 feet;
THENCE S18°03'57"W, 117.41 feet;
THENCE S83°00'00"W, 105.46 feet to the POINT OF BEGINNING.

LESS (RIVER'S EDGE 2, A CONDOMINIUM)

PARCEL A

COMMENCE AT the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 feet right-of-way);

continued...

THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet for a POINT OF BEGINNING.
THENCE S81°59'44"W, 100.00 feet;
THENCE S08°00'16"E, 295.92 feet;
THENCE by a curve to the left, radius 195.00 feet, arc 311.41 feet, chord S53°45'16"E, 279.36 feet;
THENCE S80°29'44"E, 88.51 feet;
THENCE by a curve to the left, radius 127.00 feet, arc 254.91 feet, chord N22°59'44"E, 214.22 feet;
THENCE N34°30'16"W, 52.22 feet;
THENCE by a curve to the right, radius 85.00 feet, arc 58.48 feet, chord N14°47'44"W, 57.33 feet;
THENCE N04°54'47"E, 127.14 feet;
THENCE by a curve to the left, radius 610.00 feet, arc 310.49 feet, chord N83°25'21"W, 307.51 feet to the POINT OF BEGINNING.

LESS PARCEL B

COMMENCE AT the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 feet right-of-way);
THENCE S49°29'44"W along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet;
THENCE S81°59'44"W, 150.00 feet for a POINT OF BEGINNING;
THENCE continue S81°59'44"W, 290.09 feet;
THENCE by a curve to the right, radius 2,040.00 feet, arc 534.07 feet, chord S89°29'44"W, 532.55 feet;
THENCE N83°00'16"W, 10.61 feet;
THENCE S08°38'08"E, 76.93 feet;
THENCE S54°54'53"E, 475.77 feet;
THENCE S78°15'16"E, 70.63 feet;
THENCE N78°55'10"E, 414.16 feet;
THENCE N08°00'16"W, 331.33 feet to the POINT OF BEGINNING.

LESS (RIVER'S EDGE 3, A CONDOMINIUM)

COMMENCE AT the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 feet right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 42.87 feet, chord N83°35'21"W, 42.87 feet;
THENCE S05°49'33"W, 40.00 feet for a POINT OF BEGINNING.
THENCE by a curve to the left, radius 229.68 feet, arc 147.84 feet, chord S21°49'09"E, 145.30 feet;
THENCE S40°15'34"E, 564.48 feet;

continued...

THENCE South, 96.97 feet to a point on the South boundary line of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31, Township 45 South, Range 24 East;
THENCE run along said South boundary line S88°54'50"W, 593.45 feet to the Southwest corner of Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of said Section 31;

THENCE run along the West boundary line of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31, N01°02'30"W, 665.51 feet to the Northwest corner of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31;
THENCE continue N01°02'30"W, 19.01 feet to a point on a curve having a radius of 2,060.00 feet and lying N00°36'54"E from the radius point;
THENCE run in a Southeasterly direction along said curve to the right having an arc of 187.35 feet, having a chord bearing S86°46'47"E, 187.28 feet to the POINT OF BEGINNING.

LESS (RIVER'S EDGE 4, A CONDOMINIUM, PHASES 2 & 4)

COMMENCE AT the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29'44"E, 40.00 feet;
THENCE N40°30'16"W, 195.80 feet for a POINT OF BEGINNING.
THENCE continue N40°30'16"W, 229.00 feet;
THENCE by a curve to left radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet;
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the right, a distance of 140.00 feet, chord bearing N39°47'03"E, 138.02 feet;
THENCE by a curve to the left radius 155.00 feet, arc 91.98 feet, chord N39°29'44"E, 90.64 feet;
THENCE by a curve to the right, radius 450.00, arc 149.23 feet, chord N31°59'44"E, 148.54 feet;
THENCE by a curve to the right, radius 130.00 feet, arc 297.23 feet, chord S73°00'16"E, 236.59 feet;
THENCE by a curve to the left, radius 300.00 feet, arc 115.19 feet, chord S18°30'16"E, 114.49 feet;
THENCE by a curve to the right radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;
THENCE S87°29'44"W, 25.00 feet;
THENCE S55°00'53"W, 21.10 feet;
THENCE S07°00'00"E, 19.00 feet;
THENCE S87°00'00"W, 62.00 feet;
THENCE S45°00'00"W, 50.00 feet;
THENCE S45°00'00"E, 227.14 feet;
THENCE N86°29'44"E, 28.89 feet to a point on a curve having a radius of 450.00 feet and lying S86°29'44"W from the radius point;
THENCE traverse along the arc of said curve, to the right, a distance of 86.39 feet, chord bearing S01°59'49"W, 86.26 feet;
THENCE by a curve to the right, radius 150.00 feet, arc 109.96 feet, chord S28°29'41"W, 107.51 feet;
THENCE S49°29'44"W, 15.00 feet to the POINT OF BEGINNING.
Said parcel contains 5.29 acres+/-.

LESS 40-FOOT ADDITIONAL RIGHT-OF-WAY

continued...

A parcel of land in Sections 29, 30 and 31, Township 45 South, Range 24 East, Lee County, Florida, more particularly described as follows:

COMMENCE at the Southeast corner of Section 30, Township 45 South, Range 24 East;
THENCE N00°18'34"W along the East line of said Section 30 for 303.53 feet to an intersection with the Northwesterly right-of-way line of State Road S-867, (McGregor Boulevard) and the POINT OF BEGINNING of the herein described parcel of land;
THENCE Southwesterly along said Northwesterly right-of-way line for the following described two (2) courses:

1) S49°29'44"W for 473.26 feet to an intersection with the Northerly line of Section 31;

2) THENCE continue S49°49'44"W for 1,875.47 feet to an intersection with the Northeasterly boundary line of that certain parcel described in Official Records Book 1275, page 319, Public Records of Lee County, Florida;

THENCE N40°30'16"W along said Northeasterly boundary line for 40.00 feet to an intersection with a line 40 feet Northwesterly of and parallel to as measured at right angles from the aforementioned Northwesterly right-of-way line;
THENCE Northeasterly along said parallel line for the following described five (5) courses:

1) N49°29'44"E for 1,827.62 feet to an intersection with the Southerly line of Section 30;

2) THENCE continue N49°29'44"E for 554.91 feet to an intersection with the Westerly line of Section 29;

3) THENCE continue N49°29'44"E for 207.90 feet to the Point of Curvature of a circular curve concave to the Northwest;

4) THENCE Northeasterly along the arc of said curve having for its elements a radius of 2,212.00 feet and a central angle of 03°39'25" for 141.18 feet to the Point of Tangency;

5) THENCE N45°50'19"E for 1,446.13 feet to an intersection with the Westerly right-of-way line of Griffin Boulevard;

THENCE S00°41'50"E along said Westerly right-of-way line for 55.11 feet to an intersection with the aforementioned Northwesterly right-of-way line of McGregor Boulevard;
THENCE Southwesterly along said Northwesterly right-of-way line for the following described three (3) courses:

1) S45°50'19"W for 1,408.22 feet to the Point of Curvature of a circular curve concave to the Northwest;

2) THENCE Southwesterly along the arc of said curve having for its elements a radius of 2,252.00 feet and a central angle of 03°39'25" for 143.74 feet to the Point of Tangency;

3) THENCE S49°29'44"W for 236.70 feet to the POINT OF BEGINNING.

Said parcel of land situate, lying and being in Lee County, Florida, containing 3.82 acres, more or less.

SUBJECT TO

EASEMENT DESCRIPTION NO. 1

continued...

A 40-foot easement lying in Section 31, Township 45 South, Range 24 East, Lee County, Florida, the centerline of which is described as follows:

COMMENCE at the Northeast corner of said Section;
THENCE S89°23'18"W along the North line of said Section, a distance of 361.51 feet to the existing Northwesterly right-of-way line of McGregor Boulevard;
THENCE S49°29'44"W along said Northwesterly right-of-way line 1,320.47 feet to the POINT OF BEGINNING of said easement centerline;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet to the Point of Terminus.

EASEMENT DESCRIPTION NO. 2

An 80-foot easement lying 40 feet each side of the following described centerline:

COMMENCE at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet for a POINT OF BEGINNING.
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 298.94 feet, chord N87°04'57"W, 298.68 feet to the Point of Terminus.

AN EASEMENT FOR INGRESS AND EGRESS, DRAINAGE, UTILITIES, AND CABLE TELEVISION OVER AND UNDER THE FOLLOWING EASEMENT PARCEL:

EASEMENT DESCRIPTION NO. 4

COMMENCE at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29'44"E, 40.00 feet;
THENCE N40°30'16"W, 424.80 feet;
THENCE by a curve to left radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet for a POINT OF BEGINNING.
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the left, 74.11 feet, chord bearing S14°13'35"W, 73.82 feet to a point on a curve having a radius of 690.00 feet and lying N10°51'23"E from the radius point;
THENCE traverse along the arc of said curve to the right, 35.15 feet, chord bearing S77°41'03"E, 35.14 feet to the POINT OF BEGINNING.

continued...

UTILITY EASEMENT

A Utility Easement lying in Section 31, Township 45 South, Range 24 East, Lee County, Florida, more particularly described as follows:

COMMENCING at the Northeast corner of said Section 31;
THENCE S89°22'39"W (Basis of Bearings being the line between the Southwest corner and the Southeast corner of Section 30-45-24, being N89°06'15"E) along the North line of said section a distance of 362.95 feet to the North right-of-way line of McGregor Boulevard (SR 867) (80-feet wide);
THENCE S49°30'09W along said right-of-way line for 1,255.32 feet to the POINT OF BEGINNING of the herein described easement;
THENCE N40°30'17"W a distance of 405.00 feet;
THENCE N49°29'43"E a distance of 16.00 feet;
THENCE N40°30'17"W a distance of 40.00 feet;
THENCE S49°29'43"W a distance of 40.00 feet;
THENCE S40°30'17"E a distance of 40.00 feet;
THENCE N49°29'43"E a distance of 9.00 feet;

THENCE S40°30'17"E a distance of 405.00 feet to the intersection with the Northwesterly right-of-way line of aforesaid McGregor Boulevard;
THENCE N49°30'09"E along said right-of-way line a distance of 15.00 feet to the POINT OF BEGINNING.
Containing 0.18 acre more or less.

10 FEET WIDE CONSERVATION EASEMENT

Legal Description for a Conservation Easement 10 feet in width, lying landward of, parallel with, adjacent to, and at right angles from the Mean High Water Line along the Caloosahatchee River, in Section 30, Township 45 South, Range 24 East, Lee County, Florida, more particularly described as:

BEGINNING at the intersection of the Mean High Water Line and a line lying 100 feet South, and parallel with the North line of said Section 30;
THENCE meandering Southwesterly 6,572.00 feet more or less to the point of intersection with the West boundary line of said Section 30.
LESS the 145.00 feet more or less for Access and Flushing Channel and 123.00 feet more or less for Flushing Channel described as follows:

COMMENCE at the Southeast corner of aforesaid Section 30;
THENCE N00°19'30"W along the East line of said Section 30, for 2,565.59 feet;
THENCE S89°41'28"W for 2,100.00 feet, more or less, to an intersection with the Mean High Water Line along the Southeasterly bank of the Caloosahatchee River, and the POINT OF BEGINNING;
THENCE meander Southwesterly along said Mean High Water Line for 145.00 feet, more or less, to the termination.

ALSO

COMMENCE at the Southeast corner of the Northeast Quarter (NE1/4) of said Section 30;
THENCE N00°20'05"W along the East line of said Section 30, for 538.24 feet;
THENCE S89°40'17"W for 1,371.00 feet, more or less, to an intersection with the Mean High Water Line, along the Southeasterly bank of the Caloosahatchee River, and the POINT OF BEGINNING;
THENCE meander Southwesterly along the Mean High Water Line for 123.00 feet, more or less, to the termination.

continued...

WHEREAS, the applicant has indicated the property's current STRAP numbers are: 29-45-24-00-00001.0000 30-45-24-38-0000A.0000 30-45-24-00-00001.0000 and 31-45-24-00-00002.0000; and

WHEREAS, proper authorization has been given to Steven C. Hartsell, Esq., of Pavese, Garner, Haverfield, Dalton, Harrison & Jensen, by Donald R. Feaster, Vice-President, Sundial Group, Inc., the owner of the subject parcel, to act as agent to pursue this zoning application; and

WHEREAS, a public hearing was legally and properly advertised and held before the Lee County Hearing Examiner, with full consideration of all the evidence available; and

WHEREAS, the Lee County Hearing Examiner fully reviewed the matter in a public hearing held on March 12, 1991 and continued to March 22, 1991, April 5, 1991 and April 18, 1991; and

WHEREAS, a public hearing was legally and properly advertised and held before the Lee County Board of County Commissioners; and

WHEREAS, a subsequent public hearing was legally and properly advertised and held on March 16, 1992 the Lee County Board of County Commissioners to consider the provisions of the Revised Development Order Amendment drafted by the Florida Department of Community Affairs and the Owner; and

WHEREAS, in the legislative process the Lee County Board of County Commissioners gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on file with the county, and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, that the Board of County Commissioners does hereby a) Find that the Revised Amendment does not constitute a substantial deviation; and b) APPROVE the Revised Amendment. This approval is subject to the conditions contained in the attached draft Revised Development Order Amendment (Exhibit A).

Site Plan 91-032 is attached hereto and incorporated herein by reference, as a reduced copy of the Master Concept Plan.

The following findings of fact were made in conjunction with this approval of the Revised Amendment to the Development of Regional Impact Development Order:

continued...

A. Based upon the objective criteria set forth in Section 380.06 (19), Florida Statutes, the revised amendment to the Development of Regional Impact (DRI) Development Order for the River's Edge Yacht and Country Club, specifically Sections C, C.b, C.g, C.i, ~~C.j~~, and the Master Site Plan thereof, as shown on the Draft Revised Development Order Amendment (Exhibit A, attached) and revised site plan does not constitute a substantial deviation from the initial DRI Development Order for the said River's Edge Yacht and Country Club, dated May 5, 1982, nor from the amendments thereto.

B. That this non-substantial amendment of an existing DRI Development Order, to be accomplished in the manner and under the conditions set forth in the attached Draft Revised Development Order Amendment and the revised site plan, is consistent with the Goals, Objectives, Policies and general intent of the Lee Plan, is consistent with the densities, intensities and general uses set forth in the Lee Plan, and has a neutral impact on the purposes and intent of the Lee County Zoning Ordinance.

C. That the changes, modifications or amendments set forth in the Draft Revised Development Order Amendment and revised site plan will not act to create incompatibilities with existing and planned uses on abutting or near vicinity properties, and will not cause nuisance, damage, hazard or other detriment to persons or property situated near the subject lands.

D. That the amendment to the subject DRI Development Order will not result in additional adverse impacts on environmentally sensitive areas or valued natural resources, and to the contrary, will provide for additional protective measures as compared to the original Development Order dated May 5, 1982.

The foregoing Resolution was adopted by the Lee County Board of County Commissioners upon a motion by Commissioner Judah, and seconded by Commissioner Manning, and, upon being put to a vote, the result was as follows:

John E. Manning	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Vicki Lopez-Wolfe	Absent
Donald D. Slisher	Absent

DULY PASSED AND ADOPTED this 16th day of March, A.D., 1992.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Chairman

FILED

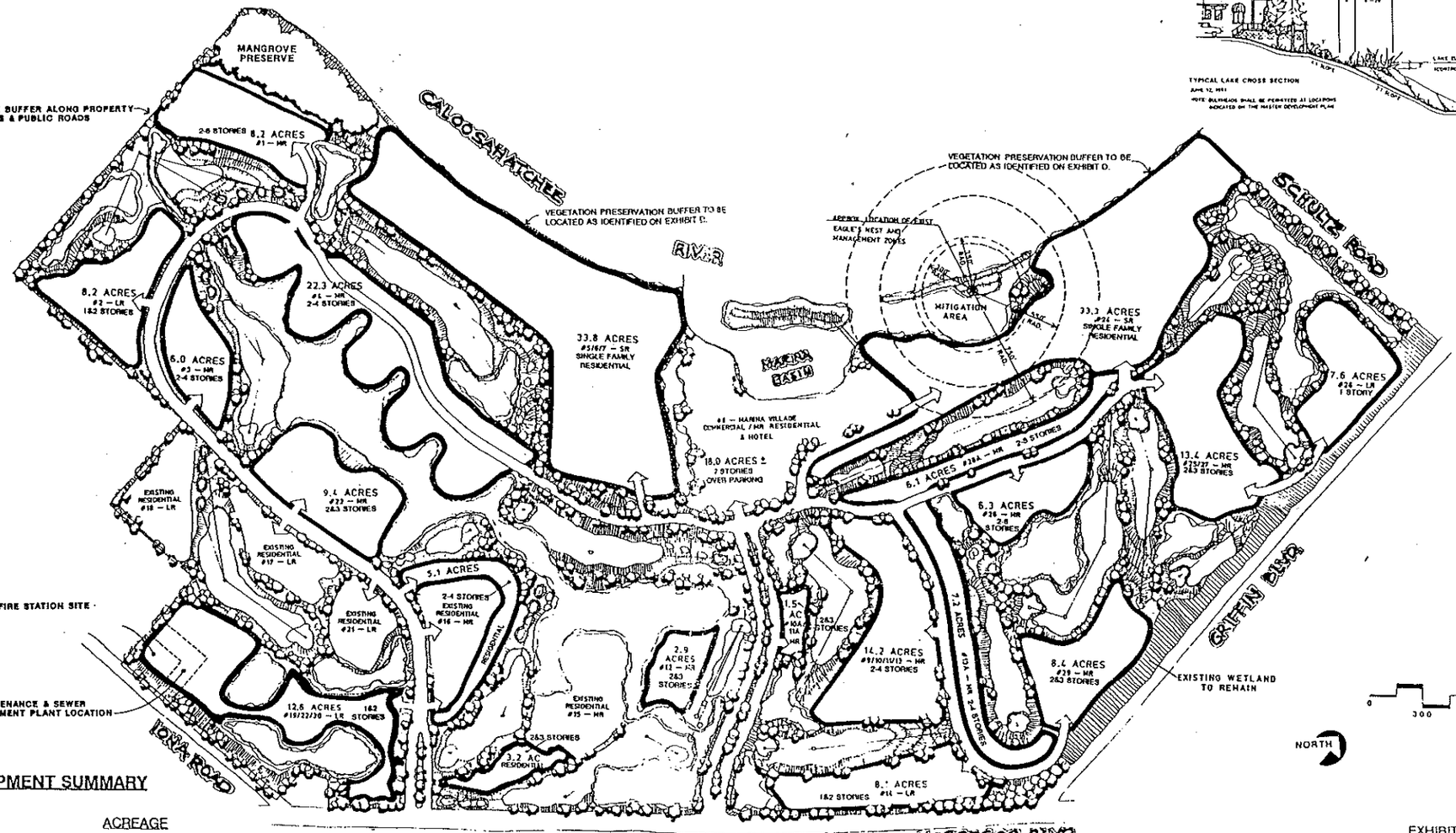
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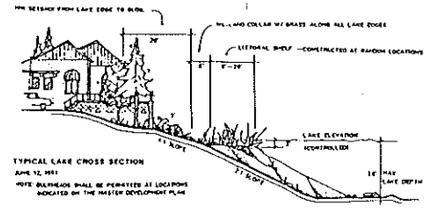
CLERK CIRCUIT COURT
BY _____ D.C.

Approved as to ~~form~~ by:

_____
County Attorney's Office

(3136)





DEVELOPMENT SUMMARY

LAND USE	ACREAGE
RESIDENTIAL (Includes Existing Residential, Proposed Residential, Marina Village Residential - 7.5 acres, Less Private Open Space)	189.7
MARINA VILLAGE (COMMERCIAL)	10.5
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	*70.0
MARINA BASIN AND MITIGATION AREAS	14.7
OPEN SPACE (Includes Vegetation/Preservation Buffer, Private Open Space, Mangrove Preserve, Other Open Space)	250.7
TOTAL ACREAGE	547.6

RESIDENTIAL UNITS Existing units - 215 Proposed units - 1,856	2071 D.U.
GROSS PROJECT DENSITY	3.8 D.U./AC

Notes:

1. Residential tracts will not exceed densities and height limitations set forth in Ordinance 84-16.
2. A conservation easement has been conveyed to the state along the project's Caloosahatchee River frontage to a depth of ten feet measured from MHW
3. The previously approved golf club and tennis/swim club facilities will be located as shown to the Marina Village.
4. Project entrance locations conform to the June 12, 1984 approved Plan. Gatehouses are permitted at the project entrances and individual tract entrances.
5. The provisions of the River's Edge Southern Bald Eagle Management Plan are incorporated in this Plan.
6. The maximum height of any buildings in this Plan is 8 stories.
7. The Marina Basin and Mitigation Areas, as shown on these plans, shall conform to the permit requirements set forth in permit number 361001749 issued by the Florida Department of Environmental Regulation (DER), where not in conflict with other conditions of the corresponding 1991 development order conditions for this project, particular as they relate to listed plant and Eagle Nest/Perch preservation areas and their management, including the preservation of the Australian Pine Bald Eagle Nest Tree.

EXHIBIT A

MASTER SITE PLAN

TRACT MAP

DECEMBER 20, 1990

REVISED: NOVEMBER 26, 1991

RIVER'S EDGE YACHT & COUNTRY CLUB

FLORIDA LAND PLANNING, INC.

2/17/92
BECKLTR DRAFT

[ADDITIONS IN BOLD; DELETIONS CROSSHATCHED]

REVISED DEVELOPMENT ORDER AMENDMENT
FOR
RIVER'S EDGE YACHT AND COUNTRY CLUB
A DEVELOPMENT OF REGIONAL IMPACT

WHEREAS, the Applicant/Owner for River's Edge Yacht and Country Club Development of Regional Impact has proposed to decrease the overall permitted density of the project from 4,380 dwelling units to 2,071 dwelling units; revise the golf course design to relocate six golf course holes from areas along the Caloosahatchee River and replace these areas with single-family units; consolidate and relocate the tennis court complex, golf course club house and marina basin and marina village land area, previously totalling 26.8 acres and consolidate to 18 acres and reduce the approved number of boat slips in the marina from 250 slips to 190 slips. The buildout of the project is proposed to be extended an additional 4 years and 11 months; and

WHEREAS under Chapter 380.06(19), Florida Statutes, the proposed change must be reviewed and evaluated to determine whether or not the change is a substantial deviation from the Original Development Order; and

WHEREAS, the Board of County Commissioners has reviewed the proposed change and finds the changes contained herein not to be a substantial deviation if subject to the conditions in this Development Order Amendment, but any further changes will be re-

reviewed cumulatively for determination as to whether or not a substantial deviation has occurred.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that the Development of Regional Impact Development Order for River's Edge Yacht and Country Club DRI, adopted by the Board of County Commissioners on May 5, 1982, is amended as follows, with additions underlined and deletions struck through:

SECTION ONE:

ADD the following to Section C of the development order.

C. The application for development approval for the RIVER'S EDGE YACHT AND COUNTRY CLUB, as amended, is hereby APPROVED for the following uses described in subsection C.1. and shown in the revised Master Site Plan dated December 20, 1990, revised November 25, 1991, attached as Exhibit A, subject to the following conditions contained in subsections C.2.a. through C.2.i:

1. USES

a. 2,071 dwelling units of which up to 536 would be single-family (detached and zero lot line type units) and up to 1,535 multi-family on a total of 250.3 acres; approved, but unbuilt multi-family units may be exchanged for single-family units, provided that the resulting total mix of approved multi-family and single-family dwelling units do not exceed a gross trip generation rate of 1,149 p.m. peak hour trips as calculated from the fitted curve formulas of the 5th Edition of the ITE Trip Generation Manual for land use categories 210 and 230 (215 multi-family units are already built);

b. 135 acre golf course and golf club with 250 parking spaces;

c. On the 10.5 acres commercial part of the 18.0 acre Marina Village Commercial/Residential Area:

1. 200 hotel rooms;

2. 250 seat restaurant with 310 parking spaces;

3. 190 wet berth marina;

4. 7,000 gross square foot health club;

5. a 16 tennis court complex;

6. 15,000 gross leasable square feet of neighborhood retail with 80 parking spaces;

7. 50,000 gross leasable square feet of specialty retail with 325 parking spaces; permitting all retail uses more particularly described in the P.U.D. Ordinance #82-15, as amended.

~~d. a maximum of 212.2 acres (not including lakes or the 14.7 acre Marina Basin and Proposed Mitigation Area or the 547.6 acre site as impervious surfaces);~~

~~e~~ d. 70.0 acres of lakes;

~~f~~ e. 17.8 acre refined vegetation preservation buffer including:

1. a mangrove and listed plant species preserve of 10.82 acres;

2. an eagles nest and listed plant species preservation island of 1.16 acres;

3. an eagles perch management and listed plant species preservation island of 2.78 acres;

4. two shoreline listed plant species preservation areas of 2.43 and 0.61 acres; and

~~g~~ f. 250.7 acres of open space (including golf course, preservation areas, and private open space, but excluding lake, **marina mitigation and basin** areas)."

SECTION TWO:

DELETE Section C.b.2 through 7 (Transportation Conditions) in its entirety and ADD the following:

2. CONDITIONS

. . .

b. TRANSPORTATION

1. Development Impact/Phasing Schedule:

The transportation impact assessment which forms the basis for this Development Order Amendment for River's Edge DRI assumes the land uses shown in Section C.1., as amended, and assumes one continuous phase of development with the project buildout extended from the Year 1993 to May 4, 1998.

Any future application for Notice of Proposed Change shall be reviewed cumulatively in accordance with Chapter 380, Florida Statutes, to determine if a substantial deviation has occurred. If a traffic related Substantial Deviation has occurred, a traffic re-analysis shall be required, along with any other necessary review pursuant to the provisions of Paragraph 380.06(19)(g), F.S.

2. Annual Monitoring Program:

Pursuant to Section 380.06(18) F.S., the River's Edge DRI shall submit an "Annual Monitoring Report" to the Lee County Department of Transportation & Engineering (LCDOT&E), the Southwest Florida Regional Planning Council (SWFRPC), the Florida Department of Transportation (FDOT) and the Florida Department of Community Affairs (DCA) ~~by/July/1st/of~~ each year until project buildout. **If the local government does not receive the annual report or receives notification that the regional planning agency or the state land planning agency has not received the report, the local government shall request in writing that the developer submit the report within thirty (30) days. The failure to submit the report after thirty (30) days shall result in the temporary suspension of the Development Order by the local government.** At a minimum, the monitoring report shall contain a.m. and p.m. peak hour peak season traffic counts (with turning movements) and a professionally acceptable level of service analysis, mutually agreed upon by the Applicant's engineer, LCDOT&E, FDOT, SWFRPC and DCA, at all project access locations onto McGregor Boulevard (SR 867) as well as at the following ~~intersections/and~~ regional roadway segments **and all intersections included within and at the end of those segments:**

REGIONAL ROADWAY SEGMENTS

BACKLOGGED LEE COUNTY FACILITIES:

McGregor Boulevard (S.R. 867) from

Gladiolus Drive to Pine Ridge Road
Pine Ridge Road to Cypress Lake Drive
Cypress Lake Drive to College Parkway

Cypress Lake Drive from

McGregor Boulevard to **South Pointe Blvd.**
~~Pine/Ridge/Road~~
~~//Pine/Ridge/Road/to/A&W/Bulb/Road~~
~~//A&W/Bulb/Road~~ **South Point Blvd.** to Winkler Road
Winkler Road to Summerlin Road

CONSTRAINED LEE COUNTY FACILITIES:

McGregor Boulevard (SR 867) from

College Parkway to Winkler Road
Winkler Road to Whiskey Creek Drive
Whiskey Creek Drive to Colonial Blvd

CONSTRAINED CITY OF FT. MYERS FACILITY:

McGregor Boulevard (SR 867) from

Colonial Boulevard to Hill Avenue

NON-BACKLOGGED/NON-CONSTRAINED LEE COUNTY FACILITIES:

Gladiolus Drive from

Pine Ridge Road to A&W Bulb Road
A&W Bulb Road to Winkler Road
Winkler Road to Summerlin Road

Cypress Lake Drive from

Summerlin Road to US 41

The above off-site intersections and roadway segments were identified as significantly impacted by greater than 5% utilization of the LOS (level of service) "D" peak hour service volume by the revised River's Edge DRI in the traffic impact statement submitted for the Notice of Proposed Change. Peak season peak hour traffic counts and

level of service calculations shall be performed by the developer's traffic consultant and submitted as part of the annual monitoring report for the above significantly impacted road segments. ~~The Regional Roadway segments listed on Glades/Brive shall be listed as the~~ ~~the 1991-92 round of Lee County Comprehensive Plan Amendments to be added by the County not later than November, 1992. The monitoring report address whether any~~ In the event that the development traffic is projected to utilize 5% or more (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year) of the peak hour level of service "D" service volume, and the monitoring report shows that peak season peak hour level of service "D" (or adopted LOS) is exceeded, or likely to be exceeded within the next year, (based on existing traffic counts plus traffic projected to be generated by the development approved and estimated to be requested within the next year) on any road segment and/or intersection identified above, the consultant will identify as part of the monitoring report whether any improvements are programmed by either Lee County or the City of Ft. Myers in their respective Comprehensive Plan Capital Improvements Elements (1991 to May 4, 1998) or in FDOT's approved three year Transportation Work Program, sufficient to correct the deficiency.

The developer shall submit the first monitoring report to the Lee County Department of Transportation & Engineering (LCDOT&E), Florida Department of Transportation (FDOT), DCA and the Southwest Florida Regional Planning council (SWFRPC) within one year after the effective date of the Development Order Amendment (45 days after adoption date or after resolution of appeal). Monitoring reports shall be submitted annually until buildout of the project. Actual buildout will occur when the developer or his successors has constructed and obtained Certificates of Occupancy for the maximum amount of residential and non-residential land uses permitted by the River's Edge Development Order Amendment. Declared buildout will occur if the developer or his successors formally declares in writing to all governmental agencies having responsibility for

monitoring this DRI that no more development will be constructed, despite the fact that less than the permissible maximum amount of residential and non-residential land uses had been built to date.

The purpose of this monitoring report is to: (1) determine if the projected traffic impacts for the Year 1998 in the traffic impact assessment for River's Edge DRI Amendment are exceeded by actual impacts; (2) assist Lee County DOT&E and FDOT in determining the proper timing of necessary roadway improvements within the Lee Plan traffic district encompassing the River's Edge DRI (currently District 4); (3) identify how the contributions of this development were applied to maintain the overall balance of surplus service volume and traffic growth within the district; (4) monitor the Lee County and FDOT schedule of programmed improvements for roadways significantly impacted by the River's Edge development that are operating or are projected to be operating within the next year, below LOS "D" (or the Lee County Comprehensive Plan adopted LOS) peak season peak hour; and (5) determine the project's external trip generation along the existing roadways.

The following is recognized and understood:

A. Traffic counts may be obtained from original machine and manual peak hour counts, Lee County Traffic Volume Reports, and other DRI developments with similar monitoring requirements and other generally acceptable sources.

B. In the event that construction has not begun on the land uses identified in Section One, Paragraph C.1. by the date the monitoring report is due, a letter to the above agencies documenting the development status on site may be considered an acceptable replacement to the above traffic monitoring for that year.

FOR BACKLOGGED LEE COUNTY FACILITIES: In the event that the Annual Monitoring Report indicates that peak season peak hour level of service "D", or applicable level of service, is exceeded, or is projected to be exceeded within the next year, for any road segment and/or intersection identified as a backlogged Lee County facility and the required road and/or intersection improvement necessary to

bring the identified roadways back to level of service "D" or other applicable comprehensive plan adopted level of service for peak season peak hour conditions, is not programmed for construction by May 4, 1998; and River's Edge is, or is projected within the next year to be, utilizing 5% or more of the peak hour level of service (LOS) "D" service volume on that segment or intersection (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); then Lee County shall determine whether there is a service volume surplus or deficiency in the Lee Plan traffic district in which River's Edge is located (currently District 4) to implement one of the following two policies for the River's Edge building permit requests during the next year:

A. If the Developer complies with the mitigation requirements contained within this Development Order, then building permits shall still be approved provided that the surplus service volume resulting from the existing surplus service volume, any service volume increases due to committed roadway improvements, and any service volume increases due to interim improvements (reported as a percent of existing service volume on a district basis) is equal to or exceeds the annual percent increase in traffic on a traffic district-wide basis.

B. In the event that the percent service volume growth identified on a traffic district basis is less than the percent traffic growth in the district, no building permits will be issued by Lee County unless capacity enhancement and/or operational improvements are programmed for implementation within the district so that the total service volume growth for the district will again be equal to or greater than the district traffic growth.

FOR LEE COUNTY CONSTRAINED FACILITIES: In the event that the Annual Monitoring Report indicates that the peak season maximum volume-to-capacity (v/c) ratio of 1.85 is exceeded, or is projected to be exceeded within the next year, for any Lee

County road segment identified in Paragraph 2 above as constrained; and the required road improvement necessary to maintain or better the v/c ratio will not be operational on that segment; then no further building permits beyond those issued at the time of the Annual Monitoring Report determination shall be issued for the River's Edge development until the necessary roadway improvements sufficient to maintain the v/c ratio at, or less than, 1.85 is operational on the constrained segment.

FOR CITY OF FT. MYERS CONSTRAINED FACILITY: In the event that the Annual Monitoring Report indicates that the River's Edge development traffic is, or is projected within the next year to be, utilizing 5% or more of the peak hour level of service "D" service volume on the City of Ft. Myers roadway segment identified in Paragraph 2 above as constrained (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); and a road improvement necessary to maintain or better the peak season level of service v/c ratio will not be operational on that segment within the next year; then no further building permits beyond those issued at the time of the Annual Monitoring Report determination shall be issued for the River's Edge development until the necessary roadway improvement sufficient to maintain the v/c ratio at, or better than, the Ft. Myers comprehensive plan adopted level of service for that link is operational on the constrained segment.

FOR NON-BACKLOGGED/NON-CONSTRAINED LEE COUNTY FACILITIES: In the event that the Annual Monitoring Report indicates that peak season peak hour level of service "E" is exceeded, or is projected to be exceeded within the next year, for any road segment and/or intersection identified in Paragraph 2 as non-backlogged/non-constrained; and the required road and/or intersection improvement necessary to bring the identified roadway back to level of service "E" peak season peak hour conditions will not be operational at the time the River's Edge development is projected to be utilizing 10% or more of the peak hour level of service "D" service volume on that segment or intersection (based upon the projection of traffic

impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); then no further building permits or additional development approvals beyond those issued at the time of the Annual Monitoring Report determination shall be issued until the necessary roadway improvement sufficient to maintain a peak season peak hour level of service "E" for that roadway is operational.

3. Site Related Improvements:

In addition to the payment of monies and other obligations specified in the Development Order Amendment, the Developer, or its successor, shall be required to construct, at no cost to Lee County and the Florida Department of Transportation, all site-related improvements deemed necessary by Lee County and the Florida Department of Transportation. The developer, or his successors, shall construct site-related roadway and intersection improvements within River's Edge DRI. The Developer shall construct any site-related intersection improvements (including but not limited to signalization, if warranted, turn lanes, and additional through lanes found to be necessary by the governmental authority with jurisdiction of the roadway) as appropriate for the project's access intersections onto McGregor Boulevard (SR 867) throughout all phases of development.

When authorized by the Lee County Engineer or his designee, upon approval of plans by Lee County and FDOT, the developer, or his successors, shall build the necessary site related intersection improvements to achieve level of service "D" peak season peak hour traffic for the following intersections:

McGregor Boulevard (SR 867) at

Pine Ridge Road/River's Edge North Entrance (The Developer's responsibility shall not include the realignment of Pine Ridge Road)

River's Edge South Entrance

The developer, or his successors, shall pay for McGregor Boulevard/Pine Ridge Road intersection

additional left turn storage lanes and traffic signal (when warranted and permitted by FDOT). Site-related improvements shall be any improvement deemed site-related at the time of construction, under the definition contained in the Lee County Roads Impact Fee Ordinance and/or Development Standards Ordinance, as either may be amended or replaced. The developer's obligation shall include the full cost of design and engineering, drainage and utility relocation, right-of-way acquisition and dedication, construction of turn lanes, acceleration and deceleration lanes, construction inspection, contract administration, testing and signalization (as needed and warranted). The alignment, design, signalization, and construction schedule shall be approved by the Lee County Engineer and FDOT. The developer shall pay the full cost for any site-related intersection improvements found necessary by the County or FDOT for the project's access.

4. Right-of-Way Dedications:

The Property Owner(s) have previously dedicated right-of-way to allow widening and improvement of McGregor Boulevard (SR 867). The dedicated property has been appraised at $191,000.00. Additionally, the Florida Department of Transportation has identified the need for a stormwater retention pond on the River's Edge site adjacent to McGregor Boulevard near the vicinity of Griffin Boulevard. (See attached map - Exhibit B). The property owner(s) shall dedicate to Lee County the land deemed necessary by the FDOT for the stormwater retention for the McGregor Boulevard widening improvements, at the time requested, by LCDOT&E. Conveyance shall be in a form and manner acceptable to Lee County.

The $191,000 McGregor Boulevard widening right-of-way and the value of the stormwater retention dedication is applicable to reduce the proportionate share of River's Edge transportation impacts. The dedication shall not be eligible for road impact fee credits.

5. Mitigation of Transportation Impacts:

A. As mitigation for the transportation impacts of the River's Edge amended land uses described in Section One, Paragraph C.1, in addition to the requirements of Section

C.2.b.1. through C.2.b.4 above, the developer, or his successors, shall:

(1) dedicate the property appraised at $191,000.00 for the McGregor Boulevard widening, and;

(2) dedicate property to Lee County for the stormwater retention area necessary for the McGregor Boulevard widening, as shown on Exhibit B attached, subject to certified appraisals agreed upon by Lee County and the Developer and approved by the Lee County Department of County Lands, determining the fair market value credit to be given for the dedication. If an agreement cannot be reached on the appraisal amount, then the two appraisers chosen by the Developer and Lee County respectively will choose a third independent appraiser to do an appraisal, and the value will be established by an average of the three appraisals; and

(3) pay Lee County Road Impact Fees at the fee schedule in effect at the time building permits are issued by Lee County. The Road Impact Fees are currently estimated to be $2,904,456 for the amended River's Edge land uses discussed in Section One, Paragraph C.1., to be used for the roadway improvements for this development; and

(4) in three (3) equal annual installments beginning on November 25, 1992 or 30 days after resolution of any appeal, whichever is later, make cash payments totalling $1,933,000, less the $191,000 right-of-way dedication and less the appraised value credit of the stormwater retention pond land deemed necessary by FDOT (as shown in Exhibit B and located in the northwest corner of the River's Edge property near the vicinity of Griffin Boulevard/McGregor Boulevard intersection), into an escrow account to Lee County for a portion of the transportation mitigation. The amount specified above shall be adjusted to current dollars at the time of payment

on a quarterly basis using the most current State (Florida) Highway Bid Price Index (BPI) published by the Engineering News Record (McGraw-Hill Publications). The base BPI for these adjustments shall be the BPI in the Third Quarterly Cost Report for 1991, said value being 100.0. The developers shall construct no more than 500 additional units prior to payment of this amount. All interest earned on this account shall accrue to the benefit of Lee County. Use of funds and terms of the escrow shall be governed by a separate escrow agreement between the parties and is subject to approval by the Lee County Attorney's Office.

The escrow money shall be used by May 4, 1998 for the roadway improvements within Lee Plan traffic district 4 identified in Section C.2.b.2. as deemed necessary by the County to maintain the balance of surplus service to volume to traffic growth, in accordance with the County's comprehensive plan and settlement agreement. Such monies shall be targeted to County funded regional roadways, in accordance with Policy 22.1.7 of the amended Lee Plan.

B. Should those provisions of the road impact fees (Ordinance #90-47 as amended) be repealed, made unenforceable or otherwise no longer in effect, they shall nevertheless be required as payment for the transportation mitigation for the River's Edge notice of change DRI Development Order as described in Paragraph 3 through 5 above.

C. The developer is informed that the Lee County Board of County Commissioners may adopt an interim operation improvement program and that such a program may be applicable to this development.

6. Nothing contained in the Development Order is to imply or supersede Florida DOT permitting requirements.

7. To fulfill the obligations of the developer to provide infrastructure, systems, facilities, and

services as required herein, the developer may employ a number of alternative management and financing mechanisms, including a uniform community development district ("UCDD") pursuant to Chapter 190, Florida Statutes, a property owners association, and special assessments, all as applicable and as available by law. In the event the developer elects to use a UCDD, the developer will enter into a Developer's Agreement with Lee County. Such Developer's Agreement will delineate boundaries of the UCDD and shall be subject to and not inconsistent with Chapter 190, Florida Statutes, and this Development Order. The various agencies which review this Development Order do not by accepting this condition waive any right they may have to comment on and review the management and financing mechanism chosen by the developer to manage and finance infrastructure, systems, facilities, services, and improvements pursuant to this paragraph. Furthermore, nothing contained in this Development Order shall be construed to exempt this development from participation in the funding, through Municipal Services Benefit Unit (MSBU) or a Municipal Services Taxing Unit (MSTU), or a special assessment district, of improvements to various state and County arterial and collector roads to the degree to which the development is benefitted and has not already mitigated its impacts.

8. River's Edge proportionate share responsibility for any improvements required in this Development Order is discharged in full upon payment of the entire proportionate share contribution due under the terms of Paragraphs 2 through 7, which contributions shall not be reduced or refunded provided, however, that all other provisions of the Development Order also shall govern.

9. If the proportionate share contribution due under the terms of Paragraphs 2 through 8 is not paid in a timely manner, issuance of development approvals and building permits for River's Edge shall immediately cease.

10. Compliance with all the terms of the transportation related provisions of this Development Order shall satisfy the substantive requirements related to regional transportation facilities of Sections 163.3177(10)(h) and 163.3202(2)(g), Florida Statutes (1989); Lee County Ordinance 89-33, as amended; the Lee County

Comprehensive Plan, adopted pursuant to Chapter 163, Part II, F.S.; and Rule 9J-5.0055, Florida Administrative Code, as they currently apply. Satisfaction of concurrency shall extend only through May 4, 1998.

SECTION THREE:

ADD the following conditions to Section C.2.g.:

g. WATER SUPPLY, WATER QUALITY AND WILDLIFE HABITAT

. . .

4. Pursuant to the drainage plans and permits approved by the South Florida Water Management District and the marina plans and permits approved by the Florida Department of Natural Resources, Department of Environmental Regulation, and Army Corps of Engineers, stormwater drainage will be collected within the drainage lake system and discharged via a system of weir control structures into spreader swales. Stormwater will not be discharged into the marina basin or the oxbow mitigation area. Direct discharge of water/effluent by RIVER'S EDGE into the Caloosahatchee River shall be prohibited. South Florida Water Management District plans for River's Edge, Phase One, Primary Drainage System Reference Plan, dated January, 1984, revised 12-27-84, Sheet 2 of 27, attached as Exhibit C, shows Lakes "O" and "L" running along Griffin Boulevard and Schultz Road, connected by a littoral zone at the northeast corner of the property at the corner of Schultz and Griffin Boulevards. Those two lakes shall remain substantially in the configuration as shown on the Water Management District Plans referenced herein. Minor adjustments may be made but shall not result in a net reduction of the area of Lakes "O" and "L" which shall continue to run in an alignment as shown along Griffin Boulevard and Schultz Road.

a. A row of shrubs and trees containing the Type "B" buffer vegetation (five trees and eighteen shrubs per 1000 linear feet), suitably clustered subject to the approval of the Division of Environmental Services (DES), shall be planted along the west side of Lakes "O" and "L" along Griffin Boulevard. DES may not unreasonably withhold its approval.

b. Littoral shelves as required in condition g.7. shall be constructed along Lakes "O" and "L".

c. A Type "B" buffer shall be placed in front of Lakes "D" and "G" at the project entrance (as shown on Exhibit C).

5. For the riverfront lots the following vegetation management and maintenance guidelines shall apply:

a. ~~For~~ The following: spider lilies, golden polypody, **giant leather fern,** and golden leather fern, hereinafter **shall be** referred to as "listed species." The developer shall provide a vegetation preservation buffer along the river, as shown by the surveyed preservation line on Exhibit D (Preservation Line Map Sheet 6 of 6, Deni Associates, dated 10/31/91), attached, excluding the area approved for the marina basin construction, oxbow mitigation area, boat access and flushing channels, for the purpose of conserving existing native vegetation, planting additional native vegetation and allowing passive recreational uses. The buffer area shall consist of the naturally vegetated area between the Caloosahatchee River and the refined preservation line described above. **Additionally, the preservation areas include the entirety of the Eagles Perch Island and the Eagles Nest Island.** It is the intent of the refined vegetation preservation line to provide natural shoreline stabilization through native vegetation and to protect a unique vegetation/wildlife habitat.

It is understood, however, that visual access to the river from the rear of the lot through the vegetation in the buffer **and preservation area** is desired **by the developer and may be allowed for specific, appropriate areas along the riverfront.** Selective trimming of trees and vegetation within the **preservation and** buffer **areas** for this purpose shall be permitted **only in those areas specifically designated in this development order in the conditions specified below.** Selective clearing for limited pedestrian access to the river via boardwalks or decks shall also be permitted subject to the conditions specified below, **but shall not involve any dredge or fill activities of wetlands, any dredge or fill activities in the Caloosahatchee River, either the Eagles Perch Island or the Eagles Nest Island, nor**

involve preservation or buffer areas located west of a north-south line running through marker RP-44 as designated on Exhibit D (Preservation Line Map Sheet 6 of 6 prepared by Deni Associates, dated 10/31/91).

b. The developer shall remove all Brazilian Pepper and Melaleuca from the refined preservation area with minimal possible disturbance to existing native vegetation.

c. No Development, boardwalks, trimming, or clearing of vegetation shall be allowed in the following preservation areas as depicted on Exhibit D (Preservation Line Map Sheet 6 of 6 prepared by Deni Associates, dated 10/31/91):

(1) Within a complete ten foot (10') radius of the Cabbage Palm with the golden polypody located between markers RP-1 and RP-2;

(2) On the Eagles Nest Island;

(3) On the Eagles Perch Island;

(4) Within a complete ten foot (10') radius of the golden leather fern located nearly adjacent to RP-34;

(5) Within a complete ten foot (10') radius of the Cabbage Palm with the golden polypody located nearly adjacent to RP-42; and

(6) West of a north-south line running through marker RP-44.

The following conditions shall apply to the remaining preservation and buffer areas not listed in (1) through (6) above:

Other than the removal of the exotics delineated above, there shall be no removal of any trees or vegetation which is greater than or equal to four inches in diameter at breast height (4" D.B.H.) except that at least a maximum four feet wide pedestrian access located outside the preservation areas (1) through (6) specified above as limited herein shall be permitted on each lot notwithstanding other limitations. Selective removal/replacement and trimming of trees and vegetation shall be permitted for the purpose of providing limited pedestrian access to the river

via boardwalks or decks provided all necessary agency or governmental permits are issued **as limited by condition a. above.** However, at a minimum the buffer shall contain those trees which area greater than or equal to 4" D.B.H. as well as naturally existing native understory growth. However, those trees or shrubs which are less than 4" D.B.H., or existing native understory growth, may be removed for purposes of providing visual access to the river and/or pedestrian access as described herein if said understory vegetation is replaced with native coastal strand vegetation replacement stock of not less than one gallon-size nursery grown containerized stock planted for any understory or shrubs removed, with a guaranteed survival rate of eighty percent (80%) after three years. Those trees which are removed shall be relocated or replaced with a similar size tree. In no case shall more than twenty percent (20%) of the refined preservation buffer be impacted for purposes of pedestrian access.

d. Prior to the recording of a subdivision plat for riverfront lots, these vegetation maintenance and management guidelines shall be included by the developer in recorded deed restrictions applicable to any residential lots located adjacent to the river and shall be enforceable by a homeowner's association as well as being made conditions of the DRI Development Order and local Final Development Order.

e. Prior to any clearing in the single-family area along the river, there shall be an on-site review by Lee County to insure that ~~any/yizyred/species~~ **there is a complete radius of twenty-five feet (25') preserved around any giant leather ferns, ten feet (10') preserved around any golden leather fern or golden polypody, and that any spider lilies without a ten foot (10') radius of preserved area** will be relocated or replaced on the River's Edge site with comparable nursery stock.

6. In the Marina mitigation area, prior to clearing or construction activity, a "listed species" vegetation survey shall be conducted and any "listed species" located ~~outside~~ **landward** of the preservation ~~buffer protection/area~~ **line shown on Exhibit D** shall be relocated or replaced elsewhere on site in a suitably similar habitat.

The spider lilies located near markers RP-21 and RP-22 and between RP-33 and RP-36 shall be appropriately relocated and transplanted to appropriate habitat on the Eagles Nest Island by a qualified botanist hired by the developer prior to development of the flushing channel at this site. The methodology, location and details of this relocation and transplantation shall be reported in the next annual monitoring report required to be submitted. Three years after the relocation, or in the 1997 annual monitoring report, whichever occurs first, a qualified botanist hired by the developer shall report on the success or failure status of the relocation and discuss any discernible reasons surrounding the success or failure of the relocation.

7. For all manmade water bodies, littoral shelves shall be constructed at random locations along lake edges with a maximum depth of two (2) feet below the lake control elevation, and shall be planted with native wetland vegetation. This work shall be done concurrently with construction of the final water management system.

8. In the 1989-90 bald eagle breeding season a bald eagle nest was constructed in the "witches broom" top of an Australian Pine tree located within 25 feet of the existing River's Edge golf course. Pursuant to the Lee County Bald Eagle Management Ordinance, River's Edge prepared a Southern Bald Eagle Habitat Management Plan for the River's Edge Yacht and Country Club which has been adopted by Lee County. The provisions of that plan, as it may be amended from time to time, are incorporated into this development order. However, if the plan is amended, the Southwest Florida Regional Planning Council and the Department of Community Affairs shall be notified of the proposed amendment.

9. There shall be no entrance ways from River's Edge directly onto Griffin Boulevard or Schultz Road.

SECTION FOUR:

ADD the following to Section C.i. [which will become C.2.i.]:

i. COMPLIANCE/MONITORING

1. The Director of the Department of Community Development, or his designee, shall be the local official responsible for assuring compliance with this Development Order.

2. Although estimated proposed construction schedules were set out in the ADA, this is not a phased Development of Regional Impact. This development order, as amended, shall remain in effect until the buildout date of May 4, 1998, unless subsequently extended by amendment.

3. The RIVER'S EDGE development shall submit an annual report on the development to the Board of County Commissioners of Lee County, the Regional Planning Council, and the State Land Planning Agency. This annual report shall be submitted beginning one (1) year from the date of this Development Order Amendment. Conversion of Phase I is completed. The contents of the annual report shall be as required by the rules legally adopted by the Florida State Land Planning Agency.

//// This Development Order shall be rendered as of the date of adoption by the Board of County Commissioners (BOCC) day approved, or

SECTION FIVE:

Certified copies of this Development Order are to be forwarded to DCA, the Southwest Florida Regional Planning Council, the applicant, and appropriate state agencies. Notice of the adoption of the Development Order shall be recorded as provided in Chapter 380, Florida Statutes.

SECTION SIX:

All conditions of the original Development Order not modified herein shall remain in full force and effect.

The motion to adopt the above Development Order Amendment was offered by Commissioner Judah, and seconded by Commissioner Manning and upon poll of the members present, the vote was as follows:

John E. Manning Aye

Douglas St. Cerny Aye

Ray Judah Aye

Vicki Lopez-Wolfe Absent

Donald D. Slisher Absent

DULY PASSED AND ADOPTED this 16th day of March,

A.D., 19 92 .

ATTEST:
CHARLIE GREEN, CLERK

BY: Clara J. Wanek
DEPUTY CLERK

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
CHAIRMAN

APPROVED AS TO FORM BY:

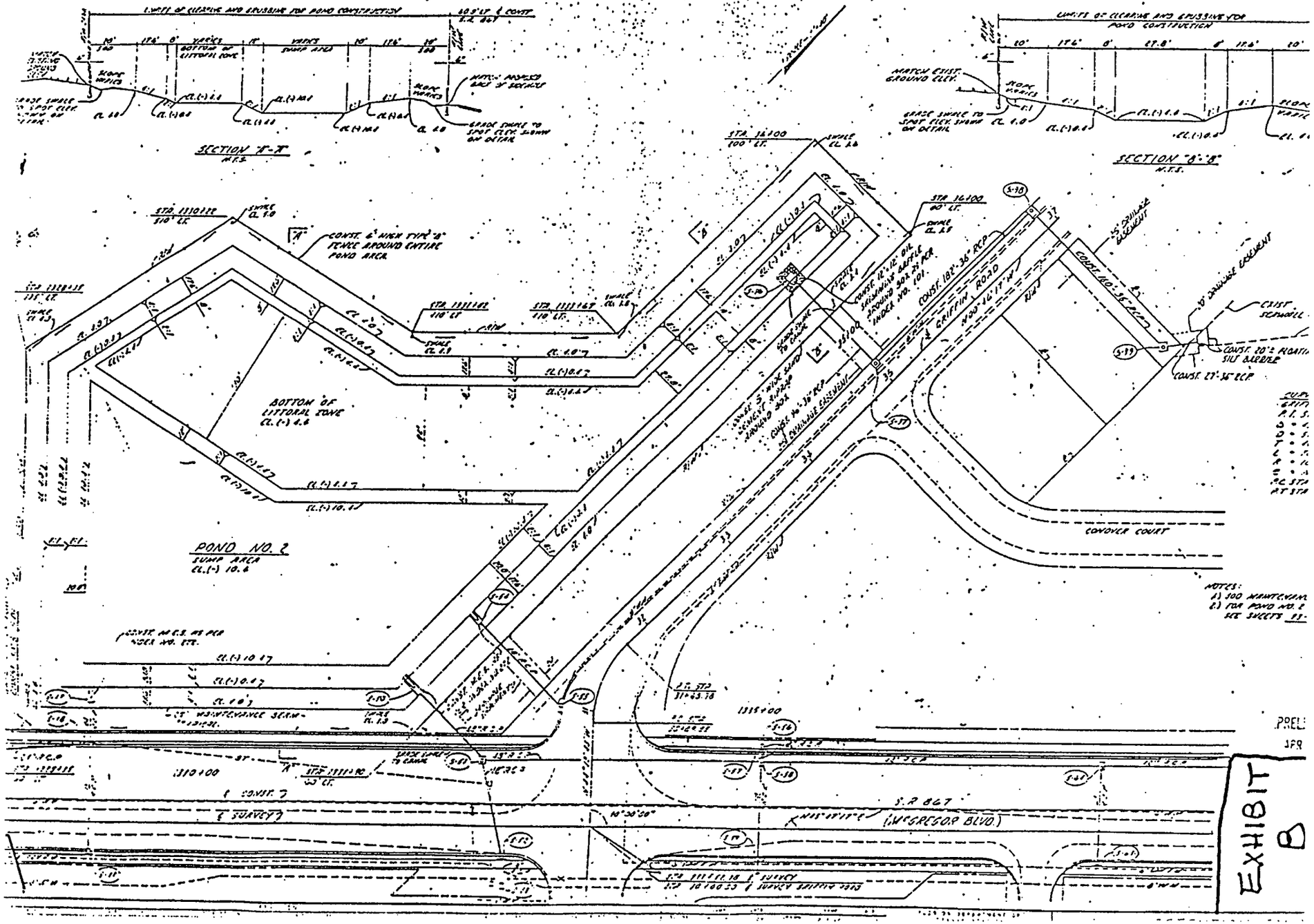
_____
COUNTY ATTORNEY'S OFFICE

rivedg2.am5
revised February 17, 1992

FILED

APR 2 1992

CLERK CIRCUIT COURT
BY C Wanek D.C.


SECTION "A-A"
SECTION "B-B"
POND NO. 2
SUMP AREA
EL.(-) 10.6
BOTTOM OF LITTORAL ZONE EL.(-) 6.6
CONSTR. 6' HIGH TYPE 'B' FENCE AROUND ENTIRE POND AREA
CONSTR. 5' WIDE SAND SCARIFIT BLANKET AROUND BOX
CONSTR. 12'x12' OIL SKIMMING BAFFLE AROUND BOX IN POND INDEX NO. 101
CONSTR. 182'-36" RCP
CONSTR. 20'x2 FLOATING SILT BARRIER
CONSTR. 27'-36" RCP
CONSTR. 96'-30" RCP
CONSTR. 8' MAINTENANCE BERM
CONSTR. 18'-42" RCP
CONSTR. 8' MAINTENANCE BERM PER INDEX NO. 101
GRIFFIN ROAD
CONOVER COURT
S.R. 867 (MCGREGOR BLVD.)
15' DRAINAGE EASEMENT
10' DRAINAGE EASEMENT
EXHIBIT B

Charlie Green
Clerk Of Circuit Court
Lee County, Florida

State of Florida

County of Lee

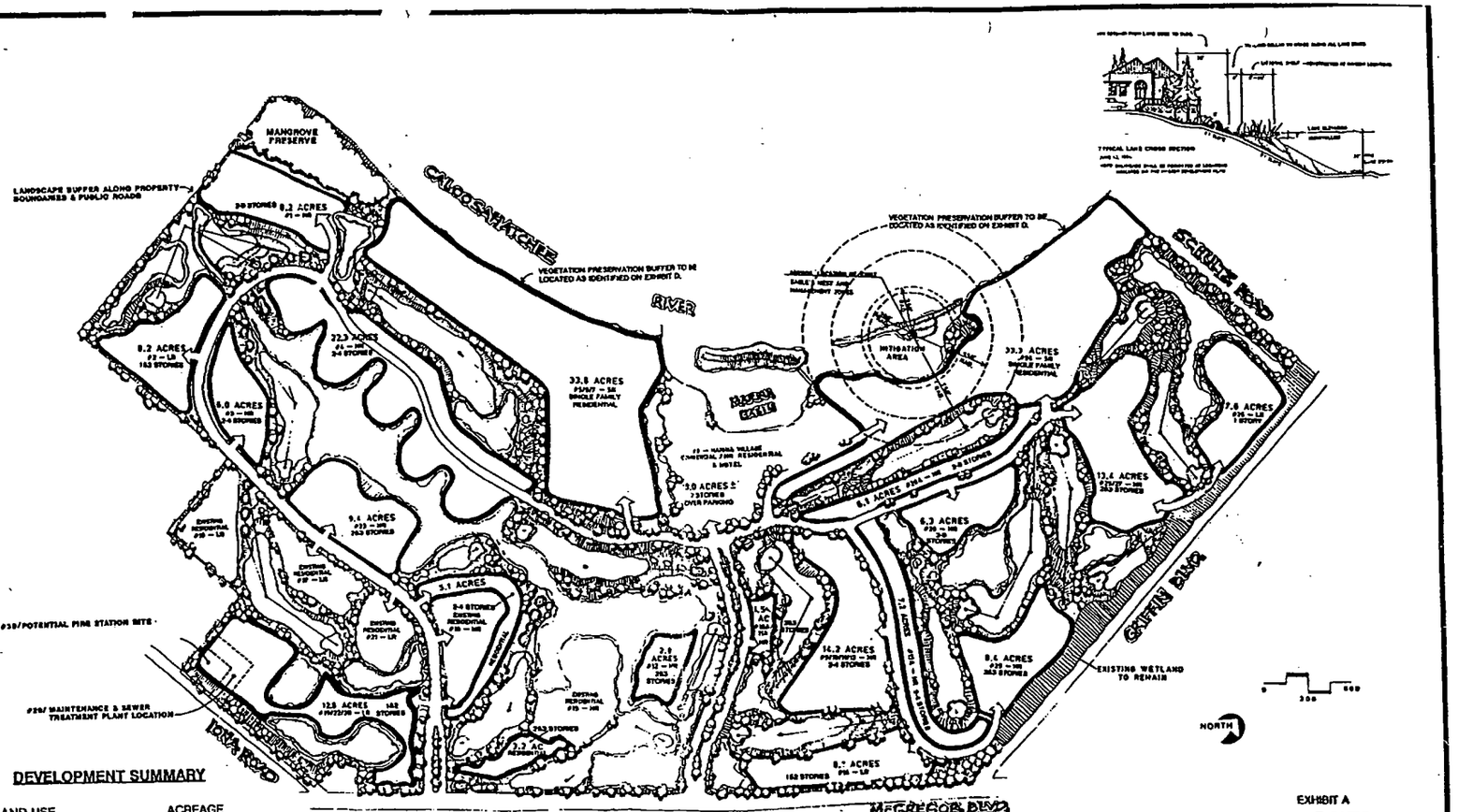
I, Charlie Green, Clerk of the Circuit Court in and for said County and State do hereby certify that the foregoing is a true and photostatic copy of Revised Development Order Amendment for River's Edge Yacht and Country Club, DRI, County Case No. 81-9-8-DRI(a), Resolution No. Z-91-032A, adopted by the Lee County Board of County Commissioners on March 16, 1992.

Given under my hand and official seal at Fort Myers, Florida, this 2nd day of April, 1992.

CHARLIE GREEN, CLERK

By _____, D.C.

EXHIBIT A



DEVELOPMENT SUMMARY

LAND USE	ACREAGE
RESIDENTIAL (Includes Existing Residential, Proposed Residential, Marina Village Residential - 7.5 acres, Less Private Open Space)	188.7
MARINA VILLAGE (COMMERCIAL)	10.5
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	±70.0
MARINA BASIN AND MITIGATION AREAS	14.7
OPEN SPACE (Includes Vegetation/Preservation Buffer, Private Open Space, Mangrove Preserve, Other Open Space)	250.7
TOTAL ACREAGE	547.8

RESIDENTIAL UNITS	2071 D.U.
Existing units - 215	
Proposed units - 1,856	
GROSS PROJECT DENSITY	3.8 D.U./AC

Notes:

1. Residential areas will not exceed density and height limitations set forth in Ordinance 84-14.
2. A conservation easement has been conveyed to the state along the project's Caloosahatchee River frontage to a depth of ten feet measured from MHW.
3. The previously approved golf club and tennis/swim club facilities will be located as shown in the Marina Village.
4. Project entrance locations conform to the June 12, 1990 approved Plan. Gatehouses are permitted at the project entrances and individual road entrances.
5. The provisions of the River's Edge Southern Bald Eagle Management Plan are incorporated in this Plan.
6. The maximum height of any buildings in this Plan is 8 stories.
7. The Master Basin and Mitigation Areas, as shown on these plans, shall conform to the permit requirements set forth in permit number 361081740 issued by the Florida Department of Environmental Regulation (DER), where not in conflict with other conditions of the corresponding 1990 development order conditions for this project, particular as they relate to bald eagle and Eagle Nest/Perch preservation areas and their management, including the preservation of the Australian Pine Bald Eagle Nest Tree.

RIVER'S EDGE UNIT #1 COUNTRY CLUB

EXHIBIT A

MASTER SITE PLAN

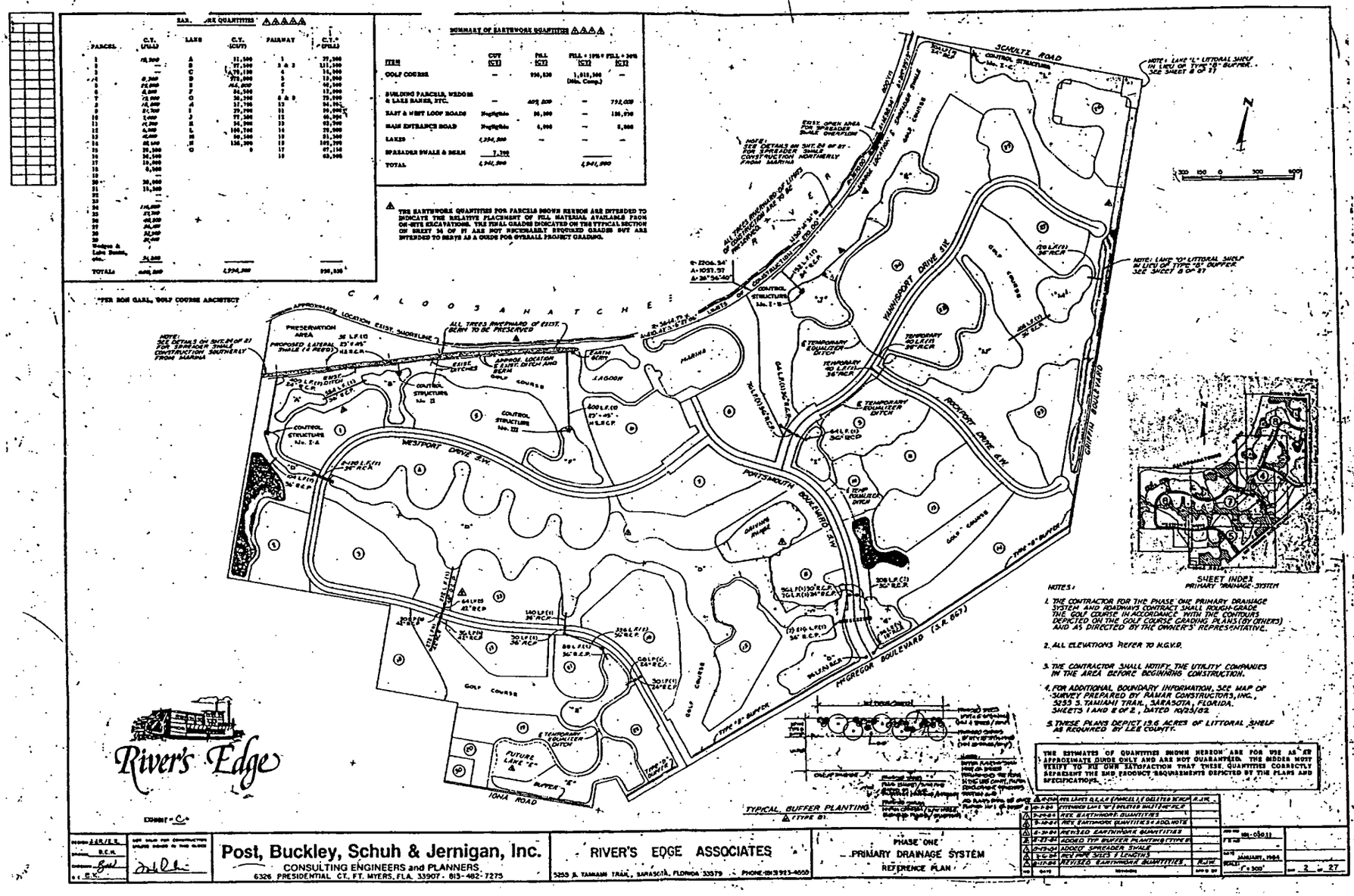
TRACT MAP

DECEMBER 20, 1990

REVISED: NOVEMBER 26, 1991

FLORIDA LAND PLANNING, INC.

EXHIBIT B



EAR... QUANTITIES △△△△△

PARCEL	C.Y. (FILL)	LAKE	C.Y. (CUT)	FAIRWAY	C.Y. (FILL)
	18,300	A	31,500	1	77,300
	—	B	27,300	2 & 3	111,300
	—	C	170,100	4	14,200
	23,100	D	273,000	5	12,200
	4,000	E	262,800	6	45,200
	2,100	F	34,500	7	17,200
	2,100	G	38,200	8 & 9	73,200
	2,100	H	37,700	10	24,200
	2,100	I	29,200	11	90,200
	2,100	J	27,300	12	69,200
	2,100	K	34,200	13	63,200
	2,100	L	135,200	14	73,200
	2,100	M	130,300	15	21,200
	88,100	N	130,300	16	102,300
	2,100	O	—	17	97,100
	2,100			18	83,200
	2,100				
	2,100				
	2,100			

CALOOSAHATCHEE RIVER

SCALE 1" = 100'

NEW MANGROVE PRESERVATION AREA 10.82± ACRES

NEW PRESERVATION AREA TO FLUSHING CHANNEL 2.43± ACRES

ORIGINAL 1982 PRESERVATION LINE AS SCALED FROM 1" = 300' MAP-F VEGETATION MAP BY ROBERT A. MORRIS, A/A SARASOTA, FLORIDA

APPROXIMATE MEAN HIGH WATER LINE (6-5-89)

PRESERVATION LINE

WITNESS LINE

MATCH LINE

GOLDEN POLYPODY FERNS ON CABBAGE PALM

NOTE:
NEW PRESERVATION LINE LOCATED AS FLAGGED BY DICK WORKMAN, COASTPLAN, INC., 9-11-91

FLUSHING CHANNEL

MARINA BOAT ACCESS & FLUSHING CHANNEL

CALOOSAHATCHEE RIVER

EAGLES NEST ISLAND 1.19± ACRES

EAGLES PERCH ISLAND 2.78± ACRES

PROPOSED MARINA BASIN

WATER AREA

PROPOSED MITIGATION AREA (OXBOW)

14.72± ACRES

SPIDER LILIES TO BE MOVED TO EAGLES NEST ISLAND

TWO CLUSTERS OF SPIDER LILIES

CLUSTER OF SPIDER LILIES

GOLDEN LEATHER FERN

GIANT LEATHER FERNS

EAGLES PERCH IN 24" DEAD PINE

EAGLES NEST IN 34" AUST. PINE

APPROXIMATE BOUNDARY LINE OF PROPOSED MARINA BASIN AND MITIGATION AREA

LOCATION MAP

CALOOSAHATCHEE RIVER

RIVER'S EDGE P.U.D.

NORTH BOULEVARD

RIVER ROAD

NEW PRESERVATION AREA EAST OF FLUSHING CHANNEL 0.61± ACRE

APPROXIMATE LOCATION OF FLUSHING CHANNEL TO OXBOW (NOT FOR BOAT TRAFFIC) SCALED FROM D.E.R. PERMIT # 361061749 SKETCH OF MITIGATION AREA (OXBOW) SHEET 7 OF 22, DATED 7-25-88

ORIGINAL 1982 PRESERVATION LINE AS SCALED FROM 1" = 300' MAP-F VEGETATION MAP BY ROBERT A. MORRIS, A/A SARASOTA, FLORIDA

NOTE:
PLANT LOCATIONS FURNISHED BY DICK WORKMAN COASTPLAN, INC. 10-30-91

EXHIBIT "D"

PRESERVATION LINE

THE SUNDIAL GROUP RIVER'S EDGE	10-31-91	9110041	MODIFY PRES. LINE PER NEW PLANT LOCATIONS
	9-23-91	9109050	ADD MARINA BASIN, MITIGATION AREA, FLUSHCHANNELS & TREES
	DATE	ORDER NO.	REVISIONS
	9-12-91	9109007	ADD SHEET 6 - PRESERV. LINE

Deni Associates
6241 ARC WAY • FORT MYERS, FLORIDA 33912 • (813) 275-8575
GEODETIC & CADASTRAL SURVEYS • AERIAL MAPPING CONTROL • PRECISION & ENGINEERING SURVEYS

EXHIBIT G

Attachment G

1.) Energy.

In accordance with the approved Devleopment Order, a bicycle and jogging trail has been incorporated into the project insofar as the facilities have been constructed to date. All structures have been designed to meet energy code requirements. A greater than required percentage of natural vegetation has been utilized on the site, and plans for future developent will incorparate natrually occurring Florida native species. The local jurisdiction has not yet required bus stops or shelters within the development.

2.) Transportation.

Access improvements along McGregor Blvd. have been completed and right-of-way along McGregor Blvd. has been deeded to Lee County. The value of the deeded right-of-way has been established by appraisal. Phase III of construction has not yet taken place. Discussions with FDOT and LCDOT regarding drainage for McGregor Blvd. have taken place. No decision has yet been reached about the amount of drainage FDOT will require. McGregor Blvd. plans are only at 60% at this time. All required transportation impact fees have been paid for previous construction. No additional development committments have been required due to the lack of construction.

3.) Fire Protection.

Lee County has adopted a new fire impact fee ordinance which will be applied to the development. The Iona-McGregor Fire District has indicated that the new site for a fire station is not needed at this location. River's Edge has committed to comply with the new development standards regarding fire protection.

4.) Schools.

River's Edge continues to cooperate with the Lee County School District regarding school bus loading zones and all applicable development guidelines and committments.

5.) Water Supply.

Florida Cities has committed to supply potable water to the development. All existing wells on the site have been plugged. Water saving techniques have been implemented in the residential portions of the development. Reuse water is being utilized for watering of the golf course.

6.) Storm Refuge.

Storm refuge areas are currently being incorporated into the plans for proposed clubhouse facilities.

Affidavit

Pursuant to Subsection 380.06(18), Florida Statutes, and the adopted and approved Development Order for the River's Edge Development of Regional Impact, I hereby certify that an original, completed annual report has been sent to:

1. The Southwest Florida Regional Planning Council
   P. O. Box 3455
   North Ft. Myers, FL 33918-3455

2. Mr. George Crawford, Director
   Lee County Dept. of Transportation and Engineering
   P. O. Box 398
   Ft. Myers, FL 33902-0398

3. Ms. Mary Gibbs, Director
   Lee County Dept. of Community Development
   P. O. Box 398
   Ft. Myers, FL 33902-0398

4. Division of Resource Planning and Management
   Bureau of State Planning
   Florida Department of Community Affairs
   2740 Centerview Drive
   Tallahassee, FL 32399

5. Florida Department of Transportation
   Southwest Area Office
   P. O. Box 1030
   Ft. Myers, FL 33902-1030

David W. Depew

The foregoing instrument was acknowledged before me this 1st day of June, 1992, David W. Depew, who is personally known to me and has produced Florida Drivers License # D100-179-50-465-0 as identification and did not take an oath.

My commission expires:

Notary Public, State of Florida at Large
My Commission Expires Sept. 27, 1995
Bonded thru Agent's Notary Brokerage

Venita M Giantino
Notary Public

Certificate # CC144818

ATTACHMENT C

RESOLUTION NUMBER Z-94-005

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

WHEREAS, Sun City Center Corporation, represented by Florida Design Communities, Inc., in reference to River's Edge Yacht and Country Club, has properly filed an application for:

a) Amendment to Development of Regional Impact Development Order and Master Concept Plan/Map H; and
b) Substantial Deviation Determination; and

WHEREAS, the subject property is located at 14700 Portsmouth Boulevard, described more particularly as:

LEGAL DESCRIPTION: In Sections 29, 30 and 31, Township 45 South, Range 24 East, Lee County, Florida:

All that part of the West Half (W1/2) of the West Half (W1/2) of Section 29, Township 45 South, Range 24 East, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard LESS the North 100 feet thereof:

Government Lot 1 of Section 30, Township 45 South, Range 24 East, LESS the North 100 feet thereof:

That part of the East Half (E1/2) of the Southeast Quarter (SE1/4), of Section 30, Township 45 South, Range 24 East, located Northwesterly of McGregor Boulevard; All that part of the Northeast Quarter (NE1/4) of the Northeast Quarter (NE1/4) of Section 31, Township 45 South, Range 24 East, lying Northwesterly of McGregor Boulevard.

Government Lots 2, 3 and 4, Section 30, Township 45 South, Range 24 East; and the East Half (E1/2) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4); and the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4); and all that part of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of Section 31, Township 45 South, Range 24 East, lying Northwesterly from McGregor Boulevard;

EXCEPTING THEREFROM the following described parcel:

From the Southwest corner of said Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of said Section 31, run N88°57'56"E along the South line of said fraction of a section for 542.85 feet;
THENCE run N01°07'16"W for 28.29 feet to a steel pin and the POINT OF BEGINNING. From said POINT OF BEGINNING continue N01°07'16"W for 190.44 feet to a concrete monument;
THENCE run N65°11'10"E for 162.71 feet to a concrete monument;
THENCE run S40°34'21"E for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867);
THENCE run S49°25'39"W for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road;
THENCE run S88°54'23"W along said Northerly line for 159.21 feet to the POINT OF BEGINNING.

LESS:

<u>RIVER'S EDGE 1, A CONDOMINIUM, PHASES 1, 2 & 3</u>

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);

continued...

THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet;
THENCE N51°50'16"W, 24.78 feet;
THENCE N01°51'26"E, 22.61 feet;
THENCE N11°09'44"E, 244.44 feet;
THENCE by a curve to the right, radius 175.00 feet, arc 33.64 feet, chord N16°40'08"E, 33.59 feet;
THENCE by a curve to the left, radius 260.00 feet, arc 74.75 feet, chord N13°56'28"E, 74.49 feet for a POINT OF BEGINNING.
THENCE continue by a curve to the left, radius 260.00 feet, arc 216.80 feet, chord N18°11'00"W, 210.58 feet;
THENCE by a curve to the right, radius 60.00 feet, arc 99.83 feet, chord N05°35'45"E, 88.71 feet;
THENCE N53°15'47"E, 115.49 feet;
THENCE N20°00'00"E, 64.11 feet;
THENCE N42°00'00"W, 52.87 feet;
THENCE N85°20'16"W, 87.69 feet;
THENCE by a curve to the right, radius 72.00 feet, arc 85.18 feet, chord N51°26'46"W, 80.30 feet;
THENCE N17°33'16"W, 121.40 feet;
THENCE by a curve to the right, radius 102.00 feet, arc 157.55 feet, chord N26°41'44"E, 142.35 feet;
THENCE N70°56'44"E, 32.21 feet;
THENCE N48°00'00"E, 78.10 feet;
THENCE East 45.69 feet;
THENCE S68°02'00"E, 124.00 feet;
THENCE S31°30'00"E, 72.86 feet;
THENCE South 80.00 feet;
THENCE S68°27'08"E, 51.00 feet;
THENCE S42°00'00"E, 86.60 feet;
THENCE S56°10'00"E, 69.99 feet;
THENCE S42°00'00"E, 91.93 feet;
THENCE S19°20'31"W, 330.95 feet;
THENCE S88°30'00"W, 160.81 feet;
THENCE S18°03'57"W, 117.41 feet;
THENCE S83°00'00"W, 105.46 feet to the POINT OF BEGINNING.

LESS:

RIVER'S EDGE 2, A CONDOMINIUM

PARCEL A

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet for a POINT OF BEGINNING.
THENCE S81°59'44"W, 100.00 feet;
THENCE S08°00'16"E, 295.92 feet;
THENCE by a curve to the left, radius 195.00 feet, arc 311.41 feet, chord S53°45'16"E, 279.36 feet;
THENCE S80°29'44"E, 88.51 feet;
THENCE by a curve to the left, radius 127.00 feet, arc 254.91 feet, chord N22°59'44"E, 214.22 feet;
THENCE N34°30'16"W, 52.22 feet;
THENCE by a curve to the right, radius 85.00 feet, arc 58.48 feet, chord N14°47'44"W, 57.33 feet;
THENCE N04°54'47"E, 127.14 feet;
THENCE by a curve to the left, radius 610.00 feet, arc 310.49 feet, chord N83°25'21"W, 307.51 feet to the POINT OF BEGINNING.

continued...

PARCEL B

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet;
THENCE S81°59'44"W, 150.00 feet for a POINT OF BEGINNING;
THENCE continue S81°59'44"W, 290.09 feet;
THENCE by a curve to the right, radius 2,040.00 feet, arc 534.07 feet, chord S89°29'44"W, 532.55 feet;
THENCE N83°00'16"W, 10.61 feet;
THENCE S08°38'08"E, 76.93 feet;
THENCE S54°54'53"E, 475.77 feet;
THENCE S78°15'16"E, 70.63 feet;
THENCE N78°55'10"E, 414.16 feet;
THENCE N08°00'16"W, 331.33 feet to the POINT OF BEGINNING.

LESS:

RIVER'S EDGE 3, A CONDOMINIUM

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 42.87 feet, chord N83°35'21"W, 42.87 feet;
THENCE S05°49'33"W, 40.00 feet for a POINT OF BEGINNING.
THENCE by a curve to the left, radius 229.68 feet, arc 147.84 feet, chord S21°49'09"E, 145.30 feet;
THENCE S40°15'34"E, 564.48 feet;
THENCE South, 96.97 feet to a point on the South boundary line of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31, Township 45 South, Range 24 East;
THENCE run along said South boundary line S88°54'50"W, 593.45 feet to the Southwest corner of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of said Section 31;
THENCE run along the West boundary line of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31, N01°02'30"W, 665.51 feet to the Northwest corner of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section 31;
THENCE continue N01°02'30"W, 19.01 feet to a point on a curve having a radius of 2,060.00 feet and lying N00°36'54"E from the radius point;
THENCE run in a Southeasterly direction along said curve to the right having an arc of 187.35 feet, having a chord bearing S86°46'47"E, 187.28 feet to the POINT OF BEGINNING.

continued...

LESS:

RIVER'S EDGE 4, A CONDOMINIUM, PHASES 2 & 4

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29'44"E, 40.00 feet;
THENCE N40°30'16"W, 195.80 feet for a POINT OF BEGINNING.
THENCE continue N40°30'16"W, 229.00 feet;
THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet;
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the right, a distance of 140.00 feet, chord bearing N39°47'03"E, 138.02 feet;
THENCE by a curve to the left radius 155.00 feet, arc 91.98 feet, chord N39°29'44"E, 90.64 feet;
THENCE by a curve to the right, radius 450.00, arc 149.23 feet, chord N31°59'44"E, 148.54 feet;
THENCE by a curve to the right, radius 130.00 feet, arc 297.23 feet, chord S73°00'16"E, 236.59 feet;
THENCE by a curve to the left, radius 300.00 feet, arc 115.19 feet, chord S18°30'16"E, 114.49 feet;
THENCE by a curve to the right, radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;
THENCE S87°29'44"W, 25.00 feet;
THENCE S55°00'53"W, 21.10 feet;
THENCE S07°00'00"E, 19.00 feet;
THENCE S87°00'00"W, 62.00 feet;
THENCE S45°00'00"W, 50.00 feet;
THENCE S45°00'00"E, 227.14 feet;
THENCE N86°29'44"E, 28.89 feet to a point on a curve having a radius of 450.00 feet and lying S86°29'44"W from the radius point;
THENCE traverse along the arc of said curve, to the right, a distance of 86.39 feet, chord bearing S01°59'49"W, 86.26 feet;
THENCE by a curve to the right, radius 150.00 feet, arc 109.96 feet, chord S28°29'41"W, 107.51 feet;
THENCE S49°29'44"W, 15.00 feet to the POINT OF BEGINNING.
Said parcel contains 5.29± acres.

SUBJECT TO:

EASEMENT "A"

A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580.
A 40-foot easement lying in Section 31, Township 45 South, Range 24 East, Lee County, Florida, the centerline of which is described as follows:

Commence at the Northeast corner of said Section;
THENCE S89°23'18"W along the North line of said Section, a distance of 361.51 feet to the existing Northwesterly right-of-way line of McGregor Boulevard;
THENCE S49°29'44"W along said Northwesterly right-of-way line 1,320.47 feet to the POINT OF BEGINNING of said easement centerline;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet to the Point of Terminus.

continued...

EASEMENT "B"

A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580, being an easement 30 feet in width from the terminus of the above described easement (40 foot wide, from McGregor Boulevard to the Southerly boundary of Phase 4) to the property described as Phase 3 on the condominium plat, the centerline of said easement being the same as the centerline of a paved roadway connecting said points, the approximate location of which roadway is depicted on the condominium plat. This easement shall terminate at such time as the property described in Phase 4 on the condominium plat has been submitted to condominium ownership as a part of River's Edge 1, a condominium.

EASEMENT "C"

A non-exclusive easement for utilities, cable television, and ingress and egress per the Declarations of Condominium of River's Edge 2, 3, and 4, Official Records Book 1783, Page 3649 and Official Records Book 1783, Page 3709 and Official Records Book 1841, Page 1465, respectively.

An 80-foot easement lying 40 feet each side of the following described centerline:

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet for a POINT OF BEGINNING.
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 298.94 feet, chord N87°04'57"W, 298.68 feet to the Point of Terminus.

EASEMENT "D"

A non-exclusive easement for utilities, trash receptacles, and ingress and egress per the Declaration of Condominium of River's Edge 2, Official Records Book 1783, Page 3649.

A 50-foot wide easement lying 25 feet each side of the following described centerline:

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet;
THENCE S81°59'44"W, 100.00 feet;
THENCE S08°00'16"E, 219.00 feet to the POINT OF BEGINNING;
THENCE S78°33'43"W, along said centerline, a distance of 50.09 feet to the Point of Termination of said centerline.

continued...

EASEMENT "E"

A non-exclusive easement for utilities, cable television, and ingress and egress over and under that certain parcel described as follows, per the Declaration of Condominium of River's Edge 4, Official Records Book 1841, Page 1465.

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29"44"E, 40.00 feet;
THENCE N40°30'16"W, 424.80 feet;

THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet for a POINT OF BEGINNING.
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the left, 74.11 feet, chord bearing S14°13'35"W, 73.82 feet to a point on a curve having a radius of 690.00 feet and lying N10°51'23"E from the radius point
THENCE traverse along the arc of said curve to the right, 35.15 feet, chord bearing S77°41'03"E, 35.14 feet to the POINT OF BEGINNING.

SUBJECT TO:

Conservation easement to State of Florida, Official Records Book 2108, Page 1846.

Irrigation easement to River's Edge 3 Condominium Association, Inc., Official Records Book 2014, Page 1661.

Florida Cities Water Company water pipeline easements, Official Records Book 1764, Page 2014 and Official Records Book 1846, Page 4662.

Florida Power & Light Company utility easements, Official Records Book 1806, Page 1963 and Official Records Book 2168, Page 287.

Lee County utility easements, Official Records Book 2123, Page 3638 and Official Records Book 2212, Page 2138.

Easements, restrictions and reservations of record.

Together with Sovereignty Submerged Land Easement, Official Records Book 2137, Page 1893.

WHEREAS, the applicant has indicated the property's current STRAP numbers are: 29-45-24-00-00001.0000, 30-45-24-00-00001.0000, and 31-45-24-00-00002.0000; and

WHEREAS, proper authorization has been given to Michael J. Ciccarone, Esq., by Florida Design Communities, Inc., representing Sun City Center Corporation, the owner of the subject parcel, to act as agent to pursue this zoning application; and

WHEREAS, a public hearing was legally and properly advertised and held before the Lee County Hearing Examiner, with full consideration of all the evidence available; and the Lee County Hearing Examiner fully reviewed the matter in a public hearing held on February 22, 1994; and

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

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS, that the Board of County Commissioners does hereby APPROVE the amendment to the Development of Regional Impact Development Order and Master Concept Plan/ Map H for River's Edge Yacht and Country Club; and MAKE A FINDING OF NO SUBSTANTIAL DEVIATION under the provisions of Section 380.06(19) Florida Statutes, and does hereby ADOPT the DRI Development Order Amendment.

Site Plan 94-005 is attached hereto and incorporated herein by reference, as a reduced copy of the Master Concept Plan.

The following findings and conclusions were made in conjunction with this approval:

A. That the proposed changes to the DRI plan of development are consistent with the goals, objectives and policies of the Lee Plan, and with the densities, intensities, and general uses set forth in the Lee Plan.

B. That the amendment to the DRI development order is consistent with the goals, objectives, and policies of the Lee Plan and will not be injurious to community, or adverse to regional or state interests.

C. That the changes to the DRI plan of development and development order do not meet or exceed any of the substantial deviation criteria as set out in Section 380.06(19), Florida Statutes.

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

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

DULY PASSED AND ADOPTED this 21st day of March, A.D., 1994.

ATTEST:
CHARLIE GREEN, CLERK

BY: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

BY: _____
Chairman

Approved as to form by:

_____
County Attorney's Office

FILED

MAR 23 1994

CLERK CIRCUIT COURT
BY _____ D.C.

NOTES:

1. RESIDENTIAL TRACTS WILL NOT EXCEED DENSITIES AND HEIGHT LIMITATIONS SET FORTH IN ORDINANCE 84.16, AS MAY BE AMENDED.
2. A CONSERVATION EASEMENT HAS BEEN CONVEYED TO THE STATE ALONG THE PROJECT'S CALOOSAHATCHEE RIVER FRONTAGE TO A DEPTH OF TEN FEET MEASURED FROM MHW.
3. THE PREVIOUSLY APPROVED GOLF CLUB AND TENNIS/SWIM CLUB FACILITIES WILL BE LOCATED AS SHOWN WITHIN THE MARINA VILLAGE.
4. PROJECT ENTRANCE LOCATIONS CONFORM TO THE JUNE 12, 1984 APPROVED PLAN. GATEHOUSES ARE PERMITTED AT THE PROJECT ENTRANCES AND INDIVIDUAL TRACT ENTRANCES.
5. THE MAXIMUM HEIGHT OF ANY BUILDINGS IN THIS PLAN IS 8 STORIES.
6. THE MARINA BASIN AND MITIGATION AREAS, AS SHOWN ON THESE PLANS, SHALL CONFORM TO THE PERMIT REQUIREMENTS SET FORTH IN THE PERMIT NUMBER 361061749 ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AS MAY BE AMENDED FROM TIME TO TIME, WHERE NOT IN CONFLICT WITH OTHER CONDITIONS OF THE CORRESPONDING DEVELOPMENT ORDER CONDITIONS FOR THIS PROJECT.
7. RESIDENTIAL, LAKE, AND GOLF COURSE AREA LINES SHOWN ON THIS PLAN ARE INCLUDED FOR CONCEPTUAL ILLUSTRATION PURPOSES ONLY. FINAL AREA LINES SHALL BE DETERMINED AT THE TIME OF LOCAL DEVELOPMENT ORDER PERMITTING; PROVIDED, HOWEVER, THAT THE TOTAL NUMBER OF ACRES DEVOTED TO PARTICULAR USES SHALL BE CONSISTENT WITH THE DRI DEVELOPMENT SUMMARY ACREAGE AMOUNTS SET FORTH HEREIN; AND PROVIDED, FURTHER, THAT THE MANGROVE PRESERVE AREA SHALL BE LOCATED AS DEPICTED HEREIN, AND THE MARINA BASIN SHALL BE BUILT AT THE LOCATION IN ACCORDANCE WITH THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION PERMIT #361061749, AS MAY BE AMENDED FROM TIME TO TIME. IT IS THE INTENT OF THE DEVELOPER TO BE ABLE TO LOCATE LAKES, GOLF COURSE AREAS, ROADS, AND RESIDENTIAL PRODUCT TYPES IN ITS SOLE DISCRETION WITHIN THE BOUNDARIES OF THE DEVELOPMENT SUBJECT TO THE MINIMUM TOTALS REQUIRED AND/OR ALLOWED FOR LAKES, OPEN SPACE, AND SPECIFIC RESIDENTIAL PRODUCT TYPES AS SET FORTH IN THE DEVELOPMENT SUMMARY.
8. LOT SETBACK:
   LOCAL STREETS – 15'
   COLLECTOR/ARTERIAL STREETS – 25'
   SIDE – 5' MIN.
   REAR – 10'
   MANMADE WATER BODIES – 10'
   NATURAL WATER BODIES – 25'
   MARINA – 0'

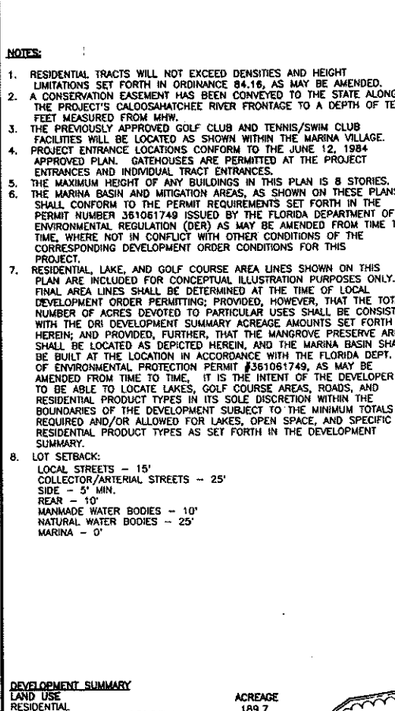
DEVELOPMENT SUMMARY

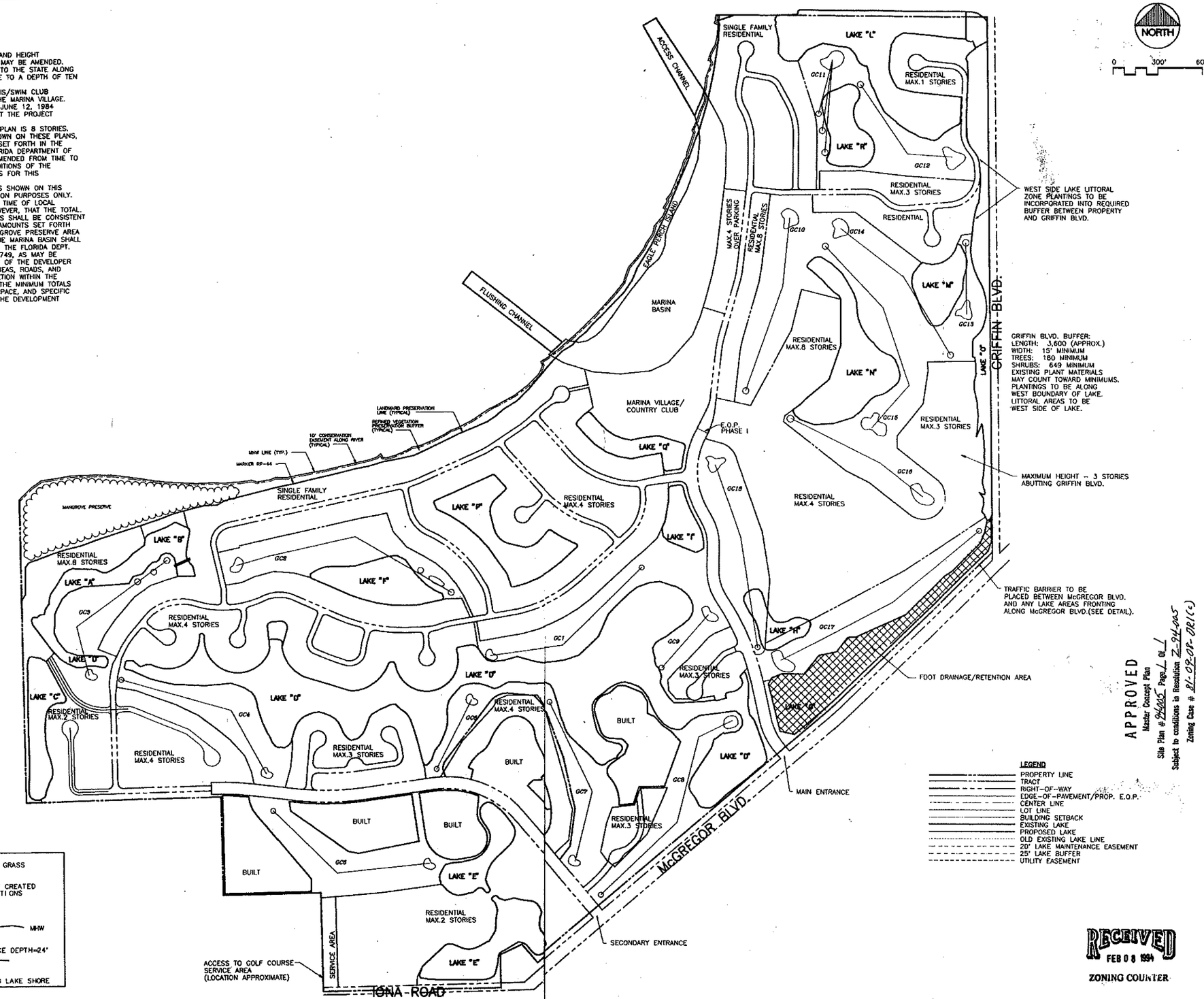
LAND USE	ACREAGE
RESIDENTIAL (INCLUDES EXISTING RESIDENTIAL, PROPOSED RESIDENTIAL, MARINA VILLAGE RESIDENTIAL--7.5ACRES LESS PRIVATE OPEN SPACE)	189.7
MARINA VILLAGE (COMMERCIAL)	8.0
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	70.0
MARINA BASIN AND MITIGATION AREAS	17.2
OPEN SPACE (INCLUDES VEGETATION/PRESERVATION BUFFER, PRIVATE OPEN SPACE, MANGROVE PRESERVATION, OTHER OPEN SPACE)	250.7
TOTAL ACREAGE	547.6

UNITS:

PREVIOUSLY CONSTRUCTED (AREAS LABELLED "BUILT")	215
APPROVED BY 1992 AMENDMENT	2,071
REMAINING TO BE CONSTRUCTED	1,856

GROSS DENSITY 3.8 DWELLING UNITS/ACRE





LEGEND

- PROPERTY LINE
- TRACT
- RIGHT-OF-WAY
- EDGE-OF-PAVEMENT/PROP. E.O.P.
- CENTER LINE
- LOT LINE
- BUILDING SETBACK
- EXISTING LAKE
- PROPOSED LAKE
- OLD EXISTING LAKE LINE
- 20' LAKE MAINTENANCE EASEMENT
- 25' LAKE BUFFER
- UTILITY EASEMENT

APPROVED
Master Concept Plan
Site Plan # 94005 Page 1 of 1
Subject to conditions in Resolution Z-94-005
Zoning Case # 81-09-DRI(c)

RECEIVED
FEB 08 1994
ZONING COUNTER

MICHAEL W. MORRIS
FE 18302
DATE

DATE	REVISIONS
02-03-94	MISC. REVISIONS

MASTER CONCEPT PLAN

RIVER'S EDGE YACHT AND COUNTRY CLUB

SECTION 29/30/31, TOWNSHIP 45 S, RANGE 24 E; LEE COUNTY, FLORIDA

MORRIS-DEPEW ASSOCIATES, INC.
ENGINEERS • PLANNERS • ENVIRONMENTAL SCIENTISTS
1940 MARAVILLA AVE • FORT MYERS, FLORIDA 33901 • (813) 275-9013 • FAX 275-7128

PROJECT NUMBER:	93066C
DRAWING FILE:	93066SP9
SCALE:	1" = 300'
CHECKED BY:	MWM
DESIGNED BY:	TLH
DATE:	10-12-93

SECOND

DEVELOPMENT ORDER

AMENDMENT

FOR

RIVER'S EDGE YACHT AND COUNTRY CLUB

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #12-8182-21
COUNTY CASE #81-09-08-DRI(c)

WHEREAS, FLORIDA DESIGN COMMUNITIES, THE OWNER OF RIVER'S EDGE YACHT AND COUNTRY CLUB DEVELOPMENT OF REGIONAL IMPACT (DRI) REQUESTED AN AMENDMENT TO THE ORIGINAL DEVELOPMENT ORDER ADOPTED ON MAY 5, 1982, AS AMENDED; and

WHEREAS, the Applicant has proposed to modify the location and design of the approved marina facility; and

WHEREAS, this proposed amendment includes, the original Development Order, adopted May 5, 1982 and the prior amendment, adopted March 16, 1992; and

WHEREAS, under Section 380.06(19), Florida Statutes, the proposed change must be reviewed and evaluated to determine whether it is, or is not, a substantial deviation from the terms of the existing Development Order; and

WHEREAS, the Board of County Commissioners has reviewed the proposed Amendment and finds the changes not to be a substantial deviation; however, any extensions of the buildout date, or any Notices of Change shall be reviewed cumulatively for determination as to whether or not a substantial deviation has occurred pursuant to Section 380.06(19), Florida Statutes; and

WHEREAS, the proposed changes to the River's Edge Yacht and Country Club DRI Development Order described herein are consistent with the adopted Comprehensive Land Use Plan of Lee County and applicable local land development regulations; and

WHEREAS, the proposed changes to the River's Edge Yacht and Country Club DRI will not unreasonably interfere with the achievement of the objectives of the adopted State Land Development Plan applicable to the area; and

WHEREAS, the proposed changes are consistent with the State Comprehensive Plan; and

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for River's Edge Yacht and Country Club DRI adopted May 5, 1982 and subsequent amendment are further amended as follows, with new language under lined and deletions struck through. All other portions of the original Development Order and subsequent amendments shall remain in full force and effect.

SECTION ONE:

A. The legal description of the subject property ~~to this Development Order~~ is as follows:

All that part of the West Half (W½) of the West Half (W½) of Section 29, Township 45 South, Range 24 East, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard LESS the North 100 feet thereof:

Government Lot 1 of Section 30, Township 45 South, Range 24 East, LESS the North 100 feet thereof:

That part of the East Half (E½) of the Southeast Quarter (SE¼), of Section 30, Township 45 South, Range 24 East, located Northwesterly of McGregor Boulevard; All that part of the Northeast Quarter (NE¼) of the Northeast Quarter (NE¼) of Section 31, Township 45 South, Range 24 East, lying Northwesterly of McGregor Boulevard.

Government Lots 2, 3 and 4, Section 30, Township 45 South, Range 24 East; and the East Half (E½) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼); and the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼); and all that part of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of Section 31, Township 45 South, Range 24 East, lying Northwesterly from McGregor Boulevard;

EXCEPTING THEREFROM the following described parcel:

From the Southwest corner of said Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of said Section 31, run N88°57'56"E along the South line of said fraction of a section for 542.85 feet;
THENCE run N01°07'16"W for 28.29 feet to a steel pin and the POINT OF BEGINNING. From said POINT OF BEGINNING continue N01°07'16"W for 190.44 feet to a concrete monument;
THENCE run N65°11'10"E for 162.71 feet to a concrete monument;
THENCE run S40°34'21"E for 204.09 feet to a steel pin

continued...

marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867);
THENCE run S49°25'39"W for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road;
THENCE run S88°54'23"W along said Northerly line for 159.21 feet to the POINT OF BEGINNING.
LESS:

RIVER'S EDGE 1, A CONDOMINIUM, PHASES 1, 2 & 3

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet;
THENCE N51°50'16"W, 24.78 feet;
THENCE N01°51'26"E, 22.61 feet;
THENCE N11°09'44"E, 244.44 feet;
THENCE by a curve to the right, radius 175.00 feet, arc 33.64 feet, chord N16°40'08"E, 33.59 feet;
THENCE by a curve to the left, radius 260.00 feet, arc 74.75 feet, chord N13°56'28"E, 74.49 feet for a POINT OF BEGINNING.
THENCE continue by a curve to the left, radius 260.00 feet, arc 216.80 feet, chord N18°11'00"W, 210.58 feet;
THENCE by a curve to the right, radius 60.00 feet, arc 99.83 feet, chord N05°35'45"E, 88.71 feet;
THENCE N53°15'47"E, 115.49 feet;
THENCE N20°00'00"E, 64.11 feet;
THENCE N42°00'00"W, 52.87 feet;
THENCE N85°20'16"W, 87.69 feet;
THENCE by a curve to the right, radius 72.00 feet, arc 85.18 feet, chord N51°26'46"W, 80.30 feet;
THENCE N17°33'16"W, 121.40 feet;
THENCE by a curve to the right, radius 102.00 feet, arc 157.55 feet, chord N26°41'44"E, 142.35 feet;
THENCE N70°56'44"E, 32.21 feet;
THENCE N48°00'00"E, 78.10 feet;
THENCE S42°00'00"E, 91.93 feet;
THENCE East 45.69 feet;
THENCE S68°02'00"E, 124.00 feet;
THENCE S31°30'00"E, 72.86 feet;

continued...

THENCE South 80.00 feet;
THENCE S68°27'08"E, 51.00 feet;
THENCE S42°00'00"E, 86.60 feet;
THENCE S56°10'00"E, 69.99 feet;
THENCE S19°20'31"W, 330.95 feet;
THENCE S88°30'00"W, 160.81 feet;
THENCE S18°03'57"W, 117.41 feet;
THENCE S83°00'00"W, 105.46 feet to the POINT OF BEGINNING.

LESS:

RIVER'S EDGE 2, A CONDOMINIUM

PARCEL A

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet for a POINT OF BEGINNING.
THENCE S81°59'44"W, 100.00 feet;
THENCE S08°00'16"E, 295.92 feet;
THENCE by a curve to the left, radius 195.00 feet, arc 311.41 feet, chord S53°45'16"E, 279.36 feet;
THENCE S80°29'44"E, 88.51 feet;
THENCE by a curve to the left, radius 127.00 feet, arc 254.91 feet, chord N22°59'44"E, 214.22 feet;
THENCE N34°30'16"W, 52.22 feet;
THENCE by a curve to the right, radius 85.00 feet, arc 58.48 feet, chord N14°47'44"W, 57.33 feet;
THENCE N04°54'47"E, 127.14 feet;
THENCE by a curve to the left, radius 610.00 feet, arc 310.49 feet, chord N83°25'21"W, 307.51 feet to the POINT OF BEGINNING.

PARCEL B

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);

continued...

THENCE S49°29'44"W along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet;
THENCE S81°59'44"W, 150.00 feet for a POINT OF BEGINNING;
THENCE continue S81°59'44"W, 290.09 feet;
THENCE by a curve to the right, radius 2,040.00 feet, arc 534.07 feet, chord S89°29'44"W, 532.55 feet;
THENCE N83°00'16"W, 10.61 feet;
THENCE S08°38'08"E, 76.93 feet;
THENCE S54°54'53"E, 475.77 feet;
THENCE S78°15'16"E, 70.63 feet;
THENCE N78°55'10"E, 414.16 feet;
THENCE N08°00'16"W, 331.33 feet to the POINT OF BEGINNING.

LESS:

RIVER'S EDGE 3, A CONDOMINIUM

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 42.87 feet, chord N83°35'21"W, 42.87 feet;
THENCE S05°49'33"W, 40.00 feet for a POINT OF BEGINNING.
THENCE by a curve to the left, radius 229.68 feet, arc 147.84 feet, chord S21°49'09"E, 145.30 feet;
THENCE S40°15'34"E, 564.48 feet;
THENCE South, 96.97 feet to a point on the South boundary line of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31, Township 45 South, Range 24 East;
THENCE run along said South boundary line S88°54'50"W, 593.45 feet to the Southwest corner of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the

continued...

Northwest Quarter (NW¼) of said Section 31;
THENCE run along the West boundary line of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31, N01°02'30"W, 665.51 feet to the Northwest corner of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31;
THENCE continue N01°02'30"W, 19.01 feet to a point on a curve having a radius of 2,060.00 feet and lying N00°36'54"E from the radius point;
THENCE run in a Southeasterly direction along said curve to the right having an arc of 187.35 feet, having a chord bearing S86°46'47"E, 187.28 feet to the POINT OF BEGINNING.

LESS:

RIVER'S EDGE 4, A CONDOMINIUM, PHASES 2 & 4

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29'44"E, 40.00 feet;
THENCE N40°30'16"W, 195.80 feet for a POINT OF BEGINNING.
THENCE continue N40°30'16"W, 229.00 feet;
THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet;
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the right, a distance of 140.00 feet, chord bearing N39°47'03"E, 138.02 feet;
THENCE by a curve to the left radius 155.00 feet, arc 91.98 feet, chord N39°29'44"E, 90.64 feet;
THENCE by a curve to the right, radius 450.00, arc 149.23 feet, chord N31°59'44"E, 148.54 feet;
THENCE by a curve to the right, radius 130.00 feet, arc 297.23 feet, chord S73°00'16"E, 236.59 feet;
THENCE by a curve to the left, radius 300.00 feet, arc 115.19 feet, chord S18°30'16"E, 114.49 feet;
THENCE by a curve to the right, radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;
THENCE S87°29'44"W, 25.00 feet;
THENCE S55°00'53"W, 21.10 feet;

continued...

THENCE by a curve to the right, radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;
THENCE S87°29'44"W, 25.00 feet;
THENCE S55°00'53"W, 21.10 feet;
THENCE S07°00'00"E, 19.00 feet;
THENCE S87°00'00"W, 62.00 feet;
THENCE S45°00'00"W, 50.00 feet;
THENCE S45°00'00"E, 227.14 feet;
THENCE N86°29'44"E, 28.89 feet to a point on a curve having a radius of 450.00 feet and lying S86°29'44"W from the radius point;
THENCE traverse along the arc of said curve, to the right, a distance of 86.39 feet, chord bearing S01°59'49"W, 86.26 feet;
THENCE by a curve to the right, radius 150.00 feet, arc 109.96 feet, chord S28°29'41"W, 107.51 feet;
THENCE S49°29'44"W, 15.00 feet to the POINT OF BEGINNING.
Said parcel contains 5.29± acres.

SUBJECT TO:

EASEMENT "A"

A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580.
A 40-foot easement lying in Section 31, Township 45 South, Range 24 East, Lee County, Florida, the centerline of which is described as follows:

Commence at the Northeast corner of said Section;
THENCE S89°23'18"W along the North line of said Section, a distance of 361.51 feet to the existing Northwesterly right-of-way line of McGregor Boulevard;
THENCE S49°29'44"W along said Northwesterly right-of-way line 1,320.47 feet to the POINT OF BEGINNING of said easement centerline;
THENCE N40°30'16"W, 180.00 feet;
THENCE N49°29'44"E, 83.10 feet;
THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet to the Point of Terminus.

EASEMENT "B"

A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580, being an easement 30 feet in width from the terminus of the above described easement (40 foot wide, from McGregor Boulevard to the

continued...

Southerly boundary of Phase 4) to the property described as Phase 3 on the condominium plat, the centerline of said easement being the same as the centerline of a paved roadway connecting said points, the approximate location of which roadway is depicted on the condominium plat. This easement shall terminate at such time as the property described in Phase 4 on the condominium plat has been submitted to condominium ownership as a part of River's Edge 1, a condominium.

EASEMENT "C"

A non-exclusive easement for utilities, cable television, and ingress and egress per the Declarations of Condominium of River's Edge 2, 3, and 4, Official Records Book 1783, Page 3649 and Official Records Book 1783, Page 3709 and Official Records Book 1841, Page 1465, respectively.

An 80-foot easement lying 40 feet each side of the following described centerline:

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet for a POINT OF BEGINNING.
THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;
THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S81°59'44"W, 440.09 feet;
THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;
THENCE N83°00'16"W, 243.34 feet;
THENCE by a curve to the left, radius 2,100.00 feet, arc 298.94 feet, chord N87°04'57"W, 298.68 feet to the Point of Terminus.

EASEMENT "D"

A non-exclusive easement for utilities, trash receptacles, and ingress and egress per the Declaration of Condominium of River's Edge 2, Official Records Book 1783, Page 3649.

A 50-foot wide easement lying 25 feet each side of the following described centerline:

continued...

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 873.40 feet;
THENCE by a curve to left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;
THENCE S08°00'16"E, 40.00 feet;
THENCE S81°59'44"W, 100.00 feet;
THENCE S08°00'16"E, 219.00 feet to the POINT OF BEGINNING;
THENCE S78°33'43"W, along said centerline, a distance of 50.09 feet to the Point of Termination of said centerline.

EASEMENT "E"

A non-exclusive easement for utilities, cable television, and ingress and egress over and under that certain parcel described as follows, per the Declaration of Condominium of River's Edge 4, Official Records Book 1841, Page 1465.

Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;
THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);
THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;
THENCE N40°30'16"W, 448.60 feet;
THENCE N49°29"44"E, 40.00 feet;
THENCE N40°30'16"W, 424.80 feet;
THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet for a POINT OF BEGINNING.
THENCE N13°46'26"E, 67.29 feet;
THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;
THENCE traverse along the arc of said curve to the left, 74.11 feet, chord bearing S14°13'35"W, 73.82 feet to a point on a curve having a radius of 690.00 feet and lying N10°51'23"E from the radius point
THENCE traverse along the arc of said curve to the right, 35.15 feet, chord bearing S77°41'03"E, 35.14 feet to the POINT OF BEGINNING.

continued...

SUBJECT TO:

Conservation easement to State of Florida, Official Records Book 2108, Page 1846.

Irrigation easement to River's Edge 3 Condominium Association, Inc., Official Records Book 2014, Page 1661.

Florida Cities Water Company water pipeline easements, Official Records Book 1764, Page 2014 and Official Records Book 1846, Page 4662.

Florida Power & Light Company utility easements, Official Records Book 1806, Page 1963 and Official Records Book 2168, Page 287.

Lee County utility easements, Official Records Book 2123, Page 3638 and Official Records Book 2212, Page 2138.

Easements, restrictions and reservations of record.

TOGETHER WITH Sovereignty Submerged Land Easement, Official Records Book 2137, Page 1893.

SECTION TWO: (Cumulative changes to the original conditions of the Development Order)

C. The Application for Development Approval for the RIVER'S EDGE YACHT AND COUNTRY CLUB, as amended, is hereby APPROVED for the following uses described in subsection C.1. and shown in the revised Master Site Plan ~~dated December 20, 1990, revised November 25, 1991~~ stamped received February 8, 1994, ~~attached as Exhibit~~ (See Attachment A), subject to the ~~following~~ conditions contained ~~in subsections C.2.a. through C.2.i~~ within this Development Order and all applicable permits:

1. USES

a. 2,071 dwelling units of which up to 536 would be single-family (detached and zero lot line type units) and up to 1,535 multi-family on a total of 250.3 acres; approved, but unbuilt multi-family units may be exchanged for single-family units, provided that the resulting total mix of approved multi-family and single-family dwelling units do not exceed a gross trip generation rate of 1,149 p.m. peak hour trips as calculated from the fitted curve formulas of the 5th Edition of the ITE Trip Generation Manual for land use categories 210 and 230 (215 multi-family units are already built);

b. 135 acre golf course and golf club with 250 parking spaces;

c. On the ~~10.5~~ 8.0 acres commercial part of the 18.0 acre marina village commercial residential area:

1. 200 hotel rooms;

2. 250 seat restaurant with 310 parking spaces;

3. 190 wet berth marina;

4. 7,000 gross square foot health club;

5. a 16 tennis court complex;

6. 15,000 gross leasable square feet of neighborhood retail with 80 parking spaces;

7. 50,000 gross leasable square feet of specialty retail with 325 parking spaces; permitting all retail uses more particularly described in the P.U.D. Ordinance #82-15, as amended.

d. 70.0 acres of lakes;

e. ~~17.8~~ 18.23 acre refined vegetation preservation buffer including:

1. a mangrove and listed plant species preserve area south of the proposed marina of ~~10.82~~ 14.02 acres;

~~2. an eagles nest and listed plant species preservation island of 1.16 acres;~~

~~3~~ 2. an eagles perch management and listed plant species preservation island of ~~2.78~~ 3.88 acres;

~~4~~ 3. ~~two~~ a shoreline listed plant species preservation area~~s~~ of ~~2.43 and 0.61~~ of 0.33 acres north of the proposed marina; and

f. 250.7 acres of open space (including golf course, preservation areas, and private open space, but excluding lake, marina mitigation and basin areas)."

2. ENERGY

~~1~~ a. The RIVER'S EDGE development shall comply with the Energy Code as adopted and in force at the time of commencement of each phase of the development.

~~2~~ b. RIVER'S EDGE shall construct a jogging and bicycle trail system as described in the Application for Development Approval (hereinafter referred to as the ADA) and the Master Site Plan. That system is to connect all points within the project. Benches and special parking areas are to be provided for bicycles and golf carts at each commercial and recreational area. That portion of the system alongside McGregor Boulevard shall be built in conformance with the Lee County Comprehensive Bicycle Facilities Plan and is to be dedicated to the County.

~~3~~ c. The Developers of RIVER'S EDGE shall design all facilities for optimum energy efficiency utilizing state-of-the-art energy conservation techniques, including but not limited to the following:

- proper roof and wall insulation
- glazing
- energy efficient appliances
- structure orientation for solar energy and natural ventilation
- structural shading, e.g., inclusion of porch/patio areas in residential units and utilization of roof overhangs for low-rise buildings
- proper landscaping throughout the project and planting of native shade trees and understory wherever appropriate for all active and passive recreation areas, streets and parking areas
- site design and landscaping to enhance energy conservation

~~4~~ d. RIVER'S EDGE shall cooperate with the Lee County Transit system in locating and providing bus stops and shelters within the development.

~~5~~ e. Alternate energy devices, such as solar collectors, may not be prohibited unless it is determined necessary for the protection of the health, safety and welfare of the residents of the RIVER'S EDGE YACHT AND COUNTRY CLUB.

~~b~~ 3. TRANSPORTATION

~~1~~ a. The RIVER'S EDGE development shall be responsible for development of all roads and bike paths within the RIVER'S EDGE development.

~~1~~ b. Development Impact/Phasing Schedule:

The transportation impact assessment which forms the basis for this Development Order Amendment for River's Edge DRI assumes the land uses shown in Section C.1., as amended, and assumes

one continuous phase of development with project buildout extended from the Year 1993 to the May 4, 1998.

Any future application for Notice of Proposed Change shall be reviewed cumulatively in accordance with Chapter 380, Florida Statutes, to determine if a substantial deviation has occurred. If a traffic related Substantial Deviation has occurred, a traffic re-analysis shall be required, along with any other necessary review pursuant to the provisions of Paragraph 380.06(19)(g), Florida Statutes.

~~2~~ c. Annual Monitoring Program:

Pursuant to Section 380.06(18), Florida Statutes, The River's Edge DRI shall submit an "Annual Monitoring Report" to the Lee County Department of Transportation & Engineering (LCDOT&E), the Southwest Florida Regional Planning Council (SWFRPC), and the Florida Department of Community Affairs (DCA) each year until project buildout. If the local government does not receive the annual report or receives notification that the regional planning agency or the state land planning agency has not received the report, the local government shall request in writing that the developer submit the report within thirty (30) days. The failure to submit the report after thirty (30) days shall result in the temporary suspension of the Development Order by the local government. At a minimum, the monitoring report shall contain a.m. and p.m. peak hour peak season traffic counts (with turning movements) and a professionally acceptable level of service analysis, mutually agreed upon by the Applicant's engineer, LCDOT&E, FDOT, SWFRPC and DCA, at all project access locations onto McGregor Boulevard (SR 867) as well as at the following regional roadway segments and all intersections included within and at the end of those segments:

REGIONAL ROAD SEGMENTS

BACKLOGGED LEE COUNTY FACILITIES:

McGregor Boulevard (SR 867) from

Gladiolus Drive to Pine Ridge Road
Pine Ridge Road to Cypress Lake Drive
Cypress Lake Drive to College Parkway

Cypress Lake Drive from

McGregor Boulevard to South Pointe Blvd.
South Pointe Blvd. to Winkler Road
Winkler Road to Summerlin Road

CONSTRAINED LEE COUNTY FACILITIES

McGregor Boulevard (SR 867) from

College Parkway to Winkler Road
Winkler Road to Whiskey Creek Drive
Whiskey Creek Drive to Colonial Blvd.

CONSTRAINED CITY OF FT. MYERS FACILITY:

McGregor Boulevard (SR 867) from
Colonial Boulevard to Hill Avenue

NON-BACKLOGGED/NON-CONSTRAINED LEE COUNTY FACILITIES:

Gladiolus Drive from

Pine Ridge Road to A&W Bulb Road
A&W Road to Winkler Road
Winkler Road to Summerlin Road

Cypress Lake Drive from
Summerlin Road to US 41

The above off-site intersections and roadway segments were identified as significantly impacted by greater than 5% utilization of the LOS (level of service) "D" peak hour service volume by the revised River's Edge DRI in the traffic impact statement submitted for the Notice of Proposed Change. Peak season peak hour traffic counts and level of service calculations shall be performed by the developer's traffic consultant and submitted as part of the annual monitoring report for the following significantly impacted road segments. In the event that the development traffic is projected to utilize 5% or more (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year) of the peak hour level of service "D" service volume, and the monitoring report shows that peak season peak hour level of service "D" (or adopted LOS) is exceeded, or likely to be exceeded within the next year, (based on existing traffic counts plus traffic projected to be generated by the development approved and estimated to be requested within the next year) on any road segment and/or intersection identified above, the consultant will identify as part of the monitoring report whether any improvements are programmed by either Lee County of the City of Ft. Myers in their respective Comprehensive Plan Capital Improvements Elements (1991 to May 4, 1998) or in FDOT'S approved three year Transportation Work Program, sufficient to correct the deficiency.

The developer shall submit the first monitoring report to the Lee County Department of Transportation & Engineering (LCDOT&E), Florida Department of Transportation (FDOT), DCA, and the Southwest Florida Regional Planning Council (SWFRPC) within one year after the effective date of the Development Order Amendment (45 days after adoption date or after resolution of appeal). Monitoring reports shall be submitted annually until buildout of the project.

Actual buildout will occur when the developer or his successors have constructed and obtained Certificates of Occupancy for the maximum amount of residential and nonresidential land uses permitted by the River's Edge Development Order Amendment. Declared buildout will occur if the developer or his successors formally declares in writing to all governmental agencies having responsibility for monitoring this DRI that no more development will be constructed, despite the fact that less than the permissible maximum amount of residential and nonresidential land uses had been built to date.

The purpose of this monitoring report is to: (1) determine if the projected traffic for the Year 1998 in the traffic impact assessment for River's Edge DRI Amendment is exceeded by actual impacts; (2) assist LCDOT&E and FDOT in determining the proper timing of necessary roadway improvements within the Lee Plan traffic district encompassing the River's Edge DRI (currently District 4); (3) identify how the contributions of this development were applied to maintain the overall balance of surplus service volume and traffic growth within the district; (4) monitor the Lee County and FDOT schedule of programmed improvements for roadways significantly impacted by the River's Edge development that are operating or are projected to be operating within the next year, below LOS "D" (or the Lee County Comprehensive Plan adopted LOS) peak season hour; and (5) determine the project's external trip generation along the existing roadways.

The following is recognized and understood:

~~A.~~1) Traffic counts may be obtained from original machine and manual peak hour counts, Lee County Traffic Volume Reports and other DRI developments with similar monitoring requirements and other generally acceptable sources.

~~B.~~2) In the event that construction has not begun on the land uses identified in Section ~~One, Paragraph~~ Two C.1, by the date the monitoring report is due, a letter to the above agencies documenting the development status on site may be considered an acceptable replacement to the above traffic monitoring for that year.

FOR BACKLOGGED LEE COUNTY FACILITIES: In the event that the Annual Monitoring Report indicates that peak season peak hour level of service "D", or applicable level of service, is exceeded, or is projected to be exceeded within the next year, for any road segment and/or intersection identified as a backlogged Lee County Facility and the required road and/or intersection improvement necessary to bring the identified roadways back to level of service "D" or other applicable comprehensive plan adopted level of service for peak season peak hour conditions, is not programmed for construction by May 4, 1998; and River's Edge is, or is projected within the next year to be, utilizing 5% or more of the peak hour level of service (LOS) "D" service volume on that segment or inter-

section (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); then Lee County shall determine whether there is a service volume surplus or deficiency in the Lee Plan traffic district in which River's Edge is located (currently District 4) to implement one of the following two policies for the River's Edge building permit requests during the next year:

~~A.~~1) If the Developer complies with the mitigation requirements contained within this Development Order, then building permits shall still be approved provided that the surplus service volume resulting from the existing surplus service volume, any service volume increases due to committed roadway improvements, and any service volume increases due to interim improvements (reported as a percent of existing service volume on a district basis) is equal to or exceed the annual percent increase in traffic on a traffic district-wide basis.

~~B.~~2) In the event that the percent service volume growth identified on a traffic district basis is less than the percent traffic growth in the district, no building permits will be issued by Lee County unless capacity enhancement and/or operational improvements are programmed for implementation within the district so that the total service volume growth for the district will again be equal to or greater than the district traffic growth.

FOR LEE COUNTY CONSTRAINED FACILITIES: In the event that the Annual Monitoring Report indicates that the peak season maximum volume-to-capacity (v/c) ratio of 1.85 is exceeded, or is projected to be exceeded within the next year, for any Lee County road segment identified in Paragraph 2 above as constrained; and the required road improvement necessary to maintain or better the v/c ratio will not be operational on that segment; then no further building permits beyond those issued at the time of the Annual Monitoring Report determination shall be issued for the River's Edge development until the necessary roadway improvements sufficient to maintain the v/c ratio at, or less than, 1.85 is operational on the constrained easement.

FOR CITY OF FT. MYERS CONSTRAINED FACILITY: In the event that the Annual Monitoring Report indicates that the River's Edge development traffic is, or is projected within the next year to be, utilizing 5% or more of the peak hour level of service "D" service volume on the City of Ft. Myers roadway segment identified in Paragraph ~~2~~ c. above as constrained (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); and a road improvement necessary to maintain or better the peak season level of service v/c ratio will

not be operational on that segment within the next year; then no further building permits beyond those issued at the time of the Annual Monitoring Report determination shall be issued for the River's Edge development until the necessary roadway improvement sufficient to maintain the v/c ratio at, or better than, the Ft. Myers comprehensive plan adopted level of service for that link is operational on the constrained segment.

FOR NON-BACKLOGGED/NON-CONSTRAINED LEE COUNTY FACILITIES: In the event that the Annual Monitoring Report indicates that peak season peak hour level of service "E" is exceeded, or is projected to be exceeded within the next year, for any road segment and/or intersection identified in Paragraph ~~2~~ c. as non-backlogged/non-constrained; and the required road and/or intersection improvement necessary to bring the identified roadway back to level of service "E" peak season peak hour conditions will not be operational at the time the River's Edge development is projected to be utilizing 10 or more of the peak hour level of service "D" service volume on that segment or intersection (based upon the projection of traffic impacts from the total amount of existing River's Edge development approved through the issuance of building permits plus what is projected to be added through building permit approval in the next year); then no further building permits or additional development approvals beyond those issued at the time of the Annual Monitoring Report determination shall be issued until the necessary roadway improvement sufficient to maintain a peak season peak hour level of service "E" for that roadway is operational.

~~3~~ d. Site Related Improvements:

In addition to the payment of monies and other obligations specified in the Development Order Amendment, the Developer, or its successor, shall be required to construct, at no cost to Lee County and the Florida Department of Transportation, all site-related improvements deemed necessary by Lee County and the Florida Department of Transportation. The developer, or his successors, shall construct site-related roadway and intersection improvements within River's Edge DRI. The Developer shall construct any site-related intersection improvements (including but not limited to signalization, if warranted, turn lanes, and additional through lanes found to be necessary by the governmental authority with jurisdiction of the roadway) as appropriate for the project's access intersections onto McGregor Boulevard (SR 867) throughout all phases of development.

When authorized by the Lee County Engineer or his designee, upon approval of plans by Lee County and FDOT, the developer, or his successors, shall build the necessary site related intersection improvements to achieve level of service "D" peak season peak hour for the following intersections:

McGregor Boulevard (SR 867) at

Pine Ridge Road/River's Edge North Entrance (The Developer's responsibility shall not include the realignment of Pine Ridge Road)

River's Edge South Entrance

The developer, or his successors, shall pay for McGregor Boulevard/Pine Ridge Road intersection additional left turn storage lanes and traffic signal (when warranted and permitted by FDOT). Site-related improvements shall be any improvement deemed site-related at the time of construction under the definition contained in the Lee County Roads Impact Fee Ordinance and/or Development Standards Ordinance, as either may be amended or replaced. The developer's obligation shall include the full cost of design and engineering, drainage and utility relocation, right-of-way acquisition and dedication, construction of turn lanes, acceleration and deceleration lanes, construction inspection, contract administration, testing and signalization (as needed and warranted). The alignment, design, signalization, and construction schedule shall be approved by the Lee County Engineer and FDOT. The developer shall pay the full cost for any site-related intersection improvements found necessary by the County or FDOT for the project's access.

~~4~~ e. Right-of-Way Dedications:

The property owner(s) have previously dedicated right-of-way to allow widening and improvement of McGregor Boulevard (SR 867). The dedicated property has been appraised at $191,000. Additionally, the Florida Department of Transportation has identified the need for a stormwater retention pond on the River's Edge site adjacent to McGregor Boulevard near the vicinity of Griffin Boulevard. (See attached map - Exhibit B). The property owner(s) shall dedicate to Lee County the land deemed necessary by the FDOT for the stormwater retention for the McGregor Boulevard widening improvements, at the time requested by LCDOT&E. Conveyance shall be in a form and manner acceptable to Lee County.

The $191,000 McGregor Boulevard widening right-of-way and the value of the stormwater retention dedication is applicable to reduce the proportionate share of River's Edge transportation impacts. The dedication shall not be eligible for road impact fee credits.

~~5~~ f. Mitigation of Transportation Impacts:

~~A.~~1) As mitigation for the transportation impacts of the River's Edge amended land uses described in Section ~~One, Paragraph~~ C.1, in addition to the requirements of Section C.~~2.b.1.~~3.b. through C.~~2.b.4.~~3.e. above, the developer, or his successors, shall:

(~~1~~a) dedicate property appraised at $191,000.00 dollars for the McGregor Boulevard widening; and

(~~2~~b) dedicate property to Lee County for the stormwater retention area necessary for the McGregor Boulevard widening, ~~as shown on Exhibit B attached,~~ subject to certified appraisals agreed upon by Lee County and the Developer and approved by the Lee County Department of County Lands, determining the fair market value for the dedication. If an agreement cannot be reached on the appraisal amount, then the two appraisers chosen by the Developer and Lee County respectively will choose a third independent appraiser to do an appraisal, and the value will be established by an average of the three appraisals; and

(~~3~~c) pay Lee County Road Impact Fees at the fee schedule in effect at the time building permits are issued by Lee County. The Road Impact Fees are currently estimated to be $2,904,456 for the amended River's Edge land uses discussed in Section ~~One, Paragraph~~ C.1., to be used for the roadway improvements for this development; and

(~~4~~d) in three (3) equal installments beginning on November 25, 1992 or 30 days after resolution of any appeal, whichever is later, make cash payments totaling $1,933,000, less the $191,000 right-of-way dedication and less the appraised value credit of the stormwater retention pond land deemed necessary by FDOT (as shown in Exhibit B and located in the northwest corner of the River's Edge property near the vicinity of Griffin Boulevard/ McGregor Boulevard intersection), into an escrow account to Lee County for a portion of the transportation mitigation. The amount specified above shall be adjusted to current dollars at the time of payment on a quarterly basis using the most current State (Florida) Highway Bid Price Index (BPI) published by the Engineering News Record (McGraw-Hill Publications). The base BPI for these adjustments shall be the BPD in the Third Quarterly Cost Report for 1991, said value being 100.00. The developers shall construct no more than 500 additional units prior to payment of this amount. All interest earned on this account shall accrue to the benefit of Lee County, Use of funds and terms of the escrow shall be governed by a separate escrow agreement between the parties and is subject to approval by the Lee County Attorney's Office.

The escrow money shall be used by May 4, 1998 for the roadway improvements within Lee Plan traffic district 4 identified in Section C.~~2.b.2.~~3.c. as deemed necessary by the County to maintain the balance of surplus service to volume to traffic growth, in accordance with the County's comprehensive plan and settlement agreement. Such monies shall be targeted to County funded regional roadways, in accordance with Policy 22.1.7 of the amended Lee Plan.

~~B.~~2) Should those provisions of the road impact fees (Ordinance #90-47 as amended) be repealed, made unenforceable or otherwise no longer in effect, they shall neverthelessbe required as payment for the transportation mitigation for the River's Edge notice of change DRI Development Order as described in Paragraphs ~~3~~c through ~~5~~e above.

~~C.~~3) The developer is informed that the Lee County Board of County Commissioners may adopt in interim operation improvement program and that such a program may be applicable to this development.

~~6~~ g. Nothing contained in this Development Order Amendment is to imply or supersede any Florida FDOT permitting requirements.

~~7~~ h. To fulfill the obligations of the developer to provide infrastructure, systems, facilities, and services as required herein, the developer may employ a number of alternative management and financing mechanisms, including a uniform community development district ("UCDD") pursuant to Chapter 190, Florida Statutes, a property owners association, and special assessments, all as applicable and as available by law. In the event the developer elects to use a UCDD, the developer will enter into a Developer's Agreement with Lee County. Such Developer's Agreement will delineate boundaries of the UCDD and shall be subject to and not inconsistent with Chapter 190, Florida Statutes, and this Development Order. The various agencies which review this Development Order do not by accepting this condition waive any right they may have to comment on and review the management and financing mechanism chosen by the developer to manage and finance infrastructure, systems, facilities, services, and improvements pursuant to this paragraph. Furthermore, nothing contained in this Development Order shall be construed to exempt this development from participation in the funding, through Municipal Services Benefit Unit (MSBU) or a Municipal Services Taxing Unit (MSTU), or a special assessment district, of improvements to various State and County arterial and collector roads to the degree to which the development is benefited and has not already mitigates its impacts.

~~8~~ i. River's Edge proportionate share responsibility for any improvements required in this Development Order is discharged in full upon payment of the entire proportionate share contribution due under the terms of Paragraphs ~~2~~b through ~~7~~h, which contribution shall not be reduced or refunded provided, however, that all other provisions of the Development Order also shall govern.

~~9~~ j. If the proportionate share contribution due under the terms of Paragraphs ~~2~~b through ~~8~~i is not paid in a timely manner, issuance of development approvals and building permits for River's Edge shall immediately cease.

~~10~~ k. Compliance with all of the terms of the transportation related provisions of this development order shall satisfy the substantive requirements related to regional transportation facilities of Sections 163.3177(10)(h) and 163.3202(2)(g), Florida Statutes (1989); Lee County Ordinance 89-33, as amended; the Lee County Comprehensive Plan, adopted pursuant to Chapter 163, Part II, Florida Statutes; and Rule 9J-5.0055, Florida Administrative Code, as they currently apply. Satisfaction of concurrency shall extend only through May 4, 1998.

~~c~~ 4. AIR QUALITY

The RIVER'S EDGE development shall comply with all applicable codes and apply for all required permits relative to air quality.

~~d~~ 5. FIRE PROTECTION

~~1~~ a. The RIVER's Edge development shall identify and make available to the Iona/McGregor Fire Protection and Rescue Service District a parcel of property acceptable to the fire district containing approximately three-fourths (3/4) acre of land for a fire station. Dedication shall occur with commencement of construction of Phase III as described on Page 15 of the ADA.

~~2~~ b. The RIVER'S EDGE development will aid in the construction of a fire station on the site to be located within the project by contributing an amount of seventy-five thousand dollars ($75,000.00) for the actual construction of the fire station. This contribution shall occur prior to commencement of construction of Phase III.

c. In lieu of the requirements set forth in Sections 5 a. and 5.b immediately above, the RIVER's EDGE development may, with the prior written consent of the Iona/McGregor Fire Protection and Rescue Service District, pay fire impact fees as required by the Lee County Fire Protection and Emergency Medical Services Impact Fees Ordinance.

d. If the RIVER'S EDGE development provides the mitigation set forth in Sections 5 a. and 5 b. above, full credit for the value of this mitigation shall be given against any fire impact fees that might otherwise be due, as required by and consistent with Sections 380.06(16)(a) and 380.06(16)(b), Florida Statutes.

~~e~~ 6. PARKS

RIVER'S EDGE shall assist Lee County in obtaining additional recreational land by paying a fee-in-lieu of dedication of five (5) acres of parklands. Payment at fair market value shall occur with the commencement of Phase III of the development and

shall be in accordance with standards and schedules established by the Lee County Division of Community Services. The requirements of this Section will not be applicable if an impact fee ordinance is adopted by Lee County and the RIVER'S EDGE development pays its pro rata share pursuant to the impact fee ordinance.

~~f~~ 7. SCHOOLS

RIVER'S EDGE shall provide off-street school bus loading zones for each development phase as deemed necessary by the Lee County School Board.

~~g~~ 8. WATER SUPPLY, WATER QUALITY AND WILDLIFE HABITAT

~~1~~ a. No residential development shall commence until sufficient water is available through a public water system to insure adequate fire flow, as well as a sufficient quantity of potable water, to adequately serve the residential development for which a building permit is requested.

~~2~~ b. During Phase I, RIVER'S EDGE shall plug all existing on-site wells in accordance with Lee County Division of Protective Services and South Florida Water Management District standards.

~~3~~ c. The RIVER'S EDGE development shall comply with the best management practices as defined by the South Florida Water Management District (SFWMD) with regard to the use of excavated areas and of wetlands acting as polishing and buffer areas and grassed swales for drainage purposes.

~~4~~ d. Pursuant to the drainage plans and permits approved by the South Florida Water Management District and the marina plans and permits approved by the Florida Department of Natural Resources, Florida Department of Environmental Regulation, and U.S. Army Corps of Engineers, stormwater drainage will be collected within the drainage lake system and discharged via a system of weir control structures into spreader swales. Stormwater will not be discharged into the marina basin or the ~~oxbow~~ marina mitigation area. Direct discharge of water/effluent by RIVER'S EDGE into the Caloosahatchee River shall be prohibited. South Florida Water Management District plans for River's Edge, Phase One, Primary Drainage System Reference Plan, dated January, 1984, revised 12-27-84, Sheet 2 of 27, ~~attached as Exhibit C,~~ shows Lakes "O" and "L" running along Griffin Boulevard and Schultz Road, connected by a littoral zone at the northeast corner of the property at the corner of Schultz and Griffin Boulevards. Those two lakes shall remain substantially in the configuration as shown on the Water Management District Plans referenced herein. Minor adjustments may be made but shall not result in a net reduction of the area of Lakes "O" and "L" which shall continue to run in an alignment as shown along Griffin Boulevard and Schultz Road.

~~a~~ 1) A row of shrubs and trees containing the Type "B" buffer vegetation (five trees and eighteen shrubs per 100~~0~~ linear feet), suitably cluster subject to the approval of the Division of Environmental Services (DES), shall be planted along the west side of Lakes "O" and "L" along Griffin Boulevard. DES may not unreasonably withhold its approval.

~~b~~ 2) Littoral shelves as required in condition g.7. shall be constructed along Lakes "O" and "L".

~~c~~ 3. A Type "B" buffer shall be placed in front of Lakes "D" and "G" at the project entrance (as shown on Exhibit C).

~~5~~ e. For the riverfront lots the following vegetation management and maintenance guidelines shall apply:

~~a.~~1) The following: spider lilies, golden polypody, giant leather fern, and golden leather fern, hereinafter shall be referred to as "listed species." The developer shall provide a vegetation conservation buffer along the river, as shown by the surveyed preservation line on ~~Exhibit D~~ Attachment B (Preservation Line Map ~~Sheet 6 of 6, Deni Associates, dated 10/31/91,~~ stamped received 1-3-94), attached, excluding the area approved for the marina basin construction, ~~oxbow~~ marina mitigation area, boat access and flushing channels, for the purpose of conserving existing native vegetation, planting additional native vegetation and allowing passive recreational uses. The buffer area shall consist of the naturally vegetated area between the Caloosahatchee River and the refined preservation line described above. Additionally, the preservation areas include the entirety of the Eagles Perch Island ~~and the Eagles Nest Island~~. It is the intent of the refined vegetation preservation line to provide natural shoreline stabilization through native vegetation and to protect a unique vegetation/wildlife habitat.

It is understood, however, that visual access to the river from the rear of the lot through the vegetation in the buffer and preservation is desired by the developer and may be allowed for specific, appropriate areas along the riverfront. Selective trimming of trees and vegetation within the preservation and buffer areas for this purpose shall be permitted only in those areas specifically designated in this development order in the conditions specified below. Selective clearing for limited pedestrian access to the river via boardwalks or decks shall also be permitted subject to the conditions specified below, but shall not involve any dredge or fill activities of wetlands, any dredge or fill activities in the Caloosahatchee River, either the Eagles Perch Island or the Eagles Nest Island, nor involve preservation or buffer areas located west of a north-south line running through marker RP-44 as designated on ~~Exhibit D~~ Attachment B (Preservation Line Map ~~Sheet 6 of 6 prepared by Deni Associated, dated 10/31/91,~~ stamped received 1-3-94).

Access to the Eagle Perch Island shall be allowed for purposes of 1) the removal and maintenance of invasive exotic vegetation, and 2) limited pedestrian use. Access to the island and permitted activities are subject to the following conditions:

(a). The Eagle Perch Island shall be accessed via the dock/bridge located in the western portion of the marina basin as shown on the Overall Marina Plan, dated October 5, 1993 (Attachment C).

(b). The point of access to the Eagle Perch Island shall be a maximum 8 feet wide. The point of access shall have a gate or similar obstruction to impede unauthorized vehicle (e.g. golf cart) access, yet allow pedestrian passage.

(c). Golf carts shall be permitted on the Eagle Perch Island only when used for the intermittent removal and maintenance of invasive exotic vegetation.

(d). Pedestrian uses permitted on the Eagle Perch Island include walking, bird watching, and nature observation. Pedestrian uses not permitted include any activities which involve boardwalks, development, trimming or removal of vegetation.

(e). In the event bald eagles build a nest on the Eagle Perch Island, access to the island shall be prohibited during the Southern bald eagle nesting season October 1 through May 15.

~~b.~~2) The developer shall remove all Brazilian Pepper ~~and~~, Melaleuca and Australian pine from the refined preservation area with minimal possible disturbance to existing native vegetation.

~~c.~~) No Development, boardwalks, trimming, or clearing of vegetation shall be allowed in the following preservation areas as depicted on ~~Exhibit D~~ Attachment B (Preservation Line Map ~~Sheet 6 of 6 prepared by Deni Associates, dated 10/31/91,~~ stamped received 1-3-94):

(~~1~~a) Within a complete ten foot (10') radius of the Cabbage Palm with the golden polypody located between markers RP-1 and RP-2;

(~~2~~b) ~~On the Eagles Nest Island;~~

(~~3~~c) On the Eagles Perch Island;

(~~4~~d) Within a complete ten foot (10') radius of the golden leather fern located nearly adjacent to RP-34;

(~~5~~e) West of a north-south line running through RP-44.

The following conditions shall apply to the remaining preservations and buffer areas not listed in (~~1~~a) through (~~6~~e) above:

Other than the removal of the exotics delineated above, there shall be no removal of any trees or vegetation which is greater than or equal to four inches in diameter at breast height (4"D.B.H.) except that at least a maximum four feet wide pedestrian access, located outside the preservation areas ~~(1)~~ a. through ~~(6)~~ e. specified above as limited herein shall be permitted on each lot notwithstanding other limitations. Selective removal/replacement and trimming of trees and vegetation shall be permitted for the purpose of providing limited pedestrian access to the river via boardwalks or decks provided all necessary agency or governmental permits are issued as limited by condition a. above. However, at a minimum, the buffer shall contain those trees which are greater than or equal to 4" D.B.H. as well as naturally existing native understory growth. However, those trees or shrubs which are less than 4" D.B.H., or existing native understory growth, may be removed for purposes of providing visual access to the river and/or pedestrian access as described herein if said understory vegetation is replaced with native coastal strand vegetation replacement stock of not less than one gallon-size nursery grown containerized stock planted for any understory or shrubs removed, with a guaranteed survival rate of eighty percent (80%) after three years. Those trees which are removed shall be relocated or replaced with a similar size tree. In no case shall more than twenty percent (20%) of the refined preservation buffer be impacted for purposes of pedestrian access.

~~d.~~4) Prior to the recording of a subdivision plat for riverfront lots, these vegetation maintenance and management guidelines shall be included by the developer in recorded deed restrictions applicable to any residential lots located adjacent to the river and shall be enforceable by a homeowner's association as well as being made conditions of the DRI Development Order and local Final Development Order.

~~e.~~5) Prior to any clearing in the single-family area along the river, there shall be an on-site review by Lee County to insure that there is a complete radius of twenty-five feet (25') preserved around any giant leather ferns, ten feet (10') preserved around any golden leather fern or golden polypody, and that any spider lilies without a ten foot (10') radius of preserved area will be relocated or replaced on the River's Edge site with comparable nursery stock.

~~f.~~6) In the Marina mitigation area, prior to clearing or construction activity, a "listed species" vegetation survey shall be conducted and any "listed species" located landward of the preservation line shown on ~~Exhibit D~~ Attachment B shall be relocated or replaced elsewhere on site in a suitably similar habitat.

The spider lilies located near markers RP-21 and RP-22 and between RP-33 and RP-36 shall be appropriately relocated and transplanted to appropriate habitat on the Eagles ~~Nest~~ Perch Island by a qualified botanist hired by the developer prior to development of the flushing channel at this site. The methodology, location and details of this relocation and transplantation shall be reported in the next annual monitoring report required to be submitted. Three years after the relocation, or in the 1997 annual monitoring report, whichever occurs first, a qualified botanist hired by the developer shall report on the success or failure status of the relocation and discuss any discernible reasons surrounding the success or failure of the relocation.

~~7~~ g. For all manmade water bodies, except the marina basin, littoral shelves shall be constructed at random locations along lake edges with a maximum depth of two (2) feet below the lake control elevation, and shall be planted with native wetland vegetation. This work shall be done concurrently with construction of the final water management system.

~~8~~ h. In the 1989-90 bald eagle breeding season a bald eagle nest was constructed in the "witches broom" top of an Australian Pine tree located within 25 feet of the existing River's Edge golf course. Pursuant to the Lee County Bald Eagle Management Ordinance, River's Edge prepared a Southern Bald Eagle Habitat Management Plan for the River's Edge Yacht and Country Club which has been adopted by Lee County. The provisions of that plan, as it may be amended from time to time, are incorporated into this development order.

A resolution (#93-09-70) amending the Habitat Management Plan was approved by the Lee County Commission in September, 1993. The amendment deleted the specific nest preservation measures outlined in the eagle management plan because the Florida Game and Fresh Water Fish Commission (FGFWFC) and the Lee County Eagle Technical Advisory Committee (ETAC) determined the eagle nest abandoned and the perch tree had been blown down.

The resolution required the creation of a short term and long term plan encouraging bald eagles to continue utilizing River's Edge for perching and feeding. This plan shall include:

1) Designing and constructing an artificial perch for the Eagle Perch Island. The structural design and placement of the perch shall be subject to approval by the Lee County Eagle Technical Advisory Committee.

2) A planting plan to install thirty-five (35) South Florida slash pine trees (Pinus elliotti var. densa), a minimum of eight (8') feet in height, on the Eagle Perch Island. The pines shall be distributed and spaced to promote the growth of tall, straight trees with large crowns at the tops of the trees. The purpose of these pines is to provide future natural perching and roosting substrates for bald eagles.

The locations of the artificial perch and the pine plantings, including sizes and numbers, shall be clearly illustrated on a local development order plan for the new marina. The artificial perch and the plantings shall be installed and approved by Lee County Division of Natural Resources Management staff prior to issuance of the Certificate of Compliance for the marina.

However, if the plan is further amended, the Southwest Florida Regional Planning Council and the Department of Community Affairs shall be notified of the proposed amendment.

~~9~~ i. There shall be no entrance ways from River's Edge directly onto Griffin Boulevard or Schultz Road.

~~h~~ 9. STORM REFUGE

RIVER'S EDGE shall provide sufficient storm refuge space during the construction of the first 512 residential units to accommodate at least 24% of that population. Such refuge space shall meet the following conditions:

~~1~~ a. Located at least 16' above MSL.

~~2~~ b. No structures located within 150' of the shoreline shall be utilized as refuge space.

~~3~~ c. Designated refuge space shall be located in the interior hallways and similar areas with no openings leading directly to the exterior.

~~4~~ d. Refuge space shall be provided at a ratio of twenty (20) square feet per person.

~~5~~ e. A homeowners association shall be established to coordinate and educate the development's residents as to the availability of refuge areas and procedures to follow during a storm event.

~~6~~ f. Structures which provide refuge space shall be constructed to withstand 140 mph wind velocities and a professional engineer licensed and registered by the State of Florida shall so certify.

~~7~~ g. Subsequent to construction of the shelter, RIVER'S EDGE will provide comparative information and other data to assist Lee County in developing adequate on site storm shelter standards which may be included within the Lee County Building Codes.

h. In lieu of the on-site storm refuge requirements set forth in 9 a. through 9 g. above, the RIVER'S EDGE development may provide off-site storm refuge space. Said space shall be coordinated with and approved by the Lee County Emergency Management Services. The timing of said alternative shall be as described above.

~~i~~ 10. COMPLIANCE/MONITORING

~~1.~~ a) The Director of the Department of Community Development, or his designee, shall be the local official responsible for assuring compliance with this Development Order.

~~2.~~ b) Although estimated proposed construction schedules were set out in the ADA, this is not a phased Development of Regional Impact. This development order, as amended, shall remain in effect until the buildout date of May 4, 1998, unless subsequently extended by amendment.

~~3.~~ c) The RIVER'S EDGE development shall submit an annual report on the development to Lee County, the Regional Planning Council, and the State Land Planning Agency. This annual report shall be submitted beginning one (1) year from the date of this Development Order Amendment. The contents of the annual report shall be as required by the rules legally adopted by the Florida State Land Planning Agency.

SECTION THREE:

1. The River's Edge Yacht and Country Club Master Site Plan is hereby revised by the Master Site Plan stamped received February 8, 1994 (see Attachment A).

2. The River's Edge Yacht and Country Club Preservation Line Map is hereby revised by the Preservation Line Map stamped received 1-3-94 see Attachment B).

3. The Overall Marina Plan, last revised 10-5-93, is hereby adopted and shall comply with the Florida Department of Environmental Protection Permit #361061749 (see Attachment C).

SECTION FOUR:

Certified copies of this Development Order are to be forwarded to the Southwest Florida Regional Planning Council, the applicant, and appropriate state agencies. Notice of the adoption shall be recorded as provided in Chapter 380, Florida Statutes.

NOW, THEREFORE, LET IT BE ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that conditions of the Development Order for River's Edge DRI adopted May 5, 1982 and subsequent amendments are further amended as follows, with new language underlined and deletions struck through. All other portions of the original Development Order and subsequent amendments shall remain in full force and effect.

THE MOTION TO ADOPT the above amendments to the development order was offered by Commissioner John E. Manning, and seconded by Commissioner Douglas R. St. Cerny and, upon poll of the members present, the vote was as follows:

John E. Manning	AYE
Douglas R. St. Cerny	AYE
Ray Judah	AYE
Franklin B. Mann	ABSENT
John E. Albion	AYE

DULY PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, THIS 21ST DAY OF MARCH, A.D. 1994.

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

BY: Ray Judah
(CHAIRMAN)

ATTEST:
Charlie Green, Ex-Officio Clerk
Board of County Commissioners
_____, CLERK

BY: _____
DEPUTY CLERK

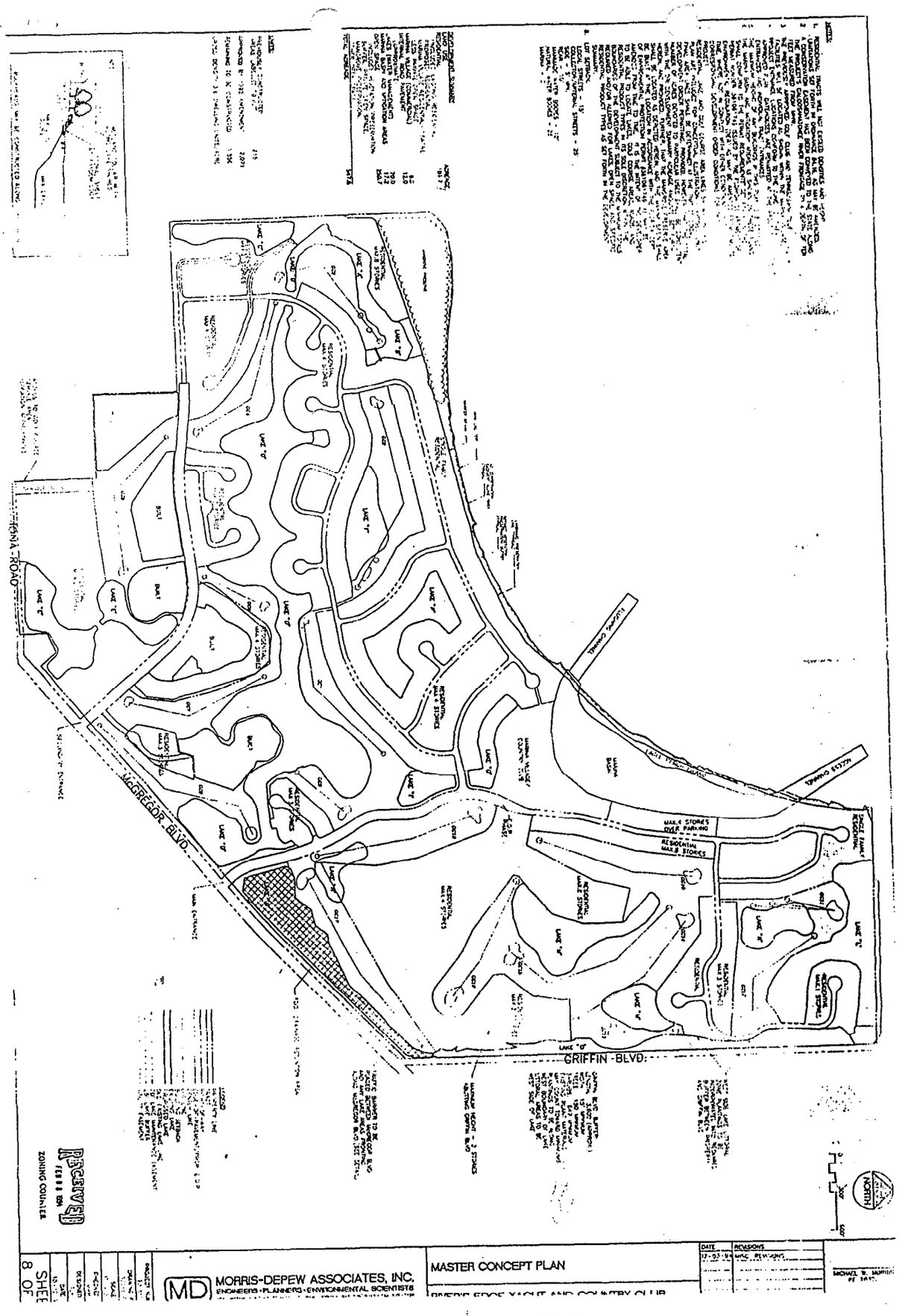
APPROVED AS TO FORM

BY _____
COUNTY ATTORNEY'S OFFICE

FILED

MAR 23 1994

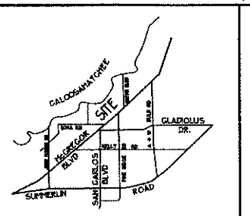
CLERK CIRCUIT COURT
BY _____ D.C.



ATTACHMENT A

SKETCH

OF THE PRESERVATION AREA
WITHIN RIVER'S EDGE YACHT AND COUNTRY CLUB,
SECTIONS 29, 30 + 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST,
LEE COUNTY, FLORIDA

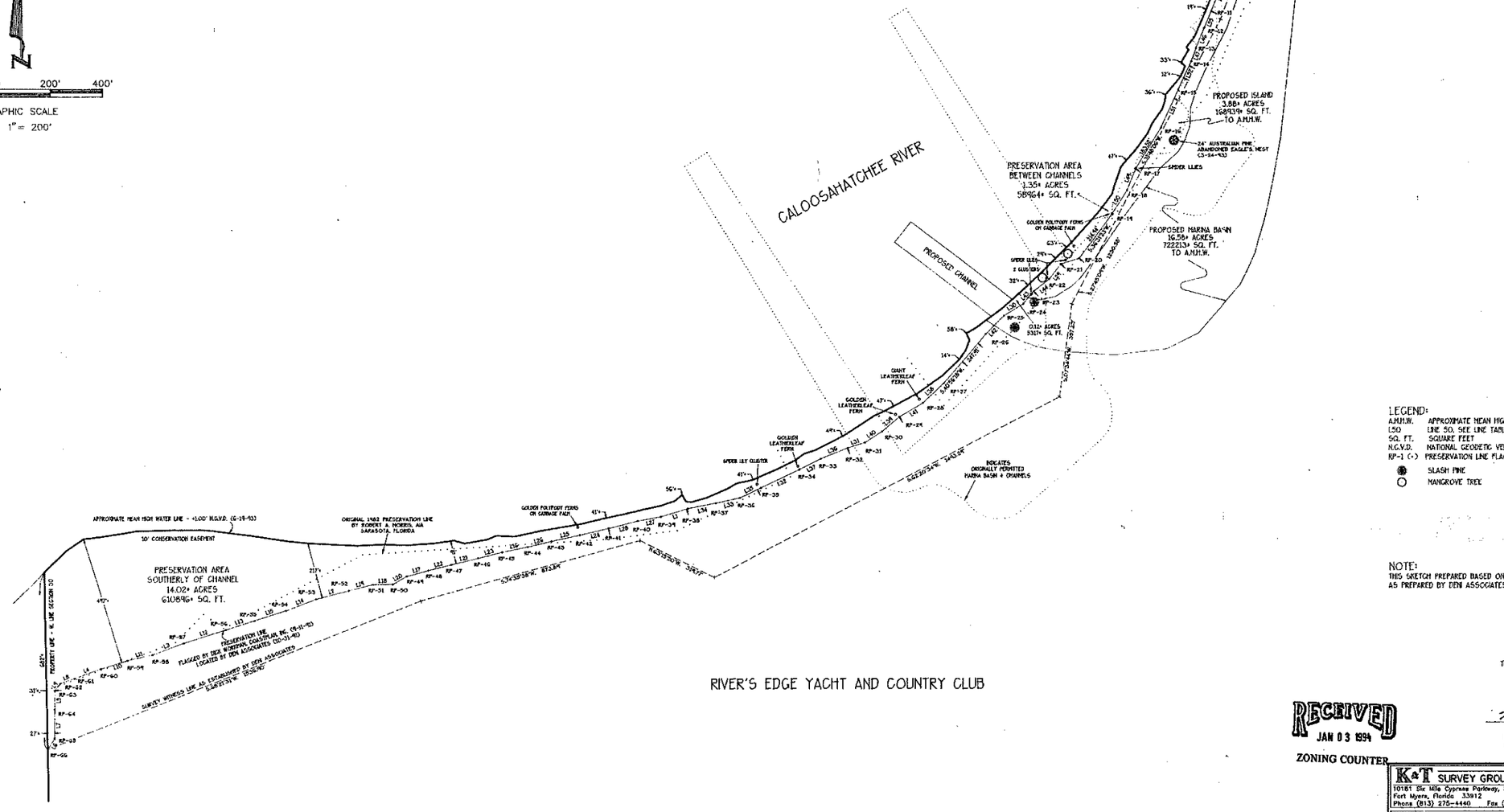


VICINITY MAP
NOT TO SCALE

N

200' 100' 0 200' 400'

GRAPHIC SCALE
1" = 200'



RIVER'S EDGE YACHT AND COUNTRY CLUB

LEGEND:

A.M.H.W.	APPROXIMATE MEAN HIGH WATER
L50	LINE SO, SEE LINE TABLE
SQ. FT.	SQUARE FEET
N.G.V.D.	NATIONAL GEODETIC VERTICAL DATUM OF 1929
RP-1 (•)	PRESERVATION LINE FLAG NUMBER ONE
✱	SLASH PINE
○	MANGROVE TREE

NOTE:
THIS SKETCH PREPARED BASED ON THE PRESERVATION LINE DRAWING AS PREPARED BY DEPEW ASSOCIATES, DATED 9-12-91.

THIS IS NOT A BOUNDARY SURVEY

RECEIVED
JAN 03 1994
ZONING COUNTER

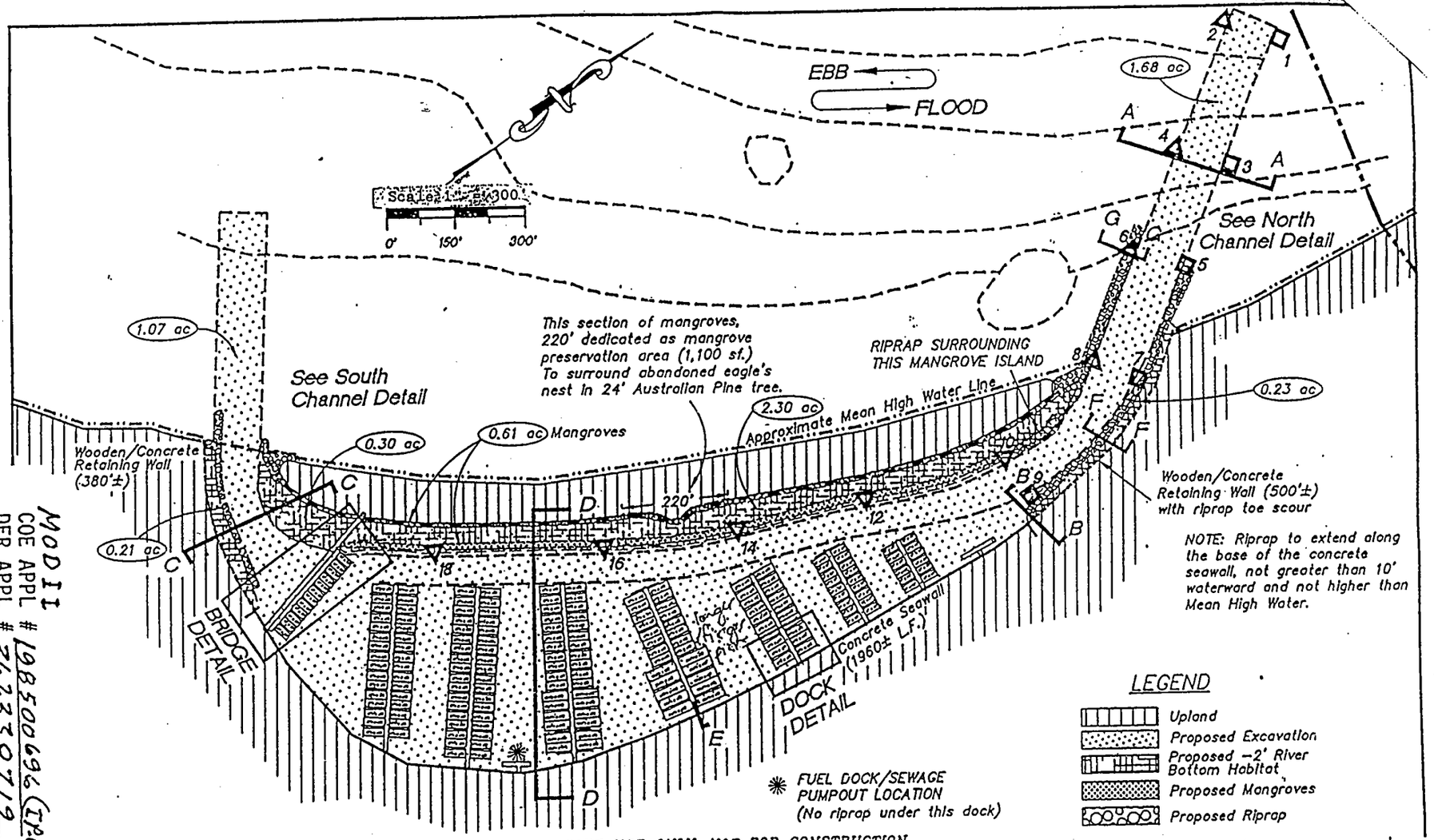
KENNETH E. TRASK
PROFESSIONAL LAND SURVEYOR
FLORIDA CERTIFICATE NO. 4684

REVISED 12-17-93 / ADD ADDITIONAL INFORMATION

K&T SURVEY GROUP, INC.
10181 Six Mile Cypress Parkway, Suite "C"
Fort Myers, Florida 33912
Phone (813) 275-4440 Fax (813) 275-3834

PREPARED FOR:	MORRIS-DEPEW ASSOCIATES
JOB #:	93-4290
DATE:	10-13-93
SCALE:	1"=200'
FB/PG:	N/A
DRAWN BY:	KT
S-T-R	30-45-24

81-09-08-DRI - e



PERMIT USE ONLY, NOT FOR CONSTRUCTION

MODII
COE APPL # 198500696 (IPS)
DER APPL # 362330719

DATE 7/30/93	2 | 17	FLORIDA DESIGN COMMUNITIES, INC.	Overall Marina Plan	DRAWN BY: hjmw REVISED: 9/9/93, 9/23/93, 10/5/93	W. DEXTER BENDER AND ASSOCIATES 1625 HENDRY ST. SUITE 201 FORT MYERS, FL 33901

FDC-MANA

Charlie Green
Clerk Of Circuit Court
Lee County, Florida

STATE OF FLORIDA

COUNTY OF LEE

I, Charlie Green, Clerk of Circuit Court, Lee County, and ex-Officio Clerk to the Board of County Commissioners, Lee County, Florida, do hereby certify that the foregoing is a true and photostatic copy of the Second Development Order Amendment for River's Edge Yacht and Country Club, DRI, State DRI No. 12-8182-21, County Case No. 81-09-08-DRI(c), adopted by the Board of County Commissioners on March 21, 1994.

Given under my hand and seal at Fort Myers, Florida, this 24th day of March, 1994.

CHARLIE GREEN,
Clerk, Circuit Court
Lee County, Florida

By Eileen J. Wacek,
Deputy Clerk

ATTACHMENT D

LEE COUNTY
RECEIVED

02 OCT 30 AM 8:48

COMM. DEV/
PUB. WKS. CNTR.
SECOND FLOOR

RESOLUTION NUMBER Z-02-020

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

WHEREAS, an application was filed by the property owner, Grosse Pointe Associates, Ltd., to amend the River's Edge DRI Development Order #12-8182-21; and

WHEREAS, a public hearing was advertised and held on June 18, 2002 and continued to July 24, 2002, before the Lee County Zoning Hearing Examiner, who gave full consideration to the evidence in the record for Case #DRI2001-00005; and

WHEREAS, a second public hearing was advertised and held on October 7, 2002 before the Lee County Board of Commissioners, who gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to amend the River's Edge DRI Development Order to:

a) permit the construction of a boardwalk and observation platform and to allow limited trimming of mangroves within Tract E; and

b) determine whether the proposed changes constitute a substantial deviation from the original development order approvals requiring further DRI review.

The property is located in the Suburban and Wetlands Land Use Categories and legally described in attached Exhibit A. The request is APPROVED, SUBJECT TO the conditions specified in Section B below.

SECTION B. CONDITIONS:

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

1. Development of this project must be in compliance with the River's Edge Yacht and Country Club DRI (aka Gulf Harbour) Development Order #12-8182-21, as amended, and DRI Map H dated 04/03/02 and stamped received at the permit counter on May 7, 2002.

2. The original zoning resolution and any amending resolutions remain in full force and effect except as may be modified by this approval.

3. The access boardwalk to the observation deck is limited to a five-foot width. The observation deck is limited to a maximum 400 square feet, and must meet the standards

of fishing piers in LDC §26-73. The boardwalk and observation deck must be field located to avoid impacts to the existing mangrove forest and individual large mangrove trees. Placement of the boardwalk must be within the limits of the existing berm along the west boundary of the mangrove preserve. The boardwalk and observation deck must be in substantial compliance with the Boardwalk and Observation Deck/Mangrove Trimming Plan prepared by W. Dexter Bender and Associates stamped received June 26, 2002 (attached as Exhibit E).

4. The rip-rap sill must consist of rock material no less than 10-inch in diameter and no greater than 24-inch in diameter. The rock must be placed in a manner that does not damage the existing mangroves. Prior to issuance of a Certificate of Compliance for the rip-rap sill, the rip-rap must be planted with three-gallon red mangrove seedlings or three-gallon wetland plants, such as leather fern, placed three-foot on center.

5. A Lee County Dock and Shoreline Permit must be obtained for the boardwalk/observation deck and the rip-rap sill. A planting plan for the rip-rap sill showing the locations, species and container size must be submitted with the Dock and Shoreline Permit for the Division of Environmental Sciences staff review and approval.

6. Prior to any mangrove trimming within the 10-acre preserve adjacent to the Palmas del Sol condominiums:

   a. The 10-foot wide rip-rap sill (breakwater) must be installed along the entire 10-acre mangrove preserve; and

   b. A Conservation Easement dedicated to Lee County and the Department of Environmental Protection (DEP) detailing the restrictions of the DEP mangrove trimming permit and the limited trimming of red mangrove must be recorded; and

   c. The donation of the 11-acre parcel (STRAP 27-45-23-00-00005.0000) must be executed at no cost to Lee County or the State of Florida. The applicant must pay all costs associated with the donation (e.g., surveys, closing fees, recording). Any exotic vegetation must be removed by hand from the 11-acre parcel prior to finalizing the donation.

7. The Division of Environmental Sciences staff must be notified of commencement and completion of any mangrove trimming and invasive exotic vegetation removal. Invasive exotic vegetation removal must be done concurrently with the mangrove trimming. All invasive exotic vegetation including, but not limited to, Brazilian pepper, melaleuca, Australian pine, seaside mahoe, and carrotwood must be removed from the preserve area.

SECTION C. EXHIBITS AND STRAP NUMBER:

The following exhibits are attached to this resolution and incorporated by reference:

Exhibit A: The legal description of the property
Exhibit B: Zoning Map (subject parcel identified with shading)
Exhibit C: The Master Concept Plan/Map H
Exhibit D. River's Edge Yacht and Country Club - Fourth Amendment
Exhibit E. Boardwalk and Observation Deck Plan

The applicant has indicated that the STRAP number for the subject property is:
30-45-24-13-0000A.0000

SECTION D. FINDINGS AND CONCLUSIONS:

1. The applicant has proven entitlement to the amendment by demonstrating compliance with the Lee Plan, the LDC, and any other applicable code or regulation.

2. The amendment, as approved:

   a. meets or exceeds all performance and locational standards set forth for the potential uses allowed by the request; and,

   b. is consistent with the densities, intensities and general uses set forth in the Lee Plan; and,

   c. is compatible with existing or planned uses in the surrounding area; and,

   d. will not place an undue burden upon existing transportation or planned infrastructure facilities and will be served by streets with the capacity to carry traffic generated by the development; and,

   e. will not adversely affect environmentally critical areas or natural resources.

3. The amendment satisfies the following criteria:

   a. the proposed use or mix of uses is appropriate at the subject location; and

   b. the recommended conditions to the concept plan and other applicable regulations provide sufficient safeguard to the public interest; and

   c. the recommended conditions are reasonably related to the impacts on the public interest created by or expected from the proposed development.

4. Urban services, as defined in the Lee Plan, are, or will be, available and adequate to serve the proposed land use.

5. The amendment does not constitute a substantial deviation under Florida Statutes §380.06(19)(e)(5)b.

The foregoing resolution was adopted by the Lee County Board of Commissioners upon the motion of Commissioner Ray Judah, seconded by Commissioner Andrew Coy and, upon being put to a vote, the result was as follows:

Robert P. Janes	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 7th day of October, 2002.

ATTEST:
CHARLIE GREEN, CLERK

BY: Michele B. Cooper
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE ~~COUNTY~~, FLORIDA

BY: _____
Chairman

Approved as to form by:

_____
County Attorney's Office

BOARD OF COUNTY COMMISSIONERS SEAL LEE COUNTY, FLORIDA

RECEIVED
MINUTES OFFICE
mgc
2002 OCT 29 PM 1:39

EXHIBIT "A"

LEGAL DESCRIPTION
Property located in Lee County, Florida

Banks Engineering, Inc.
Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

DESCRIPTION
OF A
PARCEL OF LAND
LYING IN
SECTIONS 29, 30, & 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA
(GULF HARBOUR)

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTIONS 29, 30, AND 31, TOWNSHIP 45 SOUTH RANGE 24 EAST, AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 30; THENCE S89°19'35"W (BEARINGS BASED ON THE FLORIDA COORDINATE SYSTEM, WEST ZONE) ALONG THE SOUTH LINE OF SAID SECTION 30 FOR 425.34 FEET TO THE INTERSECTION WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORDS BOOK 1837, PAGE 2982 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA AND THE POINT OF BEGINNING, THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY 556.64 TO THE INTERSECTION WITH THE EAST LINE OF SAID SECTION 30; THENCE CONTINUING N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE INTO SAID SECTION 29 FOR 202.49 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST AND SAID RIGHT-OF-WAY LINE FOR 141.67 FEET, RADIUS 2212.00 FEET, CHORD OF 141.65 FEET BEARING N47°37'OO"E; THENCE N45°46'55"E ALONG SAID RIGHT-OF-WAY LINE FOR 1444.31 FEET; THENCE N00°44'41"W, LEAVING SAID RIGHT-OF-WAY, ALONG THE WESTERLY LINE OF TRACT "B" PALMETTO POINT, AS RECORDED IN PLAT BOOK 29, PAGES 21 THROUGH 23 OF SAID PUBLIC RECORDS, AND ALONG THE WESTERLY RIGHT-OF-WAY LINE OF GRIFFIN BOULEVARD (50 FEET WIDE) FOR 3603.97 FEET; THENCE N89°37'45"W, LEAVING SAID RIGHT-OF-WAY LINE PARALLEL WITH AND 100 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 29 FOR 1279.05 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF SAID SECTION 30; THENCE N89°37'45"W PARALLEL WITH AND 100 FEET SOUTH OF THE NORTHERLY LINE OF SAID SECTION 30 FOR 554 FEET, MORE OR LESS, TO THE WATERS OF THE CALOOSAHATCHEE RIVER, THEN SOUTHWESTERLY AND WESTERLY ALONG THE WATERS OF THE CALOOSAHATCHEE RIVER FOR 6690 FEET, MORE OR LESS, TO THE INTERSECTION WITH THE WESTERLY LINE OF SAID SECTION 30 WHICH BEARS N01°03'43"W FROM THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE S01°03'43"E ALONG THE WESTERLY LINE OF SAID SECTION 30 FOR 2049 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE N88°46'47"E ALONG THE SOUTHERLY LINE OF SAID SECTION 30 FOR 1317.12 FEET TO THE SOUTHEAST CORNER OF GOVERNMENT LOT 2; THENCE S01°06'09" ALONG THE WESTERLY BOUNDARY LINE OF THE LANDS OF RIVER'S EDGE 3, A CONDOMINIUM AS RECORDED IN OFFICIAL RECORD BOOK 1783, PAGE 3709 OF SAID PUBLIC RECORDS, FOR 665.51 FEET TO THE SOUTHWEST CORNER OF

DRI 2001-00005

THE NORTHWEST QUARTER (NW1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SAID SECTION 31; THENCE N.88°51'11"E. ALONG THE SOUTH BOUNDARY LINE OF SAID CONDOMINIUM LANDS AND THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 593.45 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID CONDOMINIUM LAND; THENCE CONTINUE N88°51'11"E ALONG THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 65.45 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SAID SECTION 31; THENCE S01°09'19"E ALONG THE WESTERLY LINE OF SAID FRACTION OF SECTION 31 FOR 666.27 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION OF SECTION 31; THENCE N88°55'32"E ALONG THE SOUTHERLY LINE OF SAID FRACTION SECTION 31 FOR 659.51 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER(NW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 31; THENCE N89°11'55"E ALONG THE SOUTHERLY LINE OF SAID FRACTIONAL SECTION FOR 542.56 FEET; THENCE N01°07'54"W ALONG THE WESTERLY BOUNDARY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORD BOOK 2125, PAGE 2439, FOR 221.20 FEET TO THE NORTHWEST CORNER OF SAID LANDS; THENCE N65°09'03"E ALONG THE NORTHWESTERLY BOUNDARY LINE OF SAID LANDS FOR 163.03 FEET TO THE MOST NORTHERLY CORNER OF SAID LANDS; THENCE S40°32'55"E ALONG THE NORTHEASTERLY BOUNDARY LINE OF SAID LANDS, ALONG A LINE PERPENDICULAR WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD FOR 164.14 FEET TO THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN RECORD BOOK 1837, PAGE 2982 OF SAID PUBLIC RECORDS; THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE FOR 1826.43 FEET TO THE SOUTH LINE OF SAID SECTION 30 AND THE POINT OF BEGINNING.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, AND RIGHTS-OF-WAY.

BEARINGS ARE BASED ON THE SOUTH LINE OF THE SOUTH EAST QUARTER OF SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST AS BEARING S.89°19'35"W.

SUBJECT TO FACTS THAT MAY BE REVEALED BY AN ACCURATE BOUNDARY SURVEY.

DESCRIPTION PREPARED 7/31/01.

CCG/ta
S:\JOBS\90xx\9000-GH-DESCRIPTION.doc

Applicant's Legal Checked
by [signature] 7/11/01

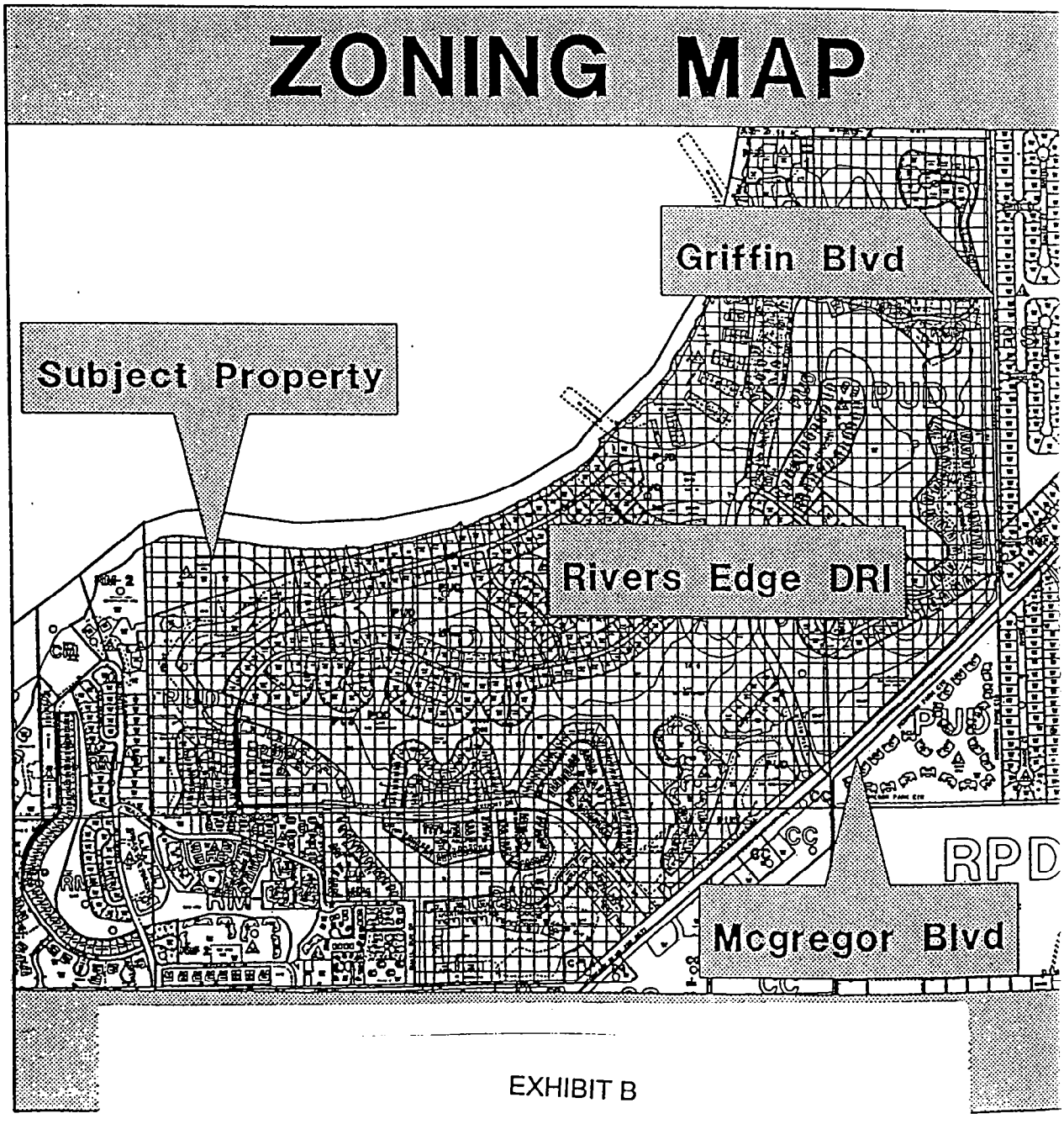
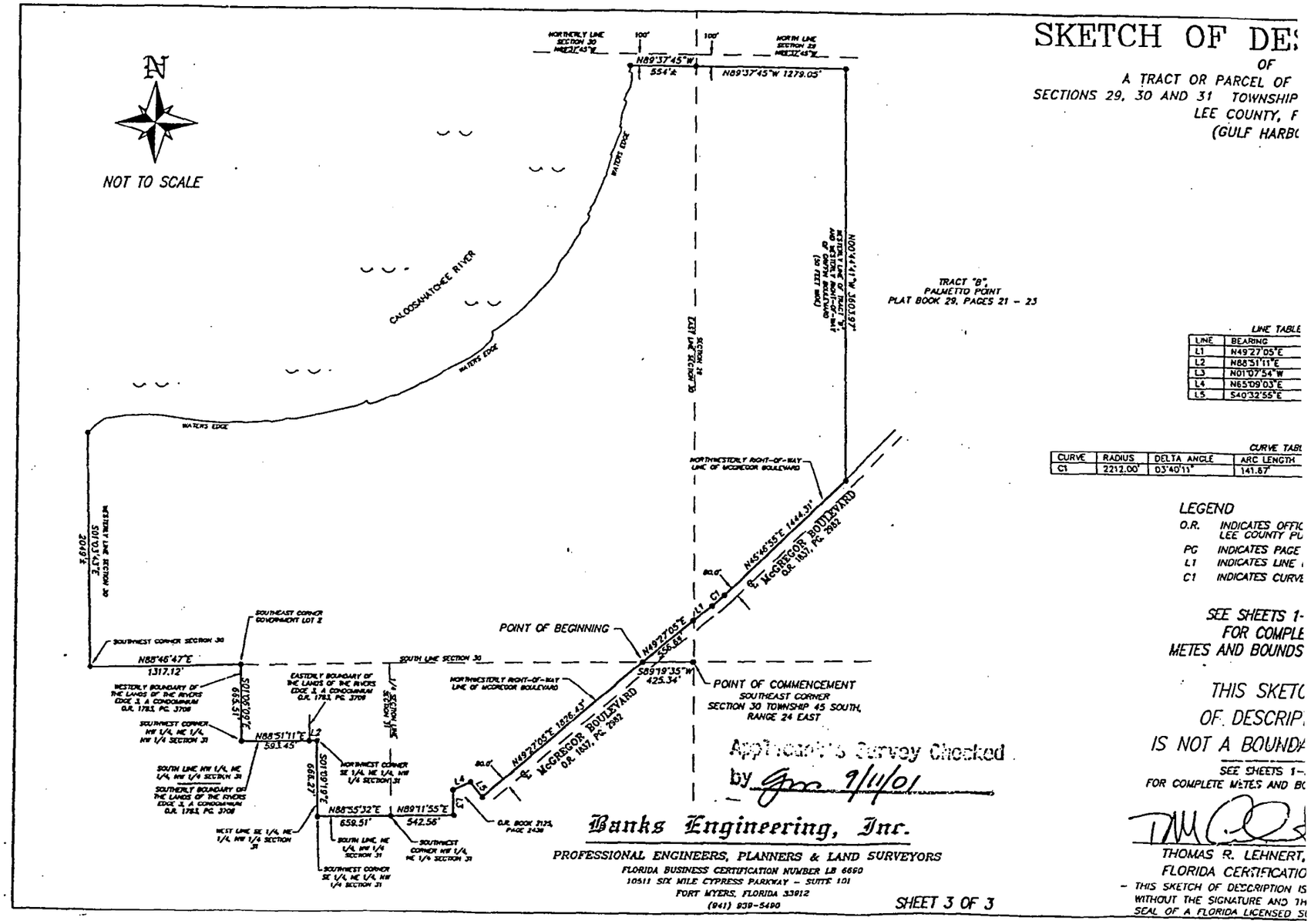

ZONING MAP
Griffin Blvd
Subject Property
Rivers Edge DRI
Mcgregor Blvd
RPD
PUD
RM
CC

EXHIBIT B



SKETCH OF DE

OF

A TRACT OR PARCEL OF
SECTIONS 29, 30 AND 31 TOWNSHIP
LEE COUNTY, F
(GULF HARBC

LINE TABLE

LINE	BEARING
L1	N49°27'05"E
L2	N88°51'11"E
L3	N01°07'54"W
L4	N65°09'03"E
L5	S40°32'55"E

CURVE TABL

CURVE	RADIUS	DELTA ANGLE	ARC LENGTH
C1	2212.00'	03°40'11"	141.67'

LEGEND

O.R. INDICATES OFFIC
LEE COUNTY PU
PG INDICATES PAGE
L1 INDICATES LINE
C1 INDICATES CURVE

SEE SHEETS 1-
FOR COMPLE
METES AND BOUNDS

THIS SKETC
OF DESCRIP
IS NOT A BOUNDA

SEE SHEETS 1-
FOR COMPLETE METES AND BC

Approximate Survey Checked
by 9/11/01

Banks Engineering, Inc.

PROFESSIONAL ENGINEERS, PLANNERS & LAND SURVEYORS
FLORIDA BUSINESS CERTIFICATION NUMBER LB 6660
10511 SIX MILE CYPRESS PARKWAY - SUITE 101
FORT MYERS, FLORIDA 33912
(941) 939-5490

THOMAS R. LEHNERT,
FLORIDA CERTIFICATIO

- THIS SKETCH OF DESCRIPTION IS
WITHOUT THE SIGNATURE AND TH
SEAL OF A FLORIDA LICENSED SU

SHEET 3 OF 3

NOTES:

1. RESIDENTIAL TRACTS WILL NOT EXCEED DENSITIES AND HEIGHT LIMITATIONS SET FORTH IN ORDINANCE 84.16, AS MAY BE AMENDED.
2. A CONSERVATION EASEMENT HAS BEEN CONVEYED TO THE STATE ALONG THE PROJECT'S CALOOSAHATCHEE RIVER FRONTAGE TO A DEPTH OF TEN FEET MEASURED FROM MHW.
3. THE PREVIOUSLY APPROVED GOLF CLUB AND TENNIS/SWIM CLUB FACILITIES WILL BE LOCATED AS SHOWN WITHIN THE MARINA VILLAGE. THESE FACILITIES INCLUDE THE MARINA ADMINISTRATION, MARINA AND MARINE SUPPLY SALES, FUEL SALES, THE GOLF CLUB PRO SHOP, THE TENNIS CLUB PRO. SHOP, THE GOLF CLUB DINING, LOUNGE, AND HEALTH CLUB FACILITIES, AND PROJECT SALES AND ADMINISTRATION OFFICES.
4. PROJECT ENTRANCE LOCATIONS CONFORM TO THE JUNE 12, 1984 APPROVED PLAN. GATEHOUSES ARE PERMITTED AT THE PROJECT ENTRANCES AND INDIVIDUAL TRACT ENTRANCES.
5. THE MAXIMUM HEIGHT OF ANY BUILDINGS IN THIS PLAN IS 8 STORIES.
6. THE MARINA BASIN AND MITIGATION AREAS, AS SHOWN ON THESE PLANS, SHALL CONFORM TO THE PERMIT REQUIREMENTS SET FORTH IN THE PERMIT NUMBER 361061749 ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AS MAY BE AMENDED FROM TIME TO TIME, WHERE NOT IN CONFLICT WITH OTHER CONDITIONS OF THE CORRESPONDING DEVELOPMENT ORDER CONDITIONS FOR THIS PROJECT.
7. RESIDENTIAL, LAKE, AND GOLF COURSE AREA LINES SHOWN ON THIS PLAN ARE INCLUDED FOR CONCEPTUAL ILLUSTRATION PURPOSES ONLY. FINAL AREA LINES SHALL BE DETERMINED AT THE TIME OF LOCAL DEVELOPMENT ORDER PERMITTING; PROVIDED, HOWEVER, THAT THE TOTAL NUMBER OF ACRES DEVOTED TO PARTICULAR USES SHALL BE CONSISTENT WITH THE DRI DEVELOPMENT SUMMARY ACREAGE AMOUNTS SET FORTH HEREIN; AND PROVIDED, FURTHER, THAT THE MANGROVE PRESERVE AREA SHALL BE LOCATED AS DEPICTED HEREIN, AND THE MARINA BASIN SHALL BE BUILT AT THE LOCATION IN ACCORDANCE WITH THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION PERMIT #361061749, AS MAY BE AMENDED FROM TIME TO TIME. IT IS THE INTENT OF THE DEVELOPER TO BE ABLE TO LOCATE LAKES, GOLF COURSE AREAS, ROADS, AND RESIDENTIAL PRODUCT TYPES IN ITS SOLE DISCRETION WITHIN THE BOUNDARIES OF THE DEVELOPMENT SUBJECT TO THE MINIMUM TOTALS REQUIRED AND/OR ALLOWED FOR LAKES, OPEN SPACE, AND SPECIFIC RESIDENTIAL PRODUCT TYPES AS SET FORTH IN THE DEVELOPMENT SUMMARY.
8. LOT SETBACK:
   LOCAL STREETS – 15'
   COLLECTOR/ARTERIAL STREETS – 25'
   SIDE – 5' MIN.
   REAR – 10'
   MANMADE WATER BODIES – 10'
   NATURAL WATER BODIES – 25'
   MARINA – 0'

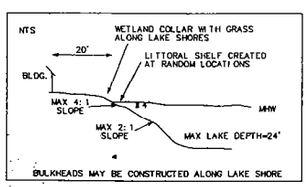
DEVELOPMENT SUMMARY:

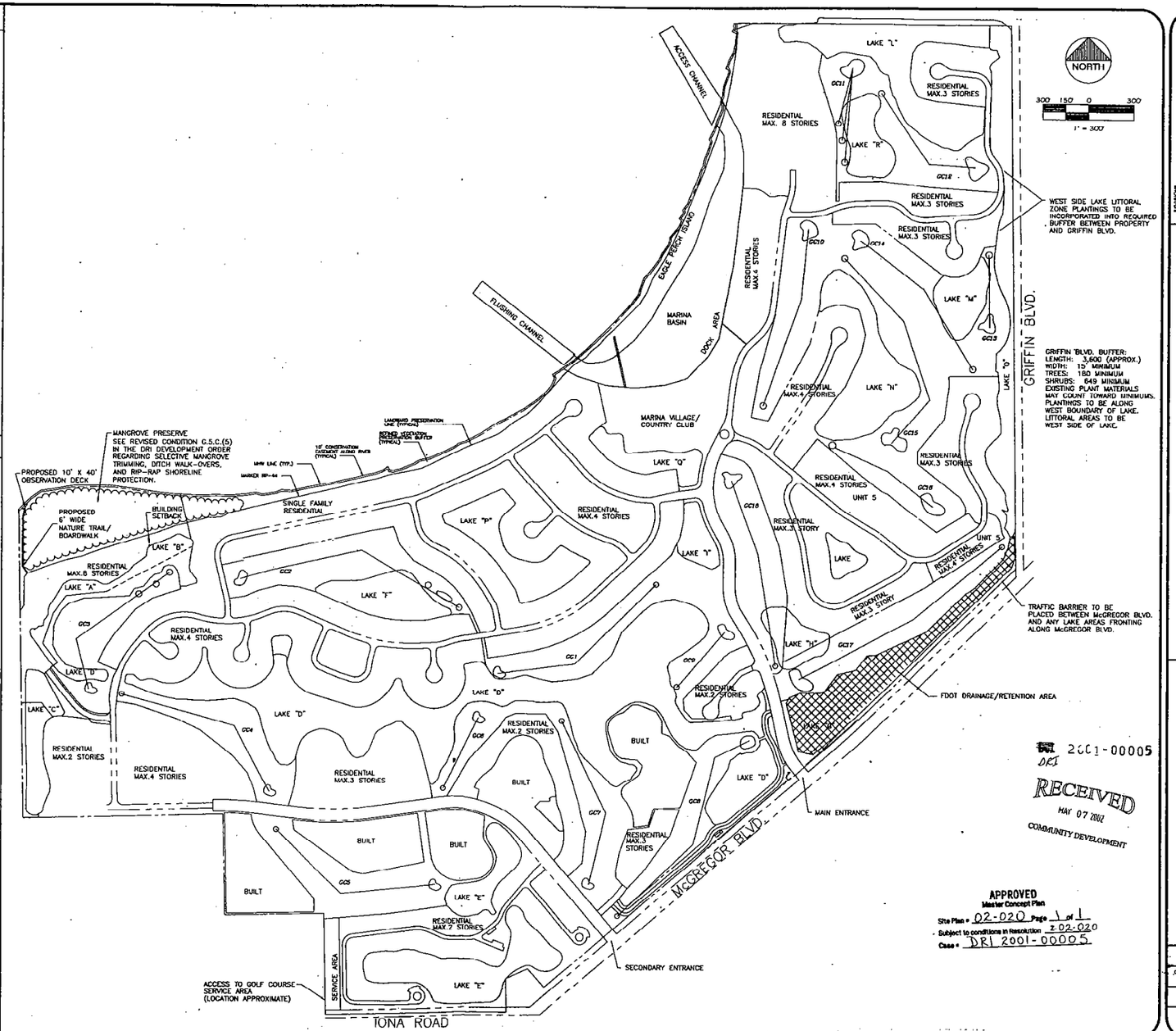
LAND USE	ACREAGE
RESIDENTIAL (INCLUDES EXISTING RESIDENTIAL, PROPOSED RESIDENTIAL, MARINA VILLAGE, LESS PRIVATE OPEN SPACE)	197.7
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	70.0
MARINA BASIN AND MITIGATION AREAS	17.2
OPEN SPACE (INCLUDES VEGETATION/PRESERVATION BUFFER, PRIVATE OPEN SPACE, MANGROVE PRESERVATION, OTHER OPEN SPACE)	250.7
TOTAL ACREAGE	547.6

UNITS:

PREVIOUSLY CONSTRUCTED (AREAS LABELED "BUILT"): 215

TOTAL UNITS APPROVED BY 1992 AMENDMENT: 2,071





MASTER CONCEPT PLAN / MAP H

MORRIS - DEPEW ASSOCIATES, INC.

REVISIONS

CHECKED BY DWD

04/

EXHIBIT D

FOURTH AMENDED DEVELOPMENT ORDER[1]

FOR

RIVER'S EDGE YACHT AND COUNTRY CLUB
(A/K/A GULF HARBOUR)

A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #12-8182-21
COUNTY CASE #81-09-08-DRI(c)

LET IT BE KNOWN that, pursuant to §380.06, Florida Statutes, the Board of County Commissioners of Lee County, Florida, considered the Application for Development Approval filed by Ramar Group, regarding a Development of Regional Impact consisting of 548 acres, at a public hearing and adopted the original development order for the River's Edge Yacht and County Club Development of Regional Impact (DRI)on April 19, 1982.

WHEREAS, the River's Edge Yacht and County Club DRI was amended on March 16, 1992 to decrease the density from 4,380 dwelling units to 2,071; relocate 6 golf holes, the golf course club house, tennis courts, marina basin and marina village; reduce the number of boat slips from 250 to 190 slips; and extend the buildout date 4 years and 11 months to May 4, 1998; and

WHEREAS, a second amendment to the River's Edge Yacht and County Club DRI was adopted on March 21, 1994 to modify the location and design of the marina facility; and

WHEREAS, a third amendment to the River's Edge Yacht and Country Club DRI was adopted on March 19, 2001 to (1) reduce the number of dwelling units from 2,071 to 1,987; (2) eliminate 200 hotel units; (3) replace the 65,000 square feet of commercial with a 5,000 square foot ship's store and 30,000 square foot club house; (4)eliminate the 250 seat restaurant; and (5) extend the buildout date an additional 7 years to May 4, 2005; and

WHEREAS, a Notice of Proposed Change was filed by Gross Pointe Associates, Ltd. on June 1, 2001 to allow construction of a boardwalk with observation platform and mangrove trimming within the established Mangrove Preservation Area (Tract E); and

WHEREAS, the requested amendment to impact an area specifically set aside for

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[1] This is a codification and restatement of all DRI development orders rendered with respect to the River's Edge Yacht and County Club DRI, including actions taken May 5, 1982, March 16, 1992, March 21, 1994, March 19, 2001 and October 7, 2002.

preservation is presumed to create a substantial deviation under §380.06(19)(e)5.b, but this presumption may be rebutted by clear and convincing evidence; and

WHEREAS, the Board of County Commissioners finds and determines that based upon the evidence in the record the proposed amendment does not constitute a substantial deviation warranting further DRI Review; and

NOW THEREFORE, it is resolved by the Board of County Commissioners that the development order for River's Edge Yacht and County Club DRI is further amended as follows:

***NOTE**: New language is underlined and deleted text is struck through.*

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A. The legal description of the River's Edge Yacht and County Club DRI property (aka Gulf Harbour) is ~~as follows~~ set forth in attached Exhibit A:

~~All that part of the West Half (W½) of the West Half (W½) of Section 29, Township 45 South, Range 24 East, lying Westerly of Griffin Boulevard and Northwesterly of McGregor Boulevard LESS the North 100 feet thereof;~~

~~Government Lot 1 of Section 30, Township 45 South, Range 24 East, LESS the North 100 feet thereof;~~

~~That part of the East Half (E½) of the Southeast Quarter (SE¼) of Section 30, Township 45 South, Range 24 East, located Northwesterly of McGregor Boulevard; All that part of the Northeast Quarter (NE¼) of the Northeast Quarter (NE¼) of Section 31, Township 45 South, Range 24 East, lying Northwesterly of McGregor Boulevard.~~

~~Government Lots 2, 3 and 4, Section 30, Township 45 South, Range 24 East; and the East Half (E½) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼); and the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼); and all that part of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of Section 31, Township 45 South, Range 24 East, lying Northwesterly from McGregor Boulevard;~~

~~EXCEPTING THEREFROM the following described parcel:~~

~~From the Southwest corner of said Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of said Section 31, run N88°57'56"E along the~~

~~South line of said fraction of a section for 542.85 feet;~~
~~THENCE run N01°07'16"W for 28.29 feet to a steel pin and the POINT OF BEGINNING. From said POINT OF BEGINNING continue N01°07'16"W for 190.44 feet to a concrete monument;~~
~~THENCE run N65°11'10"E for 162.71 feet to a concrete monument;~~
~~THENCE run S40°34'21"E for 204.09 feet to a steel pin marking the intersection with the Northwesterly line (40 feet from the centerline) of McGregor Boulevard (State Road S-867);~~
~~THENCE run S49°25'39"W for 154.71 feet to a nail marking the intersection with the Northerly line of Iona Road;~~
~~THENCE run S88°54'23"W along said Northerly line for 159.21 feet to the POINT OF BEGINNING.~~
~~LESS:~~

~~RIVER'S EDGE 1, A CONDOMINIUM, PHASES 1, 2 & 3~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W 180.00 feet;~~
~~THENCE N49°29'44"E, 83.10 feet;~~
~~THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet;~~
~~THENCE N51°50'16"W, 24.78 feet;~~
~~THENCE N01°51'26"E, 22.61 feet;~~
~~THENCE N11°09'44"E, 244.44 feet;~~
~~THENCE by a curve to the right, radius 175.00 feet, arc 33.64 feet, chord N16°40'08"E, 33.59 feet;~~
~~THENCE by a curve to the left, radius 260.00 feet, arc 74.75 feet, chord N13°56'28"E, 74.49 feet for a POINT OF BEGINNING.~~
~~THENCE continue by a curve to the left, radius 260.00 feet, arc 216.80 feet, chord N18°11'00"W, 210.58 feet;~~
~~THENCE by a curve to the right, radius 60.00 feet, arc 99.83 feet, chord~~ N05°35'45"E, 88.71 feet;
~~THENCE N53°15'47"E, 115.49 feet;~~
~~THENCE N20°00'00"E, 64.11 feet;~~
~~THENCE N42°00'00"W, 52.87 feet;~~
~~THENCE N85°20'16"W, 87.69 feet;~~
~~THENCE by a curve to the right, radius 72.00 feet, arc 85.18 feet, chord N51°26'46"W, 80.30 feet;~~

~~THENCE N17°33'16"W, 121.40 feet;~~
~~THENCE by a curve to the right, radius 102.00 feet, arc 157.55 feet, chord N26°41'44"E, 142.35 feet;~~
~~THENCE N70°56'44"E, 32.21 feet;~~
~~THENCE N48°00'00"E, 78.10 feet;~~
~~THENCE S42°00'00"E, 91.93 feet;~~
~~THENCE East 45.69 feet;~~
~~THENCE S68°02'00"E, 124.00 feet;~~
~~THENCE S31°30'00"E, 72.86 feet;~~
~~THENCE South 80.00 feet;~~
~~THENCE S68°27'08"E, 51.00 feet;~~
~~THENCE S42°00'00"E, 86.60 feet;~~
~~THENCE S56°10'00"E, 69.99 feet;~~
~~THENCE S19°20'31"W, 330.95 feet;~~
~~THENCE S88°30'00"W, 160.81 feet;~~
~~THENCE S18°03'57"W, 117.41 feet;~~
~~THENCE S83°00'00"W, 105.46 feet to the POINT OF BEGINNING.~~

~~LESS:~~

~~RIVER'S EDGE 2, A CONDOMINIUM~~

~~PARCEL A~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~

~~THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W, 873.40 feet;~~
~~THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;~~
~~THENCE S08°00'16"E, 40.00 feet for a POINT OF BEGINNING.~~
~~THENCE S81°59'44"W, 100.00 feet;~~
~~THENCE S08°00'16"E, 295.92 feet;~~
~~THENCE by a curve to the left, radius 195.00 feet, arc 311.41 feet, chord S53°45'16"E, 279.36 feet;~~
~~THENCE S80°29'44"E, 88.51 feet;~~
~~THENCE by a curve to the left, radius 127.00 feet, arc 254.91 feet, chord N22°59'44"E, 214.22 feet;~~
~~THENCE N34°30'16"W, 52.22 feet;~~

~~THENCE by a curve to the right, radius 85.00 feet, arc 58.48 feet, chord N14°47'44"W, 57.33 feet;~~
~~THENCE N04°54'47"E, 127.14 feet;~~
~~THENCE by a curve to the left, radius 610.00 feet, arc 310.49 feet, chord N83°25'21"W, 307.51 feet to the POINT OF BEGINNING.~~

~~Parcel B~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);~~
~~THENCE S49°29'44"W along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W, 873.40 feet;~~
~~THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;~~
~~THENCE S08°00'16"E, 40.00 feet;~~
~~THENCE S81°59'44"W, 150.00 feet for a POINT OF BEGINNING;~~
~~THENCE continue S81°59'44"W, 290.09 feet;~~
~~THENCE by a curve to the right, radius 2,040.00 feet, arc 534.07 feet, chord S89°29'44"W, 532.55 feet;~~
~~THENCE N83°00'16"W, 10.61 feet;~~
~~THENCE S08°38'08"E, 76.93 feet;~~
~~THENCE S54°54'53"E, 475.77 feet;~~
~~THENCE S78°15'16"E, 70.63 feet;~~
~~THENCE N78°55'10"E, 414.16 feet;~~
~~THENCE N08°00'16"W, 331.33 feet to the POINT OF BEGINNING.~~

~~LESS:~~

~~RIVER'S EDGE 3, A CONDOMINIUM~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;~~
~~THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;~~
~~THENCE S81°59'44"W, 440.09 feet;~~

~~THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet, chord S89°29'44"W, 522.10 feet;~~
~~THENCE N83°00'16"W, 243.34 feet;~~
~~THENCE by a curve to the left, radius 2,100.00 feet, arc 42.87 feet, chord N83°35'21"W, 42.87 feet;~~
~~THENCE S05°49'33"W, 40.00 feet for a POINT OF BEGINNING.~~
~~THENCE by a curve to the left, radius 229.68 feet, arc 147.84 feet, chord S21°49'09"E, 145.30 feet;~~
~~THENCE S40°15'34"E, 564.48 feet;~~
~~THENCE South, 96.97 feet to a point on the South boundary line of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31, Township 45 South, Range 24 East;~~
~~THENCE run along said South boundary line S88°54'50"W, 593.45 feet to the Southwest corner of the Northwest Quarter (NW¼) of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of said Section 31;~~
~~THENCE run along the West boundary line of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31, N01°02'30"W, 665.51 feet to the Northwest corner of the Northeast Quarter (NE¼) of the Northwest Quarter (NW¼) of Section 31;~~
~~THENCE continue N01°02'30"W, 19.01 feet to a point on a curve having a radius of 2,060.00 feet and lying N00°36'54" E from the radius point;~~
~~THENCE run in a Southeasterly direction along said curve to the right having an arc of 187.35 feet, having a chord bearing S86°46'47"E, 187.28 feet to the POINT OF BEGINNING.~~

~~LESS:~~

~~RIVER'S EDGE 4, A CONDOMINIUM, PHASES 2 & 4~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section, 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80 foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W, 448.60 feet;~~
~~THENCE N49°29'44"E, 40.00 feet;~~
~~THENCE N40°30'16"W, 195.80 feet for a POINT OF BEGINNING.~~
~~THENCE continue N40°30'16"W, 229.00 feet;~~
~~THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet;~~
~~THENCE N13°46'26"E, 67.29 feet;~~
~~THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of~~

~~240.00 feet, lying N66°55'38"W from the radius point;~~
~~THENCE traverse along the arc of said curve to the right, a distance of 140.00 feet, chord bearing N39°47'03"E, 138.02 feet;~~
~~THENCE by a curve to the left radius 155.00 feet, arc 91.98 feet, chord N39°29'44"E, 90.64 feet;~~
~~THENCE by a curve to the right, radius 450.00, arc 149.23 feet, chord N31°59'44"E, 148.54 feet;~~
~~THENCE by a curve to the right, radius 130.00 feet, arc 297.23 feet, chord S73°00'16"E, 236.59 feet;~~
~~THENCE by a curve to the left, radius 300.00 feet, arc 115.19 feet, chord S18°30'16"E, 114.49 feet;~~
~~THENCE by a curve to the right, radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;~~
~~THENCE S87°29'44"W, 25.00 feet;~~
~~THENCE S55°00'53"W, 21.10 feet;~~
~~THENCE by a curve to the right, radius 400.00 feet, arc 188.50 feet, S16°00'16"E, 186.76 feet;~~
~~THENCE S87°29'44"W, 25.00 feet;~~
~~THENCE S55°00'53"W, 21.10 feet;~~
~~THENCE S07°00'00"E, 19.00 feet;~~
~~THENCE S87°00'00"W, 62.00 feet;~~
~~THENCE S45°00'00"W, 50.00 feet;~~
~~THENCE S45°00'00"E, 227.14 feet;~~
~~THENCE N86°29'44"E, 28.89 feet to a point on a curve having a radius of 450.00 feet and lying S86°29'44"W from the radius point;~~
~~THENCE traverse along the arc of said curve, to the right, a distance of 86.39 feet, chord bearing S01°59'49"W, 86.26 feet;~~
~~THENCE by a curve to the right, radius 150.00 feet, arc 109.96 feet, chord S28°29'41"W, 107.51 feet;~~
~~THENCE S49°29'44"W, 15.00 feet to the POINT OF BEGINNING.~~
~~Said parcel contains 5.29± acres.~~

~~SUBJECT TO:~~

~~EASEMENT "A"~~

~~A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580.~~
~~A 40-foot easement lying in Section 31, Township 45 South, Range 24 East, Lee County, Florida, the centerline of which is described as follows:~~

~~Commence at the Northeast corner of said Section;~~
~~THENCE S89°23'18"W along the North line of said Section, a distance of 361.51 feet to the existing Northwesterly right-of-way line of McGregor Boulevard;~~
~~THENCE S49°29'44"W along said Northwesterly right-of-way line 1,320.47 feet to the POINT OF BEGINNING of said easement centerline;~~
~~THENCE N40°30'16"W, 180.00 feet;~~
~~THENCE N49°29'44"E, 83.10 feet;~~
~~THENCE by a curve to the left, radius 800.00 feet, arc 203.20 feet, chord N42°13'10"E, 202.65 feet to the Point of Terminus.~~

~~EASEMENT "B"~~

~~A non-exclusive easement for utilities and ingress and egress per the Declaration of Condominium of River's Edge 1, Official Records Book 1783, Page 3580, being an easement 30 feet in width from the terminus of the above described easement (40 foot wide, from McGregor Boulevard to the Southerly boundary of Phase 4) to the property described as Phase 3 on the condominium plat, the centerline of said easement being the same as the centerline of a paved roadway connecting said points, the approximate location of which roadway is depicted on the condominium plat. This easement must terminate at such time as the property described in Phase 4 on the condominium plat has been submitted to condominium ownership as part of River's Edge 1, a condominium.~~

~~EASEMENT "C"~~

~~A non-exclusive easement for utilities, cable television, and ingress and egress per the Declarations of Condominium of River's Edge 2, 3, and 4, Official Records Book 1783, Page 3649 and Official Records Book 1783, Page 3709 and Official Records Book 1841, Page 1465, respectively.~~

~~An 80-foot easement lying 40 feet each side of the following described centerline:~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet for a POINT OF BEGINNING.~~
~~THENCE leaving said right-of-way line run N40°30'16"W, 873.40 feet;~~

~~THENCE by a curve to the left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;~~
~~THENCE S81°59'44"W, 440.09 feet;~~
~~THENCE by a curve to the right, radius 2,000.00 feet, arc 523.60 feet; chord S89°29'44"W, 522.10 feet;~~
~~THENCE N83°00'16"W, 243.34 feet;~~
~~THENCE by a curve to the left, radius 2,100.00 feet, arc 298.94 feet, chord N87°04'57"W, 298.68 feet to the Point of Terminus.~~

~~EASEMENT "D"~~

~~A non-exclusive easement for utilities, trash receptacles, and ingress and egress per the Declaration of Condominium of River's Edge 2, Official Records Book 1783, Page 3649.~~

~~A 50-foot wide easement lying 25 feet each side of the following described centerline:~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida; THENCE S89°23'18" W, along the South line of said Section, 361.51 feet, to the intersection with the Northwesterly right-of-way line of McGregor Boulevard (80-foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W, 873.40 feet;~~
~~THENCE by a curve to left, radius 650.00 feet, arc 652.32 feet, chord N69°15'16"W, 625.29 feet;~~
~~THENCE S08°00'16"E, 40.00 feet;~~
~~THENCE S81°59'44"W, 100.00 feet;~~
~~THENCE S08°00'16"E, 219.00 feet to the POINT OF BEGINNING;~~
~~THENCE S78°33'43"W, along said centerline, a distance of 50.09 feet to the Point of Termination of said centerline.~~

~~EASEMENT "E"~~

~~A non-exclusive easement for utilities, cable television, and ingress and egress over and under that certain parcel described as follows, per the Declaration of Condominium of River's Edge 4, Official Records Book 1841, Page 1465.~~

~~Commence at the Southeast corner of Section 30, Township 45 South, Range 24 East, Lee County, Florida;~~
~~THENCE S89°23'18"W, along the South line of said Section 361.51 feet to the intersection with the Northwesterly right-of-way line of McGregor~~

~~Boulevard (80-foot right-of-way);~~
~~THENCE S49°29'44"W, along said right-of-way line, 1,320.47 feet;~~
~~THENCE N40°30'16"W, 448.60 feet;~~
~~THENCE N49°29'44"E, 40.00 feet;~~
~~THENCE N40°30'16"W, 424.80 feet;~~
~~THENCE by a curve to left, radius 690.00 feet, arc 430.17 feet, chord N58°21'53"W, 423.24 feet for a POINT OF BEGINNING.~~
~~THENCE N13°46'26"E, 67.29 feet;~~
~~THENCE N66°55'37"W, 35.00 feet to a point on a curve having a radius of 240.00 feet, lying N66°55'38"W from the radius point;~~
~~THENCE traverse along the arc of said curve to the left, 74.11 feet, chord bearing S14°13'35"W, 73.82 feet to a point on a curve having a radius of 690.00 feet and lying N10°51'23"E from the radius point~~
~~THENCE traverse along the arc of said curve to the right, 35.15 feet, chord bearing S77°41'03"E, 35.14 feet to the POINT OF BEGINNING.~~

~~SUBJECT TO:~~

~~Conservation easement to State of Florida, Official Records Book 2108, Page 1846.~~

~~Irrigation easement to River's Edge 3 Condominium Association, Inc., Official Records Book 2014, Page 1661.~~

~~Florida Cities Water Company water pipeline easements, Official Records Book 1764, Page 2014 and Official Records Book 1846, Page 4662.~~

~~Florida Power & Light Company utility easements, Official Records Book 1806, Page 1963 and Official Records Book 2168, Page 287.~~

~~Lee County utility easements, Official Records Book 2123, Page 3638 and Official Records Book 2212, Page 2138.~~

~~Easements, restrictions and reservations of record.~~

~~TOGETHER WITH Sovereignty Submerged Land Easement, Official Record Book 2137, Page 1893.~~

B. The River's Edge Yacht and County Club DRI is a Development of Regional Impact consisting of approximately 548 acres. The proposed development is depicted on Map "H", attached as Exhibit B and includes:

1. 1,987 dwelling units of which up to 788 may be single-family (detached and

zero lot line type units) and up to 1,199 multi-family on a total of 250.3 acres; approved, but unbuilt multi-family units may be exchanged for single-family units, provided that the resulting total mix of approved multi-family and single-family dwelling units do not exceed a gross trip generation rate of 1,349 p.m. peak hour trips as calculated from the fitted curve formulas of the 6th Edition of the ITE Trip Generation Manual for land use categories 210 and 230;

2. 135 acre 18 hole golf course and 30,000 square foot golf clubhouse with 250 parking spaces;

3. 190 wet berth marina and 5,000 square foot ancillary ship's store;

4. 7,000 gross square foot health club;

5. a 16 tennis court complex;

6. 70.0 acres of lakes;

7. 18.23 acre refined vegetation preservation buffer including:

   a 14.02 acre mangrove and listed plant species preserve area south of the proposed marine;

   b. a 3.88 acre eagles perch management and listed plant species preservation island of 3.88 acres;

   c. a 0.33 acre shoreline listed plant species preservation area of north of the proposed marina; and

8. 250.7 acres of open space (including golf course, preservation areas, and private open space, but excluding lake, marina mitigation and basin areas).

C. The subject property is currently zoned Planned Unit Development (PUD) in accordance with the Lee County Land Development Code and Lee County Ordinance 93-26.

D. The application for development approval is consistent with the requirements of §380.06, Florida Statutes.

E. The proposed development:

1. is not located in an area designated as an Area of Critical State Concern,

pursuant to the provisions of §380.05, Florida Statutes;

2. will not unreasonably interfere with the achievement of the objectives of the adopted State Land Development Plan applicable to the area; and

3. is consistent with the Lee County Comprehensive Plan and the Lee County Land Development Code.

F. The Southwest Regional Planning Council has reviewed the proposed development and adopted recommendations subsequently forwarded to Lee County pursuant to §380.06, Florida Statutes. The development, as proposed in the Application for Development Approval and modified by this amended Development Order, is consistent with the recommendations issued by the Southwest Regional Planning Council in accordance with §380.06(12).

G. The proposed conditions set forth below meet the criteria found in §380.05(15)(d), Florida Statutes.

H. The request to ~~extend the buildout date to May 4, 2005 constitutes a substantial deviation. However, based upon the traffic data submitted by the applicant and analyzed by Lee County Department of Transportation, the applicant has proven there are no additional regional impacts precipitated by the buildout extension.~~ amend the DRI Development Order to allow construction of a boardwalk and observation platform along the western edge of the Mangrove Preserve area and trim mangroves within the Preserve area to provide vistas for dwelling units is presumed to constitute a substantial deviation under § 380.06(19)(e)5.b, Florida Statutes . However, based upon the Developer's agreement to provide offsite mitigation and the conditions imposed on boardwalk location and mangrove trimming, the presumption has been rebutted and no additional regional impacts are precipitated by this amendment.

I. This constitutes the ~~Third~~ Fourth Amendment to the River's Edge Yacht and County Club DRI (aka Gulf Harbour)development order and is based upon the NOPC filed by ~~Watermark Communities, Inc.~~ Grosse Pointe Associates, Ltd.

II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

A ENERGY

1. The River's Edge development must comply with the Energy Code as adopted and in force at the time of commencement of each phase of the development.

2. River's Edge must construct a jogging and bicycle trail system as described in the Application for Development Approval (hereinafter referred to as the ADA) and the

Master Site Plan. That system is to connect all points within the project. Benches and special parking areas are to be provided for bicycles and golf carts at each commercial and recreational area. That portion of the system alongside McGregor Boulevard must be built in conformance with the Lee County Comprehensive Bicycle Facilities Plan and is to be dedicated to the County.

3. The Developers of River's Edge must design all facilities for optimum energy efficiency utilizing state-of-the-art energy conservation techniques, including but not limited to the following:

- proper roof and wall insulation
- glazing
- energy efficient appliances
- structure orientation for solar energy and natural ventilation
- structural shading, e.g., inclusive of porch/patio areas in residential units and utilization of roof overhangs for low-rise buildings
- proper landscaping throughout the project and planting of native shade trees and understory wherever appropriate for all active and passive recreation areas, streets and parking areas
- site design and landscaping to enhance energy conservation

4. River's Edge must cooperate with the Lee County Transit System in locating and providing bus stops and shelters within the development.

5. Alternate energy devices, such as solar collectors, may not be prohibited unless it is determined necessary for the protection of the health, safety and welfare of the residents of the River's Edge Yacht and Country Club DRI.

B. TRANSPORTATION

1. The River's Edge development is responsible for development of all roads and bike paths within the River's Edge development.

2. *Development Impact/Phasing Schedule.* The transportation impact assessment that forms the basis for this Development Order Amendment assumes the land uses and phasing schedule as set forth in attached Exhibit C with a project buildout date of May 4, 2005.

3. *Annual Monitoring Program.* Pursuant to Section 380.06(18), Florida Statutes, the River's Edge DRI must submit an "Annual Monitoring Report" to the Lee County Department of Transportation (LCDOT), the Southwest Florida Regional Planning Council (SWFRPC), and the Florida Department of Community Affairs (DCA) each year until project buildout. If the local government does not receive the annual report or

receives notification that the regional planning agency or the state land planning agency has not received the report, the local government must request in writing that the developer submit the report within thirty (30) days. The failure to submit the report after thirty (30) days may result in the temporary suspension of the Development Order by the local government. At a minimum, the monitoring report must contain a.m. and p.m. peak hour peak season traffic counts (with turning movements) and a professionally acceptable level of service analysis, mutually agreed upon by the Applicant's engineer, LCDOT, FDOT, SWFRPC and DCA, at all project access locations onto McGregor Boulevard (SR 867) as well as at the following regional roadway segments and all intersections included within and at the end of those segments:

REGIONAL ROAD SEGMENTS

McGregor Boulevard (SR 867) from

Gladiolus Drive to Pine Ridge Road
Pine Ridge Road to Cypress Lake Drive
Cypress Lake Drive to College Parkway
College Parkway to Winkler Road

Cypress Lake Drive from

McGregor Boulevard to South Pointe Blvd.
South Pointe Blvd. to Winkler Road
Winkler Road to Summerlin Road

Gladiolus Drive from

Pine Ridge Road to A&W Bulb Road
A&W Bulb Road to Winkler Road

Pine Ridge Road from

Gladiolus Drive to McGregor Boulevard

San Carlos Boulevard from

Summerlin Road to Kelly Road
Kelly Road to Gladiolus Drive

INTERSECTIONS:

Gladiolus Drive at Pine Ridge Road

McGregor Boulevard at San Carlos Boulevard/Gladiolus Drive
McGregor Boulevard at Iona Road
McGregor Boulevard at south project entrance
McGregor Boulevard at north project entrance/Pine Ridge Road
McGregor at A&W Bulb Road
McGregor Boulevard at Cypress Lake Drive
San Carlos Boulevard at Kelly Road

The above off-site intersections and roadway segments were identified as significantly impacted by greater than 5% utilization of the adopted level of service volume in the traffic impact statement submitted for the Notice of Proposed Change. Peak season peak hour traffic counts and level of service calculations must be performed by the developer's traffic consultant and submitted as part of the annual monitoring report for the significantly impacted road segments.

The purpose of this monitoring report is to: (1) determine if the projected traffic for the Year 2005 in the traffic impact assessment for River's Edge DRI Amendment is exceeded by actual impacts; (2) assist LCDOT and FDOT in determining the proper timing of necessary roadway improvements within the Lee Plan traffic district encompassing the River's Edge DRI (currently District 4); (3) determine the project's external trip generation compared to the estimate of 1,115 net new external trips.

The following is recognized and understood:

a. Traffic counts may be obtained from original machine and manual peak hour counts, Lee County Traffic Volume Reports and other DRI developments with similar monitoring requirements and other generally acceptable sources.

b. In the event that construction has not begun on the land uses identified above by the date the monitoring report is due, a letter to the above agencies documenting the development status on-site may be considered an acceptable replacement to the above traffic monitoring for that year.

4. *Site Related Improvements.* In addition to the payment of monies and other obligations specified in the Development Order Amendment, the Developer, or its successor, is required to construct, at no cost to Lee County and the Florida Department of Transportation, all site-related improvements deemed necessary by Lee County and the Florida Department of Transportation. The developer, or its successors, must construct site-related roadway and intersection improvements within River's Edge DRI. The Developer must construct any site-related intersection improvements (including but not limited to signalization, if warranted, turn lanes, and additional through lanes found to be

necessary by the governmental authority with jurisdiction of the roadway) as appropriate for the project's access intersections onto McGregor Boulevard (SR 867) throughout all phases of development.

When authorized by the Lee County Engineer or his designee, upon approval of plans by Lee County and FDOT, the developer, or his successors, must build the necessary site related intersection improvements to achieve the adopted level of service for the following intersections:

McGregor Boulevard (SR 867) at

Pine Ridge Road/River's Edge North Entrance (The Developer's responsibility does not include the realignment of Pine Ridge Road)

River's Edge South Entrance

Site-related improvements include any improvement deemed site-related at the time of construction under the definition contained in the Lee County Roads Impact Fee or Development Standards regulations, as either may be amended or replaced. The developer's obligation must include the full cost of design and engineering, drainage and utility relocation, right-of-way acquisition and dedication, construction of turn lanes, acceleration and deceleration lanes, construction inspection, contract administration, testing and signalization (as needed and warranted). The alignment, design, signalization, and construction schedule must be approved by the Lee County Engineer and FDOT. The developer must pay the full cost for any site-related intersection improvements found necessary by the County or FDOT for the project's access.

5. *Right-of-Way Dedications*. The property owner(s) have previously dedicated right-of-way to allow widening and improvement of McGregor Boulevard (SR 867). The dedicated property has been appraised at $191,000.

Additionally, the Florida Department of Transportation identified the need for a stormwater retention pond on the River's Edge site adjacent to McGregor Boulevard near the vicinity of Griffin Boulevard. The property owners dedicated this land to FDOT for the stormwater retention for the McGregor Boulevard widening improvements in 1995. The agreed upon value for this dedication was $1,742,000.

The $191,000 McGregor Boulevard widening right-of-way and the $1,742,000 stormwater retention dedication is applicable to reduce the proportionate share of River's Edge DRI transportation impacts. The dedications are not eligible for road impact fee credits.

6. *Mitigation of Transportation Impacts*:

a. As mitigation for the transportation impacts ~~of the~~ created by the development of River's Edge DRI in accordance with this amended development order the ~~d~~Developer, or its successors, must:

(1) dedicate property appraised at $191,000.00 dollars for the McGregor Boulevard widening[2]; and

(2) dedicate property to Lee County for the stormwater retention area necessary for the McGregor Boulevard widening, subject to certified appraisals agreed upon by Lee County and the Developer and approved by the Lee County Department of County Lands, determining the fair market value for the dedication. If an agreement cannot be reached on the appraisal amount, then the two appraisers chosen by the Developer and Lee County respectively will chose a third independent appraiser to do an appraisal, and the value will be established by an average of the three appraisals[3]; and

(3) pay Lee County Road Impact Fees at the fee schedule in effect at the time building permits are issued by Lee County. The Road Impact Fees applicable to development of the River's Edge DRI as approved in accordance with the third development amendment are currently estimated to be $2,935,689; and

b. Should the provisions of the roads impact fee regulations be repealed, made unenforceable or of no effect, they must nevertheless be required as payment for the transportation mitigation for the River's Edge DRI Development Order as described above.

c. The developer is informed that the Lee County Board of County Commissioners may adopt an interim operation improvement program and that such program may be applicable to this development.

7. Nothing contained in this Development Order Amendment is to imply or

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[2] This obligation has been satisfied.

[3] This obligation has been satisfied. The agreed upon value is $1,742,000. The developer also agreed to forgo any claim relating to property values in excess of the agreed upon value for the stormwater retention parcel transferred to FDOT.

supersede any Florida FDOT permitting requirements.

8. To fulfill the obligations of the developer to provide infrastructure, systems, facilities, and services as required herein, the developer may employ a number of alternative management and financing mechanisms, including a uniform community development district ("UCDD") pursuant to Chapter 190, Florida Statutes, a property owners association, and special assessments, all as applicable and as available by law. In the event the developer elects to use a UCDD, the developer will enter into a Developer's Agreement with Lee County. Such Developer's Agreement will delineate boundaries of the UCDD and must be subject to and not inconsistent with Chapter 190, Florida Statutes, and this Development Order. The various agencies that review this Development Order do not by accepting this condition waive any right they may have to comment on and review the management and financing mechanism chosen by the developer to manage and finance infrastructure, systems, facilities, services, and improvements pursuant to this paragraph. Furthermore, nothing contained in this Development Order may be construed to exempt this development from participation in the funding, through Municipal Services Benefit Unit (MSBU) or a Municipal Services Taxing Unit (MSTU), or a special assessment district, of improvements to various State and County arterial and collector roads to the degree the development is benefitted and has not already mitigated its impacts.

9. River's Edge proportionate share responsibility for any improvements required in this Development Order is discharged in full upon payment of the entire proportionate share contribution due under the terms of this section. [4] The contribution may not be reduced or refunded provided, however, that all other provisions of the Development Order also must govern.

10. If the proportionate share contribution due under the terms of this section is not paid in a timely manner, issuance of development approvals and building permits for River's Edge must immediately cease.

11. Compliance with all of the terms of the transportation related provisions of this development order must satisfy the substantive requirements related to regional transportation facilities of §§163.3177(10)(h) and 163.3202(2)(g), Florida Statutes (1989); Lee County concurrency regulations; the Lee County Comprehensive Plan, adopted pursuant to Chapter 163, Part II, Florida Statutes; and Rule 9J-5.0055, Florida Administrative Code, as they currently apply. Satisfaction of concurrency extends only through May 4, 2005.

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[4] Based upon the level of development approved through and including the Third Amendment to this development order, the only outstanding transportation mitigation payments due are the roads impact fees incurred at building permit issuance.

C. AIR QUALITY

The River's Edge development must comply with all applicable codes and apply for all required permits relative to air quality.

D. FIRE PROTECTION

The fire protection impacts created by development of River's Edge DRI will be mitigated by the payment of fire impact fees in accordance with the Lee County Land Development Code. No refund or credit for fire impact fees paid prior to the adoption of the third amendment to this development order will be issued.

E. PARKS

The park impacts created by development of River's Edge DRI will be mitigated by the payment of park impact fees in accordance with the Lee County Land Development Code. No refund or credit for park impact fees paid prior to the adoption of the third amendment to this development order will be issued.

F. SCHOOLS

River's Edge must provide off-street school bus loading zones for each development phase as deemed necessary by the Lee County School Board.

G. WATER SUPPLY, WATER QUALITY AND WILDLIFE HABITAT

1. No residential development may commence until sufficient water is available through a public water system to insure adequate fire flow, as well as a sufficient quantity of potable water, to adequately serve the residential development for which a building permit is requested.

2. During Phase I, River's Edge must plug all existing on-site wells in accordance with Lee County Division of Protective Services and South Florida Water Management District standards.

3. The River's Edge development must comply with the best management practices as defined by the South Florida Water Management District (SFWMD) with regard to the use of excavated areas and of wetlands acting as polishing and buffer areas and grassed swales for drainage purposes.

4. Pursuant to the drainage plans and permits approved by the SFWMD and the marina plans and permits approved by the Florida Department of Natural Resources,

Florida Department of Environmental Protection, and U.S. Army Corps of Engineers, stormwater drainage will be collected within the drainage lake system and discharged via a system of weir control structures into spreader swales. Stormwater will not be discharged into the marina basin or the marina mitigation area. Direct discharge of water/effluent by River's Edge DRI into the Caloosahatchee River is prohibited. South Florida Water Management District plans for River's Edge, Phase One, Primary Drainage System Reference Plan, dated January, 1984, revised 12-27-84, Sheet 2 of 27, shows Lakes "O" and "L" running along Griffin Boulevard and Schultz Road, connected by a littoral zone at the northeast corner of the property at the corner of Schultz Road and Griffin Boulevards. Those two lakes must remain substantially in the configuration as shown on the Water Management District Plans referenced herein. Minor adjustments may be made but must not result in a net reduction of the area of Lakes "O" and "L" which must continue to run in an alignment as shown along Griffin Boulevard and Schultz Road.

a. A row of shrubs and trees containing the Type "B" buffer vegetation (five trees and eighteen shrubs per 100 linear feet), suitably clustered subject to the approval of the Division of Environmental Sciences (DES), must be planted along the west side of the Lakes "O" and "L" along Griffin Boulevard. DES may not unreasonably withhold its approval.

b. Littoral shelves as required in condition G.7. must be constructed along Lakes "O" and "L".

c. A Type "B" buffer must be placed in front of Lakes "D" and "G" at the project entrance as shown on Map H attached as Exhibit B.

5. For the riverfront lots the following vegetation management and maintenance guidelines apply:

a. The following: spider lilies, golden polypody, giant leather fern, and golden leather fern, will hereinafter be referred to as "listed species." The developer must provide a vegetation conservation buffer along the river, as shown by the surveyed preservation line on attached Exhibit D (Preservation Line Map stamped received 1-3-94), excluding the area approved for the marina basin construction, marina mitigation area, boat access and flushing channels, for the purpose of conserving existing native vegetation, planting additional native vegetation and allowing passive recreational uses. The buffer area must consist of the naturally vegetated area between the Caloosahatchee River and the refined preservation line described above. Additionally, the preservation areas include the entirety of the Eagles Perch Island. It is the intent of the refined vegetation preservation line to provide natural shoreline stabilization through native vegetation and to protect a unique vegetation/wildlife habitat.

It is understood, however, that visual access to the river from the rear of the lot through the vegetation in the buffer and preservation is desired by the developer and may be allowed for specific, appropriate areas along the riverfront. Selective trimming of trees and vegetation within the preservation and buffer areas for this purpose may be permitted only in those areas specifically designated in this development order in the conditions specified below. Selective clearing for limited pedestrian access to the river via boardwalks or decks may also be permitted subject to the conditions specified below, but may not involve any dredge or fill activities of wetlands, any dredge or fill activities in the Caloosahatchee River, either the Eagles Perch Island or the Eagles Nest Island, nor involve preservation or buffer areas located west of a north-south line running through marker RP-44 as designated on Exhibit D and excluding the area identified on Exhibit F.

Access to the Eagle Perch Island must be allowed for purposes of 1) the removal and maintenance of invasive exotic vegetation; and 2) the limited pedestrian use. Access to the island and permitted activities are subject to the following conditions:

(1) The Eagle Perch Island must be accessed via the dock/bridge located in the western portion of the marina basin as shown on the overall Marina Plan, dated October 5, 1993 attached as Exhibit E.

(2) The point of access to the Eagle Perch Island may be a maximum 8 feet wide. The point of access must have a gate or similar obstruction to impede unauthorized vehicle (e.g. golf cart) access, yet allow pedestrian passage.

(3) Golf carts are permitted on the Eagle Perch Island only when used for the intermittent removal and maintenance of invasive exotic vegetation.

(4) Pedestrian uses permitted on the Eagle Perch Island include walking, bird watching, and nature observation. Pedestrian uses not permitted include any activities that involve boardwalks, development, trimming or removing of vegetation.

(5) In the event bald eagles build a nest on the Eagle Perch Island, access to the island must be prohibited during the Southern bald eagle nesting season October 1 through May 15.

b. The developer must remove all Brazilian ~~P~~pepper, ~~M~~melaleuca, and Australian ~~P~~pine from the refined preservation area with minimal possible

disturbance to existing native vegetation.

c. No development, boardwalks, trimming, or clearing of vegetation is allowed in the following preservation areas as depicted on attached Exhibit ~~C~~D:

(1) ~~Within~~ a complete ten foot (10') radius ~~of the~~ around any Cabbage Palm with the golden polypody located between marks RP-1 and RP-2;

(2) ~~On the~~ Eagles Perch Island;

(3) ~~Within~~ a complete ten foot (10') radius ~~of~~ around the golden leather fern located nearly adjacent to RP-34;

(4) West of a north-south line running through RP-44 excluding the area depicted on Exhibit F which is subject to subsection G.5.d.

The following conditions apply to the remaining preservation and buffer areas not listed in (1) through (4) above:

Other than the removal of the exotics delineated above, there must be no removal of any trees or vegetation greater than or equal to four inches in diameter at breast height (4" D.B.H.), except that at least a maximum four foot wide pedestrian access, located outside the preservation areas specified above may be permitted on each lot notwithstanding other limitations. Selective removal/replacement and trimming of trees and vegetation may be permitted for the purpose of providing limited pedestrian access to the river via boardwalks or decks provided all necessary agency or governmental permits are issued as limited by condition G.5.a. above. However, at a minimum, the buffer must contain those trees that are greater than or equal to 4" D.B.H. as well as naturally existing native understory growth. However, those trees or shrubs that are less than 4" D.B.H., or existing native understory growth, may be removed for purposes of providing visual access to the river or pedestrian access as described herein if said understory vegetation is replaced with native coastal strand vegetation replacement stock of not less than one gallon-size nursery grown containerized stock planted for any understory or shrubs removed, with a guaranteed survival rate of eighty percent (80%) after three years. Those trees that are removed must be relocated or replaced with a similar size tree. In no case must more than twenty percent (20%) of the refined preservation buffer be impacted for purposes of pedestrian access.

d. Selective trimming of native vegetation, one boardwalk with an observation

deck, and one access walkover is allowed on the property described in Exhibit F, which is a portion of tract E, per the following conditions:

(1) Mangrove Trimming

(a) Prior to any mangrove trimming within the 10 acre preserve adjacent to the Palmas del Sol condominiums the following must occur:

i) The 10-foot wide rip-rap sill (breakwater) must be installed along the entire 10 acre mangrove preserve described in Exhibit F; and

ii) A Conservation Easement, approved by the County Attorney's Office, dedicated to Lee County and the Department of Environmental Protection (DEP) detailing the restrictions of the DEP mangrove trimming permit and the limited trimming of red mangrove must be recorded; and

iii) A deed donating and conveying clear title to Lee County or the State of Florida to the 11 acre parcel identified as STRAP 27-45-23-00-00005.0000 must be executed and recorded. Prior to recording, the deed must be reviewed and approved by the County Attorney's office. The applicant must pay all costs associated with the donation (e.g. surveys, closing fees, recording). Any exotic vegetation must be removed by hand from the 11 acre parcel prior to the County's acceptance of the donation.

(b) Three (3) corridors, each the width of each of the buildings (240', 244' and 152' wide) and extending from the landward boundary of the property described in Exhibit F North Northwest to the Caloosahatchee River will have selective mangrove trimming and maintenance as described as follows and as shown on Exhibit G.

(c) All mangrove trimming must be conducted as permitted by the Florida Department of Environmental Protection (FDEP) General Mangrove Permit File No. 36-0152741-0003, which includes but not limited to the following conditions:

(i) Mangrove Trimming must be supervised or conducted exclusively by a Professional Mangrove Trimmer.

(ii) No herbicide or other chemical may be used for the purpose of removing leaves of a mangrove.

(iii) Trimming must be conducted in stages so that no more

than 25% of the foliage is removed annually, and the height and configuration of the mangroves trimmed under these general permits may be maintained.

(iv) The final height of trimmed mangroves to be maintained is 32' NGVD (approximately 30'+ from substrate). Only the mangroves within the mangrove trimming areas shown in Exhibit G may be trimmed. Because many of the trees in the mangrove trimming areas are less than 32' NGVD in height (as of June 2002), approximately thirty percent of the area will not be initially trimmed. Trees less than 32' NGVD in the mangrove trimming area will only be trimmed as they exceed 32' NGVD in the future to maintain the required elevation.

(d) Red mangroves trimming is limited on the main trunk to branches above 32' NGVD with a diameter of 1" or less. All other branches above 32' NGVD will be trimmed in compliance with the FDEP Permit.

(e) Once the final configuration and height (32' NGVD) is achieved, the trimming corridors will be maintained by annual trimming events.

(i) The property described in Exhibit F must be conveyed to the Palmas del Sol Condominium Association, subject to covenants and restrictions with respect to maintenance and use consistent with the Fourth Amendment to the DRI D.O.

(ii) The observation deck is limited to a maximum of 400 square feet, and must meet the standards of fishing piers in Land Development Code Section 26-73. The access boardwalk to the observation deck is limited to a 5-foot width. The boardwalk and observation deck must be field located to avoid impacts to the existing mangrove forest and individual large mangrove trees. Placement of the boardwalk must be within the limits of the existing berm along the west boundary of the mangrove preserve. The boardwalk and observation deck must be in substantial compliance with the Boardwalk and Observation Deck/Mangrove Trimming Plan prepared by W. Dexter Bender and Associates (attached as two-page Exhibit G).

(iii) A rip-rap revetment/breakwater system including red

mangrove plantings shall be installed along the shoreline of the portion of the property described in Exhibit F to protect the shoreline from further erosion as shown on Exhibit H. The rip-rap sill must consist of rock material no less than 10-inches in diameter and no greater than 24-inches in diameter. The rock must be placed in a manner that does not damage the existing mangroves. Prior to issuance of a Certificate of Compliance for the rip-rap sill, the rip-rap must be planted with 3-gallon red mangrove seedlings or 3-gallon wetland plants such as leather fern placed 3-foot on center.

(iv) A Lee County Dock and Shoreline Permit must be obtained for the boardwalk/observation deck and the rip-rap sill. A planting plan for the rip-rap sill showing the locations, species and container size must be submitted with the Dock and Shoreline Permit for the Division of Environmental Sciences staff review and approval.

(v) The entire 10.17 acre preserve shown in Exhibit F must be placed under a conservation easement granted to Lee County. The easement document must be reviewed and approved b the County Attorney's Office prior to recording in the public records.

(vi) The nuisance plant Moon vine (Ipomoea sp.) must be killed in place by an appropriate herbicide in the portion of the subject property described in Exhibit F.

(vii) *Monitoring.* The trimming corridors must be monitored annually for a period of ten (10) years from the date of initial trimming. Annual reports will be submitted to Lee County Environmental Sciences that analyze tree health, canopy coverage, plant species present and wildlife observed.

(viii) The Division of Environmental Sciences staff must be notified prior to commencement of any mangrove trimming and invasive exotic vegetation removal. Invasive exotic vegetation removal must be done concurrently with the mangrove trimming. All invasive exotic vegetation including, but not limited to, Brazilian pepper, melaleuca, Australian pine, seaside mahoe, and carrotwood must be removed from the preserve area.

~~d~~e. Prior to the recording of a subdivision plat for riverfront lots, these vegetation maintenance and management guidelines must be included by the developer in recorded deed restrictions applicable to any residential lots located adjacent to the river and must be enforceable by a homeowner's association as well as being made conditions of the DRI Development Order and local Development Order.

~~e~~f. Prior to any clearing in the single-family area along the river, there must be an on-site review by Lee County to insure that there is a complete radius of twenty-five feet (25') preserved around any giant leather ferns, ten feet (10') preserved around any golden leather fern or golden polypody, and that any spider lilies without a ten foot (10') radius of preserved area will be relocated or replaced on the River's Edge site with comparable nursery stock.

6. In the Marina mitigation area, prior to clearing or construction activity, a "listed species" vegetation survey must be conducted and any "listed species" located landward of the preservation line shown on Exhibit D must be relocated or replaced elsewhere on-site in a suitably similar habitat.

The spider lilies located near markers RP-21 and RP-22 and between RP-33 and RP-36 must be appropriately relocated and transplanted to appropriate habitat on the Eagles Perch Island by a qualified botanist hired by the developer prior to development of the flushing channel at this site. The methodology, location and details of this relocation and transplantation must be reported in the next annual monitoring report required to be submitted. Three years after the relocation, or in the 1997 annual monitoring report, whichever occurs first, a qualified botanist hired by the developer must report on the success or failure status of the relocation and discuss any discernible reasons surrounding the success or failure of the relocation.

7. For all manmade water bodies, except the marina basin, littoral shelves must be constructed at random locations along lake edges with a maximum depth of two (2) feet below the lake control elevation, and must be planted with native wetland vegetation. This work must be done concurrently with construction of the final water management system.

8. In the 1989-90 bald eagle breeding season a bald eagle nest was constructed in the "witches broom" top of an Australian Pine tree located within 25 feet of the existing River's Edge golf course. Pursuant to the Lee County Bald Eagle Management Ordinance, River's Edge prepared a Southern Bald Eagle Habitat Management Plan for the River's Edge Yacht and Country Club that has been adopted by Lee County. The provisions of that plan, as it may be amended from time to time, are incorporated into this development order.

A resolution (#93-09-70) amending the Habitat Management Plan was

approved by the Lee County Commission in September, 1993. The amendment deleted the specific nest preservation measures outlined by the eagle management plan because the Florida Game Commission (FGC) and the Lee County Eagle Technical Advisory Committee (ETAC) determined the eagle nest abandoned and the perch tree had been blown down.

The resolution required the creation of a short term and long term plan encouraging bald eagles to continue utilizing River's Edge for perching and feeding. This plan must include:

a. Designing and constructing an artificial perch for Eagle Perch Island. The structural design and placement of the perch must be subject to approval by the Lee County Eagle Technical Advisory Committee.

b. A planting plan to install thirty-five (35) South Florida slash pine trees (Pinus elliotti var. densa), a minimum of eight (8') feet in height, on the Eagle Perch Island. The pines must be distributed and spaced to promote the growth of tall, straight trees with large crowns at the tops of the trees. The purpose of these pines is to provide future natural perching and roosting substrates for bald eagles.

The locations of the artificial perch and the pine plantings, including sizes and numbers, must be clearly illustrated on a local development order plan for the new marina. The artificial perch and the plantings must be installed and approved by Lee County Division of Natural Resources Management staff prior to issuance of the Certificate of Compliance for the marina.

However, if the plan is further amended, the Southwest Florida Regional Planning Council and the Department of Community Affairs must be notified of the proposed amendment.

9. There must be no entrance ways from River's Edge directly onto Griffin Boulevard or Schultz Road.

I. HURRICANE MITIGATION

River's Edge must provide sufficient storm shelter space during the construction of the first 512 residential units to accommodate at least 24% of that population. Such shelter space must meet the following conditions:

1. Located at least 16' above MSL.

2. No structures located within 150' of the shoreline may be utilized as shelter space.

3. Designated shelter space must be located in the interior hallways and similar areas with no openings leading directly to the exterior.

4. Shelter space must be provided at a ratio of twenty (20) square feet per person.

5. A homeowners association must be established to coordinate and educate the development's residents as to the availability of shelter areas and procedures to follow during a storm event.

6. Structures that provide shelter space must be constructed to withstand 140 mph wind velocities and a professional engineer licensed and registered by the State of Florida must so certify.

7. Subsequent to construction of the shelter, River's Edge will provide comparative information and other data to assist Lee County in developing adequate on site storm shelter standards that may be included within the Lee County Building Code.

8. In lieu of the on-site storm shelter requirements set forth above, the River's Edge development may provide off-site storm shelter space. The space must be coordinated with and approved by the Lee County Emergency Management Services. The timing of this alternative must be as described above.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER AND ADMINISTRATIVE REQUIREMENTS

1. This Codified Development Order Amendment constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the River's Edge Yacht and Country Club DRI NOPC.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval, subsequent NOPC applications and supplementary documents not in conflict with conditions or stipulations specifically enumerated above are hereby incorporated by reference into this Development Order Amendment.

3. This Development Order Amendment is binding upon the developer, its successors and assigns. Those portions of this Development Order Amendment that

clearly apply only to the project developer, will be binding upon any builder/developer who acquires any tract of land within the River's Edge Yacht and Country Club DRI.

4. The terms and conditions set out in this document constitute a basis upon which the developer and County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

5. All conditions, restrictions, stipulations and safeguards contained in this Resolution and Development Order Amendment may be enforced by either party hereto in an action at law or equity, and all costs of such proceedings, including reasonable attorneys' fees will be paid by the prevailing party.

6. It is understood that any reference herein to any governmental agency will be construed to mean future instrumentalities created and designated as successors in interest to, or which otherwise possesses the powers and duties of the referenced governmental agency in existence on the effective date of this Development Order Amendment.

7. If any portion or section of this Development Order Amendment is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will not affect the remaining portions or sections of the Development Order Amendment, which will remain in full force and effect.

8. The approval granted by this Development Order Amendment is limited. Approval may not be construed to obviate the duty of the developer to comply with all applicable local or state review and permitting procedures, except where otherwise specifically provided.

9. Subsequent requests for local development permits will not require further review pursuant to § 380.06, Florida Statutes, unless the Board of County Commissioners finds, after due notice and hearing, that one or more of the following occurs:

a. A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plan creates a reasonable likelihood of adverse regional impacts or other regional impacts not evaluated in the review by the Southwest Florida Regional Planning Council; or

b. Expiration of the period of effectiveness of this Development Order.

Upon a finding that either of the above has occurred, the Board may order a termination of all development activity until a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with §380.06, Florida

Statutes.

10. This Development Order Amendment otherwise terminates on May 4, 2005, unless an extension is approved by the Board. The established buildout date under this Development Order Amendment is May 4, 2005.

11. An extension of the buildout or termination date may be granted by the Board of County Commissioners if the project has been developing substantially in conformance with the original plans and approval conditions, and if no substantial adverse impacts not known to the Southwest Florida Regional Planning Council or to Lee County at the time of their review and approval, or arising due to the extension, have been identified. Future requests to extend time will be evaluated cumulatively with past requests in accordance with F.S. §380.06(19). For the purpose of calculating when a buildout date has been exceeded, the time is tolled during the pendency of administrative and judicial proceedings relating to development permits.

12. The Administrative Director of the Lee County Department of Community Development or his/her designee, is the local official responsible for assuring compliance with this Development Order.

13. The development will not be subject to down-zoning, or intensity reduction, for five (5) years following the date this Development Order Amendment is approved, unless the County demonstrates that substantial changes have occurred in the conditions underlying the approval of this Development Order amendment including, but not limited to such factors as a finding that the Development Order Amendment was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

14. The developer, or its successor in title to the undeveloped portion of the subject property, must continue to submit a report annually to Lee County, the Southwest Florida Regional Planning Council, the State land planning agency (the Department of Community Affairs), and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission, and must further be consistent with the rules of the State land planning agency. The annual report must include information required by Florida Statutes §380.06.

The first monitoring report must be submitted to the Administrative Director of the Department of Community Development not later than one year after the effective date of this Development Order Amendment, and further reporting must be submitted not later than May 1st of subsequent calendar years thereafter, until buildout. Failure to comply with this reporting procedure is governed by §380.06(18) Florida Statutes, and the developer must so inform any successor in title to any undeveloped portion of the real property covered by this Development Order. This may not be construed to require reporting from

individual tenants.

15. Certified copies of this Development Order Amendment will be forwarded to the Southwest Florida Regional Planning Council, the Applicant, and appropriate state agencies. This Development Order Amendment is rendered as of the date of that transmittal, but is not effective until the expiration of the statutory appeals period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order Amendment becoming effective, the developer must record a notice of its adoption in accordance with § 380.06(15), Florida Statutes.

THE MOTION TO ADOPT this Resolution approving and adopting this Development Order Amendment was offered by Commissioner Ray Judah and seconded by Commissioner Andrew Coy and upon poll of the members present, the vote was as follows:

Robert P. Janes	Aye
Douglas R. St. Cerny	Aye
Ray Judah	Aye
Andrew W. Coy	Aye
John E. Albion	Aye

DULY PASSED AND ADOPTED this 7th day of October, 2002.

ATTEST:
Charlie Green, Clerk

By: Michele B. Cooper
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

By: _____
Chairman

APPROVED AS TO FORM

By: Dawn E. Perry-Lehnert
County Attorney's Office

Attachments:

Exhibit A - Legal Description
Exhibit B - Map H
Exhibit C - Phasing Schedule
Exhibit D - Sketch of Preservation Line Map - dated 10-13-93
Exhibit E -Overall Marina Plan - dated October 5, 1993
Exhibit F - Sketch of Phase 4 Preservation Area dated 5-1-2002
Exhibit G- Boardwalk and Observation Deck/Mangrove Trimming Plan
2 page exhibit prepared by Dexter Bender & Associated dated 6-26-2002 and 6-19-2002 respectively
Exhibit H - Rip Rap detail

EXHIBIT "A"

LEGAL DESCRIPTION
Property located in Lee County, Florida

Banks Engineering, Inc.

Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

DESCRIPTION
OF A
PARCEL OF LAND
LYING IN
SECTIONS 29, 30, & 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA
(GULF HARBOUR)

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTIONS 29, 30, AND 31, TOWNSHIP 45 SOUTH RANGE 24 EAST, AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 30; THENCE S89°19'35"W (BEARINGS BASED ON THE FLORIDA COORDINATE SYSTEM, WEST ZONE) ALONG THE SOUTH LINE OF SAID SECTION 30 FOR 425.34 FEET TO THE INTERSECTION WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORDS BOOK 1837, PAGE 2982 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA AND THE POINT OF BEGINNING, THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY 556.64 TO THE INTERSECTION WITH THE EAST LINE OF SAID SECTION 30; THENCE CONTINUING N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE INTO SAID SECTION 29 FOR 202.49 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST AND SAID RIGHT-OF-WAY LINE FOR 141.67 FEET, RADIUS 2212.00 FEET, CHORD OF 141.65 FEET BEARING N47°37'OO"E; THENCE N45°46'55"E ALONG SAID RIGHT-OF-WAY LINE FOR 1444.31 FEET; THENCE N00°44'41"W, LEAVING SAID RIGHT-OF-WAY, ALONG THE WESTERLY LINE OF TRACT "B" PALMETTO POINT, AS RECORDED IN PLAT BOOK 29, PAGES 21 THROUGH 23 OF SAID PUBLIC RECORDS, AND ALONG THE WESTERLY RIGHT-OF-WAY LINE OF GRIFFIN BOULEVARD (50 FEET WIDE) FOR 3603.97 FEET; THENCE N89°37'45"W, LEAVING SAID RIGHT-OF-WAY LINE PARALLEL WITH AND 100 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 29 FOR 1279.05 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF SAID SECTION 30; THENCE N89°37'45"W PARALLEL WITH AND 100 FEET SOUTH OF THE NORTHERLY LINE OF SAID SECTION 30 FOR 554 FEET, MORE OR LESS, TO THE WATERS OF THE CALOOSAHATCHEE RIVER, THEN SOUTHWESTERLY AND WESTERLY ALONG THE WATERS OF THE CALOOSAHATCHEE RIVER FOR 6690 FEET, MORE OR LESS, TO THE INTERSECTION WITH THE WESTERLY LINE OF SAID SECTION 30 WHICH BEARS N01°03'43"W FROM THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE S01°03'43"E ALONG THE WESTERLY LINE OF SAID SECTION 30 FOR 2049 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE N88°46'47"E ALONG THE SOUTHERLY LINE OF SAID SECTION 30 FOR 1317.12 FEET TO THE SOUTHEAST CORNER OF GOVERNMENT LOT 2; THENCE S01°06'09" ALONG THE WESTERLY BOUNDARY LINE OF THE LANDS OF RIVER'S EDGE 3, A CONDOMINIUM AS RECORDED IN OFFICIAL RECORD BOOK 1783, PAGE 3709 OF SAID PUBLIC RECORDS, FOR 665.51 FEET TO THE SOUTHWEST CORNER OF

THE NORTHWEST QUARTER (NW1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SAID SECTION 31; THENCE N.88°51'11"E. ALONG THE SOUTH BOUNDARY LINE OF SAID CONDOMINIUM LANDS AND THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 593.45 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID CONDOMINIUM LAND; THENCE CONTINUE N88°51'11"E ALONG THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 65.45 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SAID SECTION 31; THENCE S01°09'19"E ALONG THE WESTERLY LINE OF SAID FRACTION OF SECTION 31 FOR 666.27 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION OF SECTION 31; THENCE N88°55'32"E ALONG THE SOUTHERLY LINE OF SAID FRACTION SECTION 31 FOR 659.51 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER(NW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 31; THENCE N89°11'55"E ALONG THE SOUTHERLY LINE OF SAID FRACTIONAL SECTION FOR 542.56 FEET; THENCE N01°07'54"W ALONG THE WESTERLY BOUNDARY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORD BOOK 2125, PAGE 2439, FOR 221.20 FEET TO THE NORTHWEST CORNER OF SAID LANDS; THENCE N65°09'03"E ALONG THE NORTHWESTERLY BOUNDARY LINE OF SAID LANDS FOR 163.03 FEET TO THE MOST NORTHERLY CORNER OF SAID LANDS; THENCE S40°32'55"E ALONG THE NORTHEASTERLY BOUNDARY LINE OF SAID LANDS, ALONG A LINE PERPENDICULAR WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD FOR 164.14 FEET TO THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN RECORD BOOK 1837, PAGE 2982 OF SAID PUBLIC RECORDS; THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE FOR 1826.43 FEET TO THE SOUTH LINE OF SAID SECTION 30 AND THE POINT OF BEGINNING.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, AND RIGHTS-OF-WAY.

BEARINGS ARE BASED ON THE SOUTH LINE OF THE SOUTH EAST QUARTER OF SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST AS BEARING S.89°19'35"W.

SUBJECT TO FACTS THAT MAY BE REVEALED BY AN ACCURATE BOUNDARY SURVEY.

DESCRIPTION PREPARED 7/31/01.

CCG/ta
S:\JOBS\90xx\9000-GH-DESCRIPTION.doc

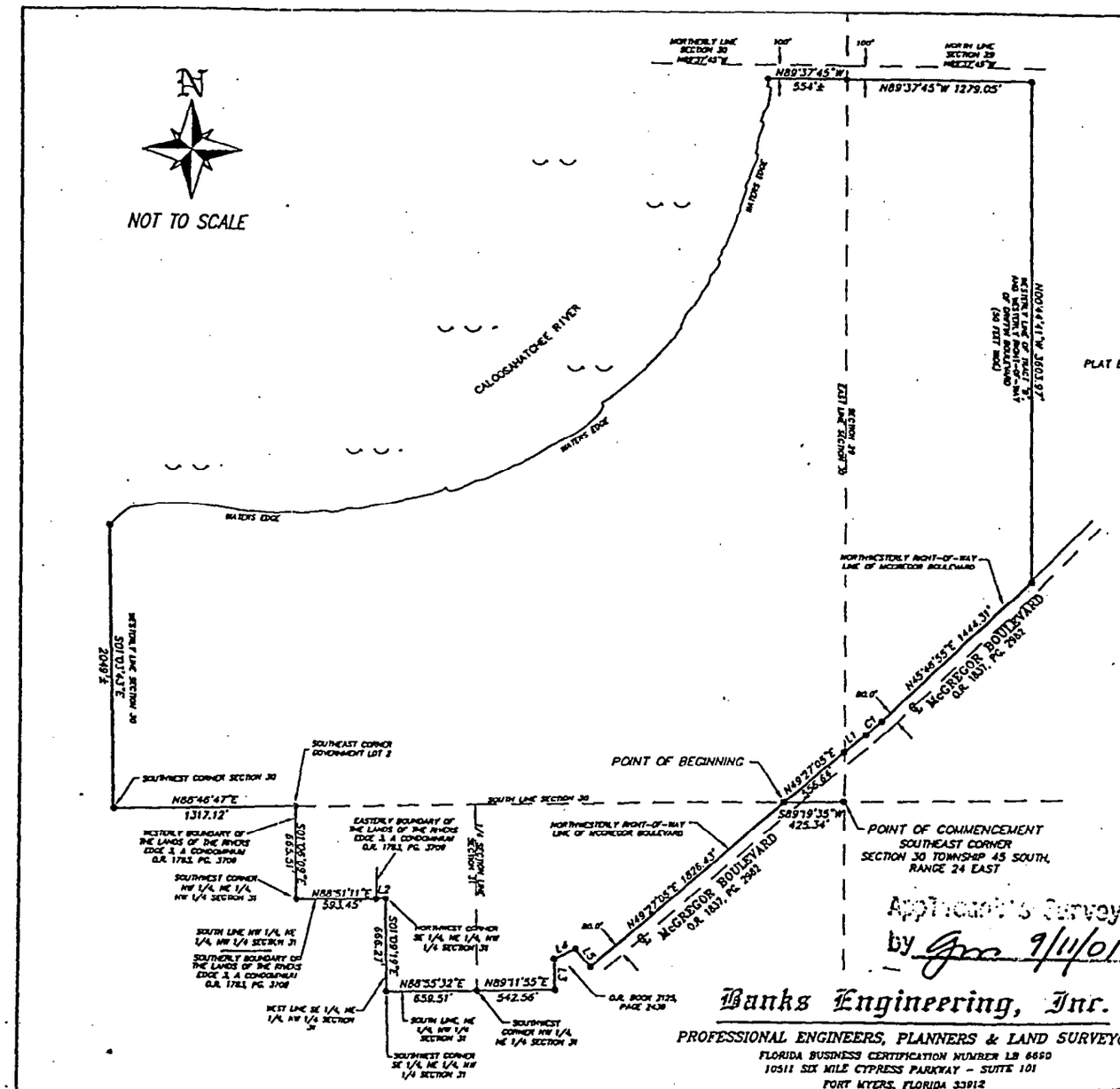
Applicant's Legal Checked
by Jm 7/11/01

DRI 2001-00005

SKETCH OF DE

OF

A TRACT OR PARCEL OF
SECTIONS 29, 30 AND 31 TOWNSHIF
LEE COUNTY, F
(GULF HARB



LINE TABLE	
LINE	BEARING
L1	N49°27'05"E
L2	N88°51'11"E
L3	N01°07'54"W
L4	N65°09'03"E
L5	S40°32'55"E

CURVE TABLE			
CURVE	RADIUS	DELTA ANGLE	ARC LENGTH
C1	2212.00'	03°40'11"	141.87'

LEGEND

O.R. INDICATES OFFIC
LEE COUNTY PU
PG INDICATES PAGE
L1 INDICATES LINE
C1 INDICATES CURVE

SEE SHEETS 1-
FOR COMPLE
METES AND BOUNDS

THIS SKETC
OF DESCRIPT
IS NOT A BOUNDA

SEE SHEETS 1-
FOR COMPLETE METES AND BO

Applicant's Survey Checked
by Gmc 9/11/01

Banks Engineering, Inc.

PROFESSIONAL ENGINEERS, PLANNERS & LAND SURVEYORS
FLORIDA BUSINESS CERTIFICATION NUMBER LB 6660
10511 SIX MILE CYPRESS PARKWAY - SUITE 101
FORT MYERS, FLORIDA 33912
(941) 939-5490

SHEET 3 OF 3

THOMAS R. LEHNERT,
FLORIDA CERTIFICATIO

- THIS SKETCH OF DESCRIPTION IS
WITHOUT THE SIGNATURE AND THE
SEAL OF A FLORIDA LICENSED SU

NOTES:

1. RESIDENTIAL TRACTS WILL NOT EXCEED DENSITIES AND HEIGHT LIMITATIONS SET FORTH IN ORDINANCE 84.16, AS MAY BE AMENDED.
2. A CONSERVATION EASEMENT HAS BEEN CONVEYED TO THE STATE ALONG THE PROJECT'S CALOOSAHATCHEE RIVER FRONTAGE TO A DEPTH OF TEN FEET MEASURED FROM MHW.
3. THE PREVIOUSLY APPROVED GOLF CLUB AND TENNIS/SWIM CLUB FACILITIES WILL BE LOCATED AS SHOWN WITHIN THE MARINA VILLAGE. THESE FACILITIES INCLUDE THE MARINA ADMINISTRATION, MARINA AND MARINE SUPPLY SALES, FUEL SALES, THE GOLF CLUB PRO SHOP, THE TENNIS CLUB PRO. SHOP, THE GOLF CLUB DINING, LOUNGE, AND HEALTH CLUB FACILITIES, AND PROJECT SALES AND ADMINISTRATION OFFICES.
4. PROJECT ENTRANCE LOCATIONS CONFORM TO THE JUNE 12, 1984 APPROVED PLAN. GATEHOUSES ARE PERMITTED AT THE PROJECT ENTRANCES AND INDIVIDUAL TRACT ENTRANCES.
5. THE MAXIMUM HEIGHT OF ANY BUILDINGS IN THIS PLAN IS 8 STORIES.
6. THE MARINA BASIN AND MITIGATION AREAS, AS SHOWN ON THESE PLANS, SHALL CONFORM TO THE PERMIT REQUIREMENTS SET FORTH IN THE PERMIT NUMBER 361061749 ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AS MAY BE AMENDED FROM TIME TO TIME, WHERE NOT IN CONFLICT WITH OTHER CONDITIONS OF THE CORRESPONDING DEVELOPMENT ORDER CONDITIONS FOR THIS PROJECT.
7. RESIDENTIAL, LAKE, AND GOLF COURSE AREA LINES SHOWN ON THIS PLAN ARE INCLUDED FOR CONCEPTUAL ILLUSTRATION PURPOSES ONLY. FINAL AREA LINES SHALL BE DETERMINED AT THE TIME OF LOCAL DEVELOPMENT ORDER PERMITTING; PROVIDED, HOWEVER, THAT THE TOTAL NUMBER OF ACRES DEVOTED TO PARTICULAR USES SHALL BE CONSISTENT WITH THE DRI DEVELOPMENT SUMMARY ACREAGE AMOUNTS SET FORTH HEREIN; AND PROVIDED, FURTHER, THAT THE MANGROVE PRESERVE AREA SHALL BE LOCATED AS DEPICTED HEREIN, AND THE MARINA BASIN SHALL BE BUILT AT THE LOCATION IN ACCORDANCE WITH THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION PERMIT #361061749, AS MAY BE AMENDED FROM TIME TO TIME. IT IS THE INTENT OF THE DEVELOPER TO BE ABLE TO LOCATE LAKES, GOLF COURSE AREAS, ROADS, AND RESIDENTIAL PRODUCT TYPES IN ITS SOLE DISCRETION WITHIN THE BOUNDARIES OF THE DEVELOPMENT SUBJECT TO THE MINIMUM TOTALS REQUIRED AND/OR ALLOWED FOR LAKES, OPEN SPACE, AND SPECIFIC RESIDENTIAL PRODUCT TYPES AS SET FORTH IN THE DEVELOPMENT SUMMARY.
8. LOT SETBACK:
   LOCAL STREETS – 15'
   COLLECTOR/ARTERIAL STREETS – 25'
   SIDE – 5' MIN.
   REAR – 10'
   MANMADE WATER BODIES – 10'
   NATURAL WATER BODIES – 25'
   MARINA – 0'

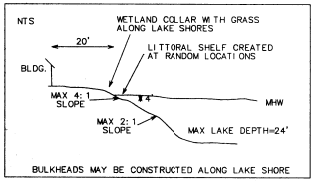
DEVELOPMENT SUMMARY:

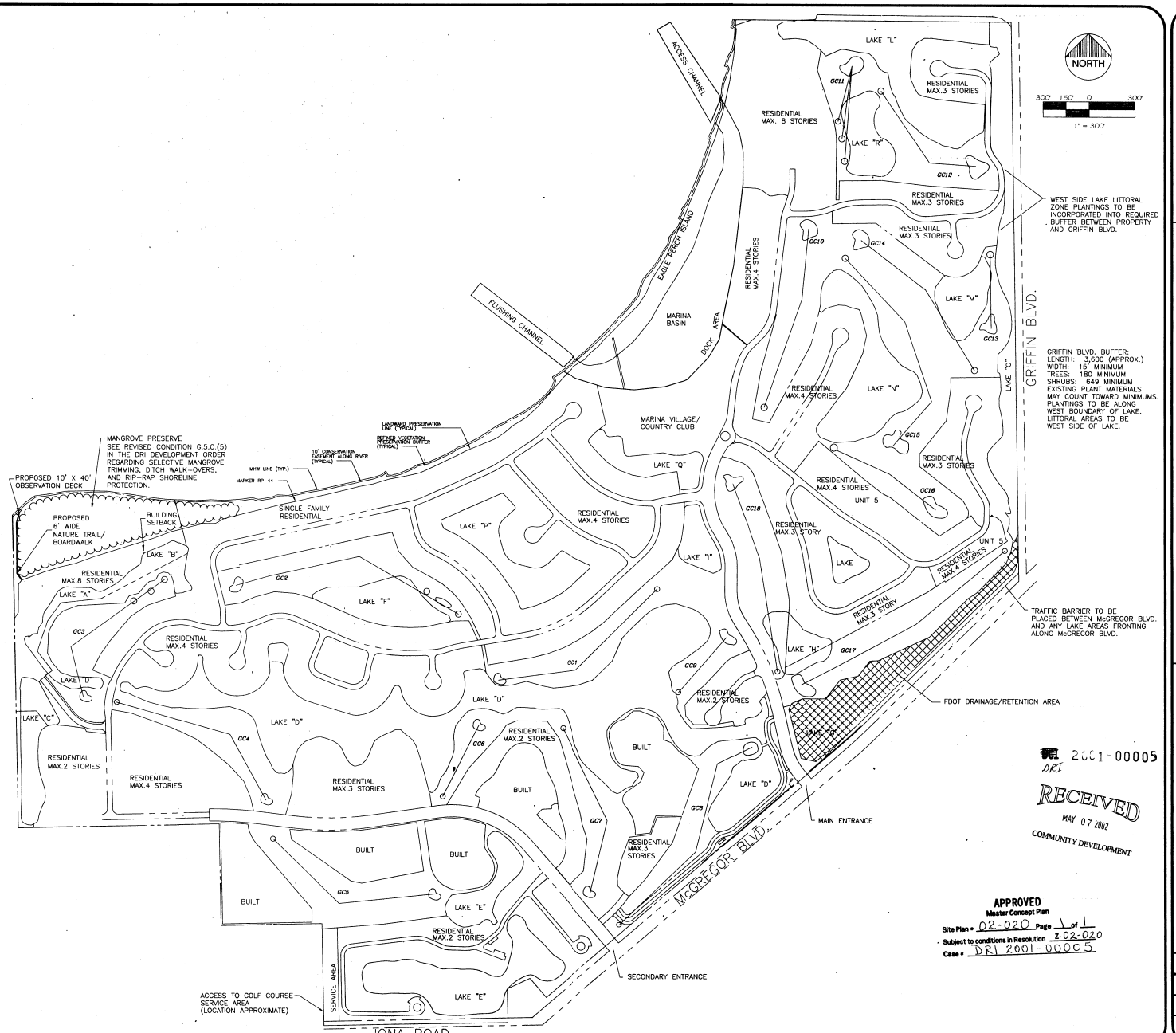
LAND USE	ACREAGE
RESIDENTIAL (INCLUDES EXISTING RESIDENTIAL, PROPOSED RESIDENTIAL, MARINA VILLAGE, LESS PRIVATE OPEN SPACE)	197.7
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	70.0
MARINA BASIN AND MITIGATION AREAS	17.2
OPEN SPACE (INCLUDES VEGETATION/PRESERVATION BUFFER, PRIVATE OPEN SPACE, MANGROVE PRESERVATION, OTHER OPEN SPACE)	250.7
TOTAL ACREAGE	547.6

UNITS:

PREVIOUSLY CONSTRUCTED (AREAS LABELED "BUILT"): 215

TOTAL UNITS APPROVED BY 1992 AMENDMENT: 2,071





DRI 2001-00005

RECEIVED
MAY 07 2002
COMMUNITY DEVELOPMENT

APPROVED
Master Concept Plan
Site Plan • 02-020 Page 1 of 1
• Subject to conditions in Resolution Z-02-020
Case • DRI 2001-00005

REVISIONS

MASTER CONCEPT PLAN / MAP H

PALMAS DEL SOL NOPC
GULF HARBOUR YACHT & COUNTRY CLUB
Lee County, Florida

MORRIS - DEPEW ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS & MAPPERS
2216 Altamont Avenue • Fort Myers, Florida 33901 • (941) 337-3993 • (FAX) 337-3994

MDA PROJECT: 97006
CHECKED BY: DWD
DESIGNED BY: RDH
DATE: 04/03/02
SHEET: 1

G:\97006 Palmas del Sol\Dwg\97126MCPSD.ornall to Dav Bender.dwg, 04/03/2002 02:14:44 PM, kgrunsky, 1:1.01577

RIVER'S EDGE YACHT AND COUNTRY CLUB DRI
(GULF HARBOUR YACHT AND COUNTRY CLUB)
PROPOSED PHASING PLAN
AMENDED TABLE 12B-1

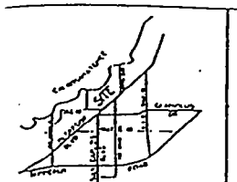
PHASE	DEVELOPMENT IMPROVEMENTS	YEARS
1	215 Multi-Family Units	1-12
	Golf Course	1982-1993
	Temporary Clubhouse	
	Temporary Pro Shop	
	Sales/Administrative Offices	
2	155 Single-Family Units	13-14
	343 Multi-Family Units	1994-1995
	Marina (190 Berths)	
	Clubhouse Facilities	
	Sales/Administrative Offices	
	Tennis Club (8 Courts)	
3	633 Single Family Units	15-24
	641 Multi-Family Units	1996-2005

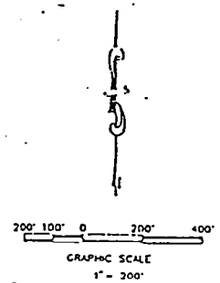
Total Single-Family Units: 788
Total Multi-Family Units: 1199
Total Dwelling Units: 1987
Total Freestanding Commercial: 0
Ancillary to Principal Uses
(Private Residential Tennis and Golf Pro
Shops, Marina Support Services)
Restaurant and Lounge Facilities Contained within Clubhouse
No Hotel/Motel Units Proposed

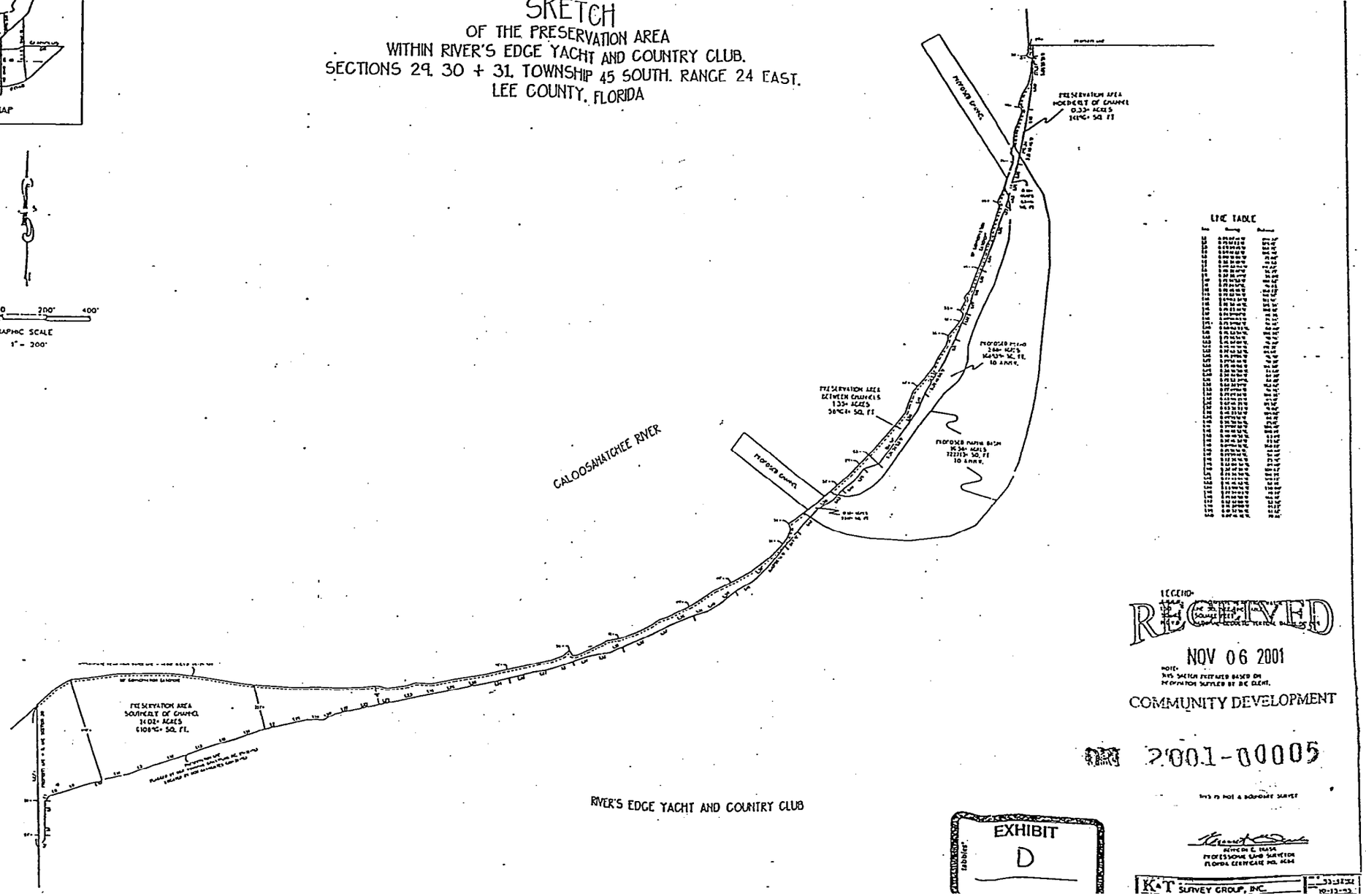
EXHIBIT C

SKETCH

OF THE PRESERVATION AREA
WITHIN RIVER'S EDGE YACHT AND COUNTRY CLUB.
SECTIONS 29, 30 + 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST.
LEE COUNTY, FLORIDA







LINE TABLE

LEGEND

RECEIVED
NOV 06 2001
COMMUNITY DEVELOPMENT

2001-00005

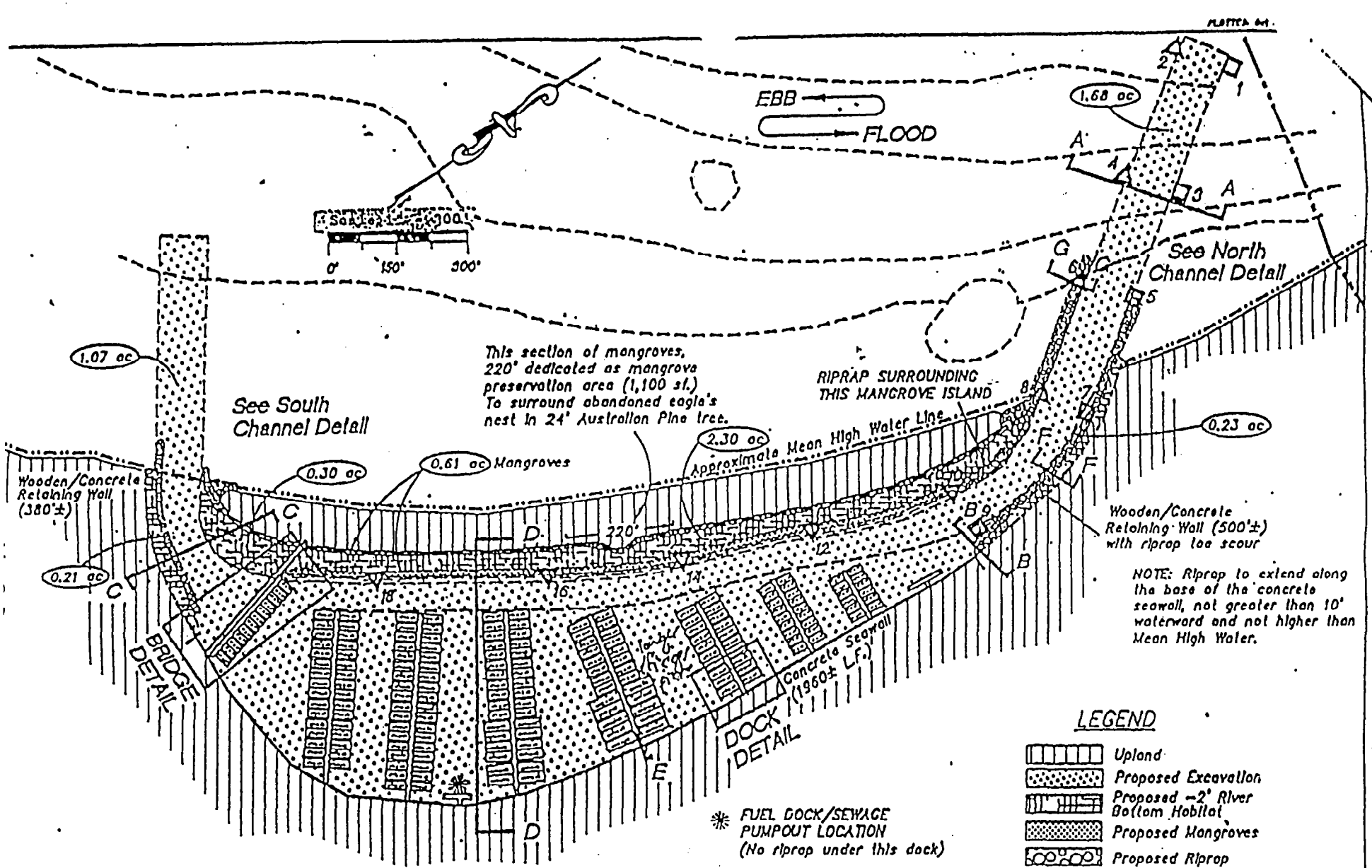
NOTE:
THIS SKETCH PREPARED BASED ON INFORMATION SUPPLIED BY RIC CLIENT.

THIS IS NOT A BOUNDARY SURVEY

STEPHEN E. DAVIS
PROFESSIONAL LAND SURVEYOR
FLORIDA CERTIFICATE NO. 4644

EXHIBIT
D

K•T SURVEY GROUP, INC.



PERMIT USE ONLY, NOT FOR CONSTRUCTION

JJF 10/93	FLORIDA DESIGN COMMUNITIES, INC.	Overall Marina Plan	DRAWN BY: AJnw REVISED: 9/9/93 9/23/93 10/5/93	W. DEXTER BENDER AND ASSOCIATES 1625 HENDRY ST. SUITE 201 FORT MYERS, FL 33901
17				

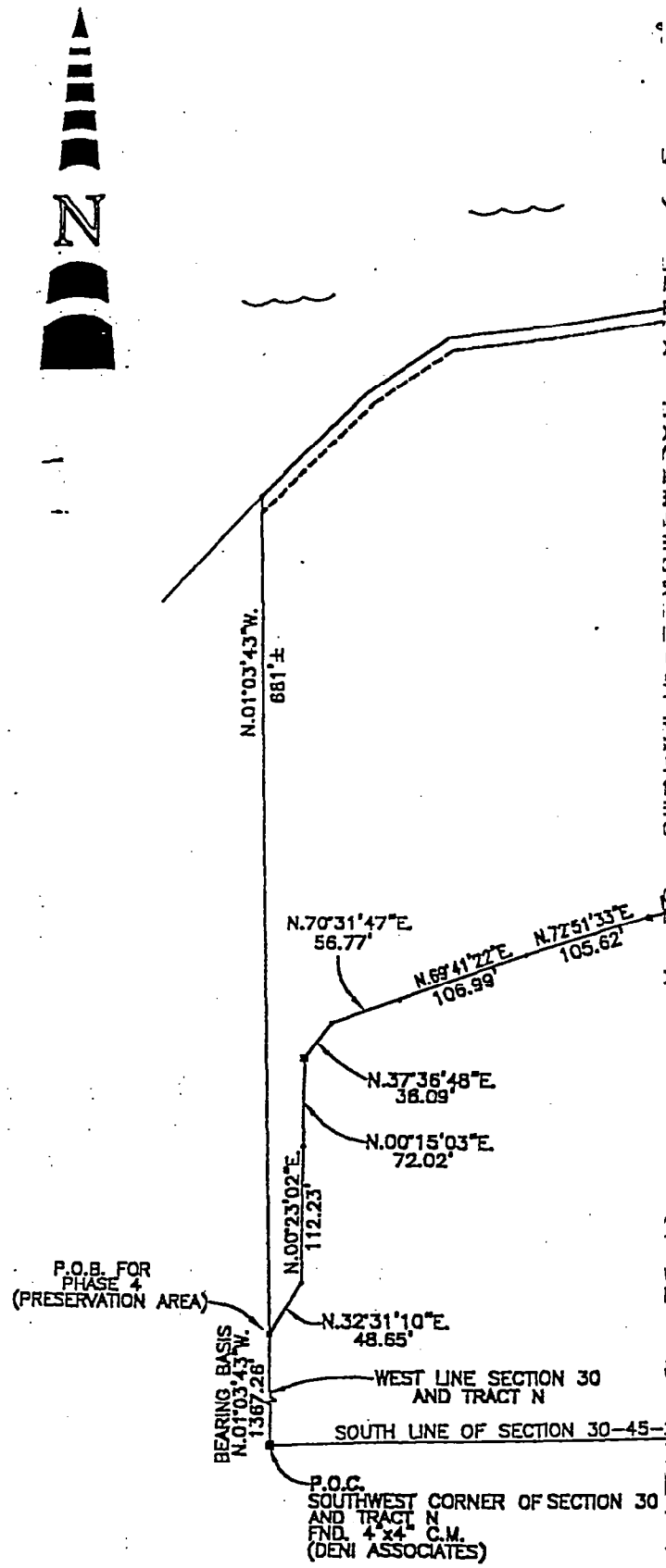
EXHIBIT E

DESCRIPTION
AS DEL SOL CONDOMINIUM, PHASE 4
(PRESERVATION AREA)
N 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST,
LEE COUNTY, FLORIDA

L OF LAND SITUATED IN THE STATE OF FLORIDA,
NG IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE
PART OF TRACT "E", GULF HARBOUR
CLUB SUBDIVISION AS RECORDED IN PLAT BOOK
OUGH 27, PUBLIC RECORDS OF LEE COUNTY,
FURTHER BOUNDED AND DESCRIBED AS FOLLOWS:

SOUTHWEST CORNER OF SAID SECTION 30 AND
ORNER OF SAID TRACT "N" OF GULF HARBOUR
CLUB; THENCE ALONG THE WEST LINE OF SAID
ID TRACT "N", N.01°03'43"W. FOR 1367.26 FEET
BEGINNING OF THE PARCEL HEREIN DESCRIBED;
ID WEST LINE, N.32°31'10"E. FOR 48.65 FEET;
E. FOR 112.23 FEET; THENCE N.00°15'03"E. FOR
CE N.37°36'48"E. FOR 36.09 FEET; THENCE
56.77 FEET; THENCE N.69°41'22"E. FOR 106.99
1'33"E. FOR 105.62 FEET; THENCE N.77°24'17"E.
IENCE N.69°39'45"E. FOR 128.70 FEET; THENCE
68.73 FEET; THENCE N.72°22'58"E. FOR 116.54
5'45"E. FOR 126.38 FEET; THENCE N.69°03'37"E.
HENCE N.75°17'23"E. FOR 75.31 FEET TO THE
R OF LOT 38 OF GULF HARBOUR YACHT AND
E ONE AS RECORDED IN PLAT BOOK 56, PAGES
IC RECORDS OF LEE COUNTY, FLORIDA; THENCE
199 FEET, MORE OR LESS, TO THE MEAN HIGH
CALOOSAHATCHEE RIVER; THENCE WESTERLY
GH WATER LINE FOR 1120 FEET, MORE OR LESS,
WITH SAID WEST LINE OF SECTION 30, BEARING
THE POINT OF BEGINNING; THENCE ALONG SAID
ON 30, S.01°03'43"E. FOR 681 FEET, MORE OR
NT OF BEGINNING.

0.17 ACRES, MORE OR LESS;



5-1-2002
DATE

VEYOR AND MAPPER
E NO. LS# 5743

THE SIGNATURE AND THE ORIGINAL RAISED SEAL
ISED SURVEYOR AND MAPPER.

IS NOT A SURVEY *

N AREA / PALMAS DEL SOL

RIDIAN
G & MAPPING, LLC
VEYORS · PLANNERS
LB# 7071

5248 RAMSEY WAY, SUITE #2
FORT MYERS, FLORIDA 33907
PHONE: (941) 275-8575
FAX: (941) 275-8457
www.meridianfl.com

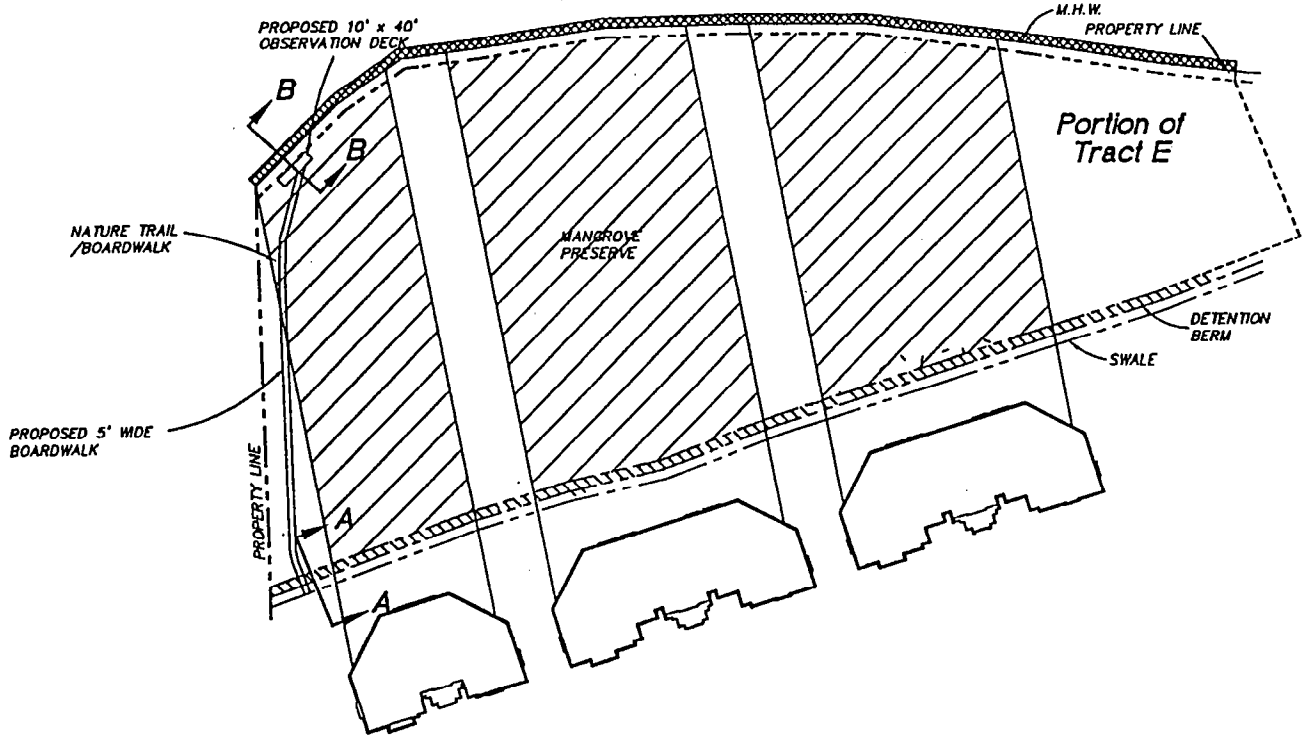
K/PAGE:	PROJECT NO.:	SHEET:
N/A	2248	1 OF 1

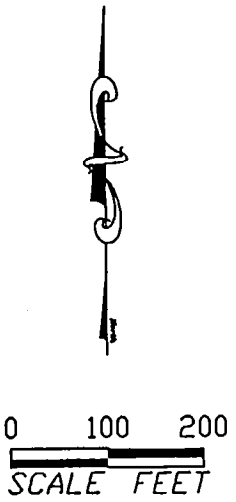
EXHIBIT F

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Boardwalk and Observation Deck/Mangrove Trimming Plan

Caloosahatchee River





Proposed Mangrove Trimming Area
Trim Trees to 32' NGVD (30'± from substrate)

Proposed Riprap Shoreline Protection

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

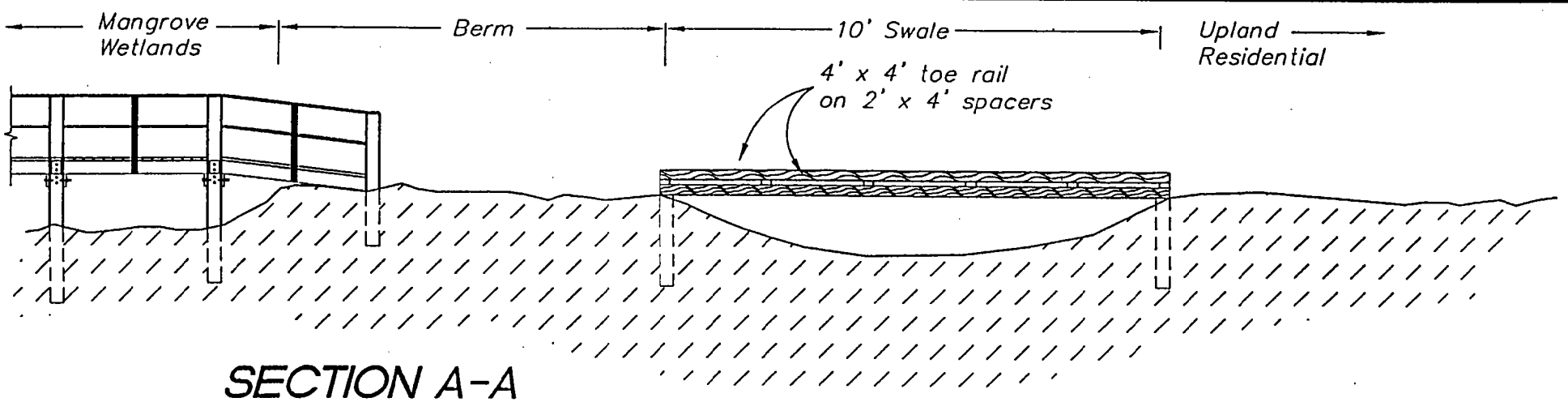
June 26, 2002 9:10:37 a.m.
Drawing: GROSS1NOTICE.DWG (DCS)

W. DEXTER BENDER
AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

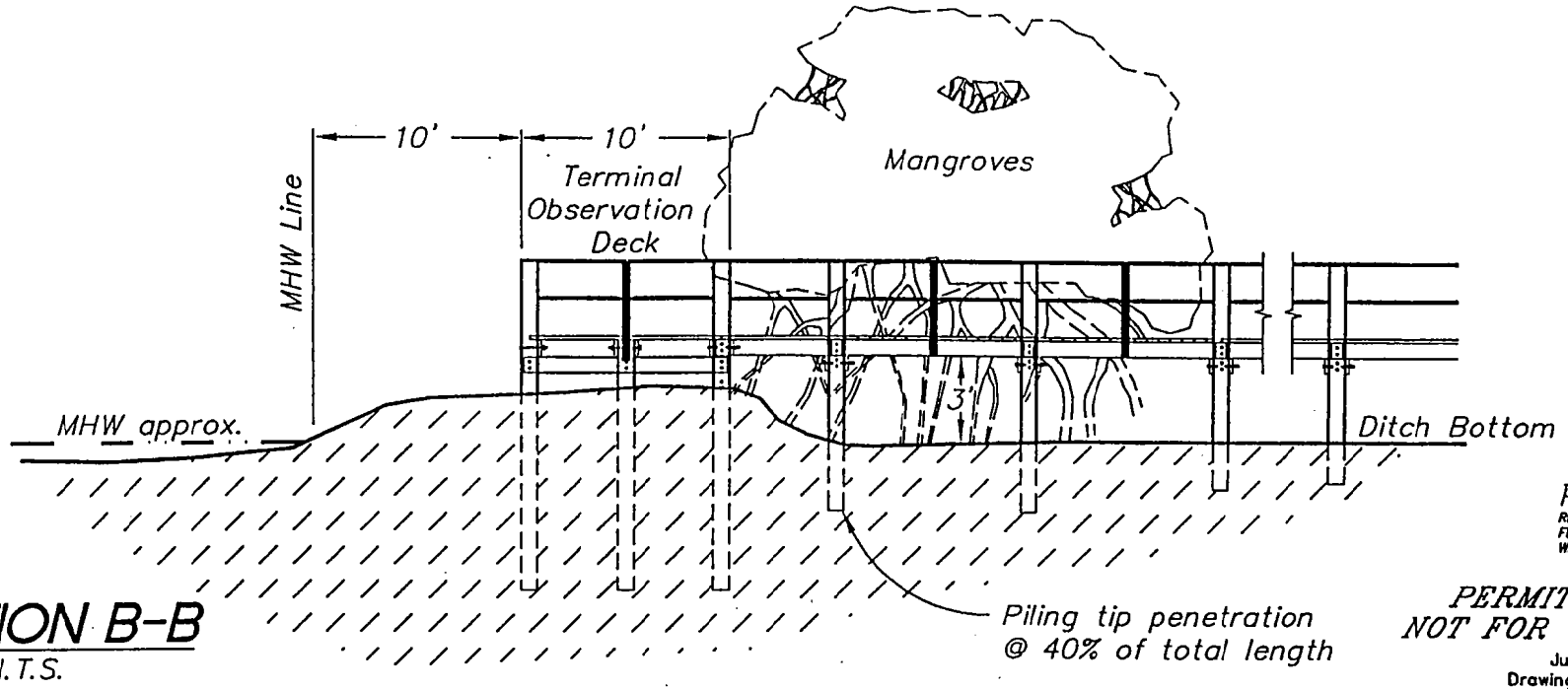
Palmas Del Sol

SHEET



SECTION A-A

N.T.S.



SECTION B-B

N.T.S.

HANS J.M. WILSON
REGISTERED PROFESSIONAL ENGINEER
FLORIDA REGISTRATION NO. 39680
W. DEXTER BENDER & ASSOC., INC.

PERMIT USE ONLY, NOT FOR CONSTRUCTION

June 19, 2002 11:25:45 a.m.
Drawing: GROSS1XSA.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
2052 VIRGINIA AVENUE
FORT MYERS, FL 33901 (813) 334-3680

REVISED:

PALMAS del SOL
BOARDWALK and OBSERVATION DECK

SHEET

ON: 30
SHIP: 45 S
E: 24 E

Rip Rap Detail and Cross-section

Caloosahatchee River

Proposed Riprap Sill

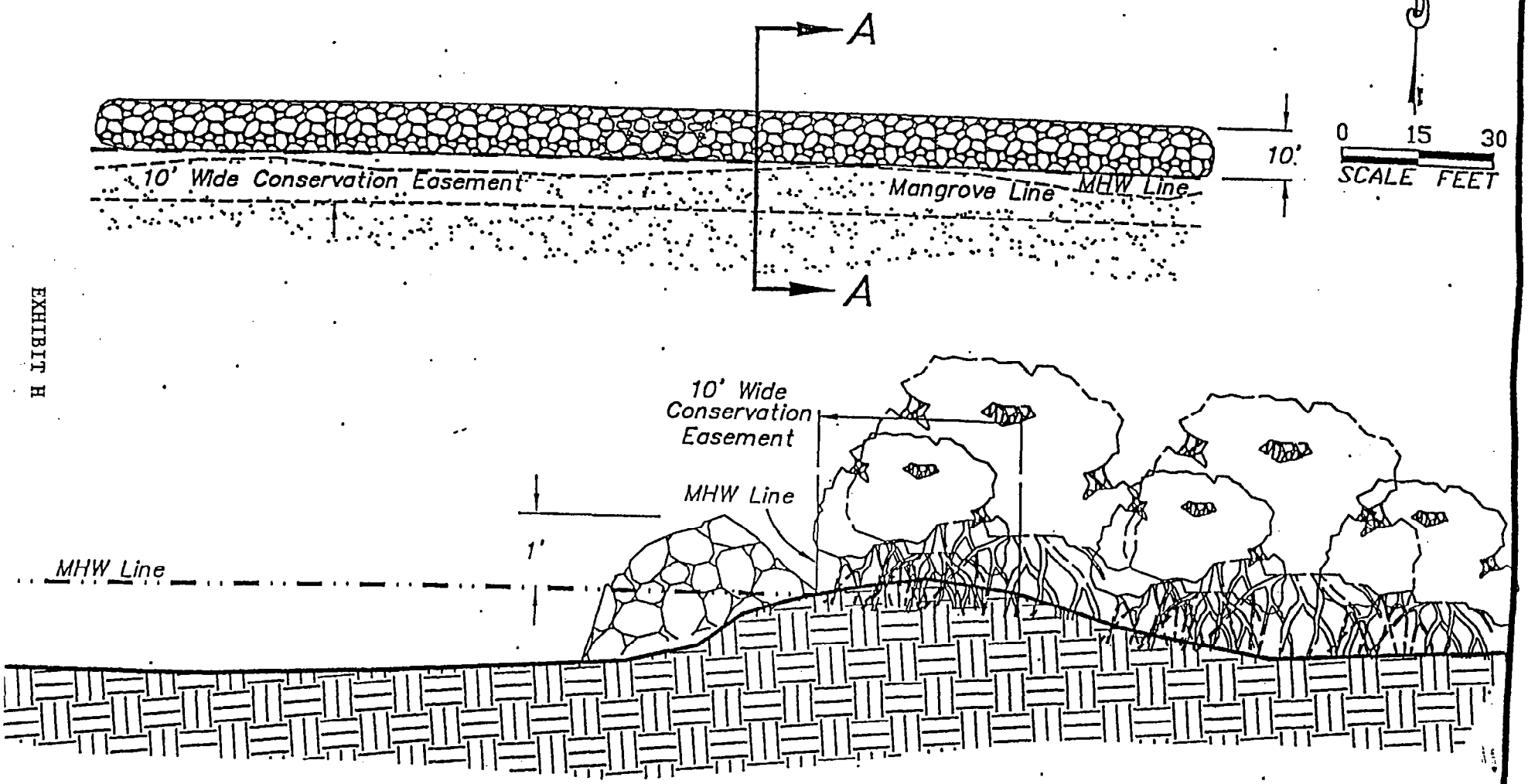


EXHIBIT H

Section A-A

Not to Scale

PERMIT USE ONLY, NOT FOR CONSTRUCTION

July 10, 2001 9:05:28 a.m.
Drawing: GROSS1DET.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

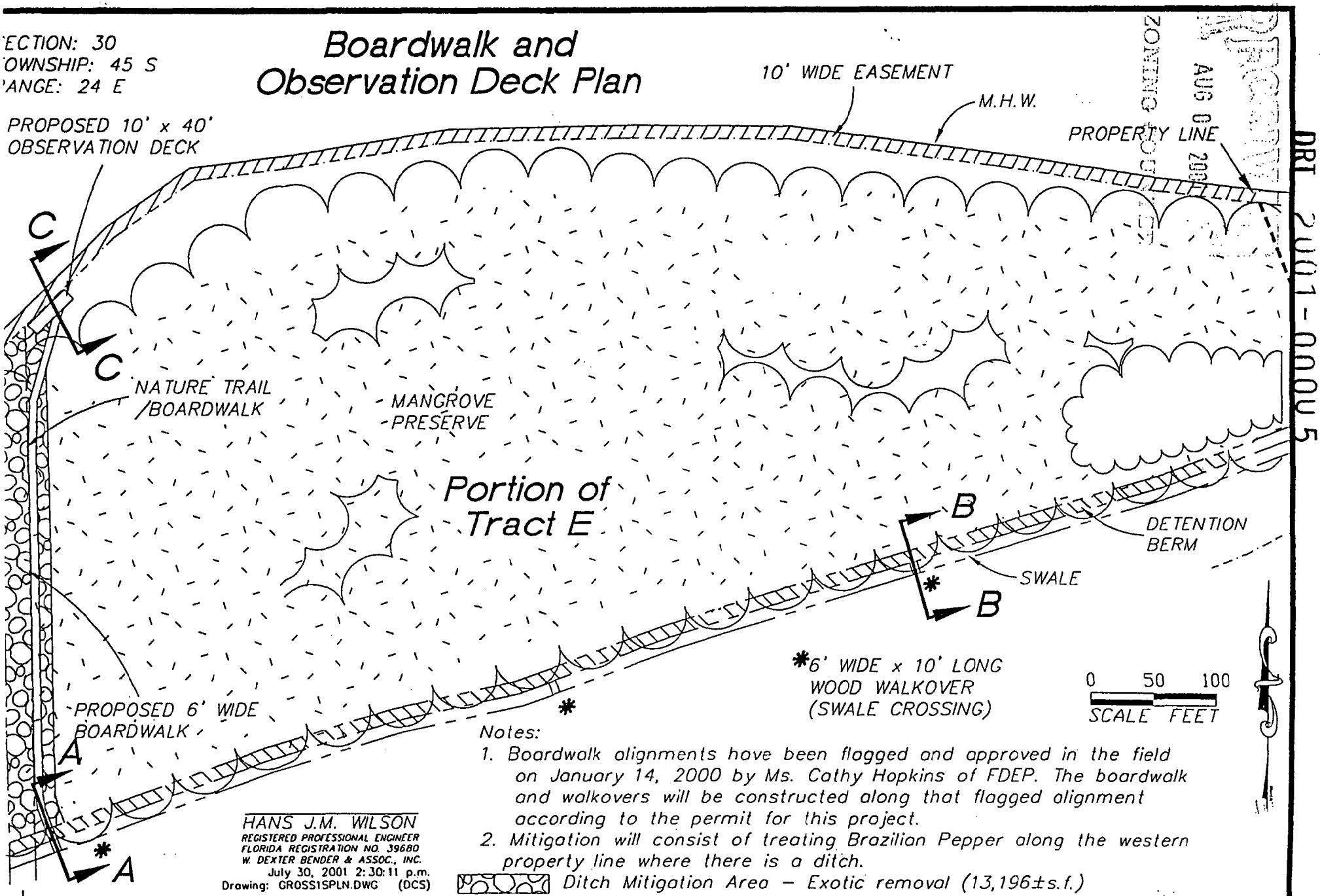
REVISED:

Palmas Del Sol

SHEET

ECTION: 30
OWNSHIP: 45 S
ANGE: 24 E

Boardwalk and Observation Deck Plan



Notes:

1. Boardwalk alignments have been flagged and approved in the field on January 14, 2000 by Ms. Cathy Hopkins of FDEP. The boardwalk and walkovers will be constructed along that flagged alignment according to the permit for this project.
2. Mitigation will consist of treating Brazilian Pepper along the western property line where there is a ditch.

Ditch Mitigation Area – Exotic removal (13,196±s.f.)

HANS J.M. WILSON
REGISTERED PROFESSIONAL ENGINEER
FLORIDA REGISTRATION NO. 39680
W. DEXTER BENDER & ASSOC., INC.

July 30, 2001 2:30:11 p.m.
Drawing: GROSS1SPLN.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
2052 VIRGINIA AVENUE
FORT MYERS, FL 33901 (941) 334-3680

REVISED:

PALMAS del SOL

SHEET

EXHIBIT E

RECEIVED AUG 03 2001 ZONING DEPT.
DRL 2001-00045

LEE COUNTY
RECEIVED
02 OCT 30 AM 11:23
COMM. DEV/
PUB. WRKS. CNTR.
SECOND FLOOR

INTEROFFICE MEMORANDUM

TO: BILLIE JACOBY

FROM: LISA PIERCE

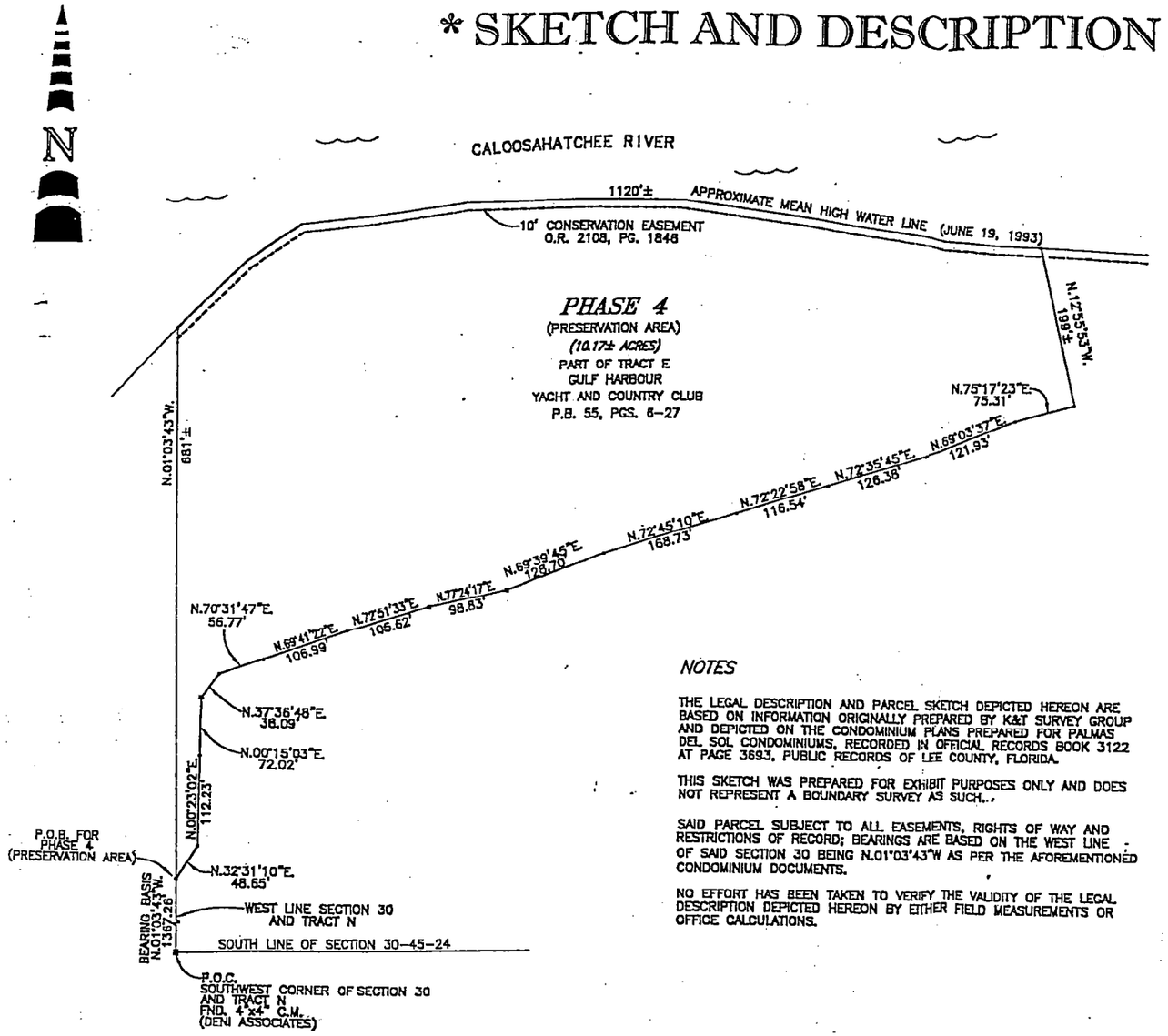
SUBJECT: RIVER'S EDGE DRI DEVELOPMENT ORDER # 12-8182-21

DATE: 10/30/2002

Attached are copies of Exhibit F to the above referenced DRI. Please replace the Exhibit F in the certified copies interoffice mailed to you yesterday. It was discovered that this Exhibit was copied as it was folded, in other words it went through the copier folded.

Thanks

* SKETCH AND DESCRIPTION *



OF PALM

LYING IN SECTION

A TRACT OR PARCEL
COUNTY OF LEE, LYIN
24 EAST, BEING A P
YACHT AND COUNTRY
55, PAGES 6 THRO
FLORIDA, AND BEING

COMMENCING AT THE
THE SOUTH-WEST CO
YACHT AND COUNTRY
SECTION 30 AND SAI
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72.02 FEET; THENC
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FEET; THENCE N.72°51
FOR 98.83 FEET; THE
N.72°45'10"E. FOR 1
FEET; THENCE N.72°35
FOR 121.93 FEET; T
NORTHWEST CORNER
COUNTRY CLUB PHASE
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TO AN INTERSECTION
N.01°03'43"W. FROM
WEST LINE OF SECTIO
LESS, TO THE POIN

PARCEL CONTAINS 10.

NOTES

THE LEGAL DESCRIPTION AND PARCEL SKETCH DEPICTED HEREON ARE BASED ON INFORMATION ORIGINALLY PREPARED BY K&T SURVEY GROUP AND DEPICTED ON THE CONDOMINIUM PLANS PREPARED FOR PALMAS DEL SOL CONDOMINIUMS, RECORDED IN OFFICIAL RECORDS BOOK 3122 AT PAGE 3693, PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

THIS SKETCH WAS PREPARED FOR EXHIBIT PURPOSES ONLY AND DOES NOT REPRESENT A BOUNDARY SURVEY AS SUCH..

SAID PARCEL SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD; BEARINGS ARE BASED ON THE WEST LINE OF SAID SECTION 30 BEING N.01°03'43"W AS PER THE AFOREMENTIONED CONDOMINIUM DOCUMENTS.

NO EFFORT HAS BEEN TAKEN TO VERIFY THE VALIDITY OF THE LEGAL DESCRIPTION DEPICTED HEREON BY EITHER FIELD MEASUREMENTS OR OFFICE CALCULATIONS.

PREPARED BY:

SCOTT M. SHORE
PROFESSIONAL SURV
FLORIDA CERTIFICATE

NOT VALID WITHOUT
OF A FLORIDA LICEN

* THIS I

LEGEND

P.O.B.	POINT OF BEGINNING, PHASE TWO
O.R.	OFFICIAL RECORDS BOOK, LEE COUNTY PUBLIC RECORDS
P.B.	PLAT BOOK, LEE COUNTY PUBLIC RECORDS
PG.	PAGE
DR. & U.E.	DRAINAGE AND UTILITY EASEMENT
LS	LICENSED SURVEYOR
C.M.	CONCRETE MONUMENT
C.E.	COMMON ELEMENT
L.C.E.	LIMITED COMMON ELEMENT
P.C.P.	PERMANENT CONTROL POINT
P.R.M.	PERMANENT REFERENCE MONUMENT

TITLE: PRESERVATIO

MEF
SURVEYIN
LAND SURV

FILE NAME:	FIELD BOOK
2248SK.DWG	
SURVEY DATE:	DRAWN BY:
5-1-2002	DAV

NOTES:

1. RESIDENTIAL TRACTS WILL NOT EXCEED DENSITIES AND HEIGHT LIMITATIONS SET FORTH IN ORDINANCE 84-16, AS MAY BE AMENDED.
2. A CONSERVATION EASEMENT HAS BEEN CONVEYED TO THE STATE ALONG THE PROJECT'S CALOOSAHATCHEE RIVER FRONTAGE TO A DEPTH OF TEN FEET MEASURED FROM MHW.
3. THE PREVIOUSLY APPROVED GOLF CLUB AND TENNIS/SWIM CLUB FACILITIES WILL BE LOCATED AS SHOWN WITHIN THE MARINA VILLAGE. THESE FACILITIES INCLUDE THE MARINA ADMINISTRATION, MARINA AND MARINE SUPPLY SALES, FUEL SALES, THE GOLF CLUB PRO SHOP, THE TENNIS CLUB PRO SHOP, THE GOLF CLUB DINING LOUNGE, AND HEALTH CLUB FACILITIES, AND PROJECT SALES AND ADMINISTRATION OFFICES.
4. PROJECT ENTRANCE LOCATIONS CONFORM TO THE JUNE 12, 1984 APPROVED PLAN. GATEHOUSES ARE PERMITTED AT THE PROJECT ENTRANCES AND INDIVIDUAL TRACT ENTRANCES.
5. THE MAXIMUM HEIGHT OF ANY BUILDINGS IN THIS PLAN IS 8 STORIES.
6. THE MARINA BASIN AND MITIGATION AREAS, AS SHOWN ON THESE PLANS, SHALL CONFORM TO THE PERMIT REQUIREMENTS SET FORTH IN THE PERMIT NUMBER 361061749 ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AS MAY BE AMENDED FROM TIME TO TIME, WHERE NOT IN CONFLICT WITH OTHER CONDITIONS OF THE CORRESPONDING DEVELOPMENT ORDER CONDITIONS FOR THIS PROJECT.
7. RESIDENTIAL, LAKE, AND GOLF COURSE AREA LINES SHOWN ON THIS PLAN ARE INCLUDED FOR CONCEPTUAL ILLUSTRATION PURPOSES ONLY. FINAL AREA LINES SHALL BE DETERMINED AT THE TIME OF LOCAL DEVELOPMENT ORDER PERMITTING; PROVIDED, HOWEVER, THAT THE TOTAL NUMBER OF ACRES DEVOTED TO PARTICULAR USES SHALL BE CONSISTENT WITH THE DRI DEVELOPMENT SUMMARY ACREAGE AMOUNTS SET FORTH HEREIN; AND PROVIDED, FURTHER, THAT THE MANGROVE PRESERVE AREA SHALL BE LOCATED AS DEPICTED HEREIN, AND THE MARINA BASIN SHALL BE BUILT AT THE LOCATION IN ACCORDANCE WITH THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION PERMIT #361061749, AS MAY BE AMENDED FROM TIME TO TIME. IT IS THE INTENT OF THE DEVELOPER TO BE ABLE TO LOCATE LAKES, GOLF COURSE AREAS, ROADS, AND RESIDENTIAL PRODUCT TYPES IN ITS SOLE DISCRETION WITHIN THE BOUNDARIES OF THE DEVELOPMENT SUBJECT TO THE MINIMUM TOTALS REQUIRED AND/OR ALLOWED FOR LAKES, OPEN SPACE, AND SPECIFIC RESIDENTIAL PRODUCT TYPES AS SET FORTH IN THE DEVELOPMENT SUMMARY.
8. LOT SETBACK:
   LOCAL STREETS – 15'
   COLLECTOR/ARTERIAL STREETS – 25'
   SIDE – 5' MIN.
   REAR – 10'
   MANMADE WATER BODIES – 10'
   NATURAL WATER BODIES – 25'
   MARINA – 0'

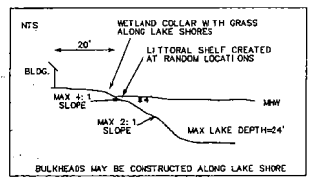
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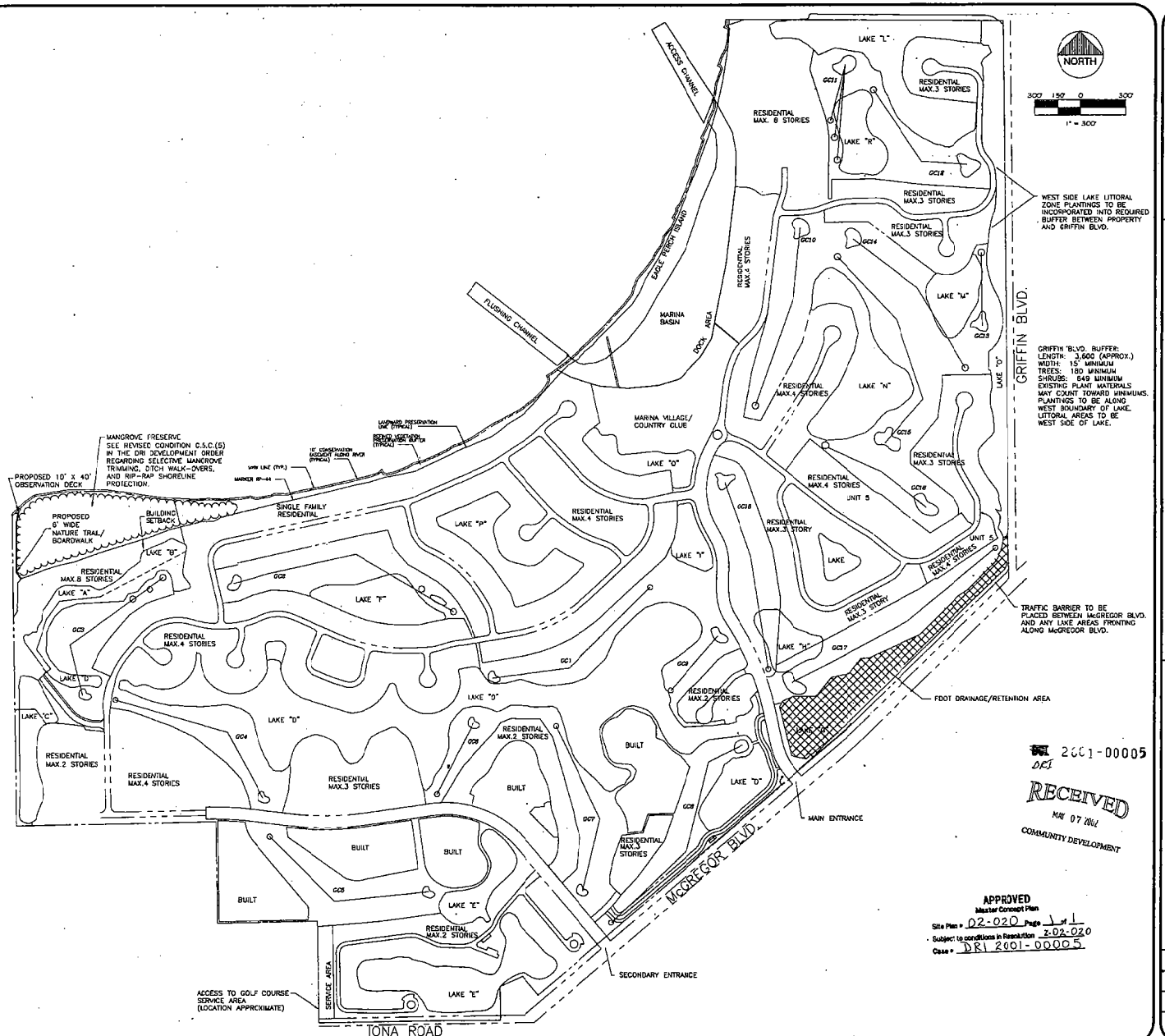
LAND USE	ACREAGE
RESIDENTIAL (INCLUDES EXISTING RESIDENTIAL, PROPOSED RESIDENTIAL, MARINA VILLAGE, LESS PRIVATE OPEN SPACE)	197.7
INTERNAL ROAD PAVEMENT (APPROXIMATE)	12.0
LAKES (WATER MANAGEMENT)	70.0
MARINA BASIN AND MITIGATION AREAS	17.2
OPEN SPACE (INCLUDES VEGETATION/PRESERVATION BUFFER, PRIVATE OPEN SPACE, MANGROVE PRESERVATION, OTHER OPEN SPACE)	250.7
TOTAL ACREAGE	547.6

UNITS:

PREVIOUSLY CONSTRUCTED (AREAS LABELLED "BUILT"): 215

TOTAL UNITS APPROVED BY 1992 AMENDMENT: 2,071





2001-00005
DRI

RECEIVED
MAY 07 2002
COMMUNITY DEVELOPMENT

APPROVED
Master Concept Plan
Site Plan # 02-020 Page 1 of 1
Subject to conditions in Resolution 2-02-020
Case # DRI 2001-00005

REVISIONS

MASTER CONCEPT PLAN / MAP H

PALMAS DEL SOL NOPC
GULF HARBOUR YACHT & COUNTRY CLUB
Lee County, Florida

MORRIS - DEPEW ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS & MAPPERS
2235 Kilburn Avenue • Fort Myers, Florida 33901 • (941) 337-3993 • (941) 337-3994

MDA PROJECT: 97005
DESIGNED BY: DWD
DRAWN BY: RDH
DATE: 04/03/02
SHEET: 1

G:\97005 Palmas del Sol\Dwg\97126NC-2-02-small to Dev Services.dwg, 04/03/2002 12:14:44 PM, kaynsky

NOTES:

1. RESIDENTIAL TRACTS WILL NOT EXCEED DENSITIES AND HEIGHT LIMITATIONS SET FORTH IN ORDINANCE 84.16, AS MAY BE AMENDED.
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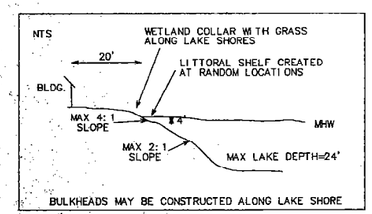
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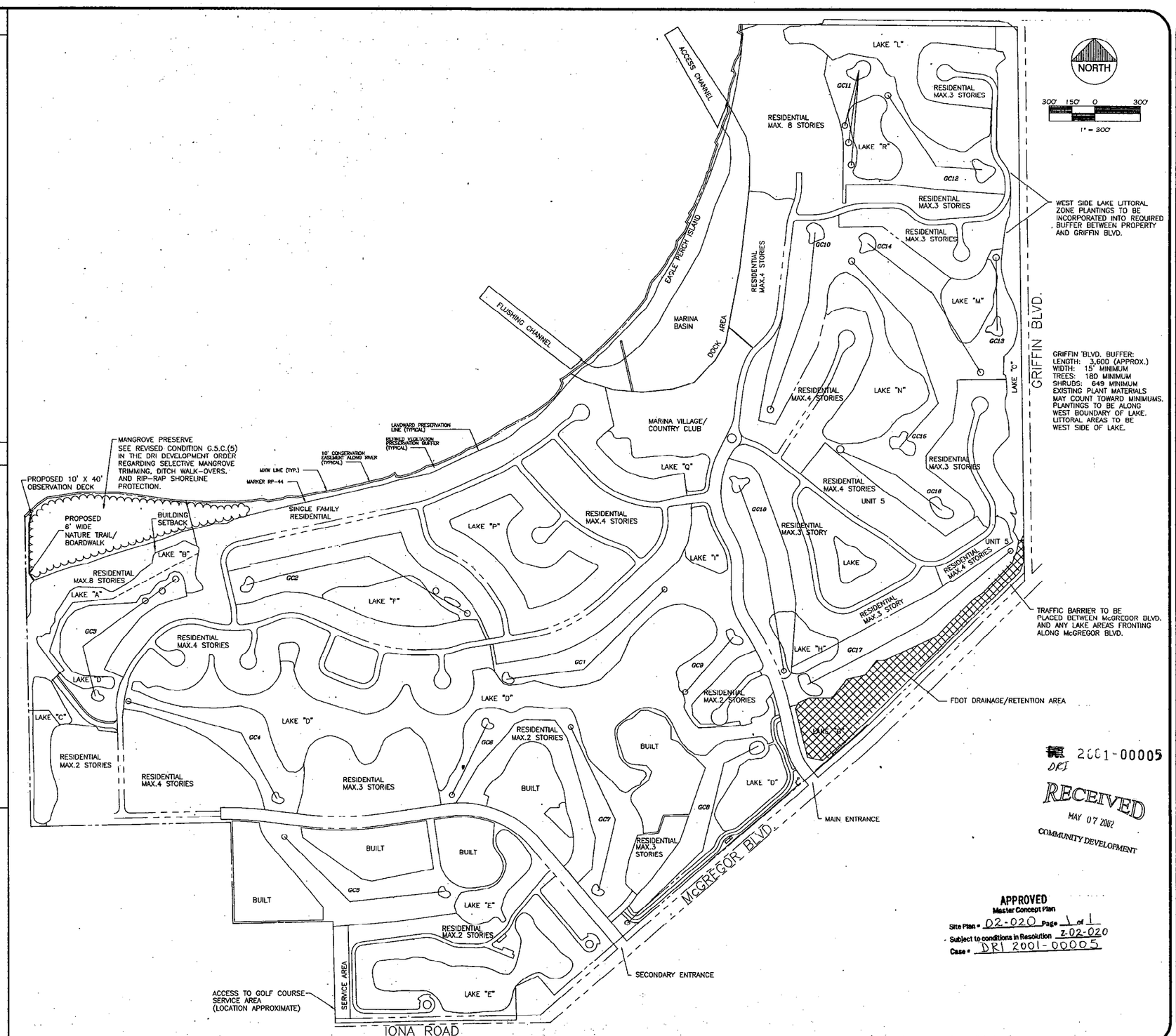
LAND USE	ACREAGE
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DRI 2001-00005

RECEIVED
MAY 07 2002
COMMUNITY DEVELOPMENT

APPROVED
Master Concept Plan
Site Plan = 02-020 Page 1 of 1
Subject to conditions in Resolution Z-02-020
Case # DRI 2001-00005

MASTER CONCEPT PLAN / MAP H

PALMAS DEL SOL NOPC
GULF HARBOUR YACHT & COUNTRY CLUB
Lee County, Florida

MORRIS - DEPEW ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS & MAPPERS
2235 Altamont Avenue • Fort Myers, Florida 33901 • (941) 337-3993 • (FAX) 337-3994

MDA PROJECT: 97008
CHECKED BY: DWD
DESIGNED BY: RDH
DATE: 04/03/02
SHEET: 1

Z:\97008\Dwg\Zoning\97008-Zoning.dwg, 4/3/2002 02:14:44 PM, rdepew

ATTACHMENT E

River's Edge aka Gulf Harbour

DRI Notice of Proposed Change

Palmas del Sol

PROJECT NARRATIVE

July 2002

Prepared by:

W. Dexter Bender & Associates, Inc.
2052 Virginia Avenue
Fort Myers, FL 33901

APPLICANT'S EXHIBIT
#8
DR1201-00005

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Existing Conditions 1

Proposed Management

- Mangrove Trimming 3
- Boardwalk and Observation Deck 4
- Rip Rap Sill 4
- Monitoring 4
- Offsite Mitigation Parcel 5

Exhibits

- A - Existing Conditions Map
- B - Shoreline Loss Map
- C - Sketch and Legal Description of Mangrove Area
- D - Boardwalk and Observation Deck/Mangrove Trimming Plan
- E - FDEP Permit File No. 36-0152741-003
- F - Riprap Detail and Cross Section
- G - Offsite Mitigation - Shell Point 11 Acre Parcel Environmental Assessment

References

EXISTING CONDITIONS

Existing Site Conditions

Currently the 10.2 acre Mangrove Preserve area owned by Grosse Pointe Associates, Ltd. (GPAL) (Exhibit D) consists of three distinct zones of mangroves as follows:

Please see the attached Existing Conditions Map (Exhibit A).

Zone A

This area is located on the shoreline of the Caloosahatchee River and is dominated by red mangroves (*Rhizophora mangle*) with scattered black mangroves (*Avicennia germinans*) and a few white mangroves (*Laguncularia racemosa*) and is approximately 50-75' wide in the western 1/3 of the 10.2 acre portion of Tract E shoreline. The eastern 2/3 of the shoreline has a one red mangrove tree wide band with the exception of a clump of red mangroves that is approximately 100' long and 50' wide. The trees in Zone A have the following heights:

5% - 45-50' NGVD
40% - 32-45' NGVD
55% - <32' NGVD

There are approximately 50 red mangrove trees in this zone that have portions of branches that are greater than 1" in diameter that are above 32' NGVD.

The trees situated along the shoreline have healthy upper canopy lateral branches with significant leaf coverage.

Zone B

This area is situated in the middle of the 10.2 acre portion of Tract E and is dominated by black mangroves with scattered red and white mangroves. This zone ranges between 170' and 380' in width. This is the dominant zone of the 10.2 acre portion of Tract E. The trees in this zone have the following heights:

10% - 40'-50' NGVD
40% - 32-40' NGVD
50% - <32' NGVD

Zone C

This area is dominated by white mangroves and includes scattered black mangroves and a few (~10) red mangroves. This area is a 40'± wide band along the landward portion of the Mangrove Preserve. The trees in this zone are the following heights:

20% - 40'-50' NGVD
50% - 32'-40' NGVD
30% - <32' NGVD

The red mangroves in this area are less than 35' NGVD.

There is a significant amount of the invasive native plant Moon vine (*Ipomoea sp.*) growing along the landward edge of this zone that has completely covered several mangrove trees and is likely to spread into the rest of the preserve if left unmanaged.

Shoreline

The shoreline of the Mangrove Preserve has been experiencing significant erosion since the 1960's due to increased boat traffic and the resulting boat wakes along the Caloosahatchee River. Please see the attached Shoreline Loss Map (Exhibit B). The Shoreline Loss Map was created using a 1944 USDA Natural Resource Conservation Service Map and 1966, 1974, 1981, 1990, 1996, and 1999 Lee County Aerial Photographs. This map shows a digitized shoreline for Tract E for the years mentioned above, superimposed over the 1999 aerial photograph.

Between 1944 and 1966, there does not appear to be any significant shoreline loss. Between 1966 and 1999, the shoreline loss averaged 94' or 2.7'/yr. measuring along the east, middle, and west of the 10.2 acre portion of Tract E. Please see the attached pictures which show dead mangroves fallen in the river along the shoreline as well as exposed roots due to erosion. Based on the fact that there was no significant shoreline loss between 1944 and 1966, and significant and consistent erosion between 1966 and 1999, it is reasonable to conclude that boat traffic is the cause. Without the installation of riprap, the shoreline is expected to continue to erode. There are no requirements to place riprap on the shoreline.

PROPOSED MANAGEMENT

Proposed Management

The project team has gone to a lot of effort to research the subject of mangrove trimming and has full confidence that the proposed trimming will have no negative effects on the mangroves or the ecosystem, and the proposed rip rap shoreline stabilization will protect a preserve in danger of further erosion.

The Florida Department of Environmental Protection (FDEP) regulates trimming of mangroves. There are three types of mangrove permits, exempt, general, and individual. The exempt and general permits are issued automatically as long as the project meets certain criteria such as heights of mangroves, width of the mangrove fringe and proposed cutting techniques. Individual permits are issued to projects that do not meet those criteria and the review is intense. This project qualified for a general mangrove trimming permit and one was quickly issued.

Mangrove Trimming

1. Three (3) corridors, each the width of the buildings (240', 244', and 152' wide), and extending from the landward boundary described in Exhibit C North Northwest to the Caloosahatchee River will have selective mangrove trimming and maintenance as described as follows and is shown on Exhibit D.

2. All mangrove trimming shall be conducted as permitted by the FDEP General Mangrove Permit File No. 36-0152741-003 (Exhibit E), which includes but not limited to the following conditions:

    a. Mangrove Trimming shall be supervised or conducted exclusively by a Professional Mangrove Trimmer.

    b. No herbicide or other chemical shall be used for the purpose of removing leaves of a mangrove.

    c. Trimming shall be conducted in stages so that no more than 25% of the foliage is removed annually, and the height and configuration of the mangroves trimmed under these general permits may be maintained.

    d. The final height of trimmed mangroves to be maintained shall be 32' NGVD (approximately 30'± from substrate) and shall only be in the mangrove trimming areas shown in Exhibit D. As many of the trees in the mangrove trimming areas are less than 32' NGVD in height, approximately 30% of the area will not be initially trimmed. These trees that are now less than 32' NGVD in the mangrove trimming areas will be trimmed as they exceed 32' in the future to maintain that elevation.

3. As to red mangroves, trimming is limited on the main trunk to branches above 32' NGVD with a diameter of 1" or less. All other branches above 32' NGVD will be trimmed in compliance with the FDEP Permit. There are relatively few red mangroves and they are

located along the edge of the shoreline. This special guideline was developed so that the main trunks of red mangroves will remain and because red mangroves have been found in the literature to be more sensitive to cutting larger branches. Black and white mangroves have been found in the literature to be much more tolerant and are able to be trimmed much more than what is proposed. It is important to note that this condition is not required anywhere in Lee County or in the State. Not all of the mangroves in the trimming corridors need to be initially trimmed as approximately 30% are less than 32' NGVD. These trees will be maintained at 32' NGVD as they grow.

4. Once the final configuration and height (32' NGVD) is achieved, the trimming corridors will be maintained by annual trimming events.

5. The portion of property in Exhibit C shall be placed under a Conservation Easement granted to Lee County.

6. The nuisance plant moon vine (*Ipomoea sp.*) shall be killed in place by an appropriate herbicide in the portion of the subject property described in Exhibit C.

Boardwalk and Observation Deck

The boardwalk and observation deck work shall be conducted as required by FDEP Environmental Resource Permit No. 36-0152741-002-ES06 and U.S. Army Corps of Engineers (USACOE) Permit No. 199903085(LP-MS).

The alignment of the boardwalk and observation deck was field located with the help of the FDEP staff and is along the west property line where an existing ditch and berm exists (Exhibit D). Minimal mangrove pruning will be required to construct this feature.

Rip Rap Shoreline Stabilization

A rip rap revetment/breakwater system including red mangrove plantings shall be installed along the shoreline of the portion of the property described in Exhibit C to protect the shoreline from further erosion as shown on Exhibit F.

Monitoring

The trimming corridors shall be monitored annually for a period of ten (10) years from the date of initial trimming. Annual reports will be submitted to Lee County Environmental Sciences and analyze tree health, canopy coverage, plant species present, and wildlife observed.

Offsite Mitigation

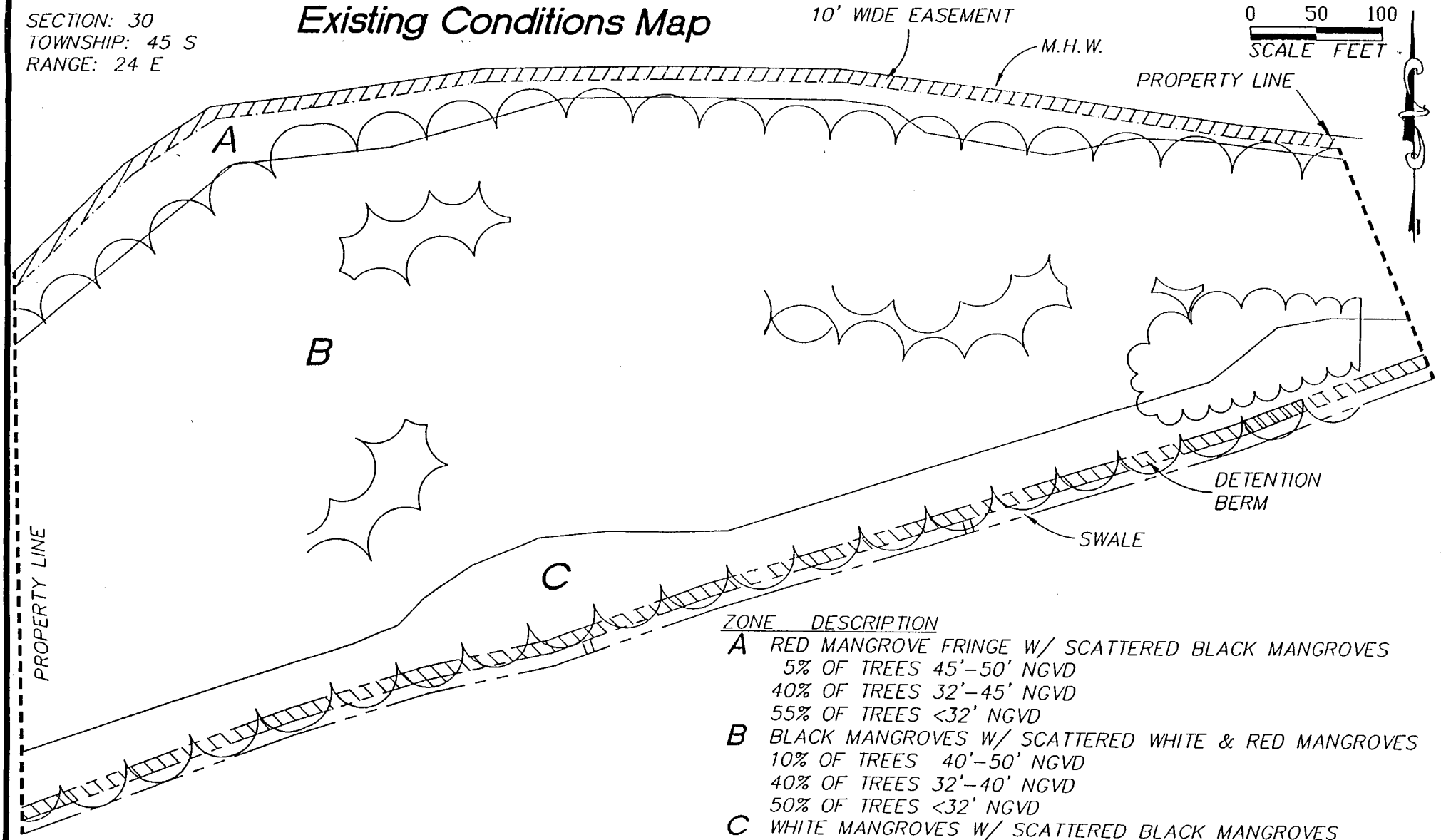
To further compensate for any minimal impacts to mangroves as a result of the proposed trimming, an 11 acre parcel consisting of pristine mangroves shall be purchased and deeded to Lee County or the State of Florida. This 11 acre parcel is located in Section 27, Township 45S, Range 23E in Lee County. It is bordered to the north and east by the Caloosahatchee River and to the south by the Shell Point Village Canal. It is bordered to the west by mangrove wetlands. Please see Exhibit G which is an environmental assessment of the parcel.

EXHIBIT A

EXISTING CONDITIONS MAP

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Existing Conditions Map



ZONE DESCRIPTION

A RED MANGROVE FRINGE W/ SCATTERED BLACK MANGROVES
- 5% OF TREES 45'–50' NGVD
- 40% OF TREES 32'–45' NGVD
- 55% OF TREES <32' NGVD

B BLACK MANGROVES W/ SCATTERED WHITE & RED MANGROVES
- 10% OF TREES 40'–50' NGVD
- 40% OF TREES 32'–40' NGVD
- 50% OF TREES <32' NGVD

C WHITE MANGROVES W/ SCATTERED BLACK MANGROVES
- 20% OF TREES 40'–50' NGVD
- 50% OF TREES 32'–40' NGVD
- 30% OF TREES <32' NGVD

April 24, 2002 10:24:43 a.m.
Drawing: GROSS1SPRESPLN.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
2052 VIRGINIA AVENUE
FORT MYERS, FL 33901 (941) 334-3680

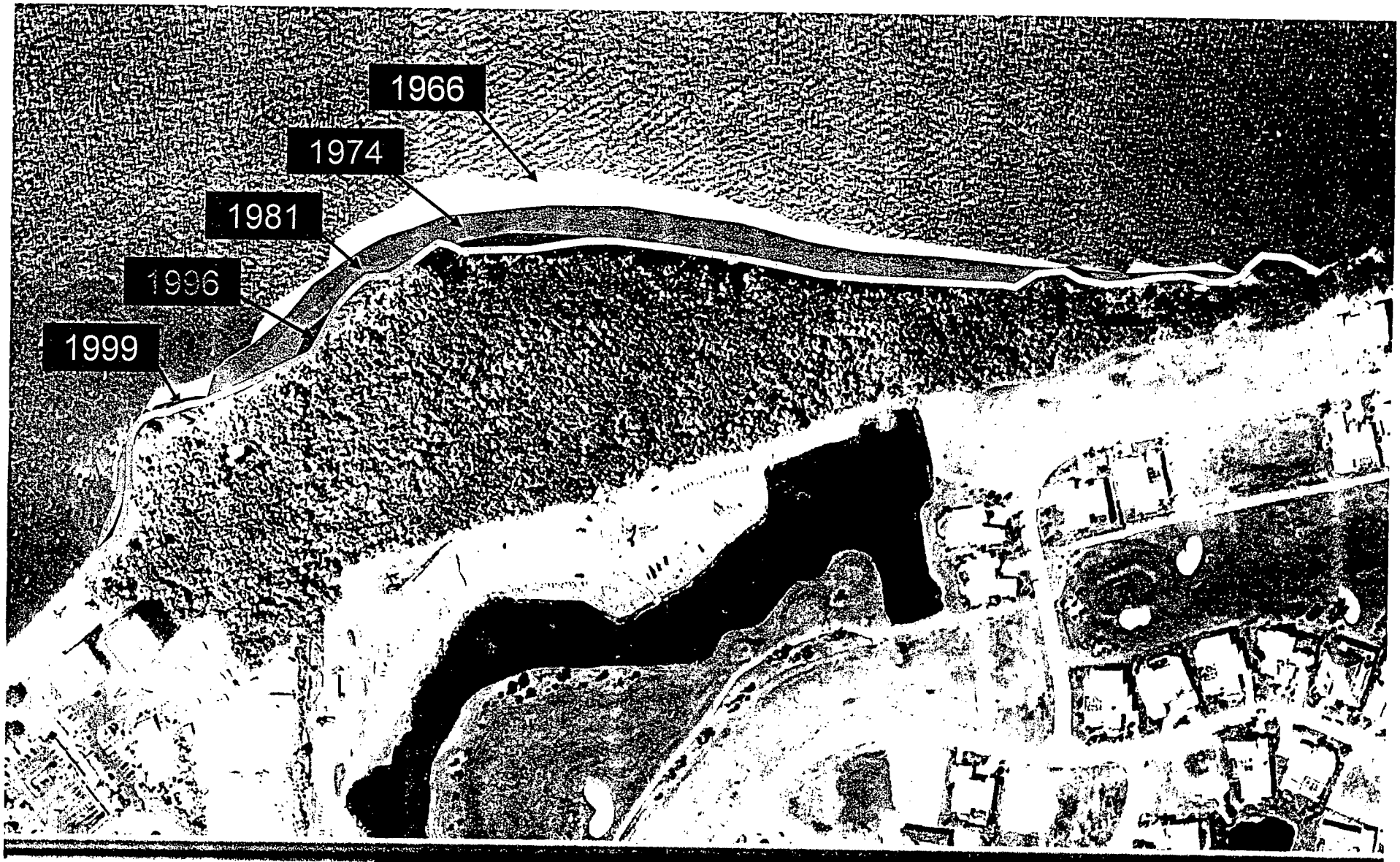
REVISED:

PALMAS del SOL

SHEET

EXHIBIT B

SHORELINE LOSS MAP



PALMAS DEL SOL

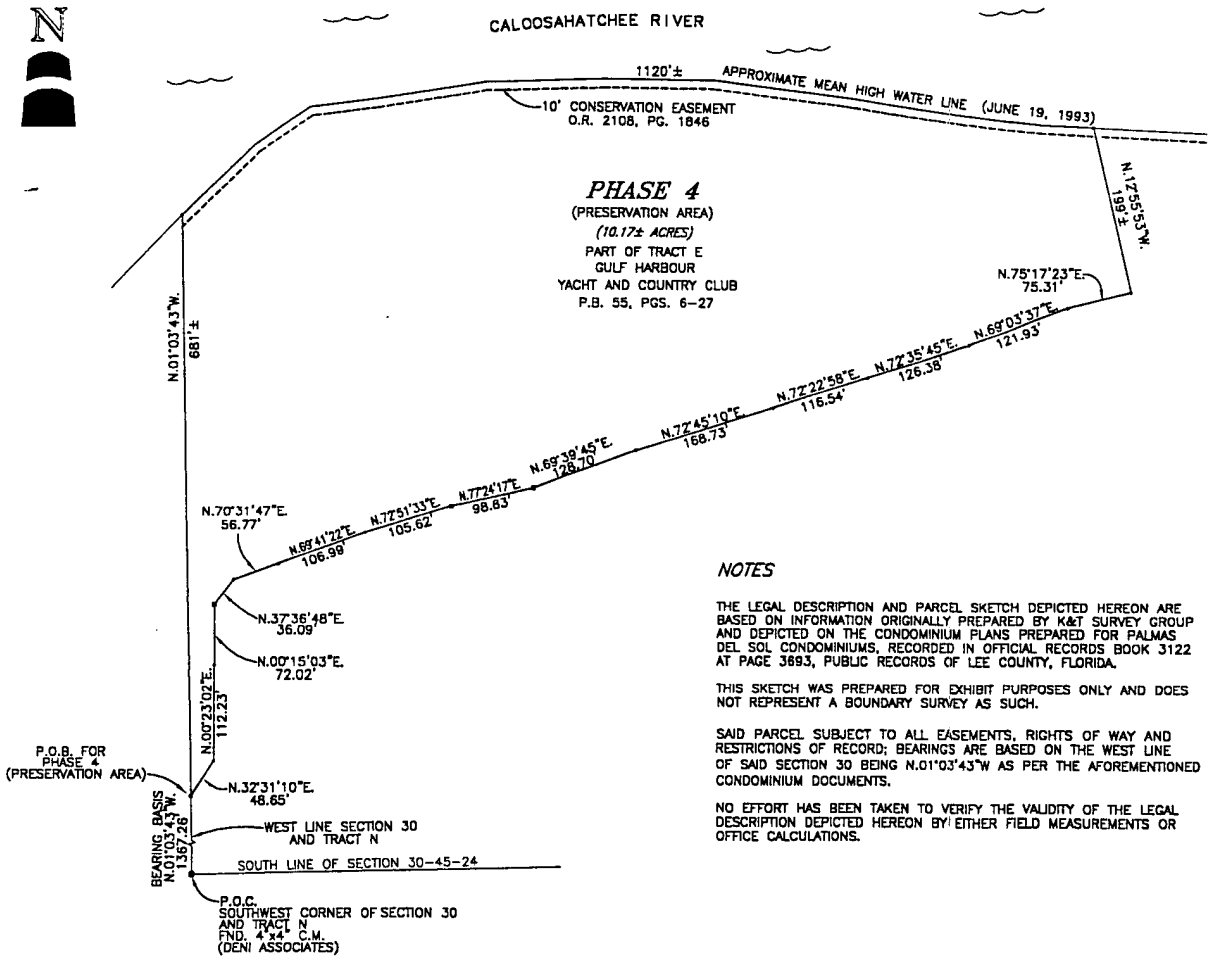
Historical Shoreline

From 1966 to 2002

EXHIBIT C

SKETCH AND LEGAL DESCRIPTION OF MANGROVE AREA

* SKETCH AND DESCRIPTION *



NOTES

THE LEGAL DESCRIPTION AND PARCEL SKETCH DEPICTED HEREON ARE BASED ON INFORMATION ORIGINALLY PREPARED BY K&T SURVEY GROUP AND DEPICTED ON THE CONDOMINIUM PLANS PREPARED FOR PALMAS DEL SOL CONDOMINIUMS, RECORDED IN OFFICIAL RECORDS BOOK 3122 AT PAGE 3693, PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

THIS SKETCH WAS PREPARED FOR EXHIBIT PURPOSES ONLY AND DOES NOT REPRESENT A BOUNDARY SURVEY AS SUCH.

SAID PARCEL SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD; BEARINGS ARE BASED ON THE WEST LINE OF SAID SECTION 30 BEING N.01°03'43"W AS PER THE AFOREMENTIONED CONDOMINIUM DOCUMENTS.

NO EFFORT HAS BEEN TAKEN TO VERIFY THE VALIDITY OF THE LEGAL DESCRIPTION DEPICTED HEREON BY EITHER FIELD MEASUREMENTS OR OFFICE CALCULATIONS.

LEGEND

P.O.B.	POINT OF BEGINNING, PHASE TWO
O.R.	OFFICIAL RECORDS BOOK, LEE COUNTY PUBLIC RECORDS
P.B.	PLAT BOOK, LEE COUNTY PUBLIC RECORDS
PG.	PAGE
DR. & U.E.	DRAINAGE AND UTILITY EASEMENT
LS	LICENSED SURVEYOR
C.M.	CONCRETE MONUMENT
C.E.	COMMON ELEMENT
L.C.E.	LIMITED COMMON ELEMENT
P.C.P.	PERMANENT CONTROL POINT
P.R.M.	PERMANENT REFERENCE MONUMENT

DESCRIPTION
OF PALMAS DEL SOL CONDOMINIUM, PHASE 4
(PRESERVATION AREA)
LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST,
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST, BEING A PART OF TRACT "E", GULF HARBOUR YACHT AND COUNTRY CLUB SUBDIVISION AS RECORDED IN PLAT BOOK 55, PAGES 6 THROUGH 27, PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND BEING FURTHER BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 30 AND THE SOUTHWEST CORNER OF SAID TRACT "N" OF GULF HARBOUR YACHT AND COUNTRY CLUB; THENCE ALONG THE WEST LINE OF SAID SECTION 30 AND SAID TRACT "N", N.01°03'43"W. FOR 1367.26 FEET TO THE POINT OF BEGINNING OF THE PARCEL HEREIN DESCRIBED; THENCE LEAVING SAID WEST LINE, N.32°31'10"E. FOR 48.65 FEET; THENCE N.00°23'02"E. FOR 112.23 FEET; THENCE N.00°15'03"E. FOR 72.02 FEET; THENCE N.37°36'48"E. FOR 36.09 FEET; THENCE N.70°31'47"E. FOR 56.77 FEET; THENCE N.69°41'22"E. FOR 106.99 FEET; THENCE N.72°51'33"E. FOR 105.62 FEET; THENCE N.77°24'17"E. FOR 98.83 FEET; THENCE N.69°39'45"E. FOR 128.70 FEET; THENCE N.72°45'10"E. FOR 168.73 FEET; THENCE N.72°22'58"E. FOR 116.54 FEET; THENCE N.72°35'45"E. FOR 126.38 FEET; THENCE N.69°03'37"E. FOR 121.93 FEET; THENCE N.75°17'23"E. FOR 75.31 FEET TO THE NORTHWEST CORNER OF LOT 38 OF GULF HARBOUR YACHT AND COUNTRY CLUB PHASE ONE AS RECORDED IN PLAT BOOK 56, PAGES 1 THROUGH 4, PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE N.12°55'53"W. FOR 199 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE OF THE CALOOSAHATCHEE RIVER; THENCE WESTERLY ALONG SAID MEAN HIGH WATER LINE FOR 1120 FEET, MORE OR LESS, TO AN INTERSECTION WITH SAID WEST LINE OF SECTION 30, BEARING N.01°03'43"W. FROM THE POINT OF BEGINNING; THENCE ALONG SAID WEST LINE OF SECTION 30, S.01°03'43"E. FOR 681 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL CONTAINS 10.17 ACRES, MORE OR LESS;

PREPARED BY:

Scott M. Shore 5-1-2002

SCOTT M. SHORE DATE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. LS# 5743

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

*** THIS IS NOT A SURVEY ***

TITLE: PRESERVATION AREA / PALMAS DEL SOL

MERIDIAN
SURVEYING & MAPPING, LLC
LAND SURVEYORS · PLANNERS
LB# 7071
5248 RAMSEY WAY, SUITE #2
FORT MYERS, FLORIDA 33907
PHONE: (941) 275-8575
FAX: (941) 275-8457
www.meridianfl.com

FILE NAME:	FIELD BOOK/PAGE:	PROJECT NO.:	SHEET:
2248SK.DWG	N/A	2248	1 OF 1

SURVEY DATE:	DRAWN BY:	SCALE:	CHECKED BY:	FILE NO. (S-T-R):
5-1-2002	DAM	1"= 200'	SMS	33-45-25

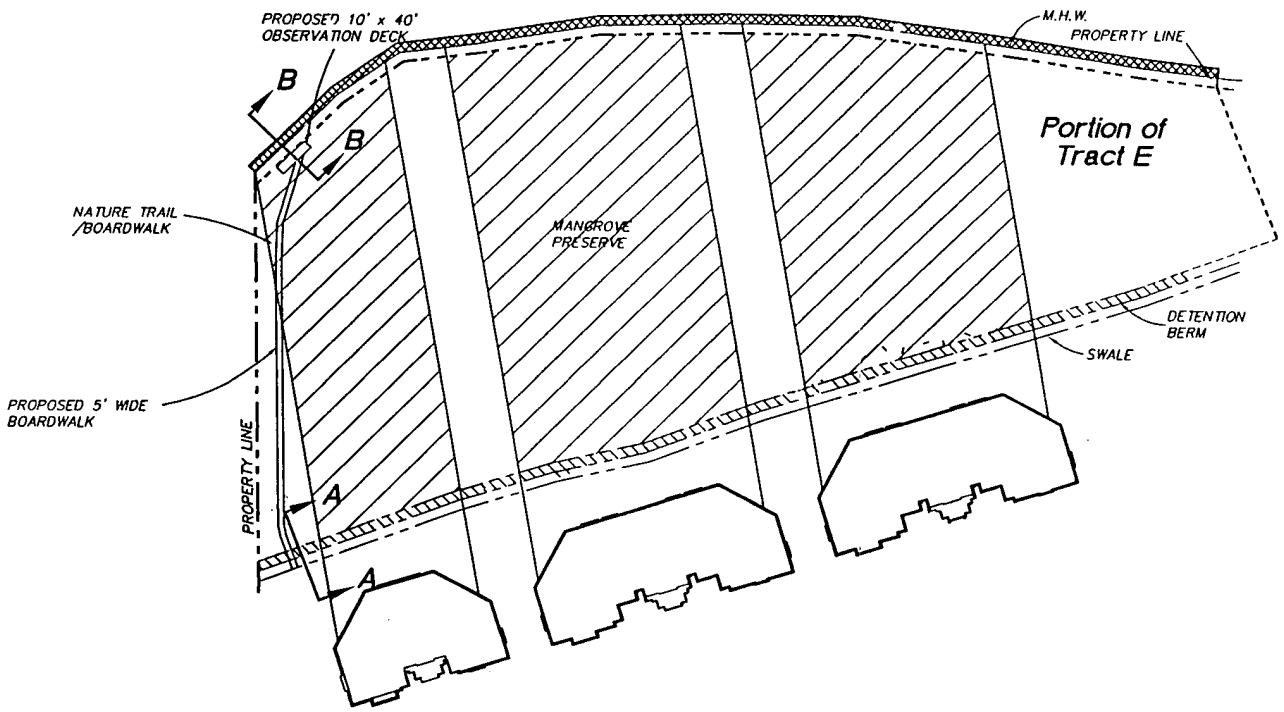
EXHIBIT D

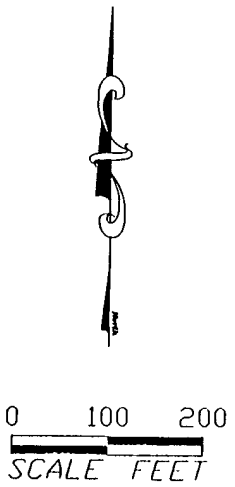
BOARDWALK AND OBSERVATION DECK/MANGROVE TRIMMING PLAN

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Boardwalk and Observation Deck/Mangrove Trimming Plan

Caloosahatchee River





Proposed Mangrove Trimming Area
Trim Trees to 32' NGVD (30'± from substrate)

Proposed Riprap Shoreline Protection

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

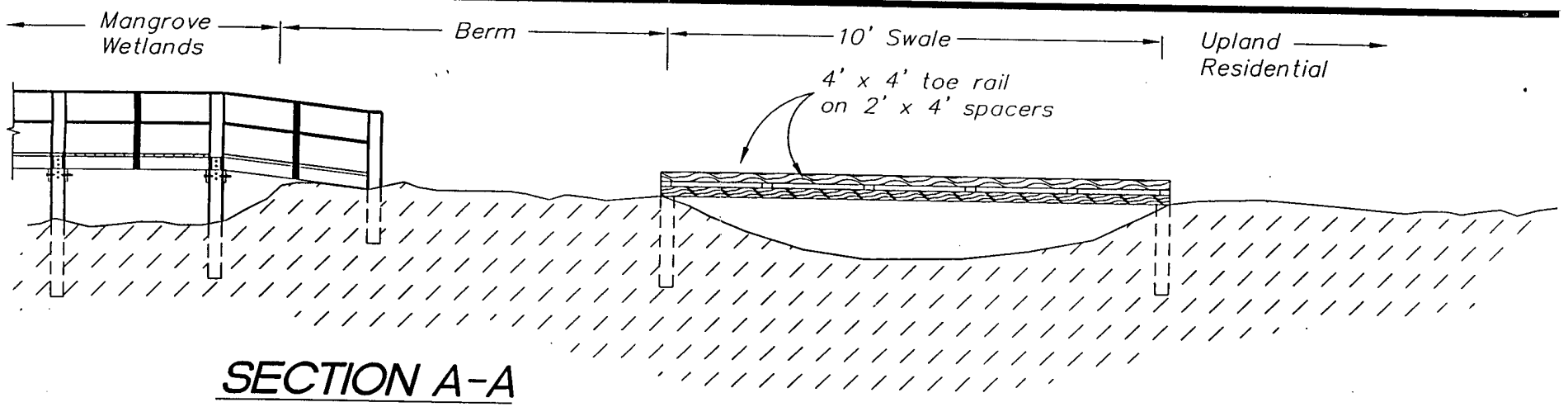
June 26, 2002 9:10:37 a.m.
Drawing: GROSSINOTICE.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

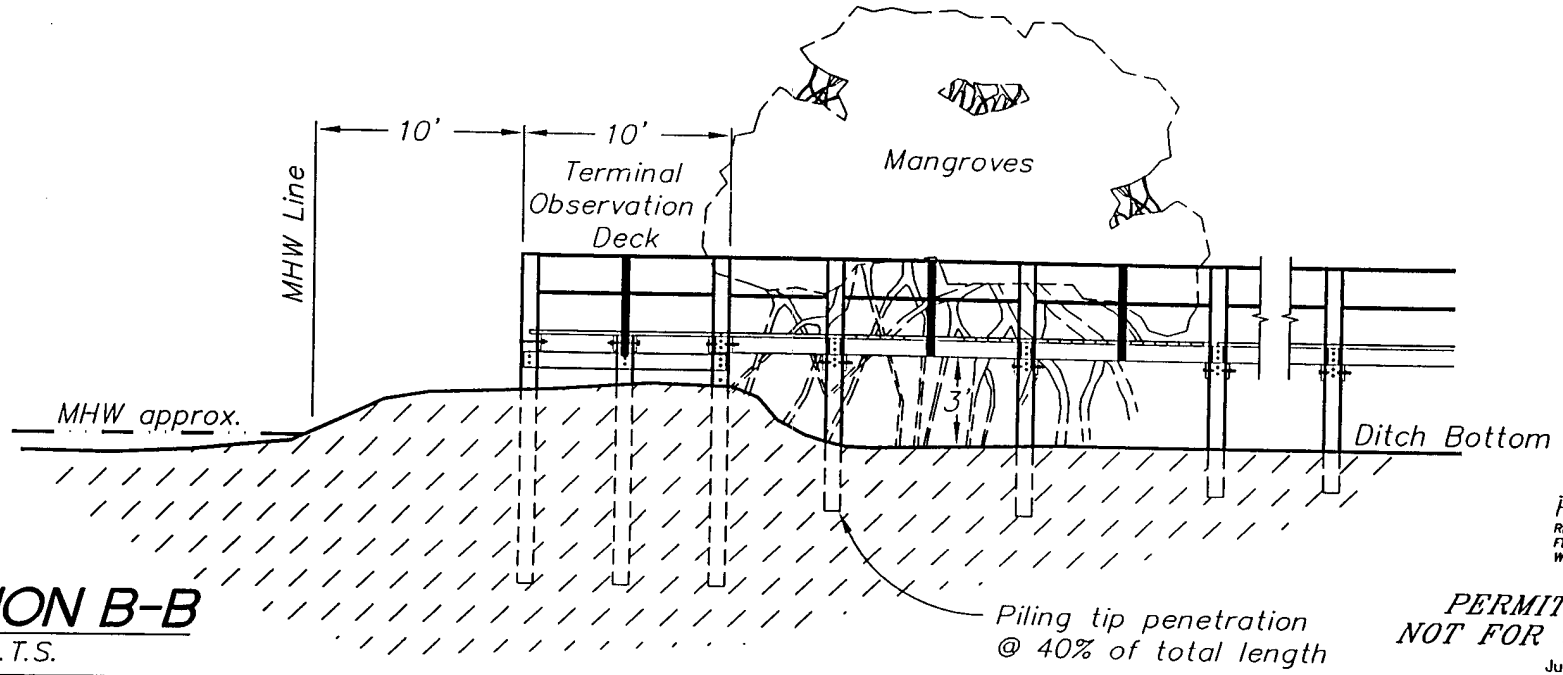
REVISED:

Palmas Del Sol

SHEET



SECTION A-A
N.T.S.



SECTION B-B
N.T.S.

HANS J.M. WILSON
REGISTERED PROFESSIONAL ENGINEER
FLORIDA REGISTRATION NO. 39680
W. DEXTER BENDER & ASSOC., INC.

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

June 19, 2002 11:25:45 a.m.
Drawing: GROSS1XSA.DWG (DCS)

W. DEXTER BENDER
AND ASSOCIATES
2052 VIRGINIA AVENUE
FORT MYERS, FL 33901 (813) 334-3680

REVISED:

PALMAS del SOL
BOARDWALK and OBSERVATION DECK

SHEET

EXHIBIT E

FDEP PERMIT FILE NO. 36-0152741-003

Department of Environmental Protection

Jeb Bush
Governor

South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

David B. Struhs
Secretary

August 13, 2001

RECEIVED
W DEX BENDER
AUG 14 2001

Grosse Point Development
c\o Paul Owens
W. Dexter Bender & Associates, Inc.
2025 Virginia Ave.
Fort Myers Florida 33901

RE: Lee County - ERP
File No. 36-0152741-003

Dear Mr. Owens:

This letter is in response to your application File No. 36-0152741-003, received on April 3, 2001 to trim existing mangroves within a mangrove preserve in three sections (240 ft., 244 ft., and 152 ft.) from 40' NGVD to 32' NGVD (28 ft.) from the substrate.

The Department has reviewed the submitted information and determined the project is consistent with the stipulations of the Mangrove Trimming and Preservation Act (copy enclosed) as a General Permit.

Under Section 403.9327(1)(a) Florida Statutes (F.S.), the proposed activity meets the conditions for trimming mangroves for riparian owners and is subject to the following conditions:

1. No trimming of any kind may be conducted within the mangrove preserve until the Development of Regional Impact (DRI) # 12-8182-2, River's Edge Yacht and Country Club, has been modified and the restriction on vegetation trimming from within the mangrove preserve has been removed. **A copy of the modified DRI must be provided to the Department 10 days prior to the trimming being conducted.**

2. The trimming is supervised or conducted exclusively by a professional mangrove trimmer;

3. The trimming is conducted in an area where the department has not delegated the authority to regulate mangroves to a local government;

4. No herbicide or other chemical will be used for the purpose of removing leaves of a mangrove;

5. The mangroves subject to trimming under the permit do not extend more than 500 feet waterward as measured from the trunk of the most landward mangrove tree in a direction perpendicular to the shoreline;

6. No more than 65 percent of the mangroves along the shoreline which exceed 6 feet in pretrimmed height as measured from the substrate will be trimmed, and no mangrove will be trimmed so that the overall height of any mangrove is reduced to less than 6 feet as measured from the substrate;

7. A general permit may be used only once on any parcel of property to achieve a mangrove height of no less than 6 feet;

8. Trimming must be conducted in stages so that no more than 25 percent of the foliage is removed annually; and the height and configuration of the mangroves trimmed under these general permits may be maintained under s. 403.9326(1)(d);

9. Notice of intent to use a general permit must be made in writing to the department and must contain sufficient information to enable the department to determine the scope of the proposed trimming and whether the activity will comply with the conditions of this section.

The trimming activities proposed are not expected to defoliate, remove, or destroy mangroves.

All activities performed under this General Permit are subject to the general conditions required in Section 62-341.215, Florida Administrative Code (F.A.C.), (attached).

Any changes made in the construction plans or location of the project may necessitate a permit modification or certification from the Department. Therefore, you are advised to contact the Department before beginning the project and before beginning any work in waters or wetlands which is not specifically described in your submittal.

The Applicant and persons whose substantial interests are affected by the Department's permitting decision (action) may petition for an administrative proceeding (hearing) in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the

Office of the General Counsel, Mail Station 35
Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000.

within fourteen (14) days from the date of receipt of this notice. A Petitioner must mail a copy of the petition to the Applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the allowed time frame shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, F.A.C.

The petition must contain the following information:

(a) The name, address, and telephone number of each Petitioner, the Applicant's name and address, the Department Application File Number and the county in which the project is proposed;

(b) A statement of how and when each Petitioner received notice of the Department's action or proposed action;

(c) A statement of how each Petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which Petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement identifying the rules or statutes that the Petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by Petitioner, stating precisely the action Petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Any person may elect to pursue mediation by reaching a mediation agreement with all parties to the proceeding (which include the Applicant, the Department, and any person who has filed a timely and sufficient petition for hearing) and by showing how the substantial interests of each mediating party are affected by the Department's action or proposed action. The agreement must

be filed (received) in the Office of General Counsel at the above address of the Department by the same deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been selected;

(f) The name of each party's representative who shall have authority to settle or recommend settlement;

(g) Either an explanation of how the substantial interests of each mediating party will be affected by the action or proposed action addressed in this notice or a statement clearly identifying the petition for hearing that each party has already filed, and incorporating it by reference; and

(h) The signatures of all parties or their authorized representatives.

As provided in Section 120.573, F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57, F.S., for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty (60) days from the date of execution of the agreement.

If mediation results in a settlement of the administrative dispute, the Department must enter a Final Order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for an administrative hearing only in accordance with the requirements for such petitions by the same deadline as set forth above for the filing of a petition.

If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57, F.S., remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the Department's action and electing remedies under those two sections.

This notice constitutes final agency action unless a petition or a request for mediation is filed in accordance with the above paragraphs, or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition, a request for mediation, or a request for an extension of time this notice will not be effective until further Order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, Mail Station 35, at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Order is filed with the clerk of the Department.

This notice does not relieve you from the responsibility of obtaining other permits (federal, state or local) which may be required for this project. **If you have any questions concerning this matter, please contact Pamela Ammon of the South District office at the letterhead address or by telephone at (941) 332-6975.**

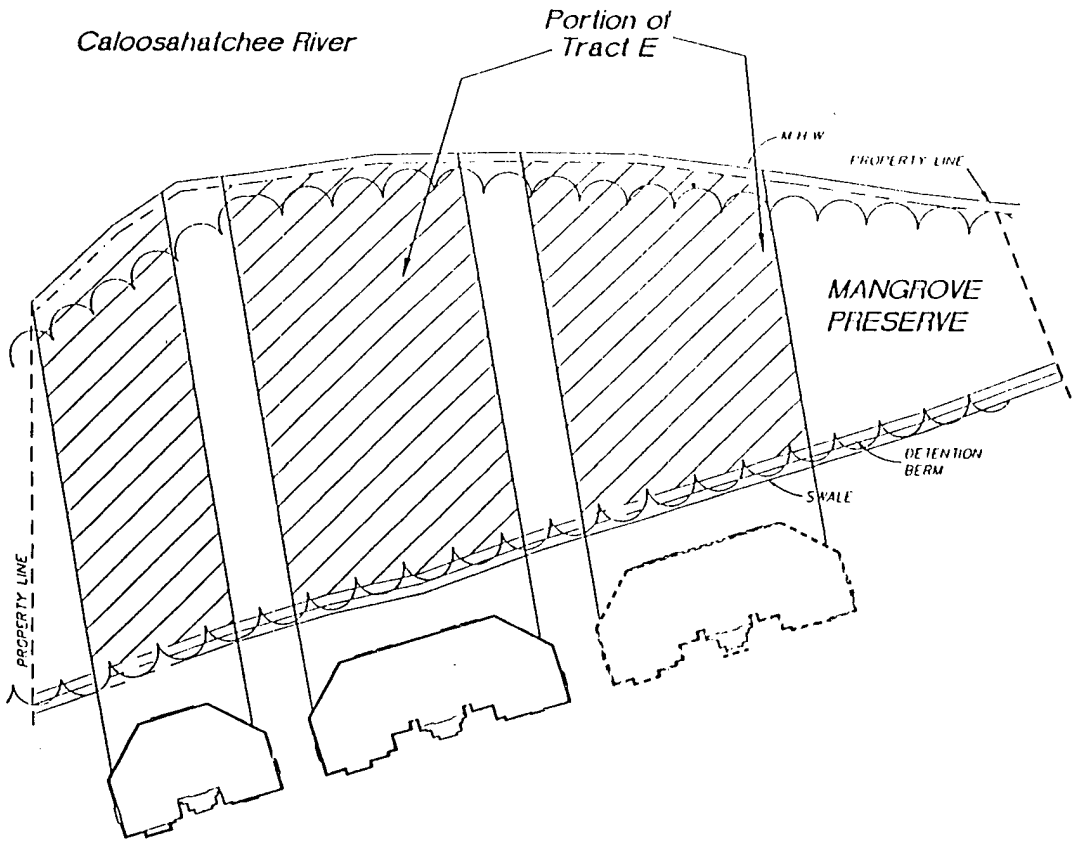
Sincerely,

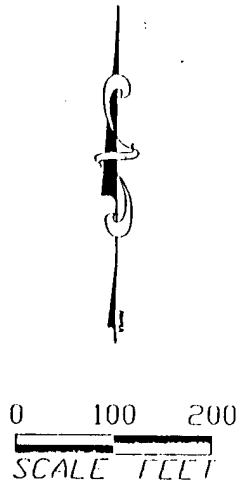
Pamela Ammon
Environmental Specialist II
Submerged Lands and
Environmental Resource Program

Pa/pa
Enclosures:
Site Plan
General Conditions
1996 Mangrove Trimming and Preservation Act
Copies to:
Kim Trebatowski, Lee County

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Mangrove Trimming and Mitigation Plan





Proposed Mangrove Trimming Area
Trim Trees to 32' NGVD (28' from substrate)

RECEIVED
AUG 07 2001
D.E.P. - South District

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

August 02, 2001 8:53:54 a.m.
Drawing: GROSSMAN.DWG (DCS)

W. DEXTER BENDER
AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Palmas Del Sol

SHEET

EXHIBIT F

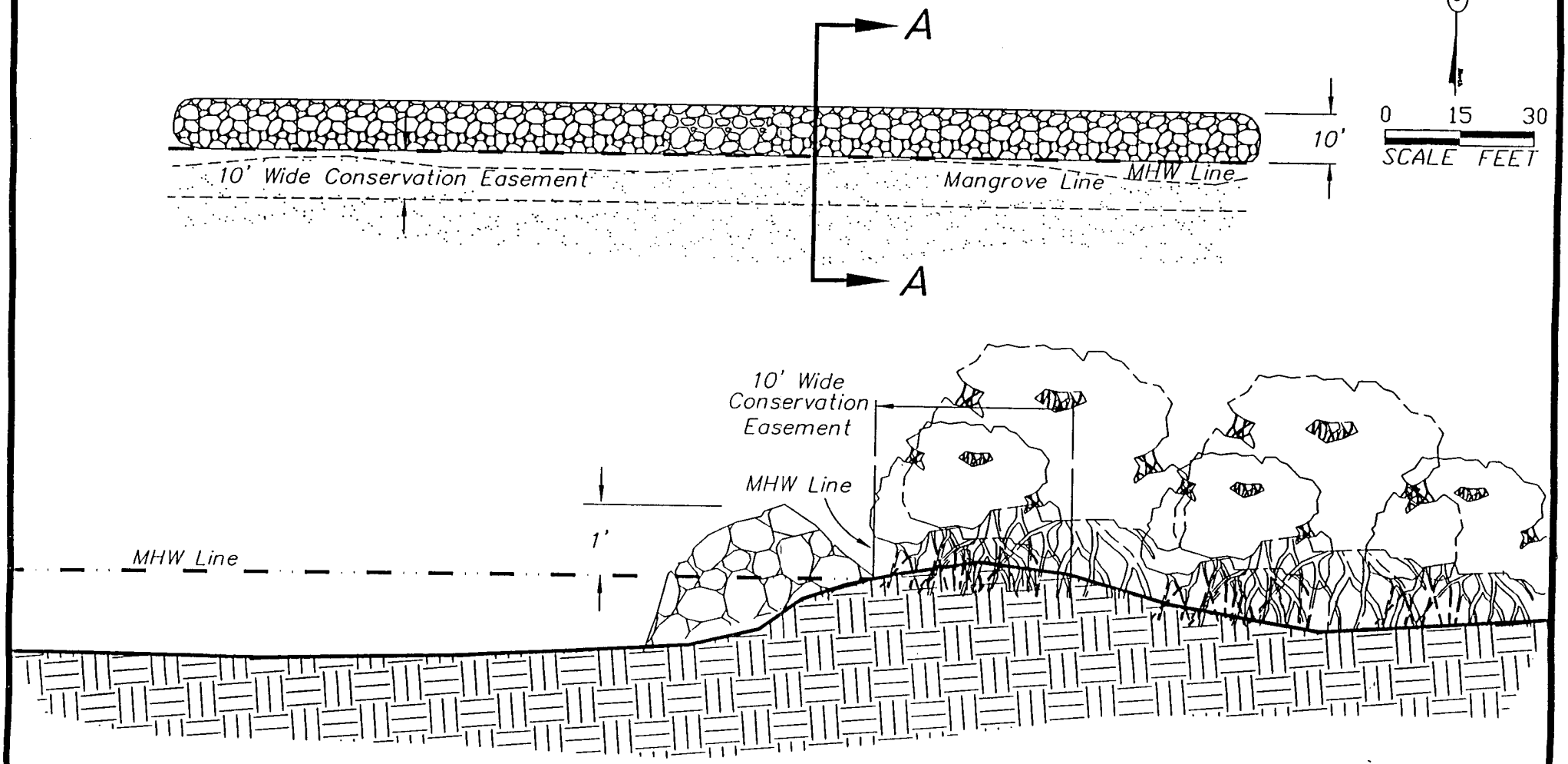
RIPRAP DETAIL AND CROSS SECTION

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Rip Rap Detail and Cross-section

Caloosahatchee River

Proposed Riprap Sill



Section A-A

Not to Scale

PERMIT USE ONLY, NOT FOR CONSTRUCTION

July 10, 2001 9:05:28 a.m.
Drawing: GROSS1DET.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Palmas Del Sol

SHEET

EXHIBIT G

OFFSITE MITIGATION - SHELL POINT 11 ACRE PARCEL ENVIRONMENTAL ASSESSMENT

SITE ASSESSMENT

Shell Point Parcel

INTRODUCTION

W. Dexter Bender & Associates, Inc. has conducted an on site investigation of the "Shell Point" parcel and offer the following comments regarding biological features. These comments are based on field mapping and soil map research. The acreage discussed in this report is approximate and based upon aerial photographs, the 1999 Lee County Plat Book and the information provided to this office.

PHYSICAL CHARACTERISTICS

This parcel of land consists of approximately 11 acres located on Section 27, Township 45 South, Range 23 East in Lee County. This parcel is bordered to the north and east by the Caloosahatchee River and to the south by the Shell Point Village Canal. It is bordered to the west by forested mangrove wetlands.

VEGETATION

The site inspection revealed the presence of one type of vegetation association as described by the Florida Land Use Cover Classification System (FLUCCS). The parcel consists of mature forested mangrove wetlands, FLUCCS 612. There were no jurisdictional uplands observed on the parcel.

This parcel is vegetated by mature red mangroves which dominate the entire shoreline along the canal and river front. The interior of the parcel consists of a mature black mangrove forest that was inundated by 2"-4" of standing water during the time of the survey.

SOILS

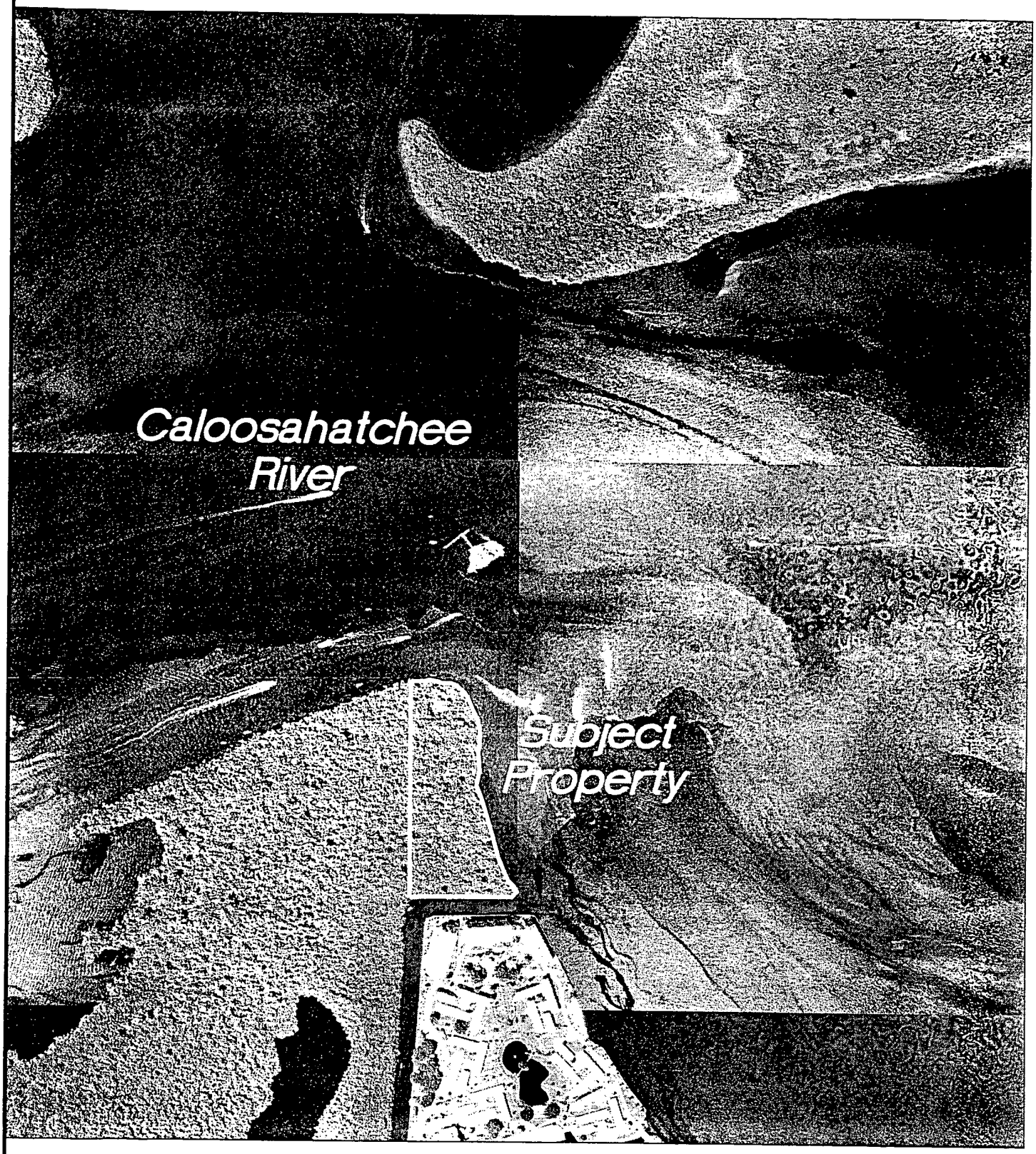
As shown in the Lee County Soil Survey prepared by the USDA Soil Conservation Service (SCS), the subject property contains one major soil type:

SCS # 23 - Wulfert Muck

SCS #23, Wulfert Muck, is considered a "hydric" soil by the Hydric Soils of Florida Handbook of Florida. A hydric soil is defined as a soil that, in its natural condition, is saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic (wetland) vegetation.

LOCATION MAP

NOT TO SCALE



PERMIT USE ONLY, NOT FOR CONSTRUCTION

May 31, 2002 2:01:29 p.m.
Drawing: GROSS1AREAMAP.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

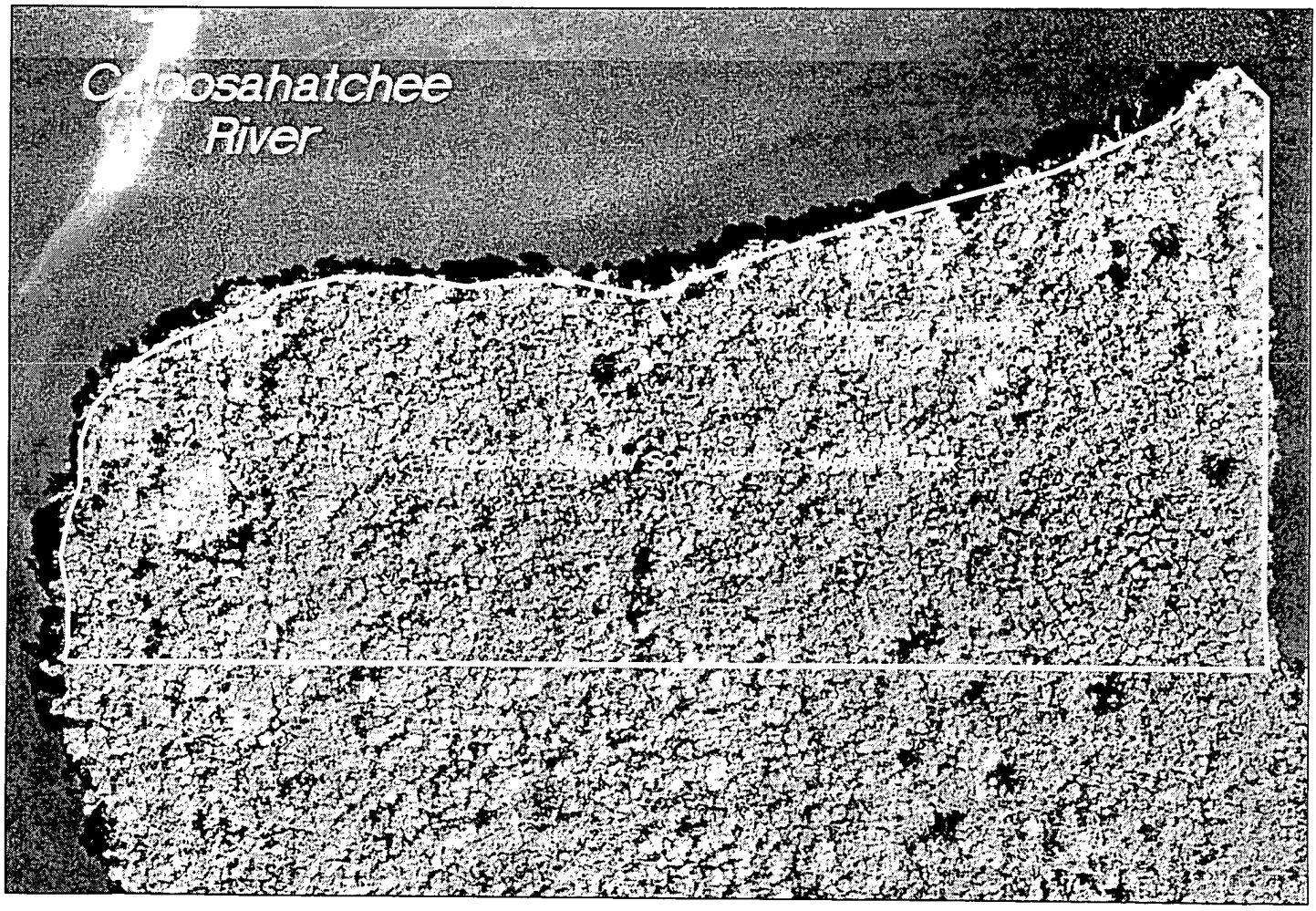
Shell Point Parcel

SHEET

SECTION: 27
TOWNSHIP: 45 S
RANGE: 23 E

Vegetation and Soils Map

0 100 200
SCALE FEET



PERMIT USE ONLY,
NOT FOR CONSTRUCTION

May 30, 2002 8:51:22 a.m.
Drawing: GROSS1SPPLAN.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Shell Point Parcel

SHEET

References

Estevez, Ernest D. and Evans, Rhonda K. 1978. *The Effects of Pruning on Reproduction by the Red Mangrove, Rhizophora mangle*. Proceedings of the Fifth Annual Conference of Restoration of Coastal Vegetation in Florida, May 13, 1978.

Florida Department of Environmental Protection. *Homeowners Guide to Mangroves, Understanding, the Mangrove Preservation Act of 1996*. Pamphlet updated.

1996 Mangrove Trimming and Preservation Act. Florida Statute section 403.9321 - 403.9333.

Florida Sea Grant College Program. *A Homeowners Guide to Trimming and Altering Mangroves*. Florida Sea Grant College Program (FISG-H-01-002-C2 SGBE-19.

Lin, Juda. 1996. *Effect of Red Mangrove Trimming on the Faunal Communities*. Florida Sea Grant College Project No. PD-94-5.

Parkinson, Randall W., Perez-Bedmar, Monica, and Santangelo, Jenna A. 1999. Hydrobiological 413: 63-76, 1999.

Snedaker, Samuel C., Brown, Melvin S., Lahmann, Enrique J., and Araujo, Raphael J. 1992. *Journal of Coast Research*, Vol. 8, No. 4, pages 919-925.

Stevely, John and Rabinowitz, Larry. 1982. *Mangroves - A Guide for Planting and Maintenance*. Florida Sea Grant Project #A/Map-1.

ATTACHMENT F

ADMINISTRATIVE AMENDMENT (PD) ADD2002-00175

ADMINISTRATIVE AMENDMENT
LEE COUNTY, FLORIDA

WHEREAS, W. Dexter Bender & Associates representing Grosse Pointe Development Company Inc. filed an application for administrative approval to **amend Conditions 3 and 6 of Resolution Z-02-020** on a project known as Palmas del Sol (part of Rivers Edge/Gulf Harbor DRI) for property located on Compass Point Drive, described more particularly as:

LEGAL DESCRIPTION: In Section 30, Township 45 South, Range 24 East, Lee County, Florida:

See Exhibit A attached (same as original Case DRI2001-00005)

WHEREAS, case number DRI2001-00005 adopted changes to the River's Edge/Gulf Harbor DRI Development Order #12-8182-21; and

WHEREAS, the Lee County Land Development Code provides for certain administrative changes to planned unit developments; and

WHEREAS, the subject application and plans have been reviewed by the Lee County Department of Community Development in accordance with applicable regulations for compliance with all terms of the administrative approval procedures; and

WHEREAS, it is found that the proposed amendment does not increase density or intensity within the development; does not decrease buffers or open space required by the LDC; does not underutilize public resources or infrastructure; does not reduce total open space, buffering, landscaping or preservation areas; and does not otherwise adversely impact on surrounding land uses.

NOW, THEREFORE, IT IS HEREBY DETERMINED that the application for administrative approval for an amendment to **amend Conditions 3 and 6 of Resolution Z-02-020** is **APPROVED.**

Approval is subject to the following conditions:

1. **The terms and conditions of the original zoning resolution (Resolution Z-02-020) remain in full force and effect, except as specifically amended herein.**

2. **Condition 3 of Resolution Z-02-020 is hereby amended as follows:**

   3. **The access boardwalk to the observation deck is limited to a five-foot width. The observation deck is limited to a maximum 400 square feet, and must meet the standards of fishing piers in LDC §26-73. The boardwalk**

and observation deck must be installed in compliance with the county approved field ~~located~~ location to avoid impacts to the existing mangrove forest and individual large mangrove trees. Placement of the boardwalk must be ~~within the limits of the existing berm~~ along the west boundary of the mangrove preserve. The boardwalk and observation deck must be in substantial compliance with the Boardwalk and Observation Deck/Mangrove Trimming Plan prepared by W. Dexter Bender and Associates stamped received January 23, 2003 ~~June 26, 2002~~(attached as Exhibit ~~E~~ F).

3. Condition 6 of Resolution Z-02-020 is hereby amended as follows:

6. Mangrove trimming within the 10-acre preserve adjacent to the Palmas del Sol condominiums is approved subject to the following:

a. Within 6 months, the 10-foot wide rip-rap sill (breakwater) must be installed along the entire 10-acre mangrove preserve. Appropriate financial assurances must be provided within 30 days, subject to approval by Department of Community Development, or no further permits will be issued.

b. Within 60 days, a Conservation Easement dedicated to Lee County and the Department of Environmental Protection (DEP) detailing the restrictions of the DEP mangrove trimming permit and the limited trimming of red mangrove must be recorded; and

c. Within 60 days, the donation of the 11-acre parcel (STRAP 27-45-23-00-00005.0000) must be executed at no cost to Lee County or the State of Florida. The applicant must pay all costs associated with the donation (e.g., surveys, closing fees, recording). Any exotic vegetation must be removed by hand from the 11-acre parcel prior to finalizing the donation.

DULY SIGNED this 4th day of February, A.D., 2003.

BY: Mary Gibbs
Mary Gibbs, Director
Department of Community Development

Fax to: Mary Gibbs

479-8341 from CD Admin

Received 2-4-03 12 Noon - M. Gibbs

Grosse Pointe
DEVELOPMENT COMPANY INC.

February 4, 2003

Mr. Don Stilwell, County Manager
P.O. Box 398
Fort Myers, FL 33902

Re: Palmas Del Sol, Mangrove Trimming

Dear Mr. Stilwell:

As you know, we are finishing the construction of Palmas Del Sol in Gulf Harbor. To that end, we have been pursuing the trimming of the mangroves behind the building for approximately three years. We have dedicated considerable time and money to obtain all the approvals necessary to begin trimming. We are deeply committed to this project and have the funds required to perform the trimming as well as all the additional requirements established in the Fourth Amendment to the River's Edge Country Club DRI, which was approved by the Board of County Commissioners on October 7, 2002.

During our January 14, 2003 meeting, we explained that the rip rap cannot be reasonably installed during the winter months because of the low water levels in the Caloosahatchie River. Accordingly, we desire to trim the mangroves now and install the rip rap during the wet season.

Within the last sixty days, I have lost three confirmed sales totaling $1.6 Million because the mangrove trimming has not begun.

I sincerely appreciate your willingness to allow us to begin the mangrove trimming. I personally commit to you that all of the paper work for the letter of the credit (LOC), to secure the rip rap installation, has been submitted to the bank, and I will provide the LOC to the County as soon as possible. I do not expect that the process will exceed two weeks.

Thank you for your assistance in this time sensitive matter.

Sincerely,

Robert D. Hensley, President
Grosse Pointe Development Co., Inc.

cc: Holly Schwartz

Banks Engineering, Inc.

Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

DESCRIPTION
OF A
PARCEL OF LAND
LYING IN
SECTIONS 29, 30, & 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA
(GULF HARBOUR)

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTIONS 29, 30, AND 31, TOWNSHIP 45 SOUTH RANGE 24 EAST, AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 30; THENCE S89°19'35"W (BEARINGS BASED ON THE FLORIDA COORDINATE SYSTEM, WEST ZONE) ALONG THE SOUTH LINE OF SAID SECTION 30 FOR 425.34 FEET TO THE INTERSECTION WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORDS BOOK 1837, PAGE 2982 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA AND THE POINT OF BEGINNING, THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY 556.64 TO THE INTERSECTION WITH THE EAST LINE OF SAID SECTION 30; THENCE CONTINUING N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE INTO SAID SECTION 29 FOR 202.49 FEET; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST AND SAID RIGHT-OF-WAY LINE FOR 141.67 FEET, RADIUS 2212.00 FEET, CHORD OF 141.65 FEET BEARING N47°37'OO"E; THENCE N45°46'55"E ALONG SAID RIGHT-OF-WAY LINE FOR 1444.31 FEET; THENCE N00°44'41"W, LEAVING SAID RIGHT-OF-WAY, ALONG THE WESTERLY LINE OF TRACT "B" PALMETTO POINT, AS RECORDED IN PLAT BOOK 29, PAGES 21 THROUGH 23 OF SAID PUBLIC RECORDS, AND ALONG THE WESTERLY RIGHT-OF-WAY LINE OF GRIFFIN BOULEVARD (50 FEET WIDE) FOR 3603.97 FEET; THENCE N89°37'45"W, LEAVING SAID RIGHT-OF-WAY LINE PARALLEL WITH AND 100 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 29 FOR 1279.05 FEET TO THE INTERSECTION WITH THE EASTERLY LINE OF SAID SECTION 30; THENCE N89°37'45"W PARALLEL WITH AND 100 FEET SOUTH OF THE NORTHERLY LINE OF SAID SECTION 30 FOR 554 FEET, MORE OR LESS, TO THE WATERS OF THE CALOOSAHATCHEE RIVER, THEN SOUTHWESTERLY AND WESTERLY ALONG THE WATERS OF THE CALOOSAHATCHEE RIVER FOR 6690 FEET, MORE OR LESS, TO THE INTERSECTION WITH THE WESTERLY LINE OF SAID SECTION 30 WHICH BEARS N01°03'43"W FROM THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE S01°03'43"E ALONG THE WESTERLY LINE OF SAID SECTION 30 FOR 2049 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID SECTION 30; THENCE N88°46'47"E ALONG THE SOUTHERLY LINE OF SAID SECTION 30 FOR 1317.12 FEET TO THE SOUTHEAST CORNER OF GOVERNMENT LOT 2; THENCE S01°06'09" ALONG THE WESTERLY BOUNDARY LINE OF THE LANDS OF RIVER'S EDGE 3, A CONDOMINIUM AS RECORDED IN OFFICIAL RECORD BOOK 1783, PAGE 3709 OF SAID PUBLIC RECORDS, FOR 665.51 FEET TO THE SOUTHWEST CORNER OF

DRI 2001-00005

Banks Engineering, Inc.
Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

THE NORTHWEST QUARTER (NW1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW1/4) OF SAID SECTION 31; THENCE N.88°51'11"E. ALONG THE SOUTH BOUNDARY LINE OF SAID CONDOMINIUM LANDS AND THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 593.45 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID CONDOMINIUM LAND; THENCE CONTINUE N88°51'11"E ALONG THE SOUTH LINE OF SAID FRACTIONAL SECTION FOR 65.45 FEET TO THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SAID SECTION 31; THENCE S01°09'19"E ALONG THE WESTERLY LINE OF SAID FRACTION OF SECTION 31 FOR 666.27 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION OF SECTION 31; THENCE N88°55'32"E ALONG THE SOUTHERLY LINE OF SAID FRACTION SECTION 31 FOR 659.51 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER(NW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 31; THENCE N89°11'55"E ALONG THE SOUTHERLY LINE OF SAID FRACTIONAL SECTION FOR 542.56 FEET; THENCE N01°07'54"W ALONG THE WESTERLY BOUNDARY LINE OF LANDS CONVEYED BY DEED RECORDED IN OFFICIAL RECORD BOOK 2125, PAGE 2439, FOR 221.20 FEET TO THE NORTHWEST CORNER OF SAID LANDS; THENCE N65°09'03"E ALONG THE NORTHWESTERLY BOUNDARY LINE OF SAID LANDS FOR 163.03 FEET TO THE MOST NORTHERLY CORNER OF SAID LANDS; THENCE S40°32'55"E ALONG THE NORTHEASTERLY BOUNDARY LINE OF SAID LANDS, ALONG A LINE PERPENDICULAR WITH THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD FOR 164.14 FEET TO THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MCGREGOR BOULEVARD (80 FEET FROM CENTERLINE), BEING THE NORTHWESTERLY LINE OF LANDS CONVEYED BY DEED RECORDED IN RECORD BOOK 1837, PAGE 2982 OF SAID PUBLIC RECORDS; THENCE N49°27'05"E ALONG SAID RIGHT-OF-WAY LINE FOR 1826.43 FEET TO THE SOUTH LINE OF SAID SECTION 30 AND THE POINT OF BEGINNING.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, AND RIGHTS-OF-WAY.

BEARINGS ARE BASED ON THE SOUTH LINE OF THE SOUTH EAST QUARTER OF SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST AS BEARING S.89°19'35"W.

SUBJECT TO FACTS THAT MAY BE REVEALED BY AN ACCURATE BOUNDARY SURVEY.

DESCRIPTION PREPARED 7/31/01.

CCG/tu
S:\JOBS\90xx\9000-GH-DESCRIPTION.doc
Applicant's Legal Checked
by _____ 7/11/01

RECEIVED
DEC 17 2002
COMMUNITY DEVELOPMENT

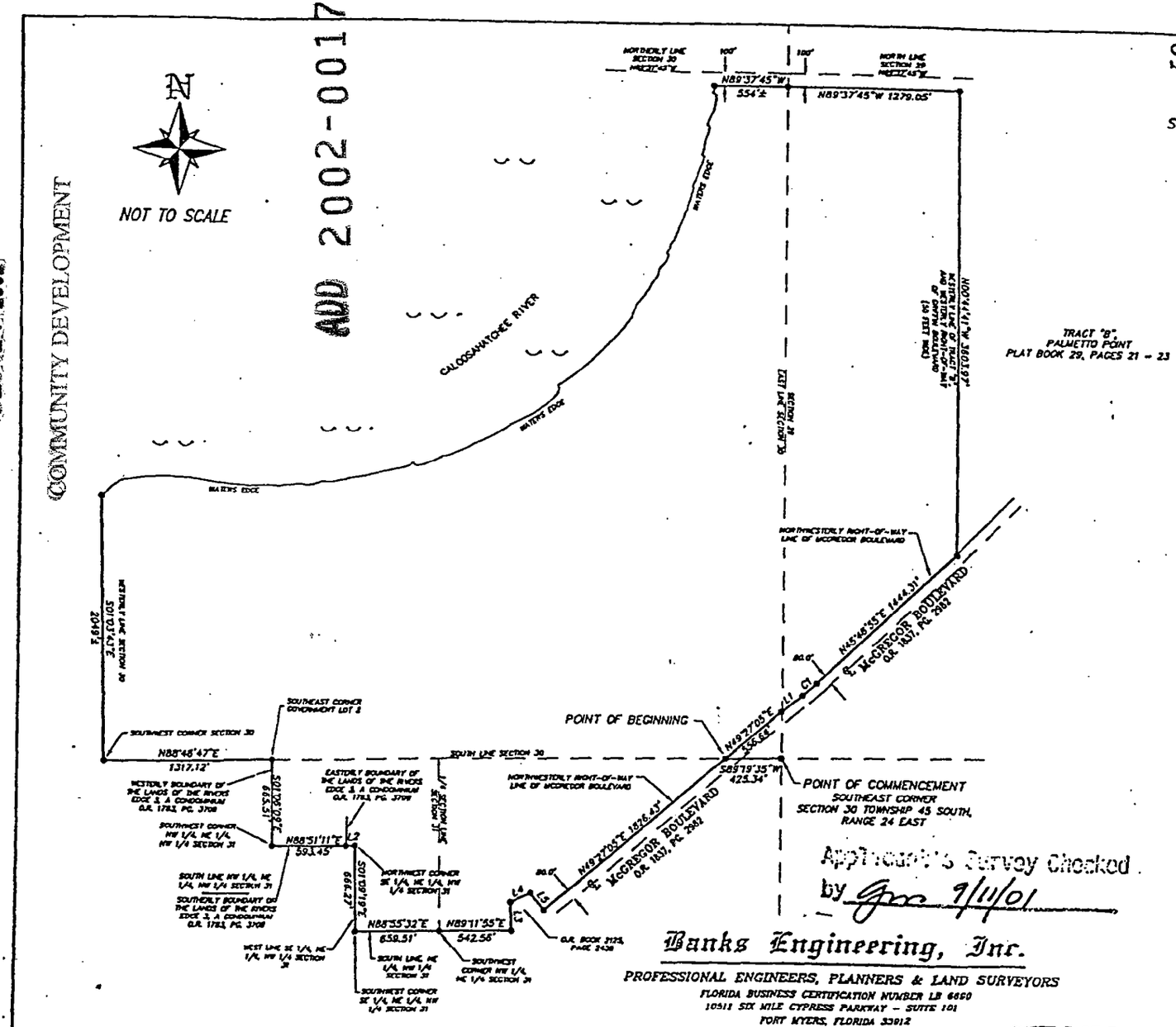
ADD 2002-00175

DRI 2001-00005

SKETCH OF DESCRIPTION

OF

A TRACT OR PARCEL OF LAND LYING IN
SECTIONS 29, 30 AND 31 TOWNSHIP 45 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA
(GULF HARBOUR)



LINE TABLE

LINE	BEARING	DISTANCE
L1	N49°27'05"E	202.49'
L2	N88°51'11"E	65.45'
L3	N01°07'54"W	221.20'
L4	N65°09'03"E	163.03'
L5	S40°32'55"E	164.14'

CURVE TABLE

CURVE	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	2212.00'	03°40'11"	141.87'	N47°37'00"E	141.85'

LEGEND

O.R. INDICATES OFFICIAL RECORDS BOOK, LEE COUNTY PUBLIC RECORDS
PG INDICATES PAGE
L1 INDICATES LINE NUMBER
C1 INDICATES CURVE NUMBER

SEE SHEETS 1-3 OF 4
FOR COMPLETE
METES AND BOUNDS DESCRIPTION

THIS SKETCH
OF DESCRIPTION
IS NOT A BOUNDARY SURVEY

SEE SHEETS 1-3 OF 4
FOR COMPLETE METES AND BOUNDS DESCRIPTION

Applicant's Survey Checked
by Jmc 9/11/01

Banks Engineering, Inc.

PROFESSIONAL ENGINEERS, PLANNERS & LAND SURVEYORS
FLORIDA BUSINESS CERTIFICATION NUMBER LB 6660
10511 SIX MILE CYPRESS PARKWAY - SUITE 101
FORT MYERS, FLORIDA 33912
(941) 939-5490

SHEET 3 OF 3

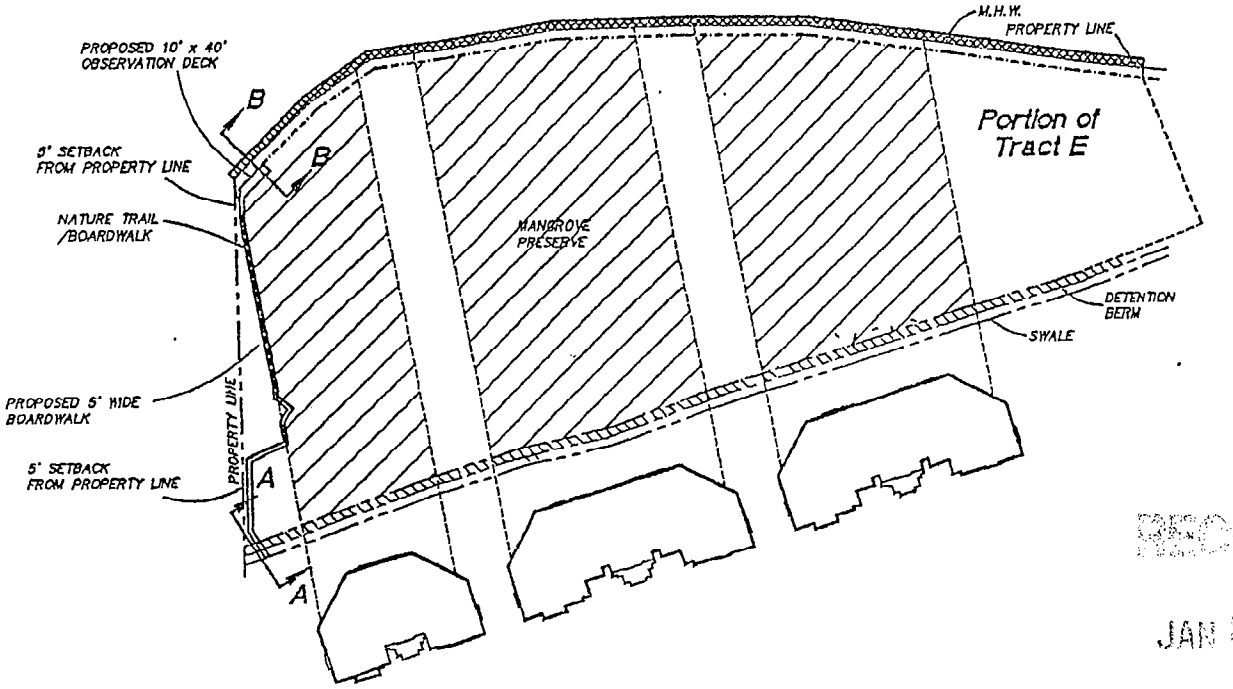
9-10-01
THOMAS R. LEHNERT, JR., P.S.M.
FLORIDA CERTIFICATION NO. 5541

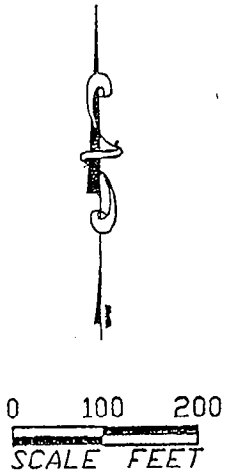
- THIS SKETCH OF DESCRIPTION IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Boardwalk and Observation Deck/Mangrove Trimming Plan

Caloosahatchee River





RECEIVED
JAN 23 2003
Environmental Sciences

Proposed Mangrove Trimming Area
Trim Trees to 32' NGVD (30'± from substrate)

Proposed Riprap Shoreline Protection

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

December 20, 2002 2:34:03 p.m.
Drawing: GROSS1NOTICE.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Exhibit F Palmas Del Sol

SHEET

AMENDED ADMINISTRATIVE AMENDMENT (PD) ADD2002-00175

AMENDED ADMINISTRATIVE AMENDMENT
LEE COUNTY, FLORIDA

WHEREAS, Beverly Grady with Roetzel & Andress representing Grosse Pointe Development Company Inc. has requested an Amended Administrative Amendment for an extension of time as previously conditioned in Condition 6.a. of ADD2002-00175 on a project known as Palmas del Sol (part of Rivers Edge/Gulf Harbor DRI) for property located on Compass Point Drive, described more particularly as:

LEGAL DESCRIPTION: In Section 30, Township 45 South, Range 24 East, Lee County, Florida:

See Exhibit A attached (same as original Case DRI2001-00005)

WHEREAS, case number DRI2001-00005 adopted changes to the River's Edge/Gulf Harbor DRI Development Order #12-8182-21; and

WHEREAS, ADD2002-00175 amended Resolution Z-02-020 specifically Conditions 3 and 6; and

WHEREAS, Condition 6. a. states "Within 6 months, the 10-foot wide rip-rap sill (breakwater) must be installed along the entire 10-acre mangrove preserve. Appropriate financial assurances must be provided within 30 days, subject to approval by Department of Community Development, or no further permits will be issued."; and

WHEREAS, the ADD2002-00175 was signed by the Director of Community Development on February 4th, 2003 which required the applicant to have the rip-rap installed by August of 2003; and

WHEREAS, the applicant has requested to amend Condition 6.a. for an extension of time from 6 months (August 2003) to 9 months (November 2003) for the installation of rip-rap; and

WHEREAS, the contractor has expended much time and energy pursuing a land approach to install the rip-rap however, it appears that a water approach is the only means to complete the installation of the rip-rap which is difficult due to the depth of the water; and

WHEREAS, part of Condition 6.a., required the applicant to provide appropriate financial assurances within 30 days of the February 4th, 2003 ADD2002-00175, Administrative Amendment; and

WHEREAS, on March 18, 2003, a Letter of Credit was approved for the Assurance of completion of the required rip-rap; and

WHEREAS, the Lee County Land Development Code provides for certain administrative changes to planned unit developments; and

WHEREAS, the subject application and plans have been reviewed by the Lee County Department of Community Development in accordance with applicable regulations for compliance with all terms of the administrative approval procedures; and

WHEREAS, it is found that the proposed amendment does not increase density or intensity within the development; does not decrease buffers or open space required by the LDC; does not underutilize public resources or infrastructure; does not reduce total open space, buffering, landscaping or preservation areas; and does not otherwise adversely impact on surrounding land uses.

NOW, THEREFORE, IT IS HEREBY DETERMINED that the Amended Administrative Amendment to Condition 6.a. is **APPROVED.**

Approval is subject to the following conditions:

1. **The terms and conditions of the original zoning resolution (Resolution Z-02-020) remain in full force and effect, except as specifically amended herein.**

2. **The terms and conditions of ADD2002-00175 remain in full force and effect, except as specifically amended herein.**

3. **Condition 6 .a. of Resolution Z-02-020 is hereby amended as follows:**

   6. **Mangrove trimming within the 10-acre preserve adjacent to the Palmas del Sol condominiums is approved subject to the following:**

      a. **Within 9 months, the 10-foot wide rip-rap sill (breakwater) must be installed along the entire 10-acre mangrove preserve. Appropriate financial assurances must be provided within 30 days, subject to approval by Department of Community Development, or no further permits will be issued.**

DULY SIGNED this 10 day of July, A.D., 2003.

BY: _____
Pamela E. Houck, Director
Division of Zoning

Banks Engineering, Inc.

Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

DESCRIPTION
OF A
PARCEL OF LAND
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SECTIONS 29, 30, & 31, TOWNSHIP 45 SOUTH, RANGE 24 EAST
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DRI 2001-00005

Banks Engineering, Inc.
Professional Engineers, Planners & Land Surveyors
FORT MYERS ♦ NAPLES ♦ SARASOTA

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SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, AND RIGHTS-OF-WAY.

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SUBJECT TO FACTS THAT MAY BE REVEALED BY AN ACCURATE BOUNDARY SURVEY.

DESCRIPTION PREPARED 7/31/01.

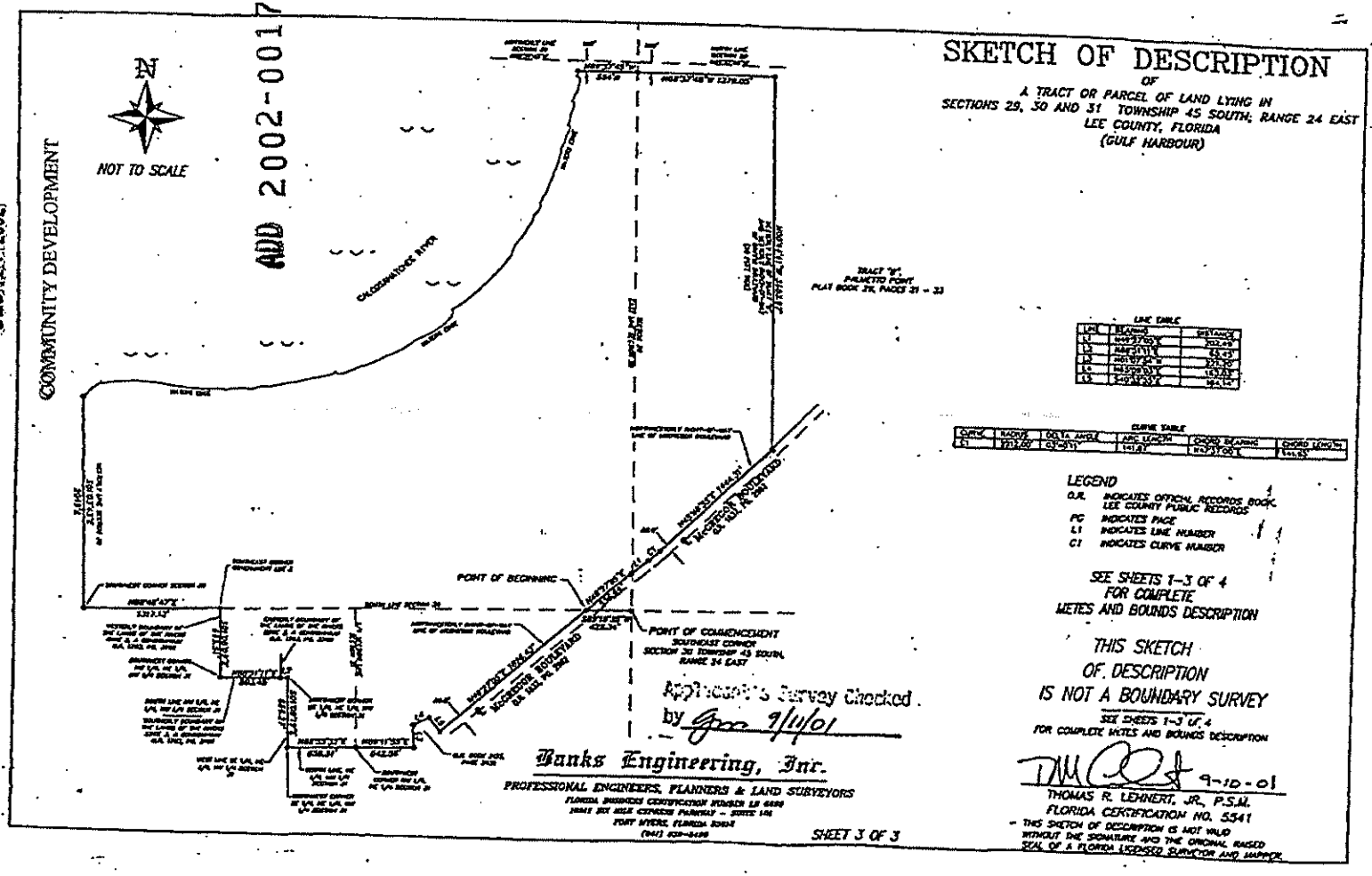
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Applicant's Legal Checked
by _____ 8/14/01

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RECEIVED
DEC 17 2002
COMMUNITY DEVELOPMENT

ADD 2002-00175

DRI 2001-00005



SKETCH OF DESCRIPTION

OF

A TRACT OR PARCEL OF LAND LYING IN
SECTIONS 29, 30 AND 31 TOWNSHIP 45 SOUTH, RANGE 24 EAST
LEE COUNTY, FLORIDA
(GULF HARBOUR)

LINE TABLE

LINE	BEARING	DISTANCE
L1	N89°11'33"W	202.49'
L2	N89°11'33"W	641.05'
L3	N89°11'33"W	641.05'
L4	N89°11'33"W	330.00'
L5	N89°11'33"W	330.00'
L6	N89°11'33"W	1,320.00'
L7	N89°11'33"W	1,320.00'

CURVE TABLE

CURVE	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	1,910.00'	07°29'01"	249.57'	N03°25'03"E	249.39'

LEGEND

O.R. INDICATES OFFICIAL RECORDS BOOK, LEE COUNTY PUBLIC RECORDS
PG INDICATES PAGE
L1 INDICATES LINE NUMBER
C1 INDICATES CURVE NUMBER

SEE SHEETS 1-3 OF 4
FOR COMPLETE
METES AND BOUNDS DESCRIPTION

THIS SKETCH
OF DESCRIPTION
IS NOT A BOUNDARY SURVEY

SEE SHEETS 1-3 OF 4
FOR COMPLETE NOTES AND BOUNDS DESCRIPTION

Applicant's Survey Checked
by 9/4/01

Banks Engineering, Inc.
PROFESSIONAL ENGINEERS, PLANNERS & LAND SURVEYORS
FLORIDA BUSINESS CERTIFICATION NUMBER LB 6690
10481 BEN HILL GRIFFIN PARKWAY - SUITE 106
FORT MYERS, FLORIDA 33913
(941) 939-6490

9-10-01
THOMAS R. LENNERT, JR., P.S.M.
FLORIDA CERTIFICATION NO. 5541

- THIS SKETCH OF DESCRIPTION IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

ATTACHMENT G

INSTR # 5773553
Official Records BK 03893 PG 2562
RECORDED 04/07/2003 02:22:19 PM
CHARLIE GREEN, CLERK OF COURT
LEE COUNTY
RECORDING FEE 60.00
DEED DOC 0.70
DEPUTY CLERK L Parent

THIS INSTRUMENT PREPARED BY:

Dawn E. Perry-Lehnert
Lee County Attorney's Office
Post Office Box 398
Fort Myers, Florida 33902

Strap No.: 30-45-24-13-0000A.0000

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is between GROSSE POINTE ASSOCIATES, LTD., a Florida limited liability partnership, whose address is 15065 McGregor Boulevard, Suite 108, Fort Myers, Florida 33908 ("Grantor") and LEE COUNTY, a political subdivision of the State of Florida, whose address is Post Office Box 398, Fort Myers, Florida 33902 ("County") and the Department of Environmental Protection for the State of Florida ("DEP").

WHEREAS, the Grantor is the owner of certain lands situated in Lee County, Florida, and more specifically described in attached Exhibit A ("Easement Area"); and

WHEREAS, the property is located wholly within the boundaries of the River's Edge Yacht and Country Club Development of Regional Impact ("DRI") (aka Gulf Harbour); and

WHEREAS, the Easement Area is contiguous to the Palmas Del Sol Condominium Project ("Project") that is being developed by Grantor as a 110 unit condominium development; and

WHEREAS, the Easement Area, which is mostly mangrove preserve, was originally designated as a preserve area to support approval of the original DRI; and

WHEREAS, Grantor pursued a Notice of Proposed Change to allow the construction of an observation deck and the trimming of mangroves within the preserve area; and

WHEREAS, Lee County approved the Fourth Amendment to the River's Edge Yacht & Country Club DRI Development Order on October 7, 2002 in Case Number 81-09-08-DRI(c); and

WHEREAS, DRI condition II.G.5.d(1)(a)(ii) requires the recording of this Deed of Conservation Easement in the public records prior to any construction or mangrove trimming activity within the original preserve area; and

WHEREAS, the Grantor, is agreeable to granting to the County and DEP a perpetual Conservation Easement as defined in Section 704.06, Florida Statutes (2002), over the Easement Area; and

WHEREAS, the County and DEP agree to accept this Conservation Easement pursuant to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, together with other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, Grantor hereby grants, creates, and establishes a perpetual Conservation Easement for and in favor of the County and DEP upon, over, across and through the Easement Area described in attached Exhibit "A" as follows:

1. The purpose of this Conservation Easement is to retain, to the greatest extent possible, the land encompassed in the original DRI preservation area in its natural, vegetative, hydrologic, scenic, open or wooded condition, allowing this area to remain as suitable habitat for fish, plants or wildlife, while providing Grantor with the ability to construct a boardwalk with observation deck, install rip-rap and pursue limited mangrove trimming. To carry out this purpose, the following rights and conditions apply:

(a) The County and DEP have the right to enter upon the Easement Area, in a manner that will not unreasonably interfere with Grantor's use and quiet enjoyment of the Easement Area, at reasonable times with equipment or vehicles necessary to enforce the rights, covenants and restrictions set forth in this easement; and

(b) The County and DEP have the right to enjoin any activity on or use of the Easement Area that is inconsistent with this Conservation Easement; and

(c) The County and DEP have the right to require the restoration of areas or features of the Easement Area that may be damaged by any activity or use inconsistent with the terms of this easement; and

(d) The Grantor has the right to construct and maintain a boardwalk with observation deck, install rip-rap and pursue limited mangrove trimming, in the manner contemplated by this Conservation Easement and the Fourth Amendment to the DRI Development Order.

2. Except for the activities outlined in paragraph 1 above, or the restoration, maintenance, monitoring, or surface water management activities permitted or required by the DRI and local permit approvals, the following activities are prohibited within the Easement Area:

(a) Constructing or placing buildings, roads, signs, billboards, utilities, or other structures within or above the Easement Area unless specifically allowed in

accordance with the terms of this easement;

(b) Dumping or placing soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;

(c) Except as otherwise set forth herein, removal or destruction of trees, shrubs, or other vegetation;

(d) Excavation, dredging, or removal of land, peat, gravel, soil, rock, or other material substance in a manner that affects the surface;

(e) Surface use except for purposes that permit the land or water area to remain in its natural condition;

(f) Except as set forth herein, activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation including, but not limited to, ditching, diking and fencing;

(g) Acts or uses detrimental to the retention of land or water areas.

3. *Passive Recreational Facilities.* Grantor reserves all rights as Owner of the fee title to the Easement Area that are not inconsistent with the intent and purpose of this Conservation Easement. Passive recreational activities that are not contrary to the purpose of this Conservation Easement are permitted in accordance with the following.

(a) The Grantor may conduct limited land clearing for the purpose of constructing a boardwalk with observation deck. Grantor must submit plans for the construction of proposed improvements to the County and DEP for approval prior to construction.

(b) The construction and use of the approved passive recreation improvements and facilities are subject to the following conditions:

(i) The observation deck is limited to a maximum of 400 square feet and must meet the standards of Fishing Piers in Land Development Code Section 26-73.

(ii) The access boardwalk to the observation deck is limited to a five foot width. The boardwalk and observation deck must be installed in compliance with the County approved field location to avoid impacts to the existing mangrove forest and individual large mangrove trees.

(iii) Placement of the boardwalk must be in substantial compliance with attached Exhibit "B".

(iv) The boardwalk and observation deck must be in substantial compliance with the Boardwalk and Observation Deck/Mangrove Trimming Plan prepared by W. Dexter Bender and Associates attached as Exhibit "B".

(v) A rip-rap revetment/breakwater system including red mangrove plantings must be installed along the shoreline of the portion of the Easement Area to protect the shoreline from further erosion as set forth in attached Exhibit "C".

(vi) The rip-rap sill must consist of rock material no less than 10" in diameter and no greater than 24" in diameter. The rock must be placed in a manner that does not damage the existing mangroves.

(vii) Prior to issuance of a Certificate of Compliance for the rip-rap sill, the rip-rap must be planted with 3-gallon red mangrove seedlings or 3-gallon wetland plants such as leather fern placed three foot on center.

(viii) A Lee County Dock and Shoreline Permit must be obtained for the boardwalk/observation deck and the rip-rap sill. A planting plan for the rip-rap sill showing the locations, species and container size must be submitted with the Dock and Shoreline Permit for the Division of Environmental Sciences staff review and approval.

(ix) The nuisance plant Moon vine (*Ipomoea sp.*) must be killed in place by an appropriate herbicide in the portion of the Easement Area described in attached Exhibit "D".

4. *Mangrove Trimming*. Grantor has the right to trim mangroves within the Easement Area in accordance with the following conditions:

(a) Selective mangrove trimming and maintenance may occur within the three corridors, each the width of each of the proposed Project buildings (240', 244' and 152' wide respectively) and extending from the landward boundary of the Easement Area, North Northwest to the Caloosahatchee River as depicted on attached Exhibit "B".

(b) All mangrove trimming must be conducted as permitted by the Florida Department of Environmental Protection (FDEP) General Mangrove Permit File No. 36-0152741-0003, which includes but is not limited to the following conditions:

(i) Mangrove trimming must be supervised or conducted exclusively by a Professional Mangrove Trimmer.

(ii) No herbicide or other chemical may be used for the purpose of removing the leaves of a mangrove.

(iii) Trimming must be conducted in stages so that no more than 25% of the foliage is removed annually, and the height and configuration of the mangroves trimmed are maintained.

(iv) The final height of trimmed mangroves must be maintained at 32' NGVD (approximately 30' + from substrate). Only the mangroves within the mangrove trimming areas shown in Exhibit "B" may be trimmed. Because many of the trees in the mangrove trimming area are less than 32' NGVD in height (as of June 2002), approximately 30% of the area will not be initially trimmed. Trees less than 32' NGVD in the mangrove trimming area will be trimmed only as they exceed 32' NGVD in the future to maintain the desired elevation.

(c) Red mangroves trimming is limited to branches on the main trunk above 32' feet NGVD with a diameter of one inch or less. All other branches above 32' NGVD will be trimmed in compliance with the FDEP Permit.

(d) Once the final configuration and height (32' NGVD) is achieved, the trimming corridors will be maintained by annual trimming events.

(e) The trimming corridors must be monitored annually for a period of ten years from the date of the initial trimming. Annual reports that analyze tree health, canopy coverage, plant species present and wildlife observed will be submitted to Lee County Environmental Sciences for review.

(f) The Division of Environmental Sciences staff must be notified in writing at least seven days prior to commencement of any mangrove trimming and invasive exotic vegetation removal. Invasive exotic vegetation removal must be done concurrently with the mangrove trimming. All invasive exotic vegetation including, but not limited to, Brazilian pepper, melaleuca, Australian pine, seaside manhoe, and carrotwood must be removed from the preserve area.

5. No right of access is conveyed by this Conservation Easement to the general public.

6. The County and DEP are not responsible for any costs or liabilities related to the operation, upkeep or maintenance of the Easement Area or any permitted improvements thereon.

7. Grantor must pay any and all real property taxes and assessments levied by competent authority on the Easement Area .

8. Any costs incurred to enforce, judicially or otherwise, the terms, provisions and restrictions of this Conservation Easement will be borne by and recoverable against the non-prevailing party in such proceedings.

9. Enforcement of the terms, provisions and restrictions of this Conservation Easement will be at the reasonable discretion of the County and DEP, and any forbearance on behalf of the County or DEP to exercise its rights hereunder in the event of any breach hereof by Grantor, may not be deemed or construed as a waiver of any rights held by the County or DEP.

10. The County and DEP hold this Conservation Easement exclusively for conservation purposes. Any assignment of the rights and obligations under this Conservation Easement will be to another organization qualified to hold such interests under the applicable state laws.

11. If any provision of this Conservation Easement is found to be invalid, the remainder of the provisions of this Conservation Easement will not be affected thereby, as long as the purpose of the Conservation Easement is preserved.

12. All notices, consents, approvals or other communications required hereunder must be in writing and are deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

13. Any amendments or modifications to the terms, conditions, restrictions, or purpose of this Conservation Easement, or any release or termination thereof, is subject to prior review and written approval by the County and DEP. This Conservation Easement may be amended, altered, released or revoked only by written agreement between the parties executed with the same formality. Any amendment must be filed in the Public Records of Lee County, Florida by Grantor.

14. The covenants, terms, conditions, restrictions and purposes imposed by this Conservation Easement continue as a servitude running in perpetuity with the property and are binding upon the parties, their successors and assigns.

15. Grantor hereby covenants with the County and DEP that Grantor is lawfully seized of said Easement Area in fee simple; that the Easement Area is free and clear of all encumbrances; that Grantor has good right and lawful authority to convey this Conservation Easement, and that it hereby fully warrants and defends the title to the Conservation Easement hereby conveyed against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grosse Pointe Associates, Ltd. executes this Deed of Conservation on this 28th day of Feb., 2003.

Witness

RITA L. KELTNER
Print Name

Witness

DICK CROSS
Print Name

GROSSE POINTE ASSOCIATES, LTD.
a Florida limited partnership

By: Grosse Pointe Development Company, Inc., a Florida corporation, its general partner

By: _____
Robert D. Hensley, Its President

STATE OF FLORIDA)
COUNTY OF LEE)

The foregoing instrument was acknowledged before me this 28TH day of Feb., 2003 by Robert D. Hensley, as President of GROSSE POINTE ASSOCIATES, LTD., a Florida limited partnership, on behalf of said corporation, who is personally known to me or who has produced _____ (type of ID) as identification.

Rita L. Keltner
Commission # DD 023346
Expires May 7, 2005
Bonded Thru
Atlantic Bonding Co., Inc.

Print Name: RITA L. KELTNER
Notary Public – State of Florida
Serial No.: COMMISSION # DD023346

My Commission Expires: May 7, 2005

(SEAL)

APPROVED AS TO FORM

Dawn E. Perry-Lehnert
Assistant County Attorney

Attachments:
Exhibit A - Legal Description & Sketch of Easement Area
Exhibit B - Boardwalk & Observation Deck/Mangrove Trimming Plan
Exhibit C - Rip-rap Detail (Exhibit H to DRI DO)
Exhibit D - Easement Area Where Nuisance Plan Moon Vine Must Be Killed

EXHIBIT "A-1"

DESCRIPTION

lying in Section 30, Township 45 South, Range 24 East,
Lee County, Florida

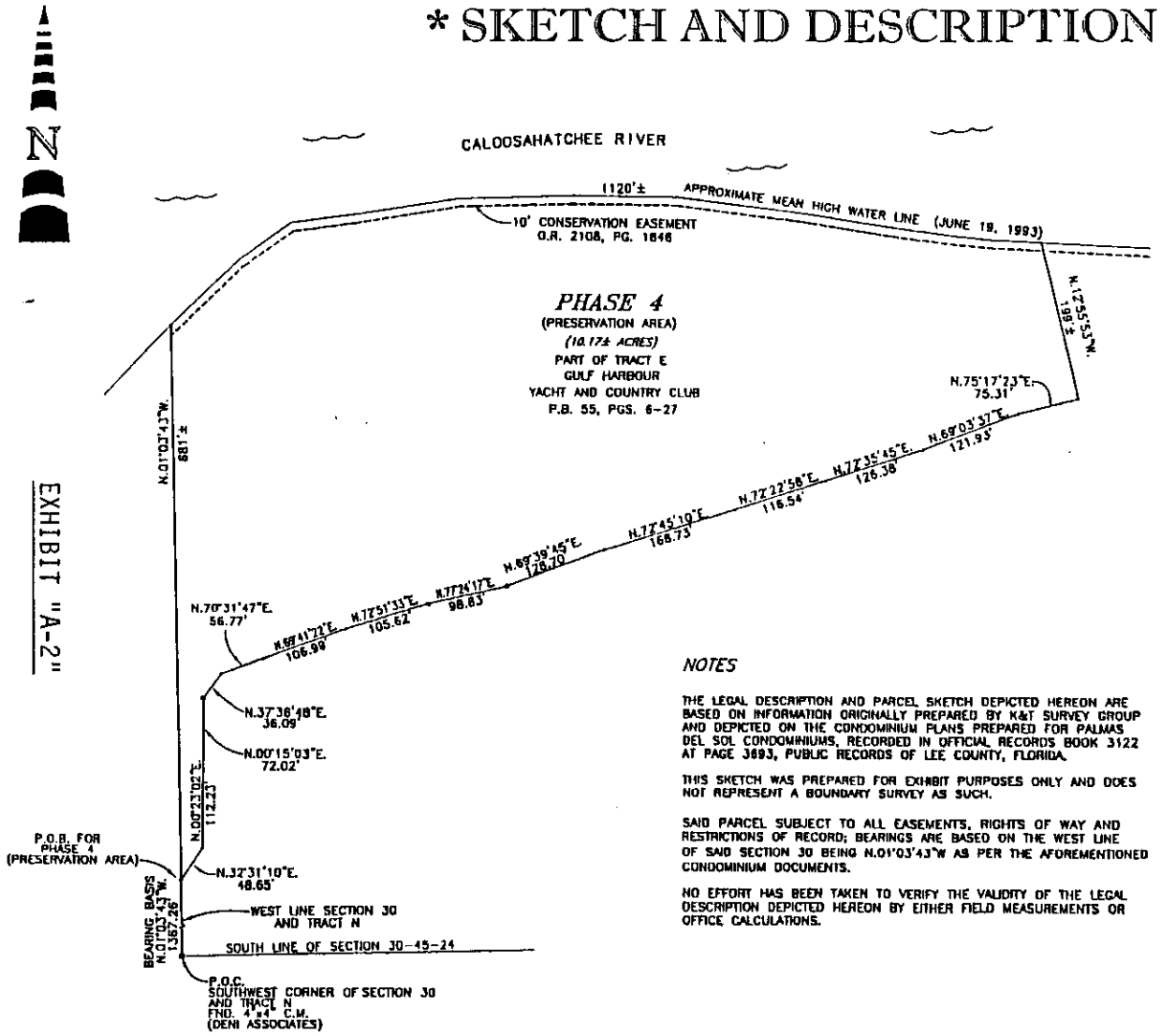
A tract or parcel of land situated in the State of Florida, County of Lee, lying in Section 30, Township 45 South, Range 24 East, being a part of Tracts "E" and "N", Gulf Harbour Yacht and Country Club subdivision as recorded in Plat Book 55, pages 6 through 27, Public Records of Lee County, Florida, and being further bounded and described as follows:

COMMENCING at the southwest corner of said Section 30 and the southwest corner of said Tract "N" of Gulf Harbour Yacht and Country Club; thence along the west line of said Section 30 and said Tract "N", N.01°03'43"W. for 1367.26 feet to the POINT OF BEGINNING of the parcel herein described; thence leaving said west line, N.32°31'10"E. for 48.65 feet; thence N.00°23'02"E. for 112.23 feet; thence N.00°15'03"E. for 72.02 feet; thence N.37°36'48"E. for 36.09 feet; thence N.70°31'47"E. for 56.77 feet; thence N.69°41'22"E. for 106.99 feet; thence N.72°51'33"E. for 105.62 feet; thence N.77°24'17"E. for 98.83 feet; thence N.69°39'45"E. for 128.70 feet; thence N.72°45'10"E. for 168.73 feet; thence N.72°22'58"E. for 116.54 feet; thence N.72°35'45"E. for 126.38 feet; thence N.69°03'37"E. for 121.93 feet; thence N.75°17'23"E. for 75.31 feet to the northwest corner of Lot 38 of Gulf Harbour Yacht and Country Club Phase One as recorded in Plat Book 56, pages 1 through 4, Public Records of Lee County, Florida; thence N.12°55'53"W. for 199 feet, more or less, to the Mean High Water line of the Caloosahatchee River; thence westerly along said Mean High Water line for 1120 feet, more or less, to an intersection with said west line of Section 30, bearing N.01°03'43"W. from the Point of Beginning; thence along said west line of Section 30, S.01°03'43"E. for 681 feet, more or less, to the Point of Beginning of the parcel herein described;
parcel contains 10.17 acres, more or less;
said parcel subject to all easements, rights of way and restrictions of record;
bearings are based on the west line of said Section 30 being N.01°03'43"W.

7

* SKETCH AND DESCRIPTION *

EXHIBIT "A-2"



NOTES

THE LEGAL DESCRIPTION AND PARCEL SKETCH DEPICTED HEREON ARE BASED ON INFORMATION ORIGINALLY PREPARED BY K&T SURVEY GROUP AND DEPICTED ON THE CONDOMINIUM PLANS PREPARED FOR PALMAS DEL SOL CONDOMINIUMS, RECORDED IN OFFICIAL RECORDS BOOK 3122 AT PAGE 3693, PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

THIS SKETCH WAS PREPARED FOR EXHIBIT PURPOSES ONLY AND DOES NOT REPRESENT A BOUNDARY SURVEY AS SUCH.

SAID PARCEL SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD; BEARINGS ARE BASED ON THE WEST LINE OF SAID SECTION 30 BEING N.01°03'43"W AS PER THE AFOREMENTIONED CONDOMINIUM DOCUMENTS.

NO EFFORT HAS BEEN TAKEN TO VERIFY THE VALIDITY OF THE LEGAL DESCRIPTION DEPICTED HEREON BY EITHER FIELD MEASUREMENTS OR OFFICE CALCULATIONS.

LEGEND

P.O.B.	POINT OF BEGINNING, PHASE TWO
O.R.	OFFICIAL RECORDS BOOK, LEE COUNTY PUBLIC RECORDS
P.B.	PLAT BOOK, LEE COUNTY PUBLIC RECORDS
PG.	PAGE
DR. & U.E.	DRAINAGE AND UTILITY EASEMENT
LS	LICENSED SURVEYOR
C.M.	CONCRETE MONUMENT
C.E.	COMMON ELEMENT
L.C.E.	LIMITED COMMON ELEMENT
P.C.P.	PERMANENT CONTROL POINT
P.R.M.	PERMANENT REFERENCE MONUMENT

DESCRIPTION
OF PALMAS DEL SOL CONDOMINIUM, PHASE 4
(PRESERVATION AREA)
LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST,
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST, BEING A PART OF TRACT "E", GULF HARBOUR YACHT AND COUNTRY CLUB SUBDIVISION AS RECORDED IN PLAT BOOK 55, PAGES 6 THROUGH 27, PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND BEING FURTHER BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH-WEST CORNER OF SAID SECTION 30 AND THE SOUTH-WEST CORNER OF SAID TRACT "N" OF GULF HARBOUR YACHT AND COUNTRY CLUB; THENCE ALONG THE WEST LINE OF SAID SECTION 30 AND SAID TRACT "N", N.01°03'43"W. FOR 1367.26 FEET TO THE POINT OF BEGINNING OF THE PARCEL HEREIN DESCRIBED; THENCE LEAVING SAID WEST LINE, N.32°31'10"E. FOR 48.65 FEET; THENCE N.00°23'02"E. FOR 112.23 FEET; THENCE N.00°15'03"E. FOR 72.02 FEET; THENCE N.37°36'48"E. FOR 36.09 FEET; THENCE N.70°31'47"E. FOR 56.77 FEET; THENCE N.69°41'22"E. FOR 106.99 FEET; THENCE N.72°51'33"E. FOR 105.62 FEET; THENCE N.77°24'17"E. FOR 98.83 FEET; THENCE N.69°39'45"E. FOR 126.70 FEET; THENCE N.77°45'10"E. FOR 166.73 FEET; THENCE N.72°22'58"E. FOR 116.54 FEET; THENCE N.72°35'45"E. FOR 126.38 FEET; THENCE N.69°03'37"E. FOR 121.93 FEET; THENCE N.75°17'23"E. FOR 75.31 FEET TO THE NORTHWEST CORNER OF LOT 38 OF GULF HARBOUR YACHT AND COUNTRY CLUB PHASE ONE AS RECORDED IN PLAT BOOK 58, PAGES 1 THROUGH 4, PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE N.12°55'53"W. FOR 189 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE OF THE CALOOSAHATCHEE RIVER; THENCE WESTERLY ALONG SAID MEAN HIGH WATER LINE FOR 1120 FEET, MORE OR LESS, TO AN INTERSECTION WITH SAID WEST LINE OF SECTION 30, BEARING N.01°03'43"W. FROM THE POINT OF BEGINNING; THENCE ALONG SAID WEST LINE OF SECTION 30, S.01°03'43"E. FOR 881 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL CONTAINS 10.17 ACRES, MORE OR LESS;

PREPARED BY:

Scott M. Shore 5-1-2002

SCOTT M. SHORE — DATE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. LS# 5743

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

* THIS IS NOT A SURVEY *

TITLE: PRESERVATION AREA / PALMAS DEL SOL

MERIDIAN
SURVEYING & MAPPING, LLC
LAND SURVEYORS · PLANNERS
L.B# 7071
5248 RAMSEY WAY, SUITE #2
FORT MYERS, FLORIDA 33907
PHONE: (941) 278-8575
FAX: (941) 278-8487
www.meridianfl.com

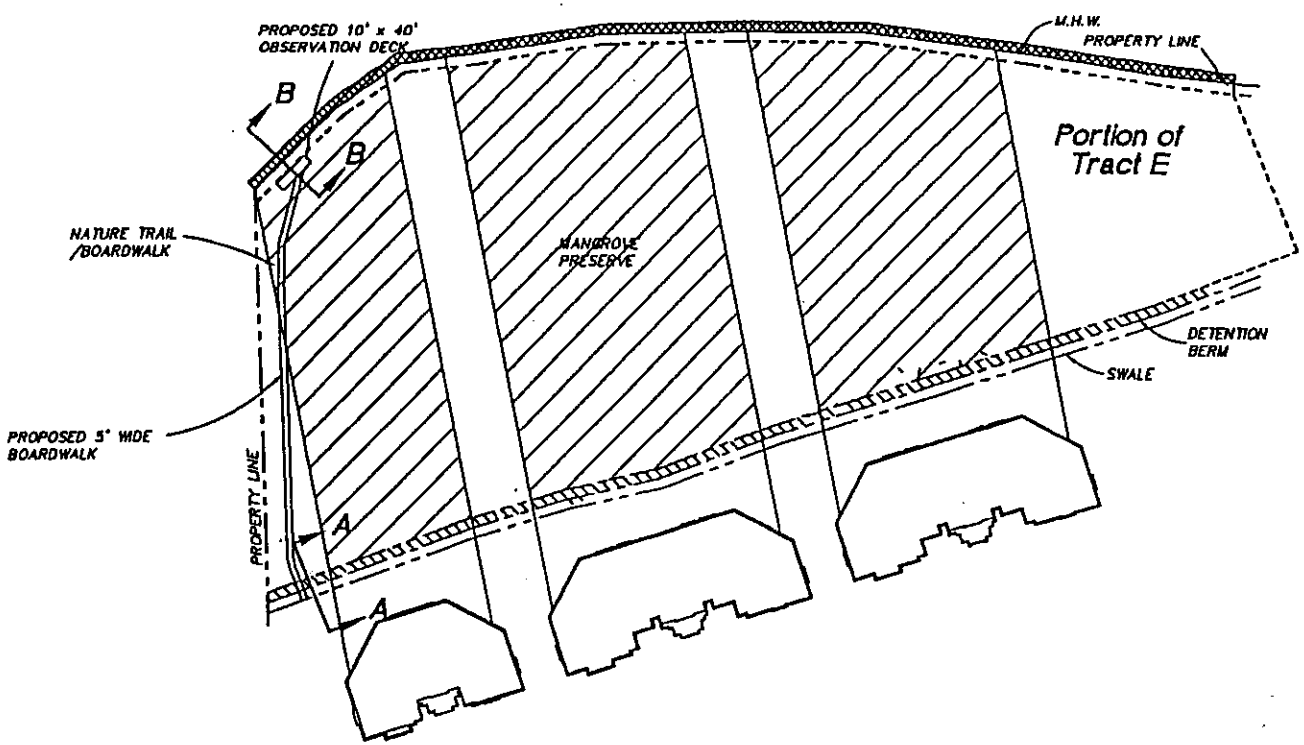
FILE NAME	FIELD BOOK/PAGE	PROJECT NO.	SHEET
2248SK.DWG	N/A	2248	1 OF 1

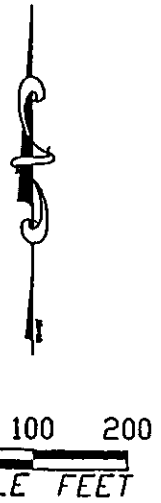
SURVEY DATE	DRAWN BY	SCALE	CHECKED BY	FILE NO. (S-T-R)
5-1-2002	DAM	1"= 200'	SMS	33-45-25

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Boardwalk and Observation Deck/Mangrove Trimming Plan

EXHIBIT B-1 Official Records BK 03893 PG 2571





Proposed Mangrove Trimming Area
Trim Trees to 32' NGVD (30'± from substrate)

Proposed Riprap Shoreline Protection

PERMIT USE ONLY.
NOT FOR CONSTRUCTION

June 26, 2002 9:10:37 a.m.
Drawing: GROSSINOTICE.DWG (DCS)

W. DEXTER BENDER
AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

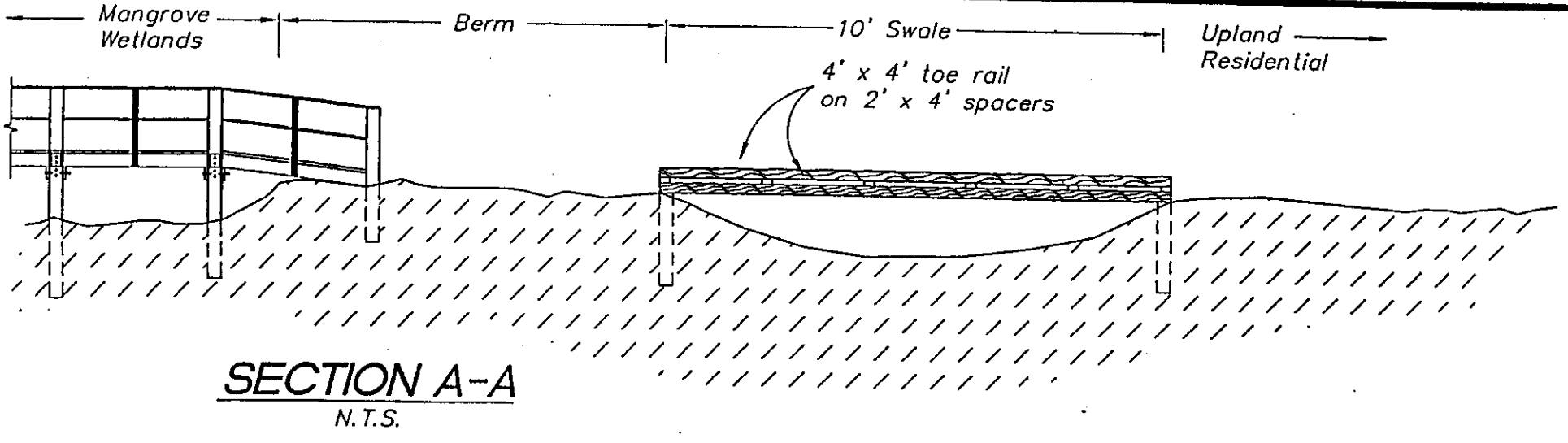
REVISED:

Palmas Del Sol

SHEET

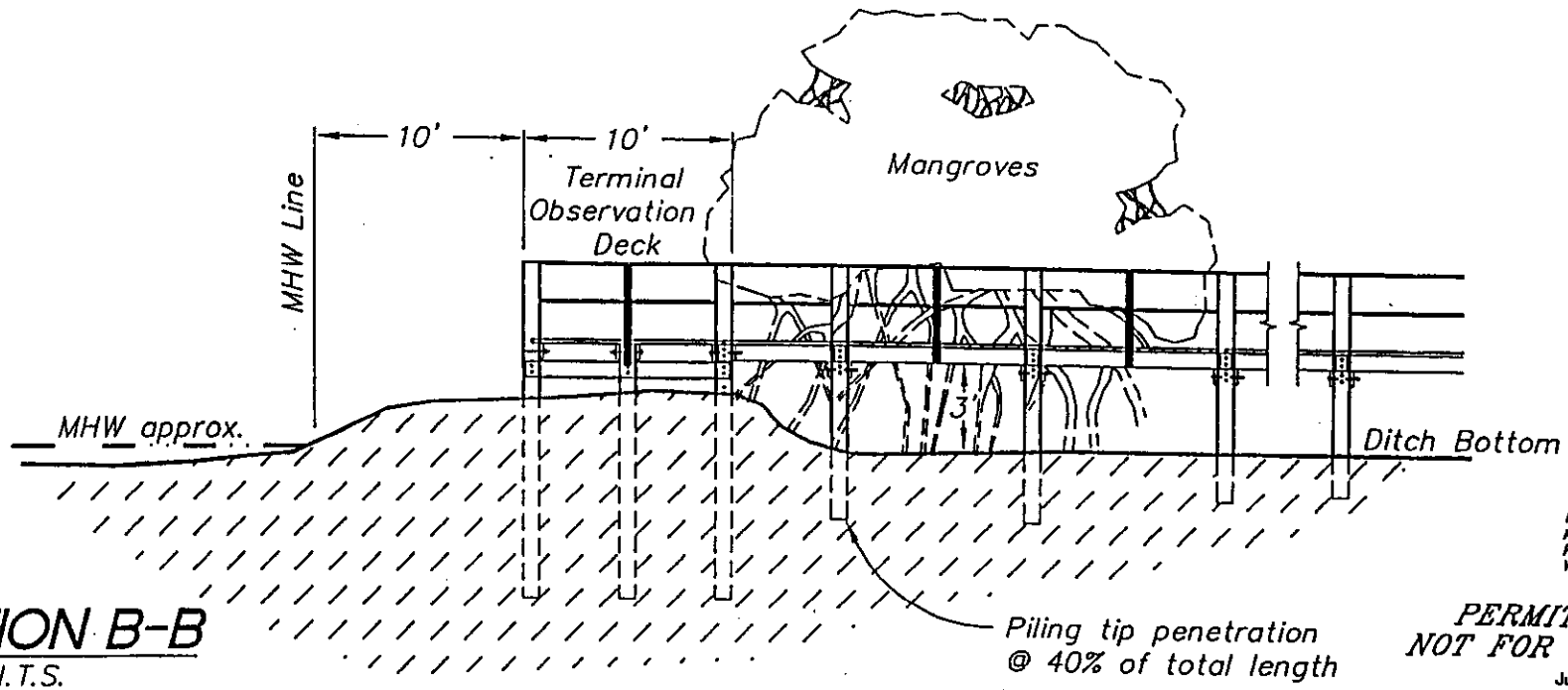
Official Records BK 03893 PG 2572

EXHIBIT B-2



SECTION A-A

N.T.S.



SECTION B-B

N.T.S.

HANS J.M. WILSON
REGISTERED PROFESSIONAL ENGINEER
FLORIDA REGISTRATION NO. 39680
W. DEXTER BENDER & ASSOC., INC.

PERMIT USE ONLY, NOT FOR CONSTRUCTION

June 19, 2002 11:25:45 a.m.
Drawing: GROSS1XSA.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
2052 VIRGINIA AVENUE
FORT MYERS, FL 33901 (813) 334-3680

REVISED:

PALMAS del SOL
BOARDWALK and OBSERVATION DECK

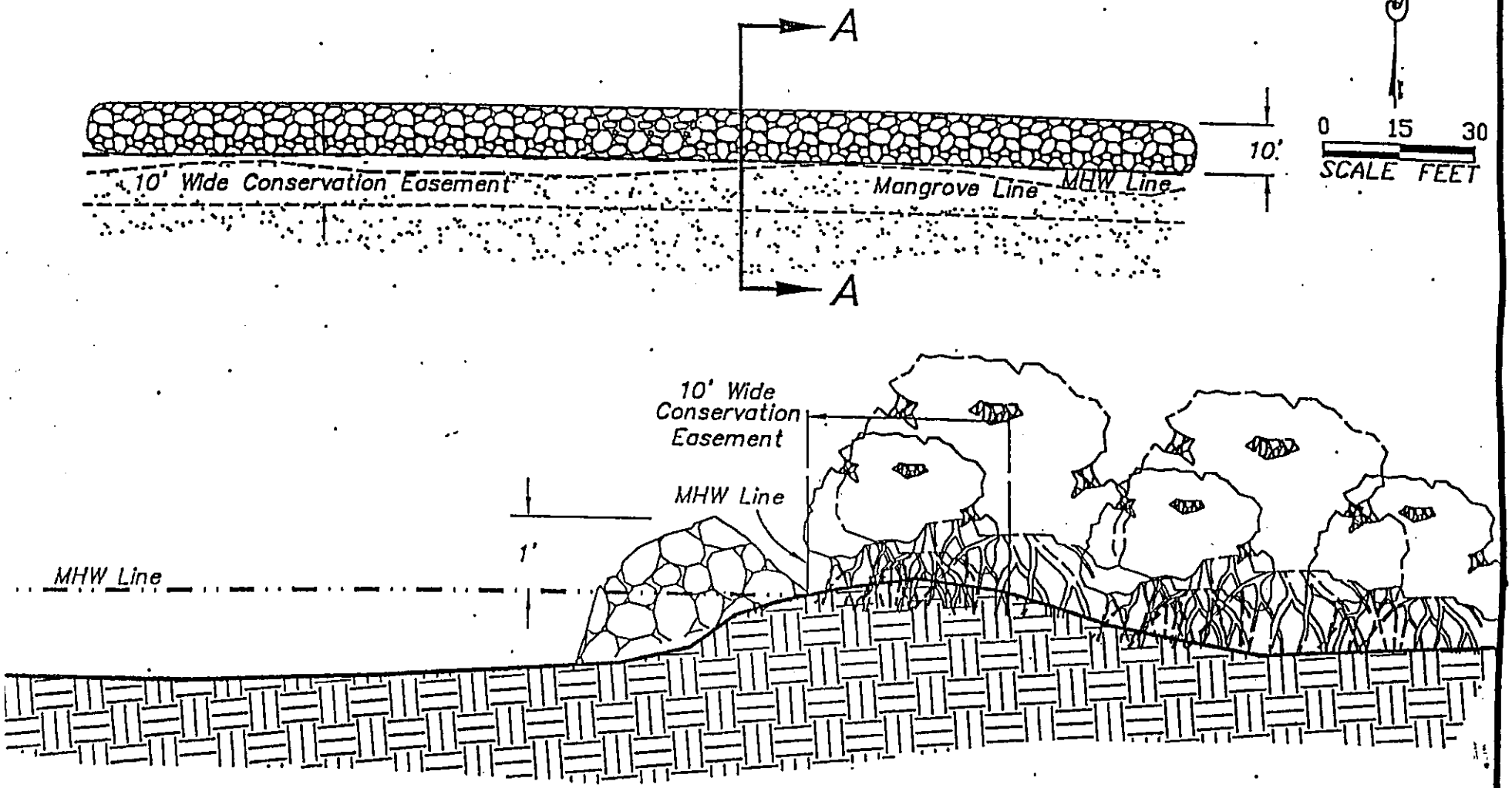
SHEET

ON: 30
SHIP: 45 S
E: 24 E

Rip Rap Detail and Cross-section

Caloosahatchee River

Proposed Riprap Sill



Section A-A

Not to Scale

PERMIT USE ONLY, NOT FOR CONSTRUCTION

July 10, 2001 9:05:28 a.m.
Drawing: GROSSIDET.DWG (DCS)

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Palmas Del Sol

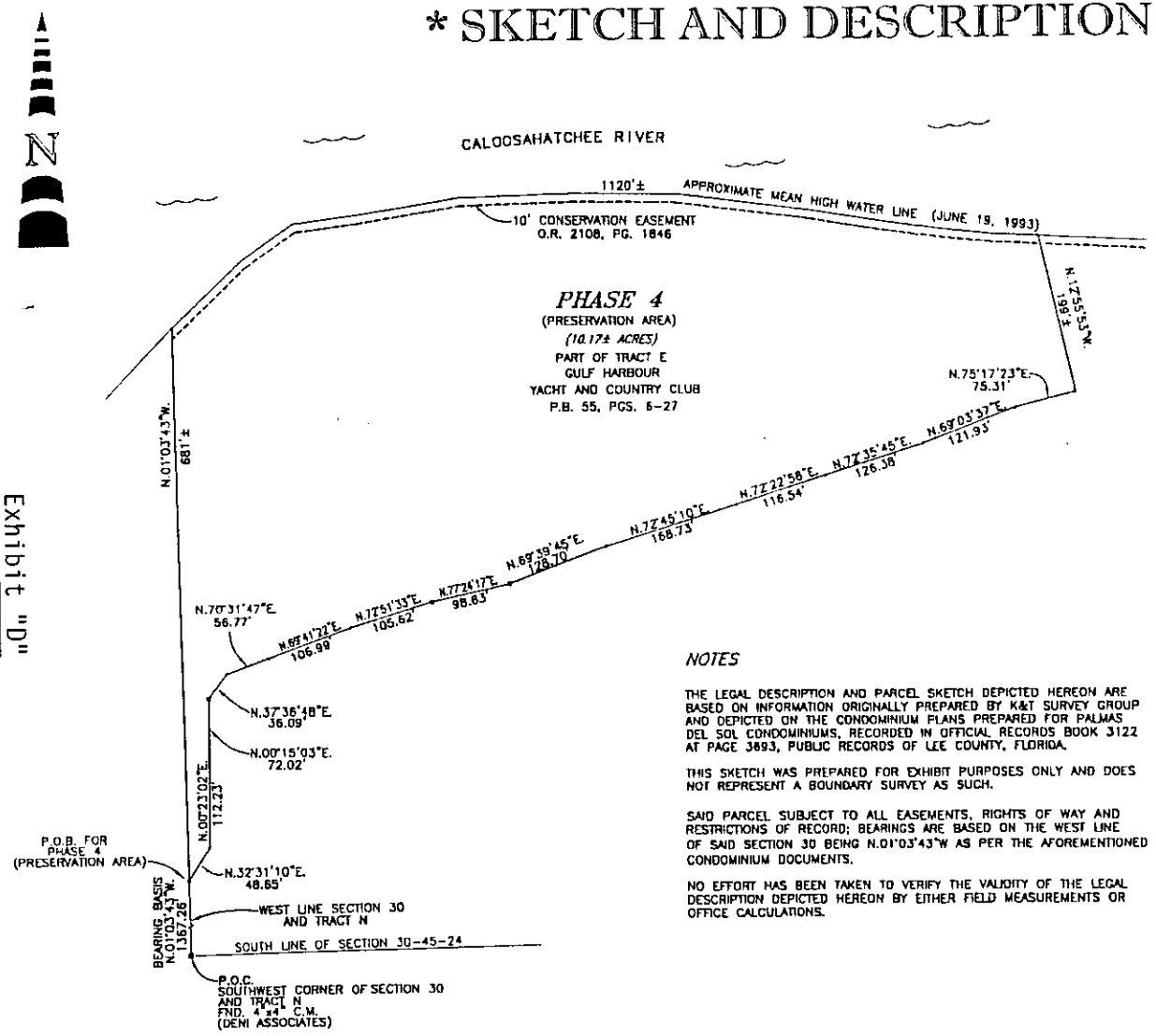
SHEET

EXHIBIT C

Official Records BK 03893 PG 2573

Exhibit "D"

* SKETCH AND DESCRIPTION *



NOTES

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SAID PARCEL SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND RESTRICTIONS OF RECORD; BEARINGS ARE BASED ON THE WEST LINE OF SAID SECTION 30 BEING N.01°03'43"W AS PER THE AFOREMENTIONED CONDOMINIUM DOCUMENTS.

NO EFFORT HAS BEEN TAKEN TO VERIFY THE VALIDITY OF THE LEGAL DESCRIPTION DEPICTED HEREON BY EITHER FIELD MEASUREMENTS OR OFFICE CALCULATIONS.

LEGEND

P.O.B.	POINT OF BEGINNING, PHASE TWO
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C.M.	CONCRETE MONUMENT
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L.C.E.	LIMITED COMMON ELEMENT
P.C.P.	PERMANENT CONTROL POINT
P.R.M.	PERMANENT REFERENCE MONUMENT

DESCRIPTION
OF PALMAS DEL SOL CONDOMINIUM, PHASE 4
(PRESERVATION AREA)
LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST,
LEE COUNTY, FLORIDA

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST, BEING A PART OF TRACT "E", GULF HARBOUR YACHT AND COUNTRY CLUB SUBDIVISION AS RECORDED IN PLAT BOOK 55, PAGES 6 THROUGH 27, PUBLIC RECORDS OF LEE COUNTY, FLORIDA, AND BEING FURTHER BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 30 AND THE SOUTHWEST CORNER OF SAID TRACT "N" OF GULF HARBOUR YACHT AND COUNTRY CLUB; THENCE ALONG THE WEST LINE OF SAID SECTION 30 AND SAID TRACT "N", N.01°03'43"W. FOR 1367.26 FEET TO THE POINT OF BEGINNING OF THE PARCEL HEREIN DESCRIBED; THENCE LEAVING SAID WEST LINE, N.32°31'10"E. FOR 48.65 FEET; THENCE N.00°23'02"E. FOR 112.23 FEET; THENCE N.00°15'03"E. FOR 72.02 FEET; THENCE N.37°36'48"E. FOR 36.09 FEET; THENCE N.70°31'47"E. FOR 56.77 FEET; THENCE N.69°41'22"E. FOR 106.99 FEET; THENCE N.72°51'33"E. FOR 105.62 FEET; THENCE N.72°24'17"E. FOR 98.63 FEET; THENCE N.69°39'45"E. FOR 128.70 FEET; THENCE N.72°45'10"E. FOR 168.73 FEET; THENCE N.72°22'58"E. FOR 116.54 FEET; THENCE N.72°35'45"E. FOR 126.38 FEET; THENCE N.69°03'37"E. FOR 121.93 FEET; THENCE N.75°17'23"E. FOR 75.31 FEET TO THE NORTHWEST CORNER OF LOT 38 OF GULF HARBOUR YACHT AND COUNTRY CLUB PHASE ONE AS RECORDED IN PLAT BOOK 58, PAGES 1 THROUGH 4, PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE N.12°55'53"W. FOR 199 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE OF THE CALOOSAHATCHEE RIVER; THENCE WESTERLY ALONG SAID MEAN HIGH WATER LINE FOR 1120 FEET, MORE OR LESS, TO AN INTERSECTION WITH SAID WEST LINE OF SECTION 30, BEARING N.01°03'43"W. FROM THE POINT OF BEGINNING; THENCE ALONG SAID WEST LINE OF SECTION 30, S.01°03'43"E. FOR 681 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL CONTAINS 10.17 ACRES, MORE OR LESS;

PREPARED BY:

Scott M. Shore 5-1-2002

SCOTT M. SHORE — DATE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. LS# 5743

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

* THIS IS NOT A SURVEY *

TITLE: PRESERVATION AREA / PALMAS DEL SOL

MERIDIAN
SURVEYING & MAPPING, LLC
LAND SURVEYORS-PLANNERS
LB# 7071
9248 RAMSEY WAY, SUITE #2
FORT MYERS, FLORIDA 33907
PHONE: (941) 278-8575
FAX: (941) 279-8457
www.meridianfl.com

FILE NAME	FIELD BOOK/PAGE	PROJECT NO.	SHEET
2248SK.DWG	N/A	2248	1 OF 1
SURVEY DATE	DRAWN BY	SCALE	CHECKED BY	FILE NO. (S-T-R)
5-1-2002	DAM	1"= 200'	SMS	33-45-25

ATTACHMENT H

OFFICIAL NOTICE OF CODE VIOLATION
----------LEE COUNTY----------
DIVISION OF ENVIRONMENTAL SCIENCES
P. O. Box 398, 1500 Monroe Street
Fort Myers, Florida 33902-0398
(239) 533-8585

June 12, 2009

Palmas Del Sol Condo Assn. Inc.
12671 Whitehall Dr.
Ft. Myers, FL 33907

Dear Property Owner:

You are hereby directed to abate the code violations on the following property: Palmas Del Sol, Fort Myers, FL. This parcel is described in Lee County Tax Rolls as STRAP# 30-45-24-13-0000A.0000.

A. These violations are contrary to the River's Edge Yacht and Country Club DRI Development Order # 12-8182-21, as amended and Zoning Resolution # Z-02-020 as follows:

A site inspection of the above referenced property made on March 30, 2009 by Lee County Division of Environmental Sciences (ES) staff revealed that:

1. Mangroves within the conservation easement have been trimmed excessively below the approved height of 30 feet. Current overall heights of the mangroves range from 22 feet to 15 feet. Red mangroves have been severely over lifted contrary to specific trimming conditions in the DRI and Conservation Easement.
2. Trimming corridors are wider than the approved widths conditioned in the DRI.
3. The Division of Environmental Sciences has not been notified prior to commencement or completion of any mangrove trimming or exotic removal as required.
4. The highly invasive exotic Brazilian pepper (Schinus terebinthifolius) was found within the conservation easement.
5. The seventh annual monitoring report does not reflect the current conditions and overall heights of the mangroves within the conservation easement.

River's Edge Yacht and Country Club DRI Development Order # 12-8182-21, as amended, Zoning Resolution # Z-02-020, and the conservation easement stipulate the conditions within the preserve.

B. To abate these violations compliance with the following conditions is required:

1. Cease all mangrove trimming within the Conservation Easement until the mangroves grow to the approved height of 30 feet. Currently the mangroves are being maintained in a range of 8 feet - 15 feet below the approved height.

   Cease the trimming of all red mangrove branches below 30 feet. Currently all the branches have been cut and removed from the substrate to the crown (canopy) of the tree.

   Cease all trimming outside the three (3) permitted corridors. The widths of these corridors are delineated in G.5.d.(1) (b) of DRI #12-8182-21 as amended.

2. The Division of Environmental Sciences staff must be notified prior to the commencement of any future mangrove trimming and invasive exotic vegetation removal as delineated in G.5.d (1) (e) (viii) DRI Development Order #12-8182-21 as amended.
3. Remove the invasive exotic plants from the site by hand and treat the stumps with the appropriate herbicide.
4. Before future trimming can occur the three trimming corridors designated in G.5.d.(1) (b) of the DRI as amended must be surveyed and staked with visible markers extending from the landward boundary to the Caloosahatchee River. Please coordinate this with ES staff.
5. The Seventh Annual Monitoring Report must be corrected to accurately reflect the current condition and resubmitted to ES staff. This will be the baseline report.
6. Annual monitoring reports must be submitted on an annual basis to ES staff depicting the regrowth of the mangroves. The overall heights of several mangrove trees throughout the three view corridors must be included in the report. The first report is due July 1, 2010.
7. Any native vegetation within the Conservation Easement that dies as a result of the trimming during the period of regrowth or during any future maintenance practices will be subject to replacement in accordance with LDC restoration standards.
8. Any future trimming that is not in compliance with the approved conditions will be subject to further enforcement including citations and monetary fines.

You are hereby directed to remedy items #3 thru #5 within 30 days of receipt of this letter. Once the violation has been abated, please contact Environmental Sciences staff to verify abatement.

Due to the nature of the violation the case will be scheduled in front of the Lee County Hearing Examiner for a finding of violation.

If you fail to remedy this condition within the time frame specified above or if the violation is abated and reoccurs, this case will be scheduled before the Lee County Hearing Examiner and a fee of $285.00 for prosecution of this case may be assessed. At the appropriate time you will be notified as to the date, time and place of this hearing.

Please be advised, under Lee County Land Development Code Chapter 2, Article VII, that the County can pursue a fine of up to $250.00 per day for each day this violation continues past the date set for compliance by the Hearing Examiner.

Please contact me at (239) 533-8190 with any questions you may have regarding this notice.

DEPARTMENT OF COMMUNITY DEVELOPMENT

Tim Camion

Tim Camion, Environmental Planner
Division of Environmental Sciences

Case # ENV2009-00034

Enclosure: River's Edge Yacht and Country Club DRI Development Order # 12-8182-21
Zoning Resolution # Z-02-020

Copy: Michael Jacob, Assistant County Attorney
Dan Van Norman, Environmental Specialist, DEP
Environmental File

ATTACHMENT "I"

THIS INSTRUMENT PREPARED BY:

LEE COUNTY ATTORNEY'S OFFICE
POST OFFICE BOX 398
FORT MYERS, FLORIDA 33902

PARCEL #30-45-24-13-0000A.0000

BEFORE THE HEARING EXAMINER OF
LEE COUNTY, FLORIDA

LEE COUNTY, FLORIDA
Petitioner,

vs. **Code Enforcement Case No. VIO2009-14087**

Palmas Del Sol Condominium Association, Inc.
Respondent.
_____/

Location of Violation: Palmas Del Sol Condominium in Gulf Harbor DRI
(f/k/a River's Edge Yacht and Country Club, DRI)I
11660 Court of Palms Drive
Fort Myers, Florida

Respondent's Mailing Address: Palmas Del Sol Condominium Association
11660 Court of Palms Drive
Fort Myers, Florida 33908

Counsel for Respondent: Steven C. Hartsell, Esq.
Pavese Law Firm
P.O. Drawer 1507
Fort Myers, Florida 33902

Violation of Lee County Land Development Code (LDC) Sections:

LDC §§10-7 and 34-378, requiring all developments to remain in compliance with the terms and conditions of the approved development order (even after issuance of a certificate of completion) and the zoning approval.

APPROVED

The following are violations of conditions contained in the River's Edge Yacht and Country Club DRI Development Order No.12-8182-21, as amended, and Lee County Zoning Resolution No. Z-02-020:

FILE COPY

1. Mangroves within the established conservation easement were trimmed below the approved minimum height of 32 feet N.G.V.D. Current trimmed heights of the mangroves trimmed range from 22 feet down to 15 feet. Red mangroves appear to have been over lifted contrary to specific trimming conditions contained in the DRI and Conservation Easement.

2. Trimming corridors were trimmed beyond the approved widths conditioned in the DRI.

3. The Lee County Division of Environmental Sciences was not notified prior to commencement of recent mangrove trimming.

4. Highly invasive exotic Brazilian pepper (*Schinus terebinthifolius*) was found within the conservation easement area.

5. The Horizon Tree Service's Seventh Annual Monitoring Report did not reflect the current conditions and overall heights of the mangroves within the Conservation Easement.

AGREED CODE ENFORCEMENT ORDER

THIS CAUSE came before the undersigned Lee County Hearing Examiner on September 23, 2009, and after execution by both Petitioner and Respondent or Respondent's authorized agent, the Hearing Examiner enters the following Agreed Code Enforcement Order:

A. FINDINGS OF FACT:

1. That the above named Respondent is the owner, lessee, or the responsible entity, or agent thereof, otherwise in charge of, or responsible for, the subject property and is present with the knowledge and consent of Respondent.

2. That Respondent received notice, by hand delivery, certified mail, or posting, as required by Lee County Ordinance, of the alleged existence of condition(s) at the above described location, that purportedly violated the cited sections of the Lee County Ordinances.

3. That notice was given to the Respondent, specifying certain action(s) had to be undertaken to abate the alleged violation by a specific date and time. The Respondent had failed to complete such actions by the abatement date as required in the notice.

4. That Lee County has incurred administrative costs and expenses in the amount of $100.00 in the successful prosecution of this case.

5. That Respondent admits to the violations described herein above, and Petitioner and Respondent agreed such violations are now abated.

6. That the Respondent agrees any subsequent violation of the following development order or zoning conditions will be deemed to be a repeat violation pursuant to §162.06(3), Florida Statutes:

a. Trimming mangroves contrary to the River's Edge Yacht and Country Club DRI Development Order No.12-8182-21, as amended, and Florida Department of Environmental Protection (FDEP) Permit below the minimum 32-foot N.G.V.D. height.

b. Trimming mangroves outside the three permitted corridors. The widths of these corridors are delineated in G.5.d.(1)(b) of DRI Development Order No. 12-8182-21, as amended. The mangrove corridors are also depicted on the Specific Purpose Survey, dated 7-7-09, by Mark Hatfield, PSM, a copy of which is attached to this order as Exhibit "A."

c. Failure to annually to kill in place or remove invasive exotic plants. Stumps must be treated with the appropriate herbicide and any removal from the site will be done by hand.

d. Failure to notify the Lee County Division of Environmental Sciences prior to the commencement or completion of either any mangrove trimming or invasive exotic removal, as required.

e. Failure to timely submit an accurate annual monitoring report for mangrove trimming by July 1st for each of 2010, 2011 and 2012, 2013 and 2014.

John Johnson Asst. Co. Atty.

B. CONCLUSIONS OF LAW:

1. Respondent, named above, by reason of the foregoing, is in violation of the above-cited section of the Lee County Ordinances.

2. The costs incurred herein constitute a legal debt against the Respondent, pursuant to Section 162.09 of the Florida Statutes, which is due and owing to the Petitioner as of the date of this Order.

WHEREFORE, it is ORDERED:

1. The Respondent will reimburse Lee County for any costs set out in the Findings of Fact at paragraph A(4) above. In the event the costs awarded herein are not paid prior to October 30, 2009, these costs may become a lien, which may attach to all real and personal property owned by the Respondent. Said lien may be recorded in the Public Records of Lee County, even if the violation has been abated in accordance with this Order.

2. The violation on the subject property has been abated and the responsibilities of the Respondent(s) in regard to this matter are otherwise fully discharged.

3. The Respondent is advised that because the abatement of the violation occurred after the time allowed in the initial Notice Of Code Violation, any similar violation in the future by the same property owner on property located in Lee County (as set out in the Findings of Fact at paragraph A(6) above) may be treated as a repeat violation pursuant to §162.06(3), Florida Statutes.

WHEREFORE, by signing below, Respondent and Petitioner, Lee County, hereby consent to the terms of this Agreed Code Enforcement Order. Under penalty of perjury, the undersigned Respondent and/or his/her Agent, declares that he/she has read the foregoing and the facts alleged are true, to his/her best knowledge and belief.

EXECUTED THIS 23rd day of September, 2009

Respondent or Authorized Agent

José M. Pascual
(Print Name)

President Palmas Del Sol Condo. Assoc.
Representative Capacity (if Agent)

Lee County, Petitioner
By: John J. Fredyma
Assistant County Attorney

DONE AND ORDERED at 1500 Monroe Street, Second Floor, Fort Myers, Lee County, Florida on the date set forth herein above.

[✓] Diana M. Parker
[ ] Richard A. Gescheidt
Lee County Hearing Examiner

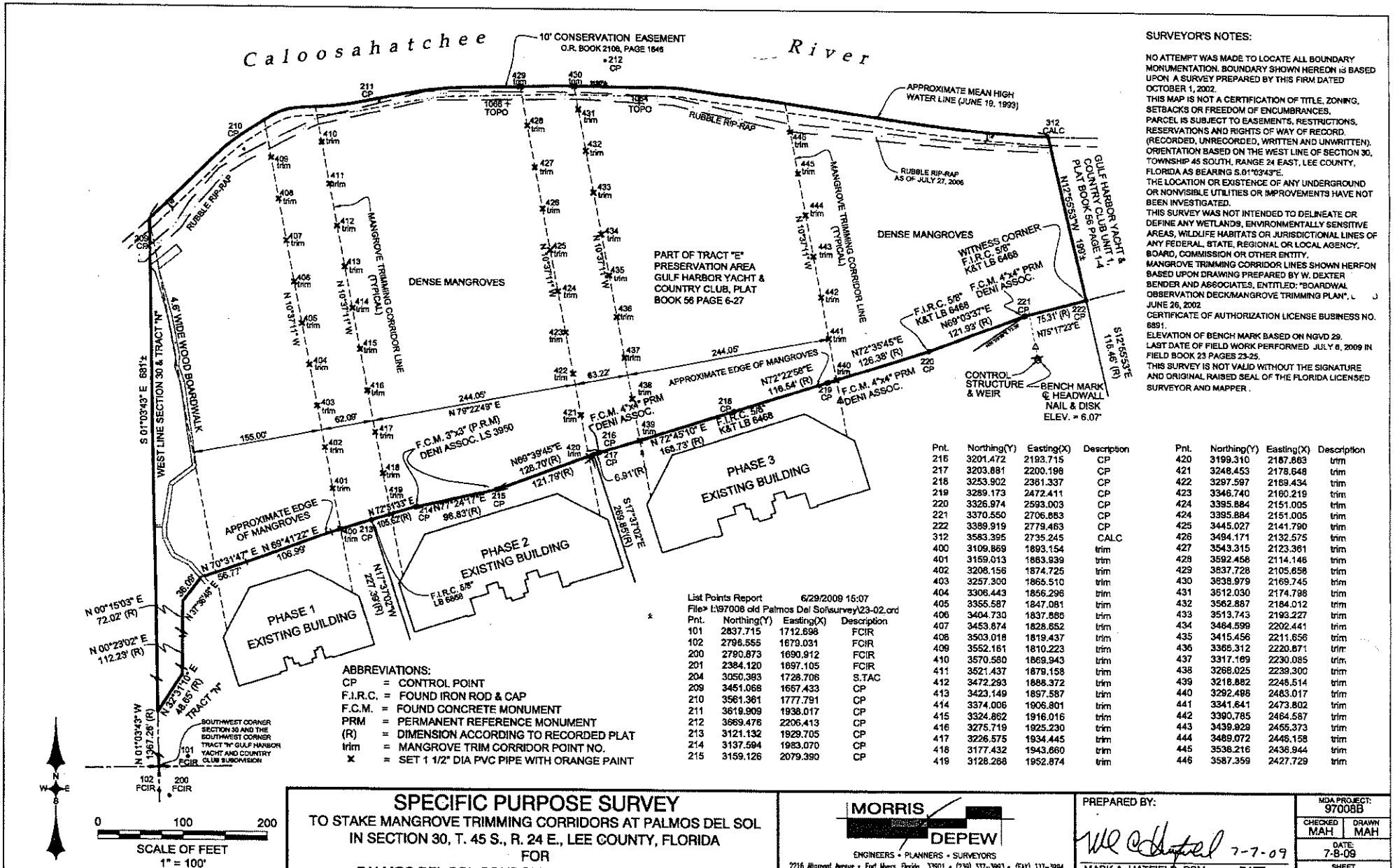
APPEAL: An aggrieved party may appeal an Order of the Lee County Hearing Examiner to the Lee County Circuit Court. The appeal shall be limited to appellate review of the record created before the Hearing Examiner, and must be filed within thirty (30) days of the execution of this Order. Extension of time to file an appeal cannot be granted.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Code Enforcement Order was sent by U.S. Mail to the Respondent or the Respondent's representative at the mailing address(es) set forth above, and was furnished by interoffice mail or hand delivery to Lee County Development Services Division and the Lee County Attorney's Office on the 23rd day of September, 2009.

Linda M. Waters

Recording Secretary
Lee County Hearing Examiner's Office
P.O. Box 398
Fort Myers, FL 33902-0398



SURVEYOR'S NOTES:

NO ATTEMPT WAS MADE TO LOCATE ALL BOUNDARY MONUMENTATION. BOUNDARY SHOWN HEREON IS BASED UPON A SURVEY PREPARED BY THIS FIRM DATED OCTOBER 1, 2002.
THIS MAP IS NOT A CERTIFICATION OF TITLE, ZONING, SETBACKS OR FREEDOM OF ENCUMBRANCES.
PARCEL IS SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS OF WAY OF RECORD. (RECORDED, UNRECORDED, WRITTEN AND UNWRITTEN).
ORIENTATION BASED ON THE WEST LINE OF SECTION 30, TOWNSHIP 45 SOUTH, RANGE 24 EAST, LEE COUNTY, FLORIDA AS BEARING S.01°03'43"E.
THE LOCATION OR EXISTENCE OF ANY UNDERGROUND OR NONVISIBLE UTILITIES OR IMPROVEMENTS HAVE NOT BEEN INVESTIGATED.
THIS SURVEY WAS NOT INTENDED TO DELINEATE OR DEFINE ANY WETLANDS, ENVIRONMENTALLY SENSITIVE AREAS, WILDLIFE HABITATS OR JURISDICTIONAL LINES OF ANY FEDERAL, STATE, REGIONAL OR LOCAL AGENCY, BOARD, COMMISSION OR OTHER ENTITY.
MANGROVE TRIMMING CORRIDOR LINES SHOWN HERFON BASED UPON DRAWING PREPARED BY W. DEXTER BENDER AND ASSOCIATES, ENTITLED: "BOARDWAL OBSERVATION DECK/MANGROVE TRIMMING PLAN", DATED JUNE 26, 2002
CERTIFICATE OF AUTHORIZATION LICENSE BUSINESS NO. 6891.
ELEVATION OF BENCH MARK BASED ON NGVD 29.
LAST DATE OF FIELD WORK PERFORMED JULY 6, 2009 IN FIELD BOOK 23 PAGES 23-25.
THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER.

List Points Report 6/29/2009 15:07
File> I:\97008 old Palmos Del Sol\survey\23-02.crd

Pnt.	Northing(Y)	Easting(X)	Description
101	2837.715	1712.698	FCIR
102	2796.555	1679.031	FCIR
200	2790.873	1690.912	FCIR
201	2384.120	1697.105	FCIR
204	3050.383	1728.706	S.TAC
209	3451.068	1667.433	CP
210	3561.361	1777.791	CP
211	3619.909	1938.017	CP
212	3669.476	2206.413	CP
213	3121.132	1929.705	CP
214	3137.594	1983.070	CP
215	3159.126	2079.390	CP
215	3201.472	2193.715	CP
217	3203.881	2200.198	CP
218	3253.902	2361.337	CP
219	3289.173	2472.411	CP
220	3326.974	2593.003	CP
221	3370.550	2706.883	CP
222	3389.919	2779.463	CP
312	3563.395	2735.245	CALC
400	3109.869	1893.154	trim
401	3159.013	1863.939	trim
402	3208.156	1874.725	trim
403	3257.300	1865.510	trim
404	3306.443	1856.296	trim
405	3355.587	1847.081	trim
406	3404.730	1837.866	trim
407	3453.874	1828.652	trim
408	3503.018	1819.437	trim
409	3552.161	1810.223	trim
410	3570.580	1869.943	trim
411	3521.437	1879.158	trim
412	3472.293	1888.372	trim
413	3423.149	1897.587	trim
414	3374.006	1906.801	trim
415	3324.862	1916.016	trim
416	3275.719	1925.230	trim
417	3226.575	1934.445	trim
418	3177.432	1943.660	trim
419	3128.288	1952.874	trim
420	3199.310	2187.863	trim
421	3248.453	2178.648	trim
422	3297.597	2169.434	trim
423	3346.740	2160.219	trim
424	3395.884	2151.005	trim
424	3395.884	2151.005	trim
425	3445.027	2141.790	trim
426	3494.171	2132.575	trim
427	3543.315	2123.361	trim
429	3592.458	2114.146	trim
429	3637.728	2105.658	trim
430	3638.979	2169.745	trim
431	3512.030	2174.798	trim
432	3562.887	2184.012	trim
433	3513.743	2193.227	trim
434	3464.599	2202.441	trim
435	3415.456	2211.656	trim
436	3366.312	2220.871	trim
437	3317.169	2230.085	trim
438	3268.025	2239.300	trim
439	3218.882	2248.514	trim
440	3292.498	2463.017	trim
441	3341.641	2473.802	trim
442	3390.785	2464.587	trim
443	3439.929	2455.373	trim
444	3489.072	2446.158	trim
445	3538.216	2436.944	trim
446	3587.359	2427.729	trim

ABBREVIATIONS:

CP	=	CONTROL POINT
F.I.R.C.	=	FOUND IRON ROD & CAP
F.C.M.	=	FOUND CONCRETE MONUMENT
PRM	=	PERMANENT REFERENCE MONUMENT
(R)	=	DIMENSION ACCORDING TO RECORDED PLAT
trim	=	MANGROVE TRIM CORRIDOR POINT NO.
x	=	SET 1 1/2" DIA PVC PIPE WITH ORANGE PAINT

SPECIFIC PURPOSE SURVEY

TO STAKE MANGROVE TRIMMING CORRIDORS AT PALMOS DEL SOL
IN SECTION 30, T. 45 S., R. 24 E., LEE COUNTY, FLORIDA
FOR
PALMOS DEL SOL CONDOMINIUM ASSOCIATION, INC.

MORRIS DEPEW
ENGINEERS • PLANNERS • SURVEYORS
2216 Altamont Avenue • Fort Myers, Florida 33901 • (239) 337-3993 • (FAX) 337-3994
FL CA NO. 6532

PREPARED BY:
MARK A. HATFIELD, PSM
FLA. CERT. NO. 4155
DATE 7-7-09

MDA PROJECT: 97008B
CHECKED MAH | DRAWN MAH
DATE: 7-8-09
SHEET 1 OF 1

EXHIBIT "A"

ATTACHMENT J

Palmas del Sol
Mangrove Preservation Area
Twelfth Annual Monitoring Report

(Fifth Annual Monitoring Report Per Lee County DES)

Fourth Amendment to River's Edge Yacht & Country Club
DRI Development Order

July 2014

Prepared by:

W. Dexter Bender & Associates, Inc.
4470 Camino Real Way, Suite 101
Fort Myers, FL 33966

Twelfth Annual Monitoring Report
Palmas Del Sol

Introduction

The mangrove preserve area consists primarily of white mangroves, black mangroves, scattered red mangroves, buttonwoods, and an understory of leather fern. Prior to the first exotic and nuisance vegetation removal event in December 2002, Brazilian pepper, seaside mahoe, scattered melaleuca, and Australian pine were found within the preserve, particularly on old spoil deposits and along the sand and shell ridge at the river front. According to Horizons Tree Service, Inc., annual mangrove trimming took place in February 2008. Construction of the boardwalk through the preserve was conducted during January and February of 2003. The Tenth Annual Monitoring Report which was submitted in 2012 reflected the success of continuing exotic vegetation eradication treatment within the preserve and the continued health and satisfactory condition of native vegetation within the designated trimming corridors. The Mangrove Preserve Monitoring Transects and Photo Points Map which depicts the location of the preserve are included in Appendix A.

Monitoring Methodology

Transects were established in the mangrove preserve to quantitatively assess vegetative cover and trimmed tree survival. Three transects, each with two four meter by four meter random study plots, were established in the preserve. At each plot the vegetative species present and the percent cover of these species was recorded. A total of seven photo points were established and are included in Appendix B. Additional photos were collected at various locations throughout the preserve. The Mangrove Preserve Monitoring Transects and Photo Points Map (Appendix A) indicating the location of transects, sample plots, photo points and sample height locations within the designated mangrove trimming areas. In addition, current conditions for the mangrove fringe which document the height and condition of trees within the preserve area is included in this report and will be included in future monitoring reports.

Results

A. Vegetation

Continuing treatment of exotic and nuisance vegetation has been successful in eradicating the Brazilian pepper, moon vine, seaside mahoe, and other exotic vegetation previously found in the preserve. As shown in the current conditions data no additional mortality was observed. The mangroves and buttonwoods which were previously trimmed also exhibit extensive signs of re-growth, particularly for the buttonwoods within the preserve. Trimming within the designated view windows

was conducted in the spring of 2014. Data collected from the sample plots is provided in Appendix C.

B. Wildlife

Typical wildlife species observed utilizing the mangrove forest preserve area include the following:

Great Crested Flycatcher (*Myiarchus crinitus*)
White Ibis (*Eudocimus albus*)
Raccoon (*Procyon lotor*)

C. Photographs

Photographs were taken at various locations to document the condition of the Mangrove Preserve. These photos are included in Appendix B. Photo stations were adjusted or added as needed during the ninth annual monitoring event in order to document existing conditions.

Discussion

Native vegetation observed within the preserve areas during the monitoring event remains in good condition. During the seventh annual monitoring event exotic vegetation observed within the preserve areas included Brazilian pepper (*Schinus terebinthifolius*), climbing cassia (*Senna pendula*), seaside mahoe (*Hibiscus tiliaceus*), wild balsam apple (*Momordica charantia*), carrotwood (*Cupaniopsis anacardioides*), wild banana (*Strelitzia reginae*), and various ornamental exotics. The exotic vegetation previously observed within the preserve areas has been successfully eradicated due to continuing spot treatment. The mangroves within the trimming areas which have been trimmed in the past vary in height from 23 to 30 feet in most places. The amount of new growth on those mangroves previously trimmed varies from 4 to 8 feet as measured above the previous cut lines. The most extensive vertical growth on trees within the preserve was recorded and observed on buttonwood, some of which have grown 10 to 12 feet since last being trimmed. Mangrove trimming below 30 feet as measured from the substrate is prohibited within the trimming corridors. Trimming conducted in the spring of 2014 focused primarily on button woods those mangroves, primarily white mangroves, reaching adequate height to trim.

APPENDIX A

Mangrove Preserve Monitoring Transects and Photo Points Map

SECTION: 30
TOWNSHIP: 45 S
RANGE: 24 E

Mangrove Preserve Monitoring
Transects and Photo Points

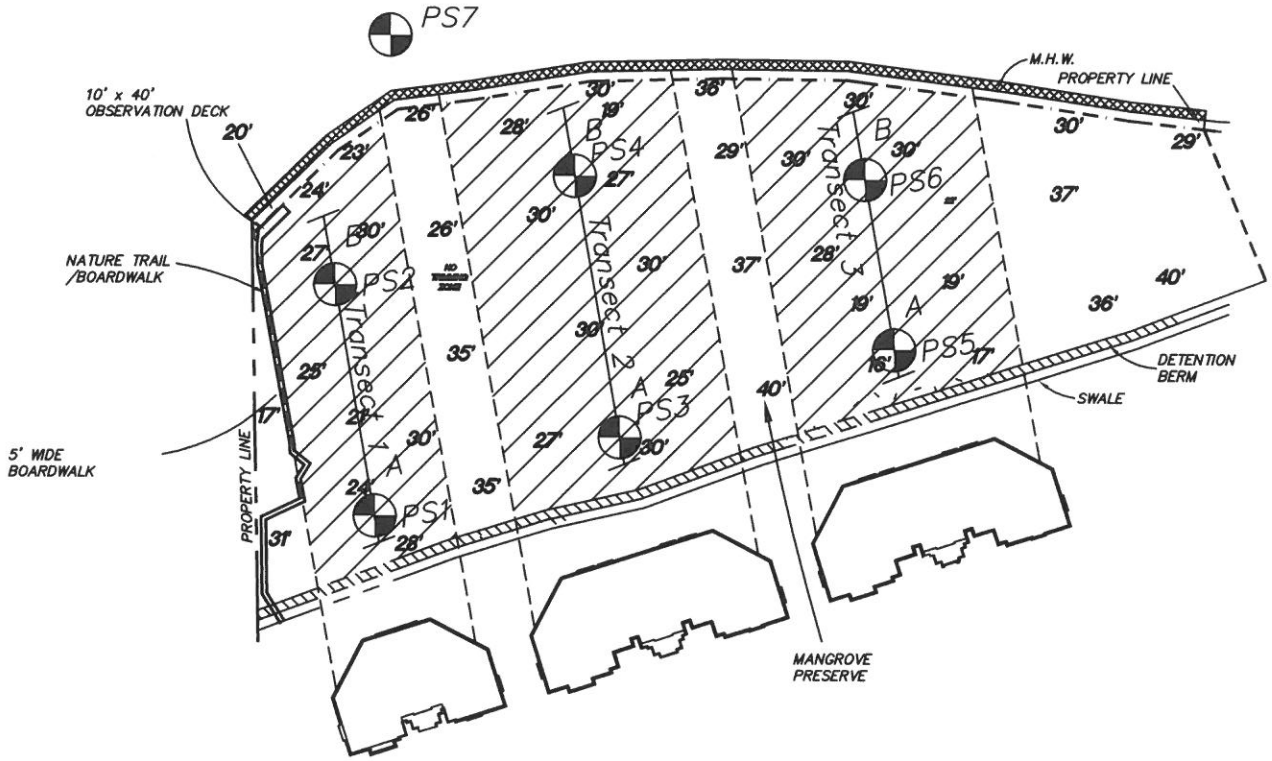


Photo Station

Transect

Vegetation Trimming Area

21' Mangrove Height Data Point Sample (typ.)

PERMIT USE ONLY,
NOT FOR CONSTRUCTION

July 25, 2014 9:28:47 a.m.
Drawing: PALMA2 NOTICE.DWG

W. DEXTER BENDER AND ASSOCIATES
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS, FL (941) 334-3680

REVISED:

Palmas Del Sol

SHEET

APPENDIX B

Photostation Photos

JULY 2014 PALMAS DEL SOL PRESERVE AREA



1) View looking upriver along the preserve area from the central residential building.



2) View of the untrimmed central portion of the preserve from the central building.



3) Close up of willow growing along the south central edge of the preserve.



4) View along the boundary of the west trimming zone.



5) View from the west building of the no trimming zone.



6) View of the south end of the eastern no trimming zone.



7) Strangler fig in the eastern no trimming zone in the area of higher elevation.



8) View looking north along Transect 3.



9) Gumbo Limbo and cabbage palm in the easternmost no trimming zone.



10) Red mangrove saplings along the south end of the eastern trimming zone.



11) Landward view of the no trimming zone on the east side of the preserve.



12) Mangroves and buttonwood along the southeast edge of the preserve.



13) View from the north end of the interior of the eastern no trimming zone.



14) View looking landward near Transect 3.



15) View looking east with Transect 3 in the background



16) View looking north along the eastern trimming and no trimming zone.



17) The north end of the western trimming zone.



18) Another view looking east into the north end of the western trimming zone along Transect 1.



19) View of the central trimming zone from the edge of the preserve.



20) View of black and white mangroves in the center of the west trimming zone at Transect 2.



21) White mangroves at the southwest end of the preserve 27± feet.



22) View looking north along Transect 1.



23) Another view looking north along Transect 1.



24) View looking east at the north end of the west trimming zone.



25) View looking into the trimming zone from the boardwalk.

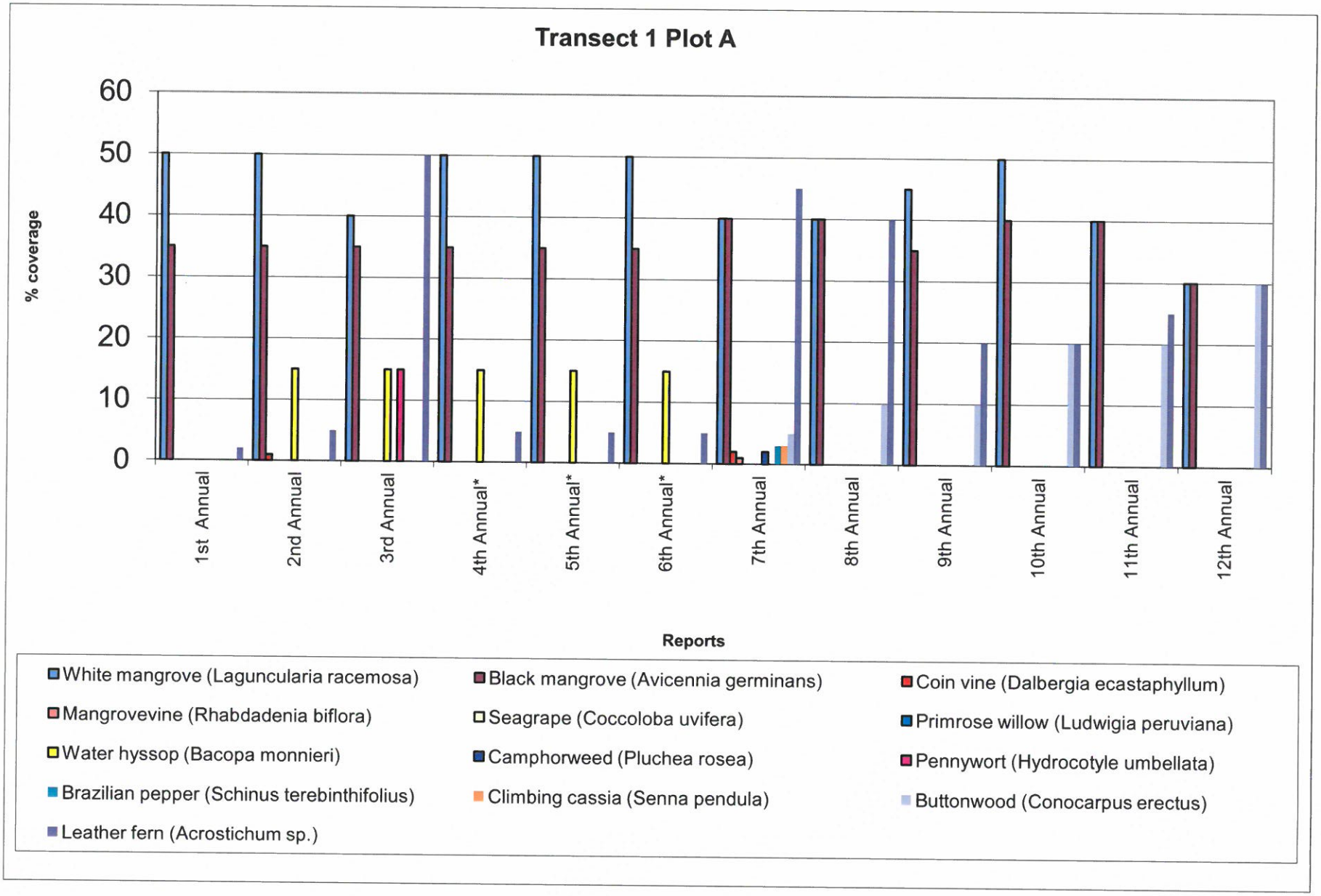
APPENDIX C

Sample Plot Data

Transect 1 Plot A

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	50	50	40	50	50	50	40	40	45	50	40	30
Black mangrove (*Avicennia germinans*)	35	35	35	35	35	35	40	40	35	40	40	30
Buttonwood (*Conocarpus erectus*)	-	-	-	-	-	-	5	10	10	20	20	30
Herbaceous												
Coin vine (*Dalbergia ecastaphyllum*)	<1	1	-	<1	<1	<1	2	-	-	-	-	-
Seagrape (*Coccoloba uvifera*)	<1	<1	<1	<1	<1	<1	-	-	-	-	-	-
Leather fern (*Acrostichum* sp.)	2	5	50	5	5	5	45	40	20	20	25	30
Primrose willow (*Ludwigia peruviana*)	<1	-	-	<1	<1	<1	-	-	-	-	-	-
Mangrovevine (*Rhabdadenia biflora*)	<1	<1	-	<1	<1	<1	1	-	-	-	-	-
Water hyssop (*Bacopa monnieri*)	-	15	15	15	15	15	-	-	-	-	-	-
Pennywort (*Hydrocotyle umbellata*)	-	-	15	-	-	-	-	-	-	-	-	-
Camphorweed (*Pluchea rosea*)	-	<1	-	<1	<1	<1	2	-	-	-	-	-
Brazilian pepper (*Schinus terebinthifolius*)	-	-	-	-	-	-	3	-	-	-	-	-
Climbing cassia (*Senna pendula*)	-	-	-	-	-	-	3	-	-	-	-	-
Water Level	**0.5"**	**1"**	**Sat.**	**1"**	**1"**	**0.5"**	**Sat.**	**1"**	**0"**	**0"**	**2"**	**1"**

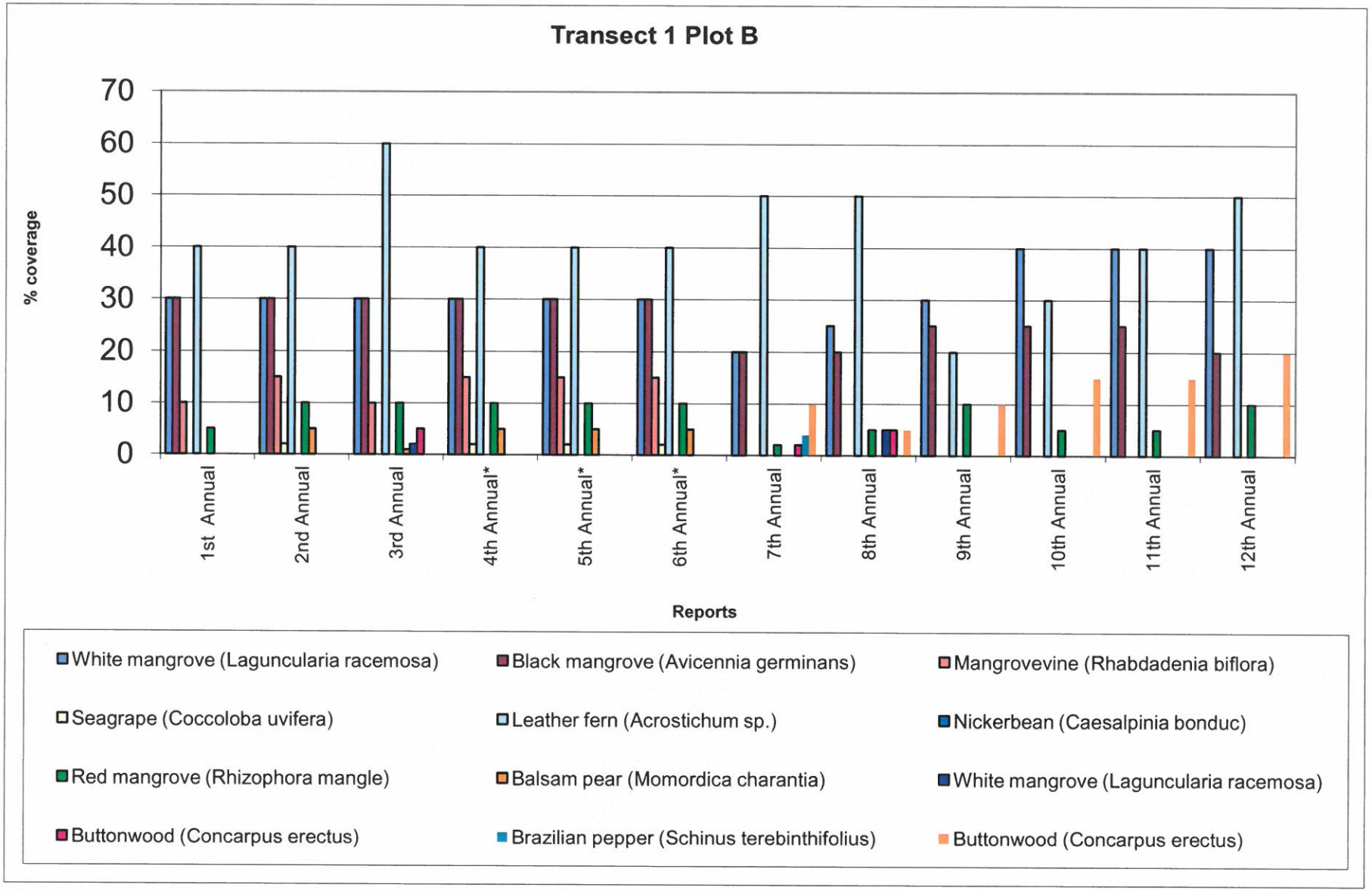
* Data collected by Horizons Tree Service, Inc.


Transect 1 Plot A
% coverage
60
50
40
30
20
10
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Black mangrove (Avicennia germinans)
Coin vine (Dalbergia ecastaphyllum)
Mangrovevine (Rhabdadenia biflora)
Seagrape (Coccoloba uvifera)
Primrose willow (Ludwigia peruviana)
Water hyssop (Bacopa monnieri)
Camphorweed (Pluchea rosea)
Pennywort (Hydrocotyle umbellata)
Brazilian pepper (Schinus terebinthifolius)
Climbing cassia (Senna pendula)
Buttonwood (Conocarpus erectus)
Leather fern (Acrostichum sp.)

Transect 1 Plot B

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	30	30	30	30	30	30	20	25	30	40	40	40
Red mangrove (*Rhizophora mangle*)	5	10	10	10	10	10	2	5	10	5	5	10
Black mangrove (*Avicennia germinans*)	30	30	30	30	30	30	20	20	25	25	25	20
Buttonwood (*Concarpus erectus*)	-	-	-	-	-	-	10	5	10	15	15	20
Herbaceous												
Seagrape (*Coccoloba uvifera*)	<1	2	-	2	2	2	-	-	-	-	-	-
Leather fern (*Acrostichum* sp.)	40	40	60	40	40	40	50	50	20	30	40	50
Nickerbean (*Caesalpinia bonduc*)	<1	<1	-	<1	<1	<1	-	-	-	-	-	-
Mangrovevine (*Rhabdadenia biflora*)	10	15	10	15	15	15	-	-	-	-	-	-
Balsam pear (*Momordica charantia*)	-	5	1	5	5	5	-	-	-	-	-	-
White mangrove (*Laguncularia racemosa*)	-	-	2	-	-	-	-	5	-	-	-	-
Buttonwood (*Concarpus erectus*)	-	-	5	-	-	-	2	5	-	-	-	-
Brazilian pepper (*Schinus terebinthifolius*)	-	-	-	-	-	-	4	-	-	-	-	-
Water Level	**2"**	**3"**	**1"**	**2"**	**1"**	**0.5"**	**0.5"**	**1"**	**0"**	**0"**	**1"**	**2"**

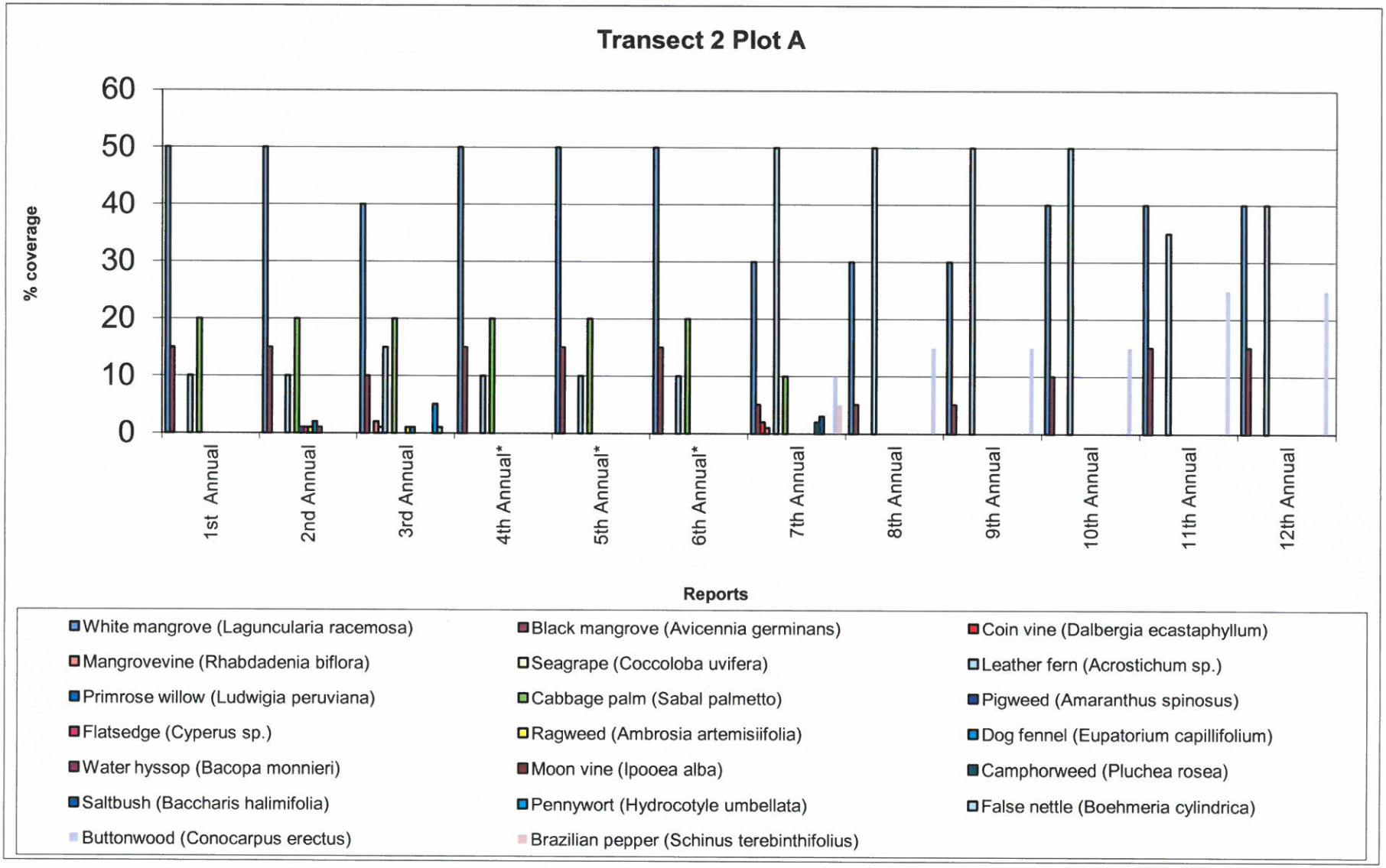
* Data collected by Horizons Tree Service, Inc.


Transect 1 Plot B
% coverage
70
60
50
40
30
20
10
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Black mangrove (Avicennia germinans)
Mangrovevine (Rhabdadenia biflora)
Seagrape (Coccoloba uvifera)
Leather fern (Acrostichum sp.)
Nickerbean (Caesalpinia bonduc)
Red mangrove (Rhizophora mangle)
Balsam pear (Momordica charantia)
White mangrove (Laguncularia racemosa)
Buttonwood (Concarpus erectus)
Brazilian pepper (Schinus terebinthifolius)
Buttonwood (Concarpus erectus)

Transect 2 Plot A

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	50	50	40	50	50	50	30	30	30	40	40	40
Black mangrove (*Avicennia germinans*)	15	15	10	15	15	15	5	5	5	10	15	15
Cabbage palm (*Sabal palmetto*)	20	20	20	20	20	20	10	-	-	-	-	-
Buttonwood (*Conocarpus erectus*)	-	-	-	-	-	-	10	15	15	15	25	25
Herbaceous												
Coin vine (*Dalbergia ecastaphyllum*)	<1	-	-	<1	<1	<1	2	-	-	-	-	-
Seagrape (*Coccoloba uvifera*)	<1	<1	1	<1	<1	<1	-	-	-	-	-	-
Leather fern (*Acrostichum* sp.)	10	10	15	10	10	10	50	50	50	50	35	40
Primrose willow (*Ludwigia peruviana*)	<1	-	-	<1	<1	<1	-	-	-	-	-	-
Mangrovevine (*Rhabdadenia biflora*)	<1	<1	2	<1	<1	<1	1	-	-	-	-	-
Pigweed (*Amaranthus spinosus*)	<1	1	-	<1	<1	<1	-	-	-	-	-	-
Flatsedge (*Cyperus* sp.)	-	1	-	<1	<1	<1	-	-	-	-	-	-
Ragweed (*Ambrosia artemisiifolia*)	-	1	1	<1	<1	<1	-	-	-	-	-	-
Dog fennel (*Eupatorium capillifolium*)	-	2	1	<1	<1	<1	-	-	-	-	-	-
Water hyssop (*Bacopa monnieri*)	-	1	-	<1	<1	<1	-	-	-	-	-	-
Moon vine (*Ipooea alba*)	-	<1	-	<1	<1	<1	-	-	-	-	-	-
Saltbush (*Baccharis halimifolia*)	-	-	<1	-	-	-	3	-	-	-	-	-
Pennywort (*Hydrocotyle umbellata*)	-	-	5	-	-	-	-	-	-	-	-	-
False nettle (*Boehmeria cylindrica*)	-	-	1	-	-	-	-	-	-	-	-	-
Camphorweed (*Pluchea rosea*)	-	<1	-	<1	<1	<1	2	-	-	-	-	-
Brazilian pepper (*Schinus terebinthifolius*)	-	-	-	-	-	-	5	-	-	-	-	-
Water Level	**0"**	**Sat.**	**Sat.**	**1"**	**1"**	**0.5"**	**Sat.**	**0.5"**	**0"**	**0"**	**0"**	**2"**

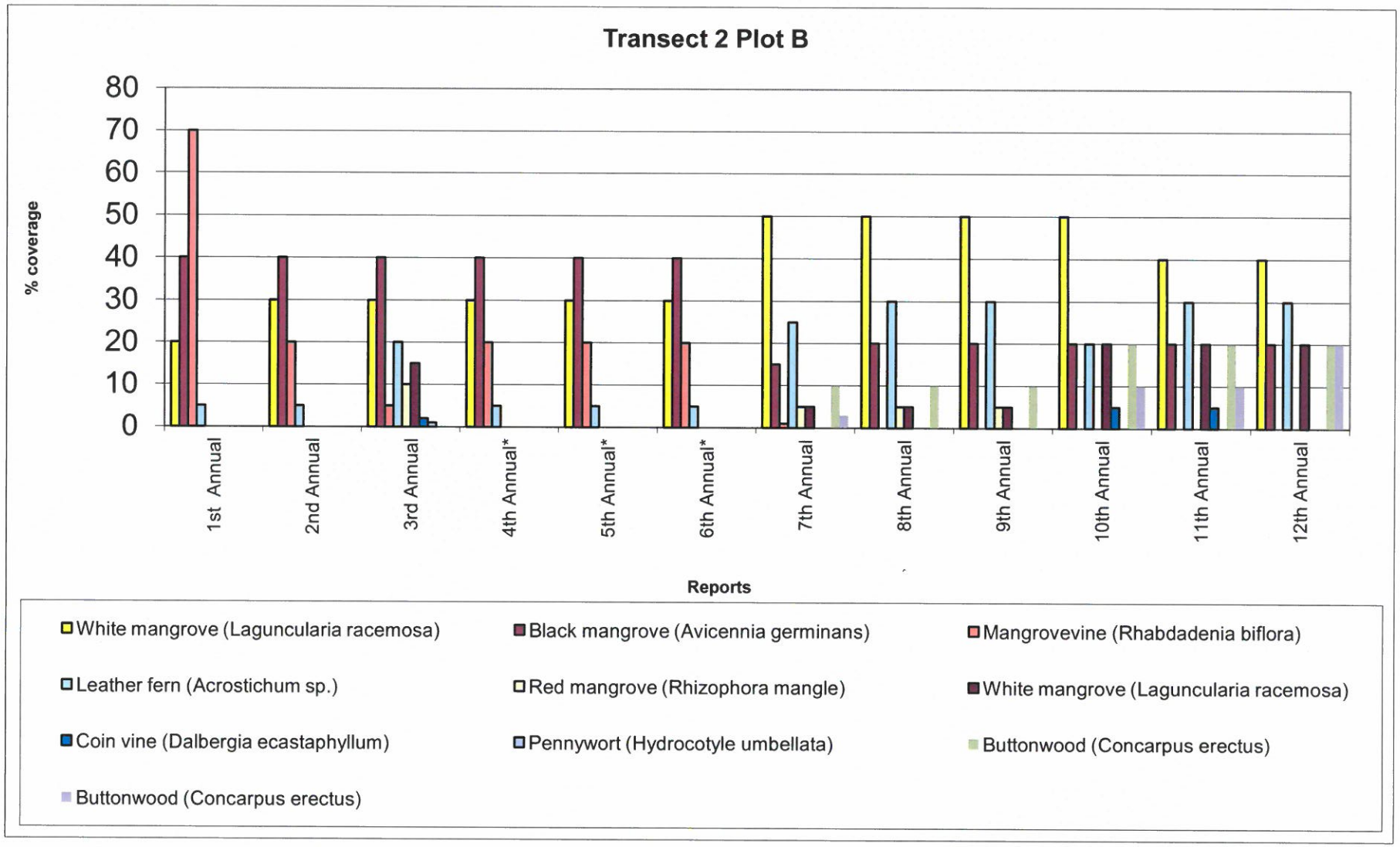
* Data collected by Horizons Tree Service, Inc.


Transect 2 Plot A
% coverage
60
50
40
30
20
10
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Black mangrove (Avicennia germinans)
Coin vine (Dalbergia ecastaphyllum)
Mangrovevine (Rhabdadenia biflora)
Seagrape (Coccoloba uvifera)
Leather fern (Acrostichum sp.)
Primrose willow (Ludwigia peruviana)
Cabbage palm (Sabal palmetto)
Pigweed (Amaranthus spinosus)
Flatsedge (Cyperus sp.)
Ragweed (Ambrosia artemisiifolia)
Dog fennel (Eupatorium capillifolium)
Water hyssop (Bacopa monnieri)
Moon vine (Ipooea alba)
Camphorweed (Pluchea rosea)
Saltbush (Baccharis halimifolia)
Pennywort (Hydrocotyle umbellata)
False nettle (Boehmeria cylindrica)
Buttonwood (Conocarpus erectus)
Brazilian pepper (Schinus terebinthifolius)

Transect 2 Plot B

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	20	30	30	30	30	30	50	50	50	50	40	40
Black mangrove (*Avicennia germinans*)	40	40	40	40	40	40	15	20	20	20	20	20
Buttonwood (*Concarpus erectus*)	-	-	-	-	-	-	10	10	10	20	20	20
Herbaceous												
Leather fern (*Acrostichum* sp.)	5	5	20	5	5	5	25	30	30	20	30	30
Red mangrove (*Rhizophora mangle*)	-	-	10	-	-	-	5	5	5	-	-	-
White mangrove (*Laguncularia racemosa*)	-	-	15	-	-	-	5	5	5	20	20	20
Coin vine (*Dalbergia ecastaphyllum*)	-	-	2	-	-	-	-	-	-	5	5	-
Pennywort (*Hydrocotyle umbellata*)	-	-	1	-	-	-	-	-	-	-	-	-
Mangrovevine (*Rhabdadenia biflora*)	70	20	5	20	20	20	1	-	-	-	-	-
Buttonwood (*Concarpus erectus*)	-	-	-	-	-	-	3	-	-	10	10	20
Water Level	**0.5"**	**1"**	**Sat.**	**1"**	**1"**	**0.5"**	**Sat.**	**0.5"**	**0"**	**0"**	**1"**	**1"**

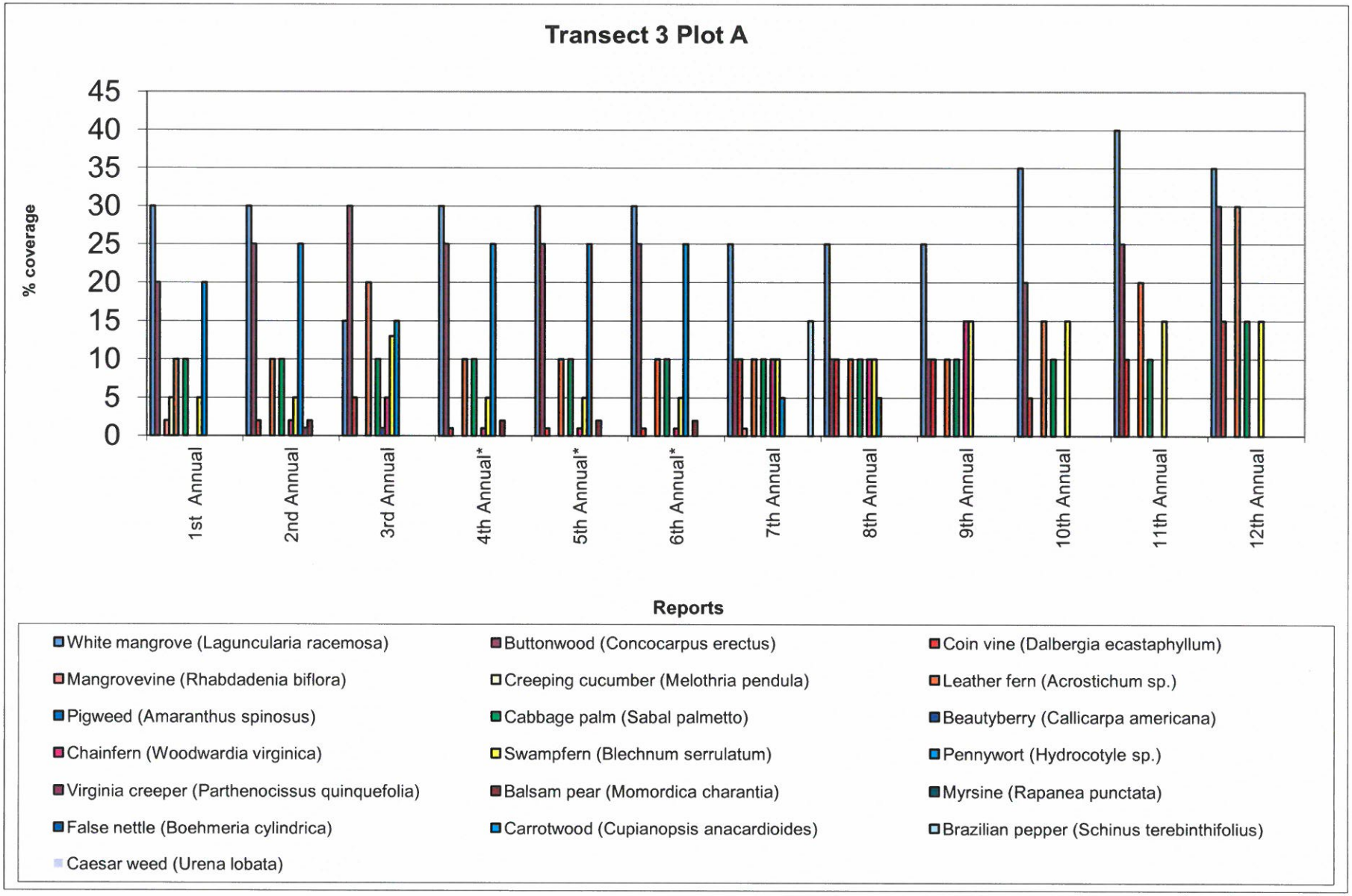
* Data collected by Horizons Tree Service, Inc.


Transect 2 Plot B
% coverage
80
70
60
50
40
30
20
10
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Black mangrove (Avicennia germinans)
Mangrovevine (Rhabdadenia biflora)
Leather fern (Acrostichum sp.)
Red mangrove (Rhizophora mangle)
White mangrove (Laguncularia racemosa)
Coin vine (Dalbergia ecastaphyllum)
Pennywort (Hydrocotyle umbellata)
Buttonwood (Concarpus erectus)
Buttonwood (Concarpus erectus)

Transect 3 Plot A

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	30	30	15	30	30	30	25	25	25	35	40	35
Buttonwood (*Concocarpus erectus*)	20	25	30	25	25	25	10	10	10	20	25	30
Cabbage palm (*Sabal palmetto*)	10	10	10	10	10	10	10	10	10	10	10	15
Herbaceous												
Coin vine (*Dalbergia ecastaphyllum*)	<1	2	5	1	1	1	10	10	10	5	10	15
Creeping cucumber (*Melothria pendula*)	5	<1	-	<1	<1	<1	<1	-	-	-	-	-
Leather fern (*Acrostichum* sp.)	10	10	20	10	10	10	10	10	10	15	20	30
Pigweed (*Amaranthus spinosus*)	<1	<1	-	<1	<1	<1	-	-	-	-	-	-
Mangrovevine (*Rhabdadenia biflora*)	2	-	-	<1	<1	<1	1	-	-	-	-	-
Beautyberry (*Callicarpa americana*)	<1	<1	1	<1	<1	<1	-	-	-	-	-	-
Chainfern (*Woodwardia virginica*)	<1	2	5	1	1	1	10	10	15	-	-	-
Swampfern (*Blechnum serrulatum*)	5	5	13	5	5	5	10	10	15	15	15	15
Pennywort (*Hydrocotyle* sp.)	20	25	15	25	25	25	5	5	-	-	-	-
Myrsine (*Rapanea punctata*)	-	-	<1	-	-	-	-	-	-	-	-	-
False nettle (*Boehmeria cylindrica*)	-	-	<1	-	-	-	-	-	-	-	-	-
Carrotwood (*Cupianopsis anacardioides*)	-	-	<1	-	-	-	-	-	-	-	-	-
Brazilian pepper (*Schinus terebinthifolius*)			<1	-	-	-	15	-	-	-	-	-
Virginia creeper (*Parthenocissus quinquefolia*)	-	1	-	<1	<1	<1	-	-	-	-	-	-
Balsam pear (*Momordica charantia*)	-	2	-	2	2	2	-	-	-	-	-	-
Caesar weed (*Urena lobata*)	-	-	-	-	-	-	<1	-	-	-	-	-
Water Level	**0"**	**Sat.**	**0"**	**1"**	**1"**	**0.5"**	**0"**	**0"**	**0"**	**0"**	**0"**	**1"**

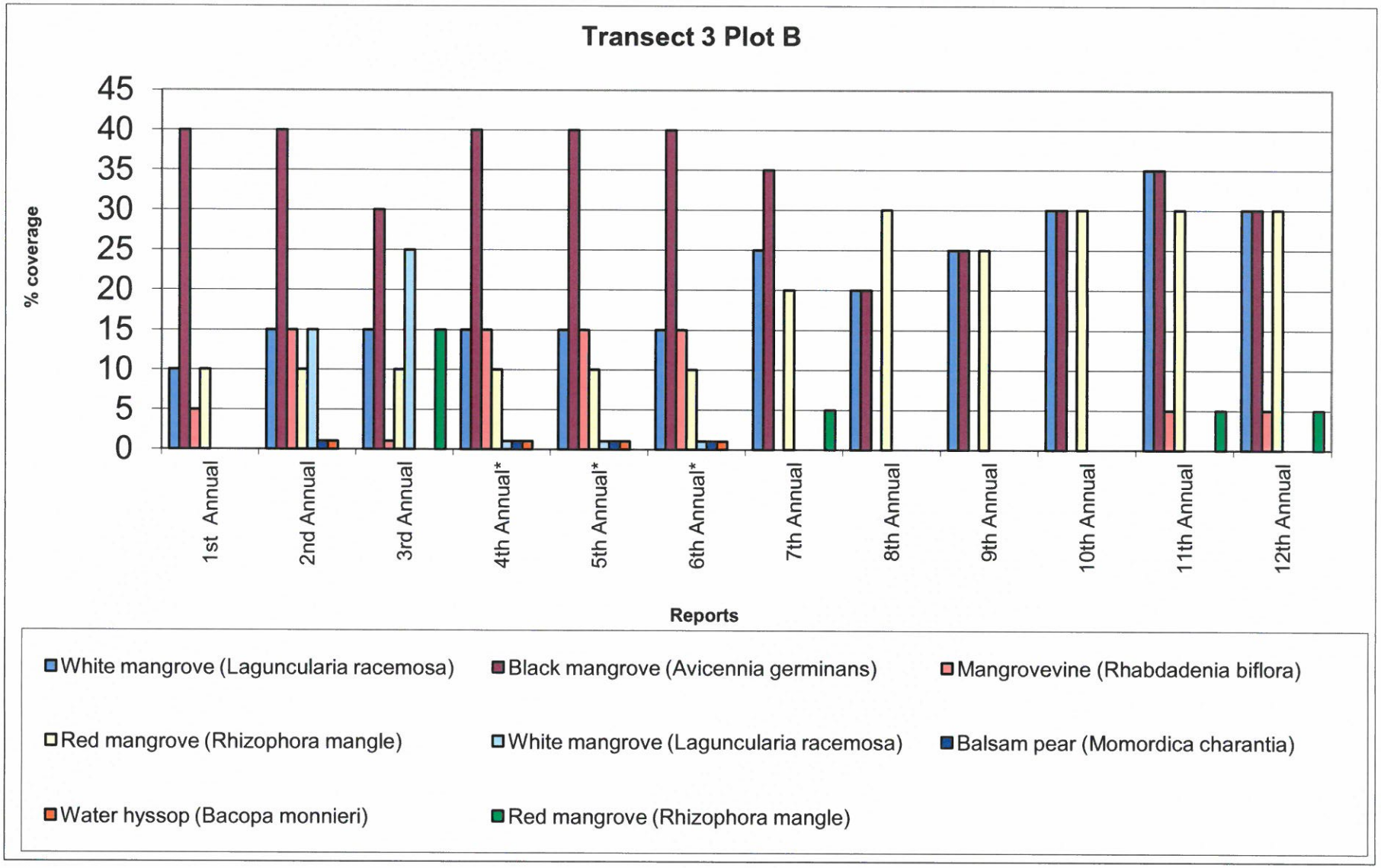
* Data collected by Horizons Tree Service, Inc.


Transect 3 Plot A
% coverage
45
40
35
30
25
20
15
10
5
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Buttonwood (Concocarpus erectus)
Coin vine (Dalbergia ecastaphyllum)
Mangrovevine (Rhabdadenia biflora)
Creeping cucumber (Melothria pendula)
Leather fern (Acrostichum sp.)
Pigweed (Amaranthus spinosus)
Cabbage palm (Sabal palmetto)
Beautyberry (Callicarpa americana)
Chainfern (Woodwardia virginica)
Swampfern (Blechnum serrulatum)
Pennywort (Hydrocotyle sp.)
Virginia creeper (Parthenocissus quinquefolia)
Balsam pear (Momordica charantia)
Myrsine (Rapanea punctata)
False nettle (Boehmeria cylindrica)
Carrotwood (Cupianopsis anacardioides)
Brazilian pepper (Schinus terebinthifolius)
Caesar weed (Urena lobata)

Transect 3 Plot B

	1st Annual	2nd Annual	3rd Annual	4th Annual*	5th Annual*	6th Annual*	7th Annual	8th Annual	9th Annual	10th Annual	11th Annual	12th Annual
% Coverage												
Trees												
White mangrove (*Laguncularia racemosa*)	10	15	15	15	15	15	25	20	25	30	35	30
Black mangrove (*Avicennia germinans*)	40	40	30	40	40	40	35	20	25	30	35	30
Red mangrove (*Rhizophora mangle*)	10	10	10	10	10	10	20	30	25	30	30	30
Herbaceous												
Mangrovevine (*Rhabdadenia biflora*)	5	15	1	15	15	15	-	-	-	-	5	5
White mangrove (*Laguncularia racemosa*)	-	15	25	1	1	1	-	-	-	-	-	-
Balsam pear (*Momordica charantia*)	-	1	0	1	1	1	-	-	-	-	-	-
Red mangrove (*Rhizophora mangle*)	-	-	15	-	-	-	5	-	-	-	5	5
Water hyssop (*Bacopa monnieri*)	-	1	<1	1	1	1	-	-	-	-	-	-
Water Level	**Sat.**	**3"**	**Sat.**	**1"**	**1"**	**0.5"**	**0.5"**	**0"**	**0"**	**0"**	**1"**	**1"**

* Data collected by Horizons Tree Service, Inc.


Transect 3 Plot B
% coverage
45
40
35
30
25
20
15
10
5
0
1st Annual
2nd Annual
3rd Annual
4th Annual*
5th Annual*
6th Annual*
7th Annual
8th Annual
9th Annual
10th Annual
11th Annual
12th Annual
Reports
White mangrove (Laguncularia racemosa)
Black mangrove (Avicennia germinans)
Mangrovevine (Rhabdadenia biflora)
Red mangrove (Rhizophora mangle)
White mangrove (Laguncularia racemosa)
Balsam pear (Momordica charantia)
Water hyssop (Bacopa monnieri)
Red mangrove (Rhizophora mangle)

SECTION: 30
TOWNSHIP: 45
RANGE: 24

MANGROVE TRIMMING PLAN
CURRENT CONDITIONS



60 30 0 60
SCALE FEET

Notes:
1. Property boundary obtained from Morris-Depew Associates, Inc.
2. Mapping based on photointerpretation of 2008 aerial photography and ground truthing in July 2009.
3. Image shown is 2014 aerial photograph.

W. DEXTER BENDER & ASSOCIATES, INC.
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS 239/334-3680

PALMAS DEL SOL

SHEET

July 25, 2014 9:11:33 am
Drawing: P:\ALMAS\PLAN2014.DWG

ATTACHMENT K

Mangrove Trimming Plan
Narrative and Analysis Document
for Palmas Del Sol

May 2014

Prepared for:

Palmas Del Sol Condominium Association
11660 Court of Palms
Fort Myers, FL 33908

Prepared by:

Parke Lewis, Senior Biologist
W. Dexter Bender & Associates, Inc.
4470 Camino Real Way, Suite 101
Fort Myers, FL 33966
(239) 334-3680

RECEIVED
MAY 27 2014
COMMUNITY DEVELOPMENT

DRI 2014-00001

RECEIVED
MAY 27 2014
COMMUNITY DEVELOPMENT

INTRODUCTION

The 10.17 acre mangrove preserve area at Palmas Del Sol consists primarily of white mangroves, black mangroves, red mangroves, buttonwoods and a ground cover understory of leather fern. The density of mature mangroves within the fringe varies from roughly 6'-8' on center along the river shoreline up to about 20' on center in the interior of the preserve. The mangrove fringe along the river contains no areas of open understory. Large mature trees consisting of black, red and white mangroves are scattered throughout the trimming area with red mangroves being the predominant species along the shoreline. Other species which can be found in the preserve include scattered cabbage palm, coin vine and pond apple in the drier portions of the preserve. Prior to the first exotic and nuisance vegetation removal event in December of 2002, extensive infestation by the exotic tree species Brazilian pepper, seaside mahoe and Australian pine were found within the preserve, particularly on the old spoil deposits and the sand and shell ridge along the river front. In order to provide for a view of the river from the residences at Palmas Del Sol, the FDEP issued General Permit # 36-0152741-003 to trim mangroves on August 13, 2001. Trimming within the preserve consisted of annual trimming in which the mangroves within the designated view corridors were to be trimmed to a height of no less than 32' NGVD. Outside of the trimming corridors, mature mangroves vary in height from 25' to 35' with trees in excess of 40' also present.

Trimming of mangroves in the indigenous preserve area is provided for with specific conditions in River's Edge Yacht and Country Club DRI Development Order #12-8182-21, as amended; Zoning Resolution Z-02-020; and a Conservation Easement recorded at Lee County Official Records Book 3893, Page 2562. These conditions do not prohibit trimming of other native vegetation (e.g., buttonwoods), and specifically allow for the mangroves to be trimmed to a final height of 32' NGVD (approximately 30' from the substrate) and to be maintained at that height on an annual basis.

PROPOSED TRIMMING

In order to provide for the residents of the Palmas Del Sol Condominiums to have:

"visual access to the river from the rear of the lot through the vegetation in the buffer and may be allowed for specific appropriate preservation area[s]along the riverfront. Selective trimming of trees and vegetation within the preservation and buffer areas for this purpose may be permitted only in those areas specifically designated in this Development Order ... " as described in the DRI Development Order Section, II.G.5.a.

The applicant is requesting that the existing Florida Department of Environmental Protection Permit (FDEP # 36-0152741-003) and the Lee County DRI Development Order and Conservation Easement language be revised so that the minimum trim height within "view corridors" be changed from 30'to 20' as measured from the substrate. This requested change is compatible with existing FDEP General Permit to Trim Mangroves guidelines and mangrove/native vegetation trimming projects on similar sites and meets the following conditions as described under F.S. 403.9327(1)(a) :

DRI 2014-00001

1) "The trimming is supervised or conducted exclusively by a professional mangrove trimmer."

- *The proposed trimming will be supervised exclusively by a professional mangrove trimmer.*

2) "The trimming is conducted in an area where the Department has not delegated the authority to regulate mangroves to a local government."

- *The project is located in Lee County. The County does not have delegated authority to regulate mangroves. However, Lee County has imposed additional restrictions on the trimming of mangroves and other native vegetation in the Palmas Del Sol preserve as part of the DRI Development Order.*

3) "No herbicide or other chemical will be used for the purpose of removing leaves of a mangrove."

- *No herbicide or chemical defoliants will be used.*

4) The mangroves subject to trimming under the permit do not extend more than 500' waterward as measured from the trunk of the most landward mangrove tree in a direction perpendicular to the shoreline.

- *All trimming corridors are less than 500' in depth from the most landward mangrove to the river.*

5) No more than 65% of the mangroves along the shoreline which exceed 6' in pre-trimmed height as measured from the substrate will be trimmed, and no mangrove will be trimmed so that the overall height of any mangrove is reduced to less than 6' as measured from the substrate.

- *The mangrove trimming corridors consist of less than 65% of the mangroves along the shoreline which exceed 6' in pre-trimmed height. And no mangroves are to be trimmed below 20' in height as measured from the substrate. As such, the proposed revisions fall under the criteria necessary to obtain a general permit to trim mangroves.*

The trimming conducted as proposed above will be significantly less than the trimming allowed down to the 6' minimum trim height provided for under a general permit. Furthermore, the 20' height as the final configuration is being applied to all vegetation in the trimming corridors, including allowing those currently less than 20' in height to grow up to 20'.

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PURPOSE OF THE 20'MINIMUM TRIM HEIGHT

As shown in the attached photographs taken of the central trimming corridor from a first floor residence, there is a slight improvement in the view of the river immediately after the annual trimming event. However, the view remains very limited and the improvement quickly deteriorates as the mangroves and buttonwoods in the trimming corridor grow back. Annual trimming removes between 3' and 4'vertical height of vegetation, depending on tree species. In order to provide for an adequate view of the river from the first floor residences a vertical reduction of the final trim height minimum to 20' will provide an adequate view of the river that is not lost in the interim between trimming events. A minimum final configuration of 20', achieved by trimming in phases annually, and removing a maximum of no more than 25% of the foliage annually will provide an adequate view of the river from the first floor residences. This limited additional trimming will provide an adequate view without adversely affecting the health of the mangrove fringe. The 20' minimum trim is proposed because this will allow for a 10' vertical reduction that will allow for an adequate view of the river even after 3-4' of growth has occurred.

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MONITORING

The Palmas Del Sol Tenth Annual Monitoring Report was submitted to Lee County in July of 2012. This report documents the overall condition of the preserve as being in satisfactory condition meeting and exceeding the requirements of plant survivability and the limitations on exotic and nuisance vegetation presence as required under the Development Order. The preserve area is treated annually for the presence of exotic and nuisance vegetation, primarily Brazilian pepper, seaside mahoe and moon vine. Currently the preserve area is free of exotic and nuisance vegetation. Permitted trimming of mangroves and other native vegetation within the view corridors has not resulted in any tree mortality. Furthermore, sampling data from the Tenth Annual Monitoring Report depicts an increase in ground cover and mid-story vegetation within the trimming corridors, with overall native vegetation densities in excess of 90%. This can be attributed to the continued growth of untrimmed vegetation at heights lower than 30' in addition to an increase in ground cover vegetation such as leather fern, immature buttonwoods and mangroves that have naturally recruited into these areas with the increase in sunlight as the canopy trees in the corridors were trimmed.

Due to inadequate supervision by the landscape company before W. Dexter Bender & Associates, Inc. began supervision, mangroves had been over-trimmed to heights ranging from 15' to 22' in height, below the approved 30' minimum trim height. Lee County identified that problem (2009 Lee County Enforcement Case, ENV2009-00034) and required remedial measures to be taken under better supervision. A site inspection by Lee County Environmental Sciences staff in September of 2011 revealed that the trees were at that time approximately 25' to 34' in height. In addition, there has been a reasonable amount of time for the individual trees and canopy cover to recover since the 2009 Enforcement Case.

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The Conservancy of Southwest Florida Collection Protocol for determining health of mangrove trees (Updated 2010/2012) and based upon Standardized Mangrove Data Collection Protocols developed for previous tree assessments and substantiated by work described by Duke *et. al.* 2010, Saintilin 2010 and FRC Environmental 2008/2010 provides the following categories and descriptors for assessing mangrove condition: "In general healthy mangroves have been described as living trees, saplings and seedlings that have green leaves with little evidence (less than 20%) of yellowing or curling, no abnormal leaf loss; little evidence of insect damage or disease (less than 20%) and no epicornic growth. Whereas unhealthy mangroves have been described as living trees, saplings and seedlings that may have die backs and/or receding canopies, many yellowing or curling canopies; extensive insect damage and/or disease; adventitious roots, and/or epicornic growth."

Consistent with the observations of Lee County Division of Environmental Sciences staff, we have observed that most all trees over trimmed in the corridors have fully recovered. In general, tree structure height has been reduced, but the canopy itself has closed in and trees are growing normally and are healthy as described above. There are dozens of similar local FDEP permitted mangrove trimming projects in preserve areas that consist of of long term maintenance trimming of mature mangroves without adverse effects to the preserve area. A few examples consistent with the 20' trim height are provided below:

The Lot "D" Safety Harbor project of North Captiva

These mangroves were initially illegally trimmed in the early 1990s. As a condition of the Consent Agreement, the FDEP allowed for a minimum trim height of 20' to be maintained. The mangrove fringe contains all three species of mangroves and has been continuously trimmed since the late 1990s. Including severe mangrove destruction as a result of hurricane Charley in 2004, this mangrove fringe is healthy in good condition and is trimmed on an annual basis to maintain the 20' configuration.

Sea Isles Condominium Fort Myers Beach

The mangroves along the residential area shoreline and within the preserve have been continuously trimmed under an FDEP general permit since 2002. Trees which were initially up to 40' in pre trimmed height were reduced through annual trimming in height to approximately 15' over a period of several years.

Harbor Place Condominium

These mangroves are located directly to the west of Palmas Del Sol. The mangroves in this preserve area are similar in height and configuration to the adjacent Palmas del Sol mangrove fringe. These Harbor Place mangroves are being trimmed under an FDEP general permit to reduce their height and configuration to improve the view of the river from the residences. The mangroves may be trimmed to a minimum height of 6'. The

DRI 2014-00001

FDEP later issued a second General Permit to allow for a larger trimming corridor than was provided for in the initial permit.

CONCLUSION

The proposed revised minimum trim height of 20' is consistent with FDEP guidelines for trimming mangroves. This trimming can be conducted in stages and under the specific conditions of an FDEP General Permit, and with continued monitoring of the preserve and annual reports to Lee County to ensure the stability of a healthy mangrove forest preserve will be assured.

Y:\PALMA-2\Management Plan.Docx

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View looking towards the river from the 1st floor of the central building after recent trimming was completed. 3/14



View looking upriver from the 1st floor of the central building after recent trimming completed.3/14

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Another view with "no trimming" area in the background.3/14



View upriver looking along the view corridor with "no trimming" zone in the background.3/14

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DRI 2014-00001

ATTACHMENT L

STAFF REPORT
FROM
DEPARTMENT OF COMMUNITY DEVELOPMENT
DIVISION OF ENVIRONMENTAL SCIENCES

Date: January 16, 2002

To: Mike Pavese, Principal Planner
From: Kim Trebatoski, Principal Environmental Planner
#(941)479-8183; e-mail: trebatkm@leegov.com

Re: River's Edge aka Gulf Harbour DRI Notice of Proposed Change
DRI 2001-00005
STRAP 30-45-24-13-0000A.0000

The Division of Environmental Sciences (ES) staff have reviewed the above referenced proposal to allow:

1. The trimming of 6 acres of the 10 acre mangrove preserve; and
2. The installation of a boardwalk (6-foot wide) and observation deck (10-foot by 40-foot); and
3. The installation of three wood walkovers (6-foot by 10-foot); and
4. The installation of a 10-foot wide riprap sill along the entire 10 acre mangrove preserve.

ES staff conducted site inspections on September 21 and November 2, 2001 to field verify the condition of the existing mangrove preserve, and evaluate the proposed changes to the Rivers Edge DRI.

Mangrove Preserve Trimming:

The proposed mangrove trimming is adjacent to the Palmas Del Sol residential development. The applicant states that the purpose of the trimming corridors is to provide a view of the Caloosahatchee River for the first two habitable stories of the condominiums where there is none now (letter from Dexter Bender and Associates dated August 6, 2001). ES staff checked the views from the first and second habitable floors of a building under construction during their November 2, 2001 field verification. The first floor of dwelling units have a view of the mangrove forest. The second floor has views of the river and mangrove forest. Photographs are attached as Staff Exhibit-A to document the views from the first and second habitable floors. The remaining four habitable floors have a full river view. It is well documented that the mangrove forest is to remain a preservation area for the Rivers Edge DRI. When the tract was purchased for development, the developer was aware of the adjacent mature mangrove forest preserve.

Palmas Del Sol is a multi family residential development containing three buildings within one tract of the River's Edge DRI. The tract is approximately 20.59 acres. However, the overall DRI consists of 547.6 acres. The 10.2 acre mangrove preserve is a preservation area for the entire DRI, although

it is directly adjacent to the Palmas Del Sol development. The entire indigenous plant community preservation within the River's Edge DRI is very limited including only 15.7 acres, with this mangrove preserve being the largest and widest portion of preserve within the DRI boundaries. Most of the preservation areas along the Caloosahatchee River are narrow strips, please refer to DRI Exhibit-C (attached) delineating the 15.7 acres of preserve. The narrow strip portions of the required DRI preserves have been impacted by single family homeowners. This has been an ongoing compliance issue as is documented in Staff Exhibit-B (attached).

Additionally, the preserve abuts an approximately 3.1 acre mangrove preserve along the west property line. The connectivity provides a larger functional natural system.

The 10.2 acre mangrove preserve consists of a high quality mangrove forest with black, white and red mangrove. The mature trees are more than 30-feet tall. The applicant estimates the height of the trees at 40-feet. Trimming a minimum of 8-feet off the top of these mature trees will substantially reduce the canopy within the mangrove forest preserve. The trimming proposal is in actuality a request to remove the upper canopy of the mangrove trees, often referred to as topping. The Land Development Code (LDC) Section 10-421(c) addresses pruning standards stating vegetation required by this code may only be pruned to promote healthy, uniform, natural growth of the vegetation, and trees must not be severely pruned to permanently maintain growth at a reduced height or spread.

The applicant's exhibit entitled "Mangrove Trimming and Mitigation Plan" prepared by W. Dexter Bender and Associates dated August 2, 2001 (attached Trimming Plan Exhibit-D) delineates the proposed trimming areas. The proposal is to allow 6 acres of trimming, 3.9 acres of preservation, and 0.3 acres of a rip-rap sill. Allowing trimming in these areas will result in the loss of viable mangrove forest. It will in essence dramatically impact the entire 10.2 acre preserve since the remaining strips of mangrove forest and the topped mangrove trees will no longer function as a mangrove forest. The majority of the canopy will be removed resulting in more sunlight penetration. The native plant community will be altered, and the colonization of invasive exotic vegetation is likely. The increased sunlight, the alterations in canopy, and resulting changes in the native plant community will affect the composition of animal life within the preserve. Mangroves serve as breeding grounds for many fish and crustacean species. Additionally, these areas provide cover, forage, and nesting habitat for many bird species, including listed wading birds.

Coastal wetlands are to receive a higher degree of protection through Lee Plan Goal 74, and subsequent clarifying Objective 74.1 and Policy 74.1.1. Additionally, LDC Section 10-415(b) requires a minimum of fifty percent of the required open space to be provided as preservation of existing indigenous plant communities. The preserves are to be maintained in perpetuity. Residential planned developments must provide 40% open space. The River's Edge DRI has provided 15.7 acres or 2.9% of the overall project as preserve. The 10.2 acre mangrove preserve under consideration in this Notice of Proposed Change is only 1.9% of the overall DRI development area. Therefore, the provided preservation of indigenous plant communities is a minute portion of the entire DRI. The proposed alterations do not preserve the existing indigenous plant community as is required by LDC Section 10-415(b). Therefore, the proposed trimming is considered a reduction

in indigenous preservation. Reduction in such a small preserve area that is already far below the LDC required minimum cannot be supported.

ES staff is also very concerned with the precedent that would be established with approving the requested tree trimming within an indigenous preserve. In this case, it is mangrove trees. If in another case the trees are live oaks, the loss of forest system would be the same. With the Board of County Commissioners current tough stance on severe tree pruning and topping, approving the proposed mangrove topping would be counter to that direction.

The proposed mangrove trimming is inconsistent with Lee Plan Goal 74, Objective 74.1, Policy 74.1.4; and LDC Sections 10-415(b) and 10-421(c), therefore ES staff strongly recommend **DENIAL** of the request to allow trimming 6 acres of mangroves within the 10.2 acre coastal wetland preserve.

Boardwalk and Observation Deck:

There is a small berm located along the west property line. This is the location of the proposed boardwalk. If a boardwalk is to be installed, the previously disturbed area along this berm will have the least impact on the existing preserve. The applicant is proposing a 6-foot wide boardwalk. It is beneficial to allow access to an indigenous preserve for the passive recreational use of residents who may learn more about the native habitats and animals of Florida through observations and educational displays. However, the placement of boardwalks should occur in a manner that least disturbs the existing preserve. Therefore ES staff recommend that the boardwalk be limited to a 5-foot width, which meets ADA standards. Additionally, the observation deck should be limited to a total 400 square feet and be designed through LDC fishing pier standards to discourage watercraft mooring.

ES staff recommend **APPROVAL with conditions** of the proposed boardwalk and fishing/observation pier:

The access boardwalk is limited to a 5-foot width. The observation deck is limited to a maximum 400 square feet, and must meet the standards of fishing piers in Land Development Code Section 26-73. The boardwalk and observation deck must be field located to avoid impacts to the existing mangrove forest. Placement of the boardwalk must be within the limits of the existing berm along the south boundary of the mangrove preserve. The boardwalk and observation deck must be in substantial compliance with the Boardwalk and Observation Deck Plan prepared by W. Dexter Bender and Associates stamped received August 7, 2001 (attached as Exhibit-1).

Wood Swale Crossings:

The applicant is proposing to install three 6-foot by 10-foot wood swale crossings. The applicant has failed to demonstrate why these crossings are necessary. Access to the preserve and fishing/observation pier may be obtained via the proposed boardwalk. Therefore ES staff

recommend **DENIAL** of the four proposed swale crossings.

Rip-rap Sill:

The applicant is proposing to install a rip-rap sill within a 10-foot wide Conservation Easement waterward of the mean high water line along the north boundary of the 10.2 acre mangrove preserve. The applicant indicates that the rip-rap is to serve as mitigation for the mangrove trimming, and to stabilize the shoreline.

During the November field verification, ES staff walked along the north shoreline of the mangrove preserve. There is a small beach ridge along the north boundary of the mangrove forest. The shoreline appears to be in good condition, and should remain so, as long as the mangrove trees are allowed to grow in their natural form.

ES staff recommend **DENIAL** of the proposed rip-rap sill along the north boundary of the mangrove preserve.

Staff Exhibit-A

Photographs of Views from 1st and 2nd Habitable Floors

BLACK INK ONLY

The Three attached photo(s) was/were taken by Kim Trebatoski the
(Number) (Inspector)
2nd day of November, 2001 at Rivers Edge DRI - Palmas Del Sol Tract.
(Location)

I, Kim Trebatoski swear or affirm the above statement is true and correct to the best of my knowledge and belief.

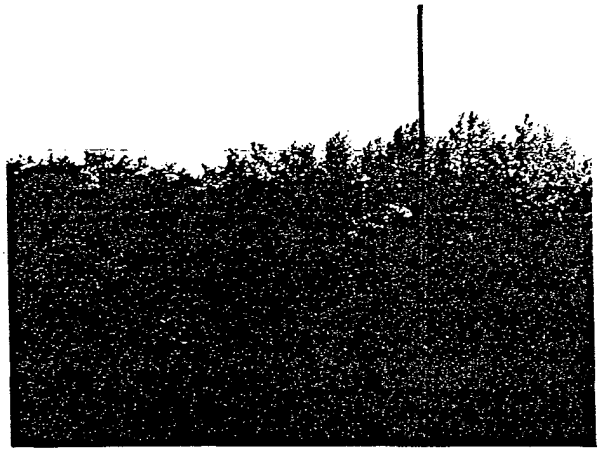
Kim Trebatoski
(INSPECTOR/AFFIANT)

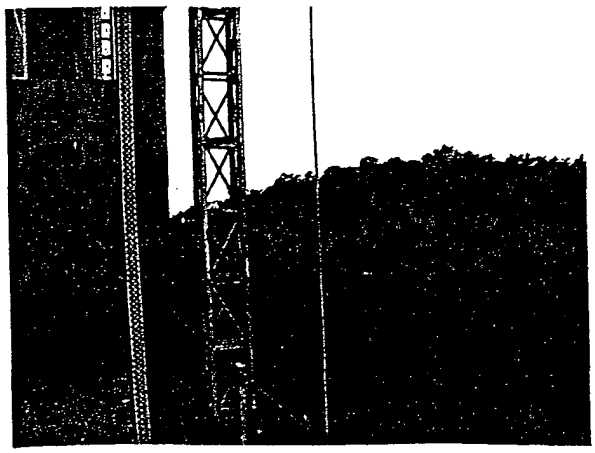
Sworn and subscribed before me this 27th day of December 2001, by Kim Trebatoski, personally known to me.

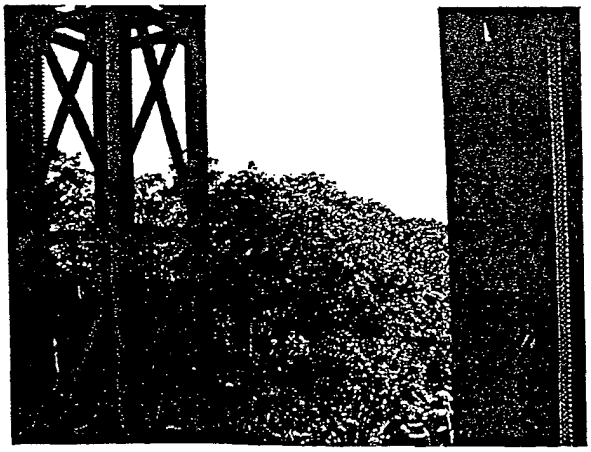
JANET MILLER
MY COMMISSION # CC 801217
EXPIRES: January 11, 2003
Bonded Thru Notary Public Underwriters

NOTARY PUBLIC
County of Lee/State of Florida

Views from First Habitable Floor







BLACK INK ONLY

The Three attached photo(s) was/were taken by Kim Trebatoski the
(Number) (Inspector)
2nd day of November, 2001 at Rivers Edge DRI - Palmas Del Sol Tract.
(Location)

I, Kim Trebatoski swear or affirm the above statement is true and correct to the best of my knowledge and belief.

Kim Trebatoski
(INSPECTOR/AFFIANT)

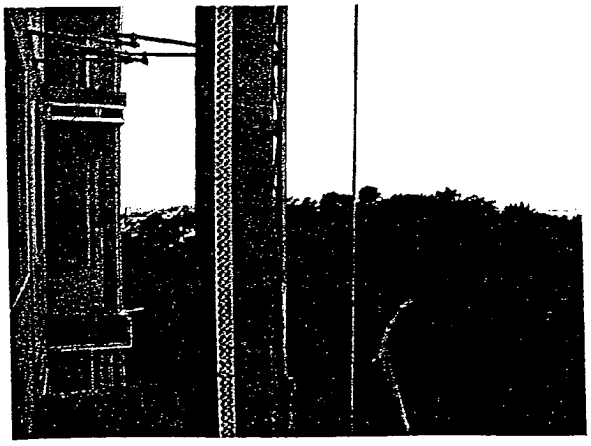
Sworn and subscribed before me this 27th day of December 2001, by Kim Trebatoski, personally known to me.

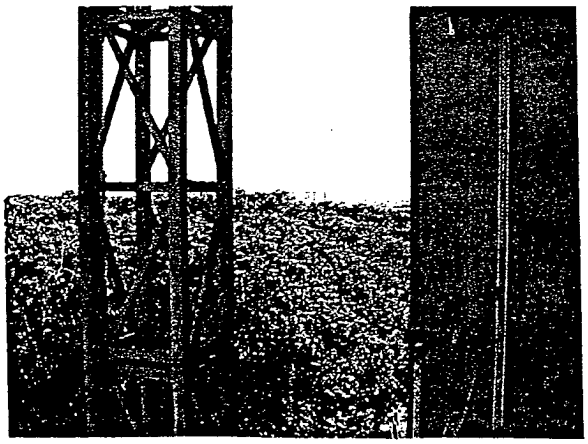
JANET MILLER
MY COMMISSION # CC 801217
EXPIRES: January 11, 2003
Bonded Thru Notary Public Underwriters

NOTARY PUBLIC
County of Lee/State of Florida

Views from Second Habitable Floor







Staff Exhibit-B

Documentation of Impacts to Preserves

MEMORANDUM
FROM THE
DEPARTMENT OF COMMUNITY DEVELOPMENT
DIVISION OF ENVIRONMENTAL SCIENCES

DATE: January 18, 2002

TO: Kim Trebatoski, Principal Environmental Planner

FROM: Carol A. Lis, Senior Environmental Planner Carol

RE: Gulf Harbor a.k.a. River's Edge DRI NOPC

In response to your request, the following is a summary of various types of chronic violations Lee County Environmental Sciences (ES) staff has encountered in the preservation area of Gulf Harbour. The preservation area is located between the river and lots 14 -38 on Longwater Chase Court, the eagle perch island and The Shores Condominiums in the Gulf Harbour development. The DRI states "It is the intent of the refined vegetation preservation line to provide natural shoreline stabilization through native vegetation and to protect a unique vegetation/wildlife habitat."

Both the DRI and the development order for this project delineated the preservation area, which was one continuous parcel, as Tract E. In July of 1998, Tract E was divided and quick claim deeded to each of the adjacent property owners with no explanation. Many property owners believed that the restrictions had been lifted and that they could impact the preservation area.

Specific conditions in the DRI limit the activities that are allowed within the preservation area. Lots 32-38 have additional restrictions. Mangrove trimming is not permitted. ES staff has met individually with property owners and provided copies of and discussed the conditions of the DRI. However, impacts have still occurred for visibility of the water and the desire to maintain it as a landscaped area instead of a preserve.

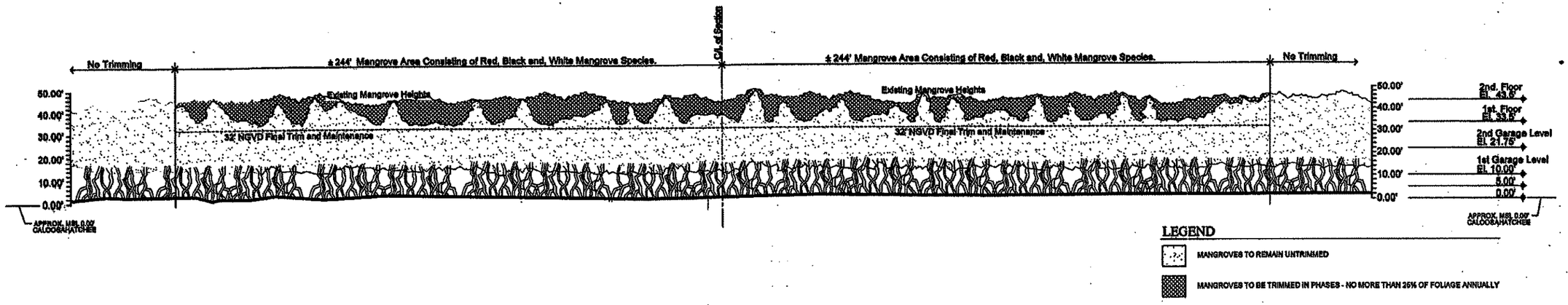
Almost every lot has had some type of violation of the preservation area. Several houses had to manually remove large quantities of fill that had washed into the preservation area, before they could receive their Certificate of Occupancy (C.O.). One house actually had five feet of fill in the preservation area, which resulted in the death of numerous mangroves.

Other violations have included tree and mangrove removal, excessive mangrove trimming, rip rap, not removing exotics, trimming leather ferns to the ground, spraying leather ferns with herbicide and sodding the area. Beach sand was even brought in on a few lots, after the vegetation was removed, to create a beach

Trees and vegetation are routinely removed one by one so as not to be noticeable. Some violations have required the replanting of vegetation, however, the success rate of the replanted material has been mixed. Currently, with most of the houses on Longwater Chase Court constructed, it is extremely difficult for enforcement staff to inspect these areas between the houses and the river.

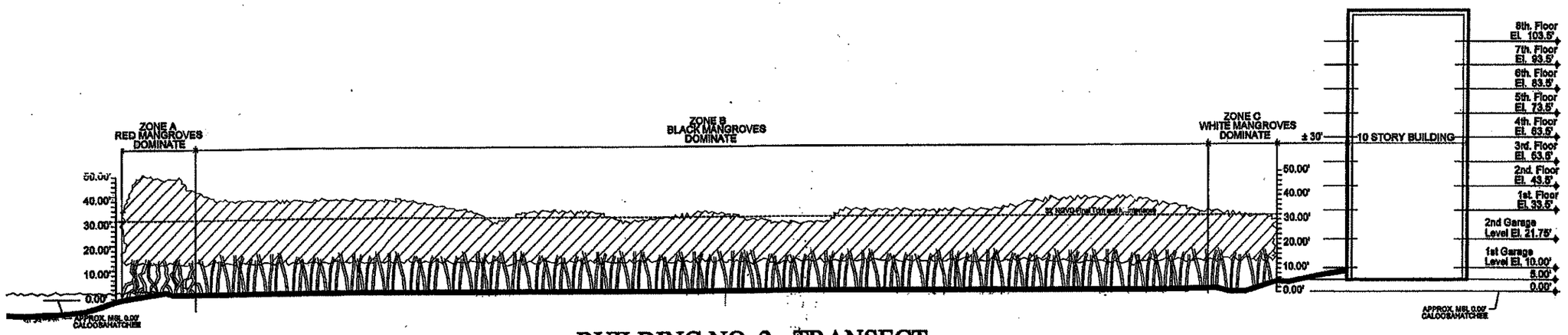
If you need any additional information, please contact me at 479-8353.

ATTACHMENT M



BUILDING NO. 2 - 244' LF WIDE TRIMMING CORRIDOR
MANGROVE TRIMING - TYPICAL CROSS SECTION VIEW FROM CALOOSAHATCHEE RIVER

VERTICLE SCALE: 1"= 20'-0"
HORRIZONTAL SCALE: 1"= 10'-0"



BUILDING NO. 2 - TRANSECT
PROPOSED MANGROVE TRIMING - TYPICAL PROFILE THROUGH SYSTEM (SIDE VIEW)

VERTICLE SCALE: 1"= 20'-0"
HORRIZONTAL SCALE: 1"= 10'-0"

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Introduction

This booklet is intended to assist coastal property owners in identifying, trimming, and altering mangrove trees in a manner that will:

- provide a view of the water
- protect valuable mangrove resources; and
- be in compliance with state laws that regulate the trimming and alteration of mangroves.

Mangroves are tropical trees that are restricted to the calm intertidal areas of Florida where temperatures do not usually drop below freezing for prolonged periods. They generally exist south of St. Augustine on the east coast and from Cedar Key south on the West Coast.

There are three species of mangroves in Florida: *red, black,* and *white.* They are generally not found in freshwater systems due to competition with other species, and other factors. Because each species responds differently to trimming, information on the identification of these species is provided in pages 7 through 10 of this booklet.

Mangroves provide many benefits to us and our environment:

- Their roots and trunks resist and prevent shoreline erosion;
- They provide food and habitat for the marine food chain, including fish we like to catch and eat;
- They assist with maintaining and improving the quality of our coastal waters; and
- They can protect homes from severe wind damage.

Mangroves can grow rapidly and often form dense thickets that block the view of the water for waterfront property owners. For this reason, many property owners have already cut their mangroves to improve their view of the water, and many more would like to cut mangroves to get a view they do not currently enjoy. Unfortunately, some cutting of mangroves has not been done in conformance with all applicable state and local regulations. If not done properly, trimming can harm or kill



mangroves. While this might maximize a view of the water, many people do not realize that killing or harming mangroves can have many unintended adverse consequences to the benefits mangroves provide. The Florida Marine Research Institute has reported an 86% loss of mangroves in Florida since the 1940's. With this has been a loss in the productivity and quality of many of our nearshore waters.

The Florida Legislature enacted the 1996 Mangrove Trimming and Preservation Act (1996 Act) in sections 403.9321-403.9334 of the Florida Statutes (F.S.). This law regulates the trimming and alteration of mangroves statewide, including at the local level. A copy of the 1996 Act can be obtained from agency sources listed at the end of this booklet. While the 1996 Act does recognize a riparian right to view in the intent section (ss.403.9323, F.S.), there are instances when waterfront property owners may not be able to legally obtain a view or all the view they desire.

Before You Trim

Shoreline owners have a unique opportunity to directly participate in the stewardship of Florida's marine environment by understanding that there are many ways that a reasonable view of the water may be obtained without severely injuring or killing mangroves. By so doing, portions of mangroves that are not cut can remain healthy and continue to provide valuable benefits to our coastal waters.

Regulations: The heights to which a mangrove tree may be trimmed depends upon the species and condition of the tree, and the provisions of the 1996 Act. Mangroves may not be trimmed lower than 6 feet in height from the substrate (ground surface) under the exemptions and general permits in the 1996 Act, except for certain maintenance trimming of historically established configurations. Large trees may have to be reduced in height in stages over several years, and often trees cannot be trimmed as low as 6 feet. In no case may trimming result in defoliation (loss of the tree's leaves), destruction (death of a part or all of the tree), or removal of a mangrove. Actions that result in the defoliation, destruction, or removal of a mangrove are considered "alteration," (not "trimming") and are regulated through individual permits. The right to trim mangroves is only provided to riparian owners (see Page 11, *Description of Terms*). Both the property owner and the person hired by the property owner to do the trimming should understand the 1996 Act and applicable local regulations, because both the property owner and the person performing the trimming are jointly and severally responsible for complying with the 1996 Act.



Chapters 373 and 403, F.S., contain separate provisions for cutting mangroves in order to conduct activities authorized under the wetland resource and environmental resource permit programs. Mangroves located within the footprint of an activity so authorized do not require a separate authorization under the 1996 Act. However, future trimming of mangroves to enjoy the view attained by a structure so authorized would be regulated under the 1996 Act.

Professional Mangrove Trimmers (PMTs): The 1996 Act has provisions (section 403.9329(1) and (2), F.S.) for qualifying certain persons as PMTs. These persons are required to supervise or conduct certain types of trimming, and typically are the best qualified to do most trimming in a manner that is least damaging to the trees. Pages 12 through 14 of this pamphlet provide additional information on the use of PMTs.

Conducting trimming without professional experience: Shoreline owners may trim mangroves themselves where previously untrimmed trees are between 6 and 10 feet in height, and where trimming is needed to *maintain* a previously trimmed configuration. However, such maintenance trimming is limited to situations where the mangroves have not grown so tall and dense that a view of the water has been blocked for a prolonged duration. Except for trees 10 feet or less in height, reestablishment of a previous configuration requires a PMT. Regardless of who conducts the trimming, contact your county Extension Service office or the International Society for Arboriculture (http://www.floridaisa.org) for additional information on standard horticultural practices. There also are some excellent and easy to read books available from libraries, bookstores, and the internet for this purpose. Remember, you are responsible for trimming mangroves in accordance with the 1996 Act. (Refer to Page 4, *Trimming for Healthy Plants,* and Pages 5-6, *Trimming Styles.*)

Styles of trimming: Mangroves can be trimmed in a variety of ways that can provide a view while still protecting the health of the tree. A PMT, your County Extension Service, libraries, and many web sites can provide additional information on standard horticultural practices. However, in all cases, the trimming must be done in a manner that will not cause the defoliation, destruction, or removal of the mangrove. Suggested alternative trimming techniques are provided on Pages 5-6, *Trimming Styles.*

Trimming for Healthy Plants

Healthy mangroves are more beneficial to your shoreline, to the fisheries, to our water quality, and to your landscape design than are mangroves that have been trimmed improperly.

Trimming (many publications also may refer to this as "pruning")

Objective - When trimming a branch, the desired result is a nice, clean cut to the branch side of the juncture of the branch and the limb (or trunk). Damage to that junction will wound the tree. Stubs left on the tree are subject to decay, and may be a source for future insect and fungal damage.

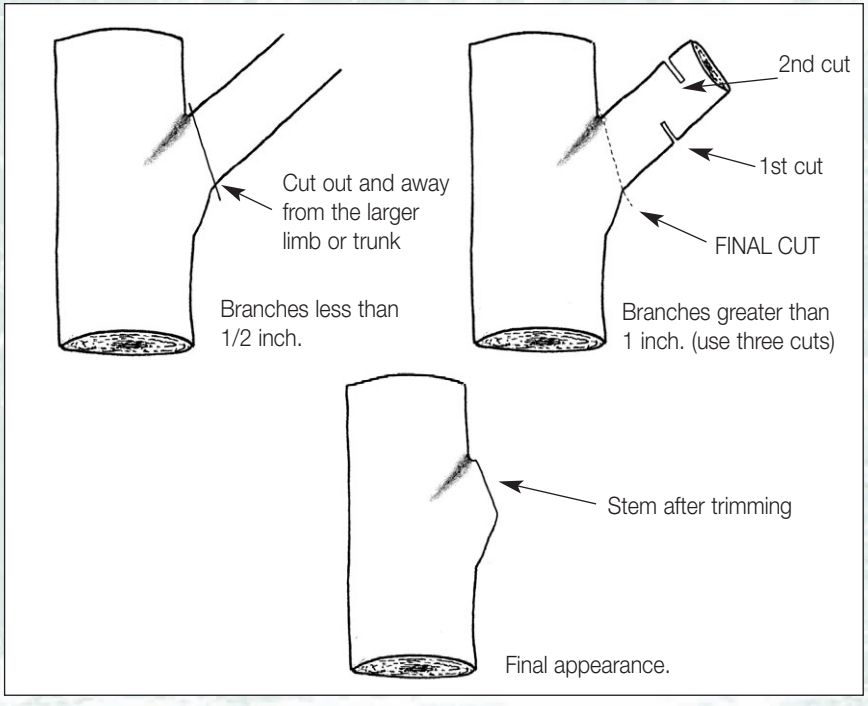
Equipment - Tools must be clean and free of oils. It is important that the tools are sharp for a clean cut. The wood at the cut should be smooth, not frayed. Frayed cuts may not heal properly and may be a source of infection. If fraying occurs, your trimmer's tools may not be sufficiently sharp. Do *not* use pesticides or pruning paint on any cuts.

Timing - Trimming is best done during the months of October through March, when mangroves are not growing as vigorously and energy demand for producing propagules is reduced. However, this is also the time when mangroves may be damaged or killed by freezes. It is recommended that mangroves not be trimmed for at least six months following a freeze in order to allow time to determine what portions of the tree may have actually been affected by the freeze. Removal of dead and freeze-damaged portions of a tree is a good horticultural practice after that six-month period. In addition, once mangroves have been trimmed, it is a good idea to maintain that configuration through regular (i.e. six-month to one-year intervals) maintenance trimming. This maintenance should only cut back to the previous configuration. Regular trimming will reduce stress to the tree in the future and will maintain a view of the water.

Procedure - To obtain the preferred cut without the weight of the branching causing the wood to tear, follow the procedures at right.

Defoliation is stressful. If all or most of the leaves are trimmed off of a mangrove, its survivability is severely reduced. Red mangroves and large black mangroves are most susceptible to death from defoliation. To prevent this from happening, it is recommended that no more than 25% of the foliage is removed annually. It is also recommended that the upper 50% of the canopy of red mangroves not be cut (i.e., no top trimming of red mangroves). The upper canopy of old, mature black mangroves also should not be removed.

Refer to pruning guides available from county extension agents, the International Society of Arboriculture (http://www.floridaisa.com) and bookstores for further details.



Trimming Styles

There are several styles of trimming that can provide a pleasing view of the water. While hedging is the form most commonly used, it often is the most environmentally damaging. Other alternate styles can provide a view in a manner that is less stressful to the mangroves and may require less maintenance.

Windows: A view through large trees can be obtained by selective limb removal within the lower or central area of the tree. Windowing allows for a view while maintaining shade, privacy, a windbreak and additional habitat for wildlife.



Hedging: Trimming mangroves into the hedged shape provides a view across the top of the mangroves. If all of the leaves of a tree are in the upper canopy and trimming the canopy will remove all of the leaves, then the top trimming activity of hedging may not be performed or only performed to the height that does not defoliate or otherwise damage the tree. Hedging is not recommended for red mangroves or for mature black mangroves. Trimming to form a hedge generally cannot be performed to heights of less than 6 ft. unless the property has a previously, legally established trimming configuration to a lower height and the agency has reviewed and approved documentation of the historic configuration. (see Page 14 *Reestablishment of Previous Configurations).*



Undercutting: This is the trimming of the lower portion of a tree. Undercutting as it is sometimes called, may provide a view lower than 6 feet through a taller tree but *young plants that grow up through that viewing area can not be trimmed until they exceed 6 feet.* The results will be similar to window trims with a lower view at 6 feet. Recruiting young plants (those colonizing under established trees) also should *not* be pulled out of the ground. This activity technically is a form of alteration and requires a permit.



Whatever style of trimming you choose, consider a style that can be maintained with the least loss of leaves resulting from the trimming activity. Mangrove leaves are an important source of nutrients for the smaller animals of the marine food chain, including sea grass and coral reef communities. Leaves that die naturally on the tree and then fall into the water are much more quickly biodegraded and available as a food source than healthy leaves cut from the tree. Fresh cut green leaves will stay mostly intact lying on the substrate for months before total leaf breakdown.

Trimming Styles - continued

Design for a view and landscape that is comfortable for you while considering the benefits mangroves provide to your home and property. Refer to individual species discussions for additional trimming information.



A combination of windowing and other landscape plants gives this home a beautiful and lush appearance with a view of their front walkway.



These homeowners have decided to let their mangroves grow naturally. A small path through the mangroves provides access to their dock and pier.



If you are fortunate to have mangroves growing along your seawall or rip rap, the lush green vegetation provides a pleasing contrast to the cement and rock structures.



This two-story house, under construction, has a view of the water from various rooms of the house and still retains privacy from passing boaters.

Red Mangroves
named after the color inside the bark

Red mangroves *(Rhizophora mangle)* are characterized by their arching prop roots. These roots, referred to as "aerial roots" before they enter the water, extend from the main trunk and lateral branches and grow down towards the water until they reach the substrate. Once in the substrate, the roots are referred to as "prop roots." These prop roots provide support to the weight of the tree and assist in nutrient uptake and salt exclusion. Their leaves are elliptical, glossy and dark green on top, and paler, dull green, often with small black spots, underneath.

Red mangroves tend to grow closest to the water. They are very valuable in preventing erosion of coastal properties because their prop roots, and smaller roots growing from them, help stabilize the shifting substrate of shorelines.



Propagules hanging from red mangrove

The intertwined habitat of the roots provides shelter for juvenile and smaller species of fish and other marine organisms. Red mangroves are the most susceptible of the mangroves to damage from severe trimming. Cutting of the aerial/prop roots is prohibited without authorization from the agency. Red mangroves only grow from the end of their stems. This area is called the "apical meristem," (growing tips on branches and main stems). When all of the leaves and the apical meristems are removed, their survival is very doubtful. This is why topping of red mangroves can be so damaging. These trees are best cut by trimming no more than 50% of the lower part of the canopy to form windows.

Propagules are red mangrove seedlings that "start growth" within the wall of the fruit. They continue to grow and sprout while floating on the water. As the tip of the propagule gets saturated with water, it becomes heavy, falls toward the substrate, and sends out roots that establish in the substrate.

Front cover photo: Ibis on a red mangrove.





(above) Red mangrove – note extensive prop roots

(left) Leaves and young propagules of red mangrove

Black Mangroves
named after their dark bark

Black mangroves *(Avicennia germinans)* are distinguished by leaves that are dull, dark green on the upper side and whitish green/gray underneath. The leaves aid in salt exchange, which is why they often have a salty encrustation on the underside. They also possess pencil-like roots, called pneumatophores, that grow up from the sediments (like soda straws) for several feet from the base of the tree. The pneumatophores grow off of extensive cable roots running just under the surface of the soil. The pneumatophores are similar to the prop roots of the red mangrove in that they aid in air, nutrient, and salt exchange.

Black mangroves can grow to be quite tall, usually with a singe main trunk that often has a large diameter in older trees. They are useful as windbreaks during severe weather. They are most attractive when the lower branches are trimmed (windowed) and the upper canopy is left intact or thinned. Their form, color and slender leaves often allow a pleasing, and somewhat private view from waterfront homes.

Black mangrove propagules are smaller than red mangrove propagules and gray. They lay stranded by the tides until the fruit wall falls from the developing seedling, as the seedling sends small roots into the substrate. Black mangroves are generally able to grow in more saline and "basin like" conditions than the other mangroves.





(above) Window views under black mangrove canopy

(left) Leaves and fruits (propagules) of black mangrove





(above) Window view through a canopy of a black mangrove

(left) Pneumatophores are primary characteristics of black mangroves

White Mangroves
named after the whitish bark

White mangroves *(Laguncularia racemosa)* are characterized by leaves that are uniformly light green on both their upper and lower surfaces. The leaves typically have small "notches" (indentations) at their tips, and two small" bumps" on opposite sides at the base of the leaf stem. The bumps are sugar secreting glands called "nectaries" that are thought to attract ants which aide in the control of other small plant-eating insects. White mangroves generally do not tolerate the same extent of flooding that black and red mangroves can tolerate. On rare occasions they produce pneumathoid roots around the base of the tree, but usually they are characterized by a single trunk without any other distinguishing features in the sediments surrounding the tree trunk.

As the fruits are stranded on exposed substrate the fruit wall becomes spongy and the seedlings emerge .

Of all Florida's mangroves, the white mangrove is the most tolerant of trimming, including hedging. The wood of the white mangroves is not as strong as the black mangrove and they do not have the supporting prop roots associated with red mangroves. Trimming that removes all of the understory and lateral branches while retaining only a canopy can produce a "lollipop" trunk that often, in time, will bend and break. When trimming white mangroves, trim for balance of their weight as well as how they look.





(above) White mangrove tree with two trunks and a balanced canopy over a mostly white mangrove hedge

(left) White mangrove leaves and fruits

(right) White mangrove flowers just opening



Similar Species – Buttonwood & Brazilian Pepper

Buttonwood - *Conocarpus erectus*

Although buttonwood typically grows in close association with mangroves and is often referred to as a mangrove, it is not a true mangrove, and is not protected or regulated by the 1996 Act. Buttonwood is protected bs some local government ordinances. Buttonwood has two forms. The most common has leaves that are similar to black mangrove leaves in shape, although they are uniform green on the upper and lower surfaces. The rarer variety has leaves that are silvery green on both sides. This later form is often used in landscaping. They do not have any prop roots or pneumatophores. The color of the leaves, the absence of large obvious root structures, and the angles that are apparent on most of the stems distinguish buttonwood from the three mangroves.



Buttonwood

Brazilian pepper – *Schinus terebinthefolius*

Brazilian pepper is an exotic shrub with dark green compound leaves (several portions to the leaf blade; as contrasted to mangroves that have simple leaves with only one apparent blade). The leaves and wood are aromatic when crushed or cut. Brazilian pepper also is distinguished by having clusters of bright red berries. The leaves can be irritating to some people, and the berries can be toxic to wildlife. Pepper grows very dense, with branches that are often intertwined and difficult to penetrate. Brazilian pepper also grows rapidly, typically crowding out other species of plants, and blocking views. Brazilian pepper typically grows immediately behind and within the landward edge of mangroves. When removing Brazilian pepper plants from the mangrove area, care must be taken not to cause destruction to the mangroves. Because Brazilian pepper is considered a nuisance exotic, homeowners are encouraged to completely



Brazilian Pepper

Description of Terms

Alter - Any human-induced removal, defoliation, or destruction of mangroves other than trimming.

PMT - Professional mangrove trimmer. See page 12.

Pre-trimmed height - The height of the mangroves prior to trimming, whether the mangrove is trimmed for the first time ever, or for the first time in a long while. If the mangroves are being trimmed to maintain a legally established height and configuration, the pre-trimmed height is the height the mangroves are just prior to the maintenance trimming.

Private or other public ownership of submerged lands - Submerged lands waterward of Mean High Water (MHW) may be owned by an entity other than the state of Florida. The entity's permission is required to trim mangroves on their (submerged) land.

Property restrictions - Legally binding covenants running with the land that restrict existing and future property owners from performing certain activities on the land. These may be in the form of a conservation easement or other deed restriction. These covenants are recorded in the public land records, and accompany the deed for the property. Homeowners associations often have covenants that restrict certain activities on private property and common property under the control of the association.



Riparian mangrove fringe (RMF) - Those areas where the band of mangroves along a shoreline is no more than 50 feet from the most landward trunk to the most waterward trunk. Certain mangrove trimming within an RMF is exempt from the need for permits (see ss. 403.9326(1)(a), (b), and (c), F.S.). However, the RMF designation does not apply to areas within certain conservation easements, certain mitigation areas, or within any of the types of public areas listed in s. 403.9325(6).

Riparian property owner - The owner of lands immediately landward of the elevation of MHW. Only a riparian property owner can trim mangroves. In many locations, an entity other than the state owns the lands between MHW and upland property; in such cases, the landward property owner is not a riparian property owner.

Sovereign submerged lands - Submerged lands, generally extending waterward from the MHW elevation, owned by the state of Florida. The 1996 Act provides permission for riparian property owners to trim mangroves on sovereign submerged lands immediately waterward of their property.

Trim- Cutting of mangrove branches, twigs, limbs and foliage, but not including the removal, defoliation, or destruction of mangroves. Some people may refer to this as "pruning," but this term is not in the 1996 Act.

Professional Mangrove Trimmers (PMT)

These are persons who are considered to be professional mangrove trimmers based on certification in one of the following organizations or who have demonstrated qualification under the 1996 Act. They include:

- Arborists certified by the International Society of Arboriculture
- Professional Wetland Scientists, certified by the Society of Wetland Scientists
- Environmental Professionals, certified by the Academy of Board Certified Environmental Professionals (Florida Association of Environmental Professionals membership is insufficient)
- Ecologists certified by the Ecological Society of America
- Landscape Architects currently licensed under part II of chapter 481
- Persons in receipt of PMT status from the Florida Department of Environmental Protection (in locations that are not delegated to local governments) or as recognized by a local government that has been delegated the state mangrove regulatory program from the DEP



Mangrove trimmer

Note: Membership in an organization generally does not constitute a certification by that organization.

The services of a PMT are required to qualify for certain provisions under the 1996 Act:

- For trimming under an exemption to establish the desired and legal height and configuration of the mangroves for the first time, where the mangroves are greater than 10 feet in height.
- For trimming to reestablish a documented, historical, and legal height and configuration for the mangroves within a Riparian Mangrove Fringe (RMF). In non-RMF areas, the homeowner must obtain a permit, but the trimming may not require a PMT. Note that reestablishment differs from maintenance. A PMT is not required to *maintain* mangroves at a previously attained, legal configuration. The difference is that maintenance is no longer available when the mangroves have grown to such a height or configuration so as to have blocked the view previously maintained for a prolonged period of time.
- For trimming mangroves under a general permit.
- In areas where a local government has been delegated mangrove regulatory authority and the local government requires a PMT (registered with the delegated government) for non-exempt trimming.

Note: In all cases, including when a PMT is not used, check into the past trimming experience of the person you are considering hiring for mangrove trimming. Contact your local mangrove regulatory office (listed on the inside back cover) for a trimmer's regulatory history and talk with other waterfront homeowners who have used various mangrove trimmers in your area.

A list of PMTs may be viewed at http://www.dep.state.fl.us/water/wetlands/erp/mangrove.htm#pmt.

A listing on that web site does not constitute an endorsement of any particular PMT by the DEP.

Exemptions for Homeowners

Activities that qualify for an exemption may be conducted at no charge and without notice to the DEP.

There are four exemptions applicable to homeowners in the 1996 Act (see ss. 403.9326(1)(a), (b), (c),and (d), F.S.). Those provisions and the rest of the 1996 Act may be viewed at: http://www.dep.state.fl.us/water/rules/mtpa96.pdf. Additional exemptions exist for trimming by governments, utilities, and surveyors. You should carefully review the definition of *riparian mangrove fringe* (RMF) in s. 403.9325(7) of the 1996 Act (and as summarized on Page 10), because this term is critical to qualifying to use the exemptions.

General conditions to qualify for an exemption:

- Only trimming, not alteration, may be performed. Defoliation is not allowed.
- Mangrove roots may not be trimmed. Cutting mangrove roots is considered alteration and needs a permit.
- Trimming may only be done by the riparian mangrove owner or with the permission of the riparian property owner. The trimming must be limited to the mangroves on the riparian property and on the sovereign submerged lands immediately waterward of that property. Cutting on another person's property is not authorized.

The following is a summary of the conditions of the homeowner's exemptions. Because this is just a summary, you should review the actual wording of the 1996 Act for all the applicable provisions.

- **Exemption 403.9326(1)(a), F.S.:**
  - Homeowners may trim the mangroves *in an RMF, without a PMT,* on their property and the sovereign submerged lands immediately waterward of the property **when the mangrove height exceeds 6 feet, but is not taller than 10 feet and the mangroves are not reduced in height below 6 feet.**
  - When the property shoreline is greater than 150 feet in length, only 65% of the mangrove trees along the property shoreline may be trimmed.

- **Exemption 403.9326(1)(b), F.S.:**
  - Homeowners may trim the mangroves *in an RMF, with a PMT,* if the **mangroves are between 10 feet and 24 feet in height.**
  - Trees over 16 feet tall prior to trimming must be trimmed in stages so that no more than 25% of their leaves, and the tree's regrowth since the last trim, is removed annually.
  - When the property shoreline is greater than 150 feet in length, only 65% of the mangrove trees along the property shoreline may be trimmed.

- **Exemption 403.9326(1)(c), F.S.:**
  - Homeowners may **reestablish the height of a previous, legally-attained mangrove configuration** if the mangroves are less than 24 feet in pre-trimmed height. The services of a PMT is required if the mangroves are between 10 feet and 24 feet in height.

- **Exemption 403.9326(1)(d), F.S.:**
  - Homeowners may **maintenance trim** mangroves that have been previously trimmed in accordance with an exemption or prior government authorization, provided the trimming does not exceed the height and configuration previously attained.



Reestablishment of Previous Configurations

Provisions of the 1996 Act generally do not allow mangroves to be trimmed lower than six feet in height from the substrate. This does not mean that everyone will be able to trim their mangroves to a height of six feet. For example, if trimming to such a height can be expected to result in the removal, defoliation, or destruction of a mangrove, the cutting is considered alteration and would not qualify as exempt trimming; a permit would be required for such alteration, and it may or may not be issued. In other cases, attaining a height of six feet must be done through stage-reduction trimming by a PMT.

However, the 1996 Act includes two exceptions to this six-foot height limitation:

- To reestablish a previous, legally-attained configuration within an RMF (s. 403.9326(1)(c), F.S.); and
- To maintain mangroves in accordance with a previous configuration attained through an exemption or previous government authorization (s. 403.9326(1)(d), F.S.).



In both cases, the reestablishment and maintenance cannot result in the destruction, defoliation, or removal of the mangroves. Further, the prior configuration must be documented. In cases where the documentation clearly establishes that the mangroves were historically and legally trimmed to a height lower than six feet, they may be reestablished and maintained to that height in accordance with all the provisions of the above exemptions. Such documentation generally must include:

- information on *when* and specifically *where* on the property the prior height and configuration was attained (so the agencies may determine if such height and configuration was legally achieved);
- copies of permits or acknowledgement of exempt status from all applicable agencies, where available. This may include copies of letters sent to DEP under the provisions of s. 62-321.060, F.A.C., (the former Mangrove Protection rule of DEP);
- copies of photos or affidavits from persons attesting to their knowledge of the previous mangrove configuration.

There are a few coastal communities where most of the waterfront property owners previously legally achieved and maintained a mangrove height and configuration of less than six feet; in other communities, only a few of the properties have such a configuration. You may expect DEP staff to request to view the above documentation during field compliance checks. If you do not have the necessary documentation, and you are not in one of the rare, fully documented communities, DEP staff may conclude that the mangroves on your property do not qualify to be reduced to a height of less than six feet from the substrate without a permit.

General Permit – Individual Permit

General Permit (GP)

Activities that do not qualify for one of the exemptions described on page 13 may qualify for a general permit. The specific conditions of the general permit in s. 403.9327(1)(a), F.S., should be reviewed before doing any work; see: http://www.dep.state.fl.us/water/rules/mtpa96.pdf.

- A $100 fee and notice to the DEP is required 30 days before beginning any work under a general permit. A suggested general permit application form is provided in: http://www.dep.state.fl.us/water/wetlands/erp/forms.htm.
- General permits are limited as follows:
  - The band of mangroves subject to trimming must not be more than 500 feet deep (from the most landward to most waterward trunk).
  - Only 65% of the mangrove trees along a shoreline that exceed a height of six feet may be trimmed. When there are multi-family units or fee simple owners along a common shoreline, the 65% must be distributed equitably so that each unit obtains a view (unless a restriction has been placed over a portion of the shoreline).
  - A PMT must be used and identified to the agency prior to trimming.
  - The trees may not be trimmed lower than 6 feet
  - Trimming must not result in the removal, defoliation, or destruction of mangroves; alteration is not authorized.
  - Once the permitted height and configuration for the mangroves is legally achieved, it may be maintained under the exemption in s. 403.9326 (1)(d), F.S.
  - The general permits in s.403.9327.F.S. are not available in areas where there is local delegation of mangrove regulations.



Individual Permit (IP)

An individual permit may be applied for all other trimming or alteration:

- that cannot be done under an exemption or GP;
- that will result in alteration of mangrove(s), e.g. extensive exotic plant removal (photo below)
- when the applicant does not want to use a PMT.

A fee of between $250 and $500 is required (depending on the number of mangroves to be trimmed or altered), and an application is required (available at http://www.dep.state.fl.us/water/wetlands/erp/forms.htm). Agency staff should be contacted for additional information.



Cutting that may lead to defoliation of mangroves would need an individual permit.

Regulatory Offices and Sources

DEP OFFICES

Flagler County
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
(904) 807-3300

Brevard, Indian River & Volusia Counties
3319 Maguire Blvd., Suite 232
Orlando, Florida, 32803-3767
(407) 893-3311

Citrus to Sarasota Counties
3804 Coconut Palm Drive
Tampa, Florida 33619-8318
(813) 744-6100

Charlotte County
7451 Golf Course Blvd.
Punta Gorda, Florida 33982
(941) 575-5814

Lee & Collier Counties
2295 Victoria Ave., Suite 364
Fort Myers, Florida 33901
(941) 332-6975

Monroe County
2796 Overseas Hwy., Suite 221
Marathon, Florida 33050
(305) 289-2310

Palm Beach County
400 N. Congress Ave., Suite 200
West Palm Beach, Florida 33401
(561) 681-6600

Indian River & St. Lucie Counties
1801 Hillmoor Drive
Port St. Lucie, Florida 34952
(772) 398-2806

LOCAL DELEGATED GOVERNMENTS

A few local governments in Florida have received delegation of the State Mangrove Regulatory program, including:

Miami-Dade Co.
Coastal Resources Section
Dade Co. Environmental Resources Management
33 SW 2nd Avenue
Miami, FL 33130-1540
Phone: (305) 372-6575, FAX (305) 372-6479

Broward Co.
Depart. of Planning & Environmental Protection
Department of Natural Resource Protection
218 SW 1st Avenue
Fort Lauderdale, FL 33301
Phone: (954) 519-1230, FAX (954) 519-1412

Pinellas Co.
Water and Navigation Section
Department of Environmental Management
512 S. Ft. Harrison Ave.
Clearwater, Fl 33756
Phone: (727) 464-4761, FAX (727) 453-3371

City of Sanibel
Natural Resources
City of Sanibel
800 Dunlop Road
Sanibel, FL 33957-4096
Phone: (941) 472-3700, FAX (941) 472-3065

Town of Indian River Shores
Building Dept.
Town of Indian River Shores
6001 North A-1-A
Phone: (561) 231-4453, FAX (561) 234-5246

Town of Jupiter Island
Town of Jupiter Island
P.O. Box 7
Hobe Sound, FL 33475
Phone: (561) 546-5578, FAX (561) 546-6228

STATE MANGROVE COORDINATOR

The office of the State Mangrove Coordinator is located in Tallahassee:

Bureau of Beaches
& Wetland Resources
2600 Blair Stone Rd., MS 2500
Tallahassee, Florida 32399-2400
(850) 245-8482 or 245-8474

WEBSITES

1996 Mangrove Trimming & Preservation Act
http://www.dep.state.fl.us/water/rules/mpta96.htm

Professional Mangrove Trimmers
http://www.dep.state.fl.us/water/
wetlands/erp/mangrove.htm#pmt

Mangrove Trimming & Alteration Applications
http://www.dep.state.fl.us/water/wetlands/erp/form.htm
Scroll down to Mangrove Trimming

Facts About Mangroves
http://www.dep.state.fl.us/water/
wetlands/erp/mangrove.htm#facts



Mangroves

FNAI Global Rank:	**G3**
FNAI State Rank:	**S3**
Federally Listed Species in S. FL:	**9**
State Listed Species in S. FL:	**46**

Red Mangrove. (*Rhizophora mangle*) *Original photograph courtesy of Florida Department of*



The mangrove forests of South Florida are a vital component of the estuarine and marine environment, providing a major detrital base to organic food chains, significant habitat for arboreal, intertidal and subtidal organisms, nesting sites, cover and foraging grounds for birds, and habitat for some reptiles and mammals. The relationship between mangroves and their associated marine life cannot be overemphasized. The mangrove forest provides protected nursery areas for fishes, crustaceans, and shellfish that are important to both commercial and sport fisheries.

The value and central role of mangroves in the ecology of South Florida has been well established by numerous scientific investigations directed at primary productivity, food web interactions, listed species, and support of sport and commercial fisheries. Mangroves are important in recycling nutrients and the nutrient mass balance of the estuarine ecosystem. They are one of the highest primary and associated secondary biologically productive ecosystems in the world. Mangroves provide one of the basic food chain resources for arboreal life and nearshore marine life through their leaves, wood, roots, and detrital materials. This primary production forms a significant part of the base of the arboreal, estuarine, and marine food web. Mangroves have a significant ecological role as physical habitat and nursery grounds for a wide variety of marine/estuarine vertebrates and invertebrates. Many of these species have significant sport fishery and/or commercial fishery value. Approximately 224,579 ha (554,515 acres) of mangroves remain in central and South Florida. This tropical ecosystem is a habitat unique in the continental United States. They deserve special protection because of this uniqueness and because of the multiple ecological functions they provide. Mangroves have a significant ecological role as habitat for endangered and threatened species, and species of special concern. For several of these species, the habitat is critical and vital to their continued survival. Mangroves serve as storm buffers

by functioning as wind breaks and through prop root baffling of wave action. Mangrove roots stabilize shorelines and fine substrates, reducing turbidity, and enhancing water clarity. Mangroves improve water quality and clarity by filtering upland runoff and trapping waterborne sediments and debris. Unaltered mangroves contribute to the overall natural setting and visual aesthetics of Florida's estuarine waterbodies. Through a combination of the above functions, mangroves contribute significantly to the economy of the coastal counties of South Florida and the State of Florida.

Synonymy

The sense of synonymy for mangroves is unusual in that the same term is used to describe both the individual tree species and the total plant community including the individual tree species. Synonyms for the term mangrove include tidal forest, tidal swamp forest, mangrove community, mangrove ecosystem, mangal (Macnae 1968), and mangrove swamp (Odum *et al.* 1982). The term mangal is used by researchers, authors, and the general public in the United Kingdom and other countries. Often mangal, or mangle, is used both for the red mangrove and the mangrove forest of which it is a part. The FLUCCS codes for mangroves include: 612 (mangrove swamps).

Distribution

There are approximately 55 mangrove species worldwide, with the center of diversity in Southeast Asia. Four species occur in South Florida: red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), and buttonwood (*Conocarpus erectus*).

Mangroves are tropical species restricted by frost and vegetative competition to intertidal regions in tropical and subtropical sheltered waterbodies. Mangroves in the subtropical regions of South Florida represent the northern limits of tropical species that have been able to colonize because of the warm ocean waters and warm currents along the Florida coastline and dependably warm winters (Tomlinson 1986). The red mangrove is the mangrove tree most susceptible to damage from frost. White mangrove and buttonwood are less susceptible and the black mangrove is the most cold-tolerant of the Florida mangroves. Freeze damage to mangroves is well documented (Chapman and Ronaldson 1958, Lugo and Patterson-Zucca 1977) and frequently reported anecdotally.

The distribution of mangroves in North America has changed through geologic time. When the red mangrove evolved in the Cretaceous, Florida was a great coral reef in shallow seas. There may have been a few mangroves surrounding small islands and on the coastline in what is currently Georgia. Black and white mangroves evolved during the Eocene and extended as far north as South Carolina. During the Pleistocene, mangroves were absent from the Florida coastline and *Spartina* marshes dominated the estuarine intertidal zone. During the past few centuries, mangrove distribution has changed in response to short-term climatic fluctuations (Odum *et al.* 1982).

Red and white mangroves have been reported as far north as 29N latitude: near Ponce de Leon Inlet on the east coast and Cedar Key on the west coast of Florida. Black mangroves occur further north than reds and whites and have been

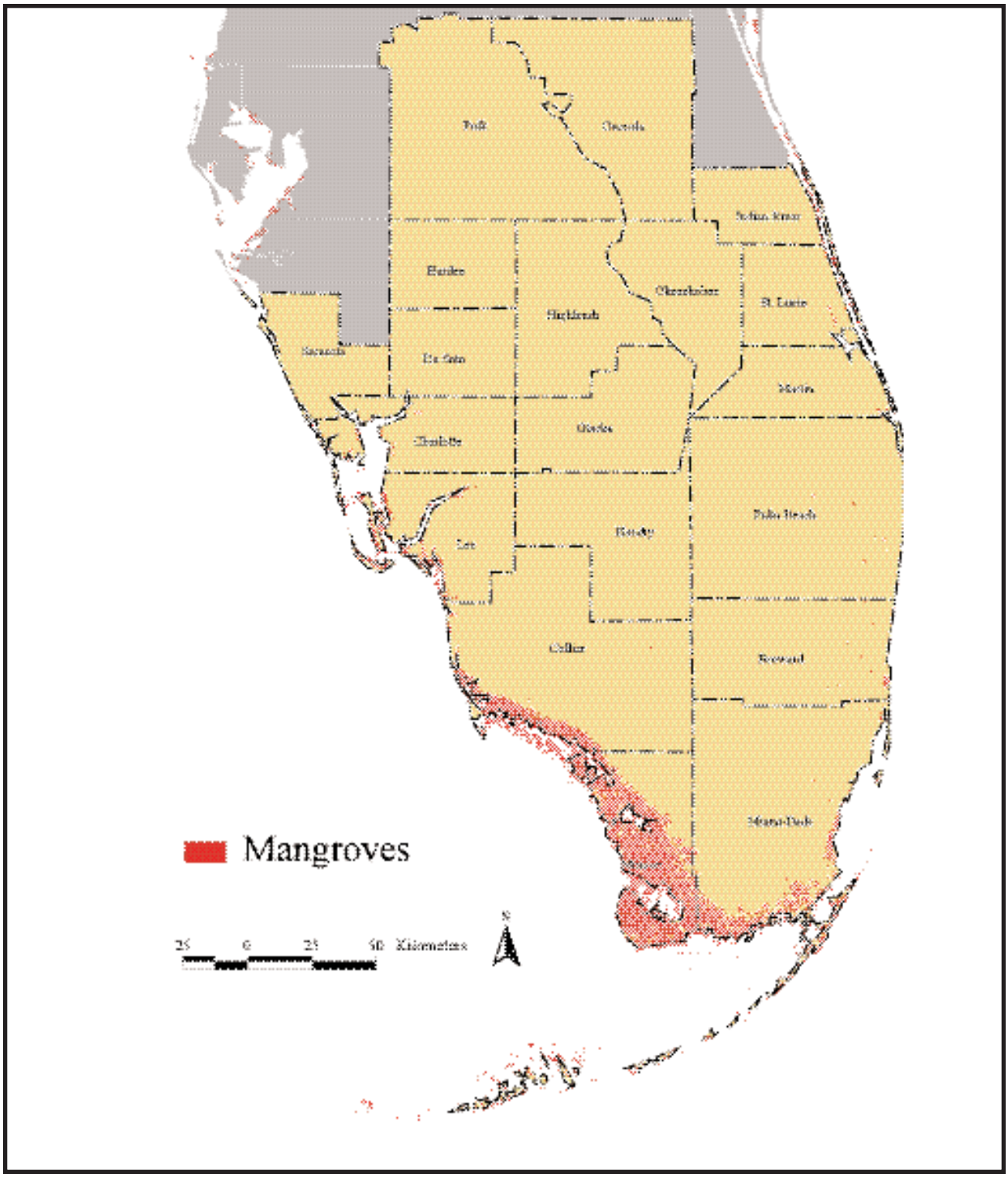


Figure 1. The distribution of mangroves in South Florida (adapted from USGS, BRD 1996).

reported as far north as 30N latitude on the east coast of Florida (Odum *et al.* 1982) and are distributed as a shrub around the Gulf of Mexico where vegetated shorelines have survived development. Over 90 percent of the mangroves in Florida occur in the four southern counties of Lee, Collier, Miami-Dade, and Monroe (Figure 1).

The availability of fresh water and nutrients influences the location, size, structure, and productivity of mangrove communities in South Florida. Mangroves reach their greatest abundance in southwest Florida where the positive interaction of fresh water and nutrient inputs with lower wave energy shorelines occur. In southeast Florida, mangrove development has historically been limited by the lack of fresh water and nutrients combined with narrow intertidal zones and high wave energy. Along the central east cost (Indian River Lagoon) and parts of the west coast (Charlotte Harbor and Sarasota Bay), mangrove communities support the continued existence of barrier islands against tidal and wave forces. The Everglades system changes from fresh water to an extensive mangrove community at its seaward margin of Florida Bay.

Fluctuations in sea-level rise along the Florida peninsula can limit the distribution of mangroves, particularly if the rate of sea-level rise exceeds the rate of mangrove forest growth and substrate accretion, and if the landward slopes provide no suitable habitat for forest retreat as sea-level rises (Wanless 1998). Areas with seawalls behind mangrove habitat prevent such shoreline adjustment.

The local distribution of mangroves is affected primarily by a variety of interacting factors that include microclimate, substrate type, tidal fluctuation, terrestrial nutrients, wave energy, and salt water. Sea-level rise, shore erosion, interspecific competition, and seed dispersal also affect local distribution to a lesser degree. The interrelations of these factors can alter the intertidal distribution of mangrove species. Mangroves are unique in that their morphological specialization, such as aerial roots, vivipary, and salt excretion or excluding abilities, allow them to adapt to these different rigorous environmental factors.

Description

Mangrove ecosystems are a mosaic of different types of forest, with each type providing different physical habitats, topology, niches, microclimates, and food sources for a diverse assemblage of animals. Mangroves have important structural properties including: the trapping and stabilization of intertidal sediments; the formation of organic soils and mucks; providing protection from wave and wind erosion; providing a dendritic vegetative reef surface in the subtidal and intertidal zones; and forming a structural complex of a multi-branched forest with a wide variety of surface habitats (Savage 1972).

Red mangrove

Red mangroves are distinguished by the dendritic network of aerial prop roots extending from the trunk and lower branches to the soil. The prop roots are important adaptations to living in anaerobic substrates and providing gas exchange, anchoring system, and absorbing ability. Within the soils, micro-roots stabilize fine silts and sands maintaining water clarity and quality. Red mangroves may attain heights of 25 to 38 m (82 to 125 ft) in the rich deltas of

riverine forests, but average 8 to 10 m (26 to 33 ft) on most fringing shorelines, and occur as smaller trees at their northern extents or in marginal habitats such as the coral rock salt ponds of the Florida Keys. Bark is grey and the interior red. Red mangroves can form a variety of crown shapes from short continuous scrubby crown to uneven discontinuous crowns. As trees age, gaining size and putting down large prop root supports, significant horizontal as well as vertical growth occurs. This horizontal growth habit has led to the metaphor of "walking trees." The leaves are shiny, deep green on the surface and paler underside. Flowers are small, white, four-petalled, four-bracted, and wind pollinated. The germinated seed produces a long (25 to 30 cm, or 10 to 12 in) pencil or torpedo-shaped propagule.

Black mangrove

Black mangroves have distinctive horizontal cable roots that radiate from the tree with short, vertically erect aerating branches (pneumatophores) extending 2 to 20 cm (0.8 to 7.9 in) above the substrate. The trees grow straight, attaining heights of 40 m (131 ft) and averaging 20 m (66 ft). The bark is dark and scaly. They have narrow, elliptic or oblong leaves that are shiny dark green above and pale almost cream green with short dense hairs below. The upper surface of leaves can be encrusted with salt excreted by the tree. The bilaterally symmetric white flowers are showy and pollinated by Hymenoptera (Tomlinson 1986). The black mangrove is the source of mangrove honey. The germinated seed produces a "lima bean size and shaped" propagule (Odum and McIvor 1990). Black mangroves are shade tolerant and sun intolerant when immature (Snedaker 1982). As it matures, the black mangrove becomes shade intolerant. This provides different growth forms in immature and mature trees.

White mangrove

White mangroves grow either in tree form or shrub form up to heights of 15 m (49 ft) or more. The growth form tends to be erect. Some white mangroves form erect, blunt-tipped pneumatophores if growing in anaerobic or chemically stressed soils. Bark is white and relatively smooth. Leaves are fleshy, flattened ovals with rounded ends. The same pale green color is on both upper and lower surfaces. Two glands are found at the apex of the petiole that excrete salt and extra floral nectar. Small yellowish flowers are found in alternate rows on the terminal ends of branches. These germinate into small "football-shaped" propagules (1 to 1.5 cm, or 0.4 to 0.6 in). In the northern part of their range, white mangroves may not propagate on the tree and true propagules are not formed.

All three mangrove species flower in the spring and early summer. Propagules fall from late summer through early autumn.

Buttonwood

Buttonwoods grow to 12 to14 m (39 to 46 ft) in height in a shrub or tree form, but do not produce a true propagule in Florida (Tomlinson 1986). Bark is grey and very furrowed providing attachment for epiphytes. Leaves are thin, broad-to-narrow, and pointed. There are two morphotypes: the green with medium green leaves found on peninsular Florida and the silver with pale pastel green

leaves historically limited to the Florida Keys but now widespread by nursery practices. It is thought the silver buttonwood is an adaptation to the rocky, dry habitats associated with the Keys archipelago. Two glands are found at the apex of the petiole that excrete extra floral nectar and salt. Tiny brownish flowers are found in a sphere on the terminal ends of branches. These produce a seed cluster known as the button. Buttonwoods are able to grow in areas seldom inundated by tidal waters. The mangrove adaptations to the osmotic desert of salt water, also adapted buttonwoods to arid areas of barrier islands and coastal strands.

Community Types

Six mangrove community types have been characterized based on their different geomorphic and hydrological processes (Lugo and Snedaker 1974). Overwash mangrove forests are islands frequently inundated or washed over by tides, resulting in high rates of organic matter. They usually contain red mangroves with a maximum height of 7 m (23 ft). Fringe mangroves form thin forests bordering waterbodies with standard mangrove zonation, attaining a maximum height of 10 m (33 ft). Riverine mangroves are in the floodplains and along embankments of tidal creeks and rivers but still get flooded by daily tides. Riverine forests have higher levels of productivity than the other mangrove community types as a result of increased nutrient availability, litter fall, and tidal flushing. All three species are present and the canopy layer can reach heights of 18 to 20 m (59 to 66 ft).

Basin mangrove forests occur in depressions along the coast and further inland that collect precipitation and sheetflow that are tidally influenced and can attain heights of 15 m (49 ft). Red mangroves are more common along the coastal areas, while black and whites dominate further inland. Influences from daily tides decrease further inland. In areas where salinity is concentrated by evaporation, black mangroves dominate and major tidal flushing occurs seasonally. Hammock forests grow on higher elevated, typically highly organic grounds and rarely exceed 5 m (16 ft) in height. These are often surrounded by other wetland types such as salt marsh. Scrub or dwarf forests are found in peninsular South Florida and the Florida Keys and rarely grow taller than 1.5 m (4.9 ft), which may be a result of fewer available nutrients and rocky substrates.

Mangrove forest canopy heights depend upon climate, topography, substrate type, and the extent of human disturbance. Undisturbed mature mangrove communities have a high, dense, complex, continuous canopy; whereas, in naturally disturbed mangrove areas, the canopy is lower with more irregular growth (Tomlinson 1986). Dense mangrove forests do not typically have understory plant associations, except for mangrove seedlings.

Areas of tree fall or other open canopy provide opportunity for other halophytic plants and young mangroves to flourish in available sunlight. Mangrove associates including up to 30 species of vascular plants occur in transitional areas with mangroves, but are not restricted to mangrove communities. Several saltmarsh grasses (*Juncus*, *Sporobolus*, *Monanthochloe*, *Distichlis*) and succulent herbs (*Salicornia*, *Sesuvium*, *Batis*) occur with

mangroves along transition zones of saline marshes. Smooth cordgrass (*Spartina alterniflora*) communities often colonize bare emergent areas near mangrove forests, but are eventually displaced by mangroves shading them.

Wildlife Diversity

Mangrove ecosystems are important habitat for at least 1,300 species of animals including 628 species of mammals, birds, reptiles, fish, and amphibians. They provide areas for breeding, nesting, foraging, and shelter (Odum *et al.* 1982, Beever 1989, Day *et al.* 1989, Odum and McIvor 1990). The mangrove forest provides a multitude of habitats for resident, seasonal, and transient organisms from adjacent terrestrial and marine habitats (refer to Appendix C). Many of the larger motile species are not restricted to mangroves, but are seasonal or opportunistic visitors. However, most invertebrate and some resident vertebrate species are totally dependent upon mangroves to survive and complete important life cycle functions (Tomlinson 1986). Fish and invertebrates from the marine environment are frequent visitors to mangrove communities, as are birds and mammals from nearby terrestrial systems.

Vertebrate species that utilize mangroves throughout the year are capable of tracking the changes in food availability as mangroves bloom, germinate, and fruit, and the subsequent changes in invertebrate and small vertebrate populations in response to these food resource changes. Other vertebrate species visit the mangrove habitat during the period that best suits their life cycle. The most seaward habitat is the mangrove fringe area containing red and/or black mangroves. The littoral and benthic components of this microhabitat contribute to the structure and resources available to organisms. As previously discussed, prop roots of red mangroves support a specific microhabitat for resident species (*e.g.*, tunicates, crustaceans, mollusks, fishes) that spend their entire life cycle either on or among the root systems. Transient species are not dependent upon prop roots, but use them intermittently for shelter, feeding, and/or breeding. The prop root system also provides an important nursery for organisms (*e.g.*, crustaceans, mollusks, fishes) that develop here and spend their adult lives elsewhere (Odum and McIvor 1990).

One hundred and ninety-one bird species known from South Florida are found in mangrove communities. Many of the birds associated with mangroves are neotropical migratory birds that utilize the habitat in their migration from northern breeding grounds to southern wintering grounds in autumn and their subsequent return in spring. The high productivity of mangrove ecosystems provides an energy source important for migrating bird species traveling on long distance routes (Day *et al.* 1989). These neotropical migratory birds are a focus of considerable concern since many species are apparently in decline due to habitat loss in northern breeding grounds, southern wintering grounds, and the stopovers in the migratory corridor in coastal Florida. Other birds, including shorebirds, ducks, and perching birds, migrate to their wintering grounds in South Florida and are found only in late autumn, winter, and early spring.

Mangrove canopies provide habitat for some species of songbirds that occur only in this habitat type, such as the black-whiskered vireo (*Vireo*

altiloquus), mangrove cuckoo (*Coccoyzus minor*), yellow warbler (*Dendroica petechia*), and Florida prairie warbler (*D. discolor*). The black-whiskered vireo nests primarily in red mangroves up to 5 m (15 ft) above the ground. Considered a rare bird species by FCREPA, the mangrove cuckoo requires large expanses of undisturbed forested mangrove and hardwood hammock habitat found primarily in the southernmost parts of Florida, from Charlotte Harbor to the Florida Keys (Smith 1996). The mangrove cuckoo nests on horizontal branches of mature mangrove trees. The yellow and Florida prairie warblers nest 3 to 6 m (10 to 20 ft) high in mangroves.

In addition to these mangrove endemic species, many estuarine birds utilize fringing mangrove forest as loafing areas and foraging perches. Included in this group are osprey (*Pandion haliaetus*), northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), broad-winged hawk (*Buteo platypterus*), short-tailed hawk (*Buteo brachyurus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), peregrine falcon (*Falco peregrinus tundrius*), bald eagle (*Haliaeetus leucocephalus*), merlin (*Falco columbarius*), kingfisher (*Megaceryle alcyon*), eastern brown pelican (*Pelecanus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*), anhinga (*Anhinga anhinga*), and a variety of wading birds. As loafing areas, this habitat provides resting areas near their food supplies. This allows the use of foraging habitat distant from nighttime roosts or nesting areas without the added energy cost of flight. For other species in this group, the height of the mangroves offers a better view of prey.

Twenty-four taxa of reptiles utilize the aquatic and arboreal habitats of the mangroves. Resident species include the mangrove water snake (*Nerodia fasciata compressicauda*), the threatened Atlantic salt marsh snake (*Nerodia fasciata taeniata*), rough green snake (*Opheodrys aestivus*), the threatened eastern indigo snake (*Drymarchon corais couperi*), yellow rat snake (*Elaphe obsoleta quadrivittata*), green anole (*Anolis carolinensis*), mangrove terrapin (*Malaclemys terrapin rhizophorarum*), American alligator (*Alligator mississippiensis*), and the endangered American crocodile (*Crocodylus acutus*). The threatened loggerhead sea turtle (*Caretta caretta*) and the endangered green sea turtle (*Chelonia mydas*) are found in association with mangrove-lined shorelines along tidal passes and within estuarine embayments.

Five amphibian species utilize the mangrove habitat for feeding and/or breeding. The most frequently encountered and abundant amphibians are tree frogs (*Hyla* spp.) and, unfortunately, the exotic marine toad (*Bufo marinus*). No State listed amphibians are found in mangrove habitats. The amphibian life cycle is poorly adapted to the saline environment required by mangroves.

The value of the red mangrove as the basis of the detrital food chain of estuarine waters is well documented (Odum *et al.* 1982, Seaman 1985, Hutchings and Saenger 1987). It is recognized that over 90 percent of commercial fishery species and at least 70 percent of sport fishery species depend upon the natural mangrove forest for food and habitat as a critical part of their life cycles (Lewis *et al.* 1985). In concert with seagrass beds, macrophytic algae, phytoplankton, benthic microalgae, and emergent marshes, the mangroves provide the primary

productive food base of the estuarine system. The detritus provided by decomposition of seasonally shed mangrove leaves is the food base for microcrustaceans and other detrital processors that are consumed by macrocrustaceans, small fishes, and other first order predators. The animals in turn are the prey of larger fish species such as snooks (*Centropomus* spp.), snappers (*Lutjanus* spp.), jacks (*Caranx* spp.), tarpon (*Megalops atlantica*), sheepshead (*Archosargus probatocephalus*), spotted seatrout (*Cynoscion nebulosus*), and redfish (*Sciaenops ocellatus*). Based on surveys performed during the preparation of the Charlotte Harbor Aquatic Preserve Management Plan, at least 230 species of fish utilize the mangrove ecosystem of Charlotte Harbor for food, shelter, breeding and/or nursery grounds (Beever 1988).

The dominant fish species of the basin mangrove forests are poeciliids, the mosquitofish (*Gambusia* spp.), the least killifish (*Heterandria formosa*), and the sailfin molly (*Mollienesia latipinna*). These cyprinodont fish are a fundamental link between primary producers and higher trophic level fish and wildlife species. The typical cyprinodont diet consists of plant and animal tissue, including periphyton, insect larvae, and vascular plant detritus. They subsequently are food for sport fish and wading bird species. Fourteen of the 54 freshwater fish species found in South Florida (Kushlan and Lodge 1974) utilize the mangrove wetlands during the wet season, high-runoff flow events (Odum *et al.* 1982).

Most of the 350 species of marine invertebrates in Charlotte Harbor are found in or depend on mangroves for habitat or food. The arboreal canopy provides habitat to both aquatic and amphibious resident and transient species (Simberloff and Wilson 1969, Beever *et al.* 1979, Odum and McIvor 1990). Approximately 264 species of arboreal arthropods inhabit the mangrove canopy, branches, and wood (Beever *et al.* 1979). Aquatic organisms, such as crabs and snails, spend part of their time in the water, but can also migrate up into the canopy of mangroves.

Wildlife Species of Concern

Federally listed species that depend upon or utilize the mangrove community in South Florida include: Florida panther (*Puma (=Felis) concolor coryi*), Key deer (*Odocoileus virginianus clavium*), Lower Keys rabbit (*Sylvilagus palustris hefneri*), West Indian manatee (*Trichechus manatus*), wood stork (*Mycteria americana*), American crocodile (*Crocodylus acutus*), bald eagle (*Haliaeetus leucocephalus*), rice rat (=silver rice rat) (*Oryzomys palustris natator*) (=*O. argentatus*), and eastern indigo snake (*Drymarchon corais couperi*). Biological accounts and recovery tasks for these species (except Gulf sturgeon) are included in "The Species" section of this recovery plan. Refer to Appendix C for a list of other species of concern that utilize the mangrove community.

The **Florida black bear** (*Ursus americanus floridanus*), listed as threatened by the State, is a forest habitat generalist with seasonal preference for wherever food is most available. Black bears utilize all the natural forested systems of South Florida, with a decided preference for ecotones, including the boundaries between mangroves and other plant communities. Documented movements of radio-collared Florida black bear in Lee and Collier counties and documented signs/sightings of Florida black bear in Charlotte, Collier, and Lee counties indicate that the large areas of relatively undisturbed mangrove forest, in

combination with hydric and mesic forests and the major wetland basins, provide the principal habitat of the black bear in southwest Florida (Maehr 1984, Brady and Maehr 1985, Maehr *et al.* 1988, Maehr and Wooding 1992). Bears are omnivores that feed on readily available food resources, such as the seasonal abundances of propagules and insects. Occasionally, fish and carrion are also eaten. Movement by individuals can be extensive and may be related to both mating and food availability. Black bears will swim between mangrove islands in Collier County.

The **Big Cypress (=mangrove) fox squirrel** (*Sciurus niger avicennia*), listed as threatened by the State, is found in mangroves south of the Caloosahatchee River, along the estuarine coast south to the western edge of the Everglades sawgrass marshes. The Big Cypress fox squirrel utilizes a wide variety of forested and non-forested upland and wetland systems including mangroves. The Big Cypress fox squirrel possesses a large territory from which it harvests seasonally available bounties of cones, nuts, and seeds. The fox squirrel forages on mangrove propagules, in particular, the black mangrove. Nesting occurs in pines, hardwoods, cypress, cabbage palms, bromeliad clumps, and black mangroves.

The **Everglades mink** (*Mustela vison evergladensis*) is found in the Big Cypress Swamp; the western edge of the Everglades; southern Lee County; Collier County; mainland Monroe and Miami-Dade counties (Allen and Neill 1952, Humphrey and Setzer 1989, Humphrey 1992). Mink are nocturnal and crepuscular predators of mammals, reptiles, birds, amphibians, fishes, and eggs. The species does not appear to be numerous and, given its period of activity, the literature on distribution is based primarily on road kills. The Everglades mink is found in a wide variety of shallow wetland systems, including mangrove swamps.

The **white-crowned pigeon** (*Columba leucocephala*) is a resident of the mangrove arboreal habitat for nesting and nearby tropical hardwood hammock areas for foraging. This herbivorous pigeon found from Biscayne Bay south through the Marquesas Keys is listed as a threatened species by GFC and FCREPA (Bancroft 1996). The white-crowned pigeon requires undisturbed mangrove communities for nesting and foraging. Over half of the State's pigeon population nest on islands in the Upper Florida Keys (Bancroft 1996). Nesting on the mainland is rare, but does occur (Strong *et al.* 1991). Most of the population migrates to the Caribbean for the winter breeding season, but some birds are present in South Florida year-round. Breeding occurs from March to June. The white-crowned pigeon's mangrove and hardwood hammock habitat continues to decline as residential and commercial development increases. The continued existence of this species in Florida and the Caribbean is dependent upon the integrity of its nesting and foraging habitat here in South Florida.

The **eastern brown pelican**, a State species of special concern, nests predominantly on overwash mangrove islands and forages over open water, mudflats, and seagrass beds in the shallow waters of estuaries, creeks, and nearshore areas. Brown pelican rookeries are located on isolated red mangrove islands with a substantial water depth barrier that protects the nests from mainland predators. Diet consists of fish of all sizes. Foraging consists of plummeting dives, short plunges, and swimming scoops of fish. Historically,

brown pelican populations were reduced as a result of pesticides. Today, the greatest threats to brown pelicans are still human-caused. Brown pelicans and their nesting/roosting/loafing sites are vulnerable to disturbance from construction activities and monofilament line entanglement. Brown pelicans are especially susceptible to death and injury caused by sport fishing equipment. It has been estimated that over 500 individuals die each year as a result of entanglement with fishing tackle (Schreiber 1978).

The **osprey** is a State species of special concern only in the Lower Florida Keys. It nests in a variety of trees (*i.e.*, principally tall mangroves) and on artificial structures, and forages in a variety of marine and estuarine habitats.

Tricolored heron (*Egretta tricolor*), **little blue heron** (*Egretta caerulea*), **white ibis** (*Eudocimus albus*), and **snowy egret** (*Egretta thula*) forage and nest in mangroves. Little blue herons and white ibis are the most common of the listed wading bird species observed in mangroves in southwest Florida (Beever 1992). Diet consists of small fish, crustaceans, insects, frogs, and lizards (Ogden 1978a). Nesting in mangroves typically occurs on overwash islands. They appear to prefer to forage in freshwater habitats even when nesting in saltwater wetlands. The little blue heron forages throughout the wet and dry season in mangroves. Adjacent tidal wetlands are used throughout the year with greater emphasis during low tides on seagrass beds. The snowy egret forages throughout the wet and dry season in mangrove wetlands of the proper depth to allow for their foraging methods. Snowy egrets are the third most abundant listed wading bird observed. Preferred foraging areas are the seagrass beds and mudflats adjacent to the mangroves. Their diet consists of crustaceans, insects, and small fish (Ogden 1978c).

Reddish egrets (*Egretta rufescens*) and **roseate spoonbills** (*Ajaia ajaja*) are obligate mangrove breeders. Reddish egrets forage on the sandbars and mudflats adjacent to mangroves, in an active fashion with spread wings and rapid steps over unvegetated bottoms. Reddish egrets are the least abundant of the listed wading birds associated with mangroves. Reddish egrets utilize a limited set of saltwater habitats that allow for use of their unique foraging method. Diet consists of crustaceans and small fish. Kale and Maehr (1991) indicate that red mangrove rookeries are used during the December through June breeding period. Roseate spoonbills use dry-down pools in the high marsh,and during low tides, adjacent to mangroves. Preferred foraging areas included sheltered coves. They often forage in groups and with other wading birds including wood storks, great egret (*Casmerodius albus*),white ibis, and snowy egret. Roseate spoonbills nest exclusively in mangrove forests, typically on overwash islands, and forage wherever concentrations of small fish and crustaceans allow the birds to utilize their unique bills for feeding (Ogden 1978b).

A wide variety of shorebird species forage on the mudflats of mangrove estuaries. Among the State listed species are the threatened **least tern** (*Sterna antillarum*); the **black skimmer** (*Rynchops niger*), a species of special concern; and the **American oystercatcher** (*Haematopus palliatus*) a species of special concern. Least terns and roseate terns require open beach or bare



Roseate spoonbill. *Original photograph by Betty Wargo.*

substrates for nesting near areas where schools of forage fish concentrate. American oystercatchers utilize oyster bars and mudflat areas in mangroves and nest on bare unvegetated shores. Foraging occurs throughout the year with seasonal movements tracking warmer conditions.

Mangrove clapper rails (*Rallus longirostris*) use high marsh and basin black mangrove forest areas. They forage on fiddler crabs and other small crustaceans. Mangrove clapper rails are resident in South Florida's mangrove and marsh ecosystems. Little is known of their life history due to their crepuscular to nocturnal activity period, the heavy cover of their preferred habitat, and the excellent camouflage of their plumage.

The **Lower Keys striped mud turtle** (*Kinosternon baurii*) is found in small ponds with salinities less than 15 ppt in the Lower Florida Keys typically in or at the edge of elevated hardwood hammocks (Dunson 1992). Pond vegetation includes mangroves, buttonwood, and cattails. When ephemeral pools dry down, turtles will seek refuge in rock ledges and in mangrove prop roots.

From Lemon Bay, Sarasota County, to the Ten Thousand Islands, Collier County, the estuaries of southwest Florida support at least 384 species of bony and cartilaginous fish (Beever 1988), including the **common snook** (*Centropomus undecimalis*), a State listed species of special concern, and the **Key silverside** (*Menidia conchorum*), listed as threatened by the State.

Some species that depend wholly, or primarily on the mangrove habitat are now imperiled because of loss and degradation of their habitat. **Mangrove rivulus** (*Rivulus marmoratus*) is a small fish living only in and around mangrove areas as far north as Indian River County south through the Keys and north to Tampa Bay on the west coast of Florida (Taylor and Snelson 1992). It is the only species of *Rivulus* in North America and has adapted to conditions

of varying water levels and low oxygen levels of the mangrove community. It is an important link in the food chain, as it has been found to constitute part of the diet of many organisms including the wood stork (Ogden *et al.* 1976). It is listed as a species of special concern by the State because of its limited distribution and vulnerability to loss of its habitat.

The **mangrove gambusia** (*Gambusia rhizophorae*) is another small fish species associated with red mangrove roots in southeastern Florida, mainly in Miami and the Florida Keys (Gilbert 1992).

The **mangrove tree crab** (*Aratus pisonii*) is found only in estuarine areas from the Indian River Lagoon and Tampa Bay south to the Florida Keys (Gore 1994a). This species is restricted to mangroves for its adult life cycle, especially red mangroves. It is one of the few crabs that also uses the arboreal canopy and can climb to the uppermost branches which it forages upon (Beever *et al.* 1979). The **mangrove crab** (*Goniopsis cruentata*) is restricted to mangrove forests in central and southern Florida mangrove areas (Gore 1994b).

Ecology

The value and central role of fringing red mangroves in the ecology of the South Florida estuarine ecosystems has been well established by numerous scientific investigations directed at primary productivity, food web interactions and support of sports and commercial fisheries (Odum and Heald 1972, Odum *et al.* 1982). Mangrove swamps are among the most productive plant communities in the world and are often a large proportion of the total area of tropical estuaries (Day *et al.* 1989). The high level of animal diversity in a community of so few plant species occurs because of the wide variety of spatial and temporal microhabitats. The complex structure of prop roots, pneumatophores, and main trunks provides living spaces for numerous organisms and cover from predation for large populations of small fishes, nektonic and benthic crustaceans, annelids, mollusks, and echinoderms. Aside from providing refuge, mangrove prop roots also provide shade which is important for thermoregulation in some organisms. This combination of shelter and food source makes the mangrove forest a rich nursery and feeding ground for the juvenile and adult forms of many commercially and ecologically significant species of fish and other vertebrates.

Many animals associated with mangroves, oyster bars, and open unvegetated waters by day forage in seagrass beds at night. Many estuarine fishes spend their early life in mangroves and then move as adults to complete life cycles in seagrass habitats. The highest quality seagrass beds are associated with mangrove-fringed shorelines. Animals associated with the mangrove/seagrass communities include herbivores, such as green turtles, manatees, sea urchins, blue crabs, fiddler crabs, and many fishes.

Landward from the shoreline, the mangrove forest intermixes with salt marsh species and provides habitat to organisms that can withstand changing water levels. Common saltmarsh species found in this ecotone are saltwort (*Batis maritima*), perennial glasswort (*Salicornia virginica*), and saltgrass (*Distichlis spicata*). As water levels change with daily tides and seasonal

influences, the organisms here migrate to adjacent permanent aquatic habitats. This area is an important foraging area during periods of low water because organisms get concentrated into small pools of water, making it easy for predators to capture prey. Juvenile endangered wood storks (*Mycteria americana)* are especially dependent on these conditions.

Further inland, the mangrove forest mixes with tropical hardwood hammock species. Organisms rely on the arboreal and terrestrial components of this transition community. Commonly associated hardwood species include cabbage palms (*Sabal palmetto*), Jamaica dogwood (*Piscidia piscipula*), West Indian mahogany (*Swietenia mahogani*), stopper (*Myrtus verrucosa*), poisonwood (*Metopium toxiferum*), black bead (*Pithecellobium keyense*), and gumbo limbo (*Bursera simaruba*) (Schomer and Drew 1982). The transition between these two adjacent communities provides an important ecotone, where species can take advantage of resources from both communities. Mammals and reptiles move from the hardwood forests to feed in the mangrove community.

Zonation

The standard zonation of mangroves consists of red mangroves in the lower and middle intertidal zone, black mangroves in the upper intertidal areas that are occasionally flooded, and white mangroves in patches on higher elevations that are less frequently flooded. Buttonwoods are located further inland in areas that are within the limits of the highest tides (Tomlinson 1986).

Mangrove forests are different than other vegetative communities in not experiencing traditional plant succession. Instead, mangrove communities experience replacement succession primarily as a function of sea-level rise, where mangroves must either keep up with the rise in sea-level or retreat from rising water levels. On shorter time scales, the mangrove community can experience fluctuations in habitat type and species composition as a result of changes in such factors as hydrologic patterns.

Substrate

Mangroves can grow on many different types of substrates and can alter their substrate through peat formation and sedimentation. Mangroves are found on fine inorganic muds, muds with high organic content, peat, sand, rock, coral, oysters, and some man-made surfaces if there are sufficient crevices for root attachment. Black mangroves grow best in soils of high salinity, red mangroves grow best in areas of estuarine salinity with regular flushing, and white mangroves grow best in areas with freshwater input on sandy soils. Red, black, and white mangroves can grow in completely anaerobic soils (Lee 1969).

Mangroves grow better in areas of low wave-energy shorelines, river deltas, and floodplains where fine sediments, muds, and clays accumulate and peats will form (Odum *et al.* 1982). Fluctuating tidal waters are important for transporting nutrients, controlling soil salinities, and dispersing propagules. Mangroves are denser along coasts with high levels of rainfall, heavy runoff, seepage, and a resultant increase in sedimentation which provides a diversity of substrate types and nutrient levels higher than that of sea water (Tomlinson

1986). Mangroves can grow in waters from high-to-low nutrient concentrations. In removing nutrients from surface waters, mangrove forests can be important nutrient sinks for an estuary.

Mangroves can modify soils by organic contributions and peat formation, particularly in southwest Florida and the north shoreline of Florida Bay. This peat appears to be primarily from red mangrove root material and can reach thicknesses of several meters. When mangrove soils are drained by human activity, they experience dramatic increases in acidity due to oxidation of reduced sulfur compounds in the formerly anaerobic soils. This creates "cat clays" which can kill all vegetation including the mangroves.

Salinity

Mangroves are facultative halophytic species (*i.e.*, salt water is not required for growth). They are limited to areas that are partially inundated by brackish or saline water and cannot persist solely in fresh water principally as the result of interspecific competition from much faster-growing freshwater wetland plants. Mangroves grow in surface waters with a range of salinities from 0 to 40 parts per thousand (ppt). Coastal salinities generally range from 18 to 30 ppt throughout South Florida, except in parts of the Indian River Lagoon, Florida Bay, and the Florida Keys, where hypersaline conditions of over 40 ppt seasonally occur. Red mangroves address salinity by excluding or storing salt, whereas black and white mangroves and buttonwood secrete salt.

Reproduction

All mangroves share two common reproductive strategies: dispersal by means of water and vivipary (*i.e.*, the embryo develops continuously while attached to the parent tree and during dispersal) (Odum *et al.* 1982). Dispersal of mangrove propagules is primarily by water currents and tides. The propagules of all three mangrove species float and remain viable for extended periods of time. During this dispersal period, the propagules continue to germinate in preparation for seedling establishment. Black and white mangrove propagules require a stranding period of 5 days or more beyond the influence of tides in order to take hold in the substrate; whereas, red mangrove propagules have the potential to become established in shallow water.

Mangroves are considered pioneer species because of their ability to establish on otherwise unvegetated substrates. Once individuals begin to colonize a disturbed area, same age communities are established with little variance in the structure because new development of successive colonizers is arrested by the closed canopy.

Biomass

The biomass of mangroves and the mangrove forest is predominantly above ground. Measures of biomass in a 1.5 m (5-ft) tall canopy are: 712 dry kg/ha (131 lb/acre) in the leaves; 1,140 dry kg/ha (210 lbs/acre) in leaf litter; no fruit and flowers; 3,959 dry kg/ha (729 lbs/acre) in the wood; and 3,197 dry kg/ha (588 lbs/acre) in the roots. In contrast, a 6.1 m (20-ft) tall canopy has 5,843 to

7,031 dry kg/ha (1,075 to 1,294 lbs/acre) in the leaves; 22,730 to 98,410 dry kg/ha (6,209 to 18,110 lbs/acre) in leaf litter; 28 to131 dry kg/ha (5 to 24 lbs/acre) in fruit and flowers; 57,960 to 128,510 dry kg/ha (10,666 to 23,649 lbs/acre) in the wood; and 17,190 to 27,200 dry kg/ha (3,163 to 5,005 lbs/acre) in the roots. The standing crop of a short canopy whether young, naturally stunted, or hedged is from 3.6 percent to 8.3 percent of an untrimmed mature red mangrove fringe. With reduced standing crop, annual gross primary production can be expected to be proportionally less.

The annual net primary production of a 1.5 m (5-ft) high red mangrove system is 18 percent of the annual net primary productivity of a mature system, which produces 20.5 metric tons C/ha/year (Teas 1979). In the form of mangrove detritus, the net primary production exported from a natural red mangrove fringe has been measured at 9.9 metric tons C/ha/year by Pool *et al.* (1975). Teas (1979) derived 10.6 metric tons C/ha/year for mature red mangroves and 1.3 metric tons C/ha/year for shrubby 5-foot tall red mangrove fringes. Short canopy mangroves provide only 12 to 19 percent of the detrital export of a mature untrimmed red mangrove fringe.

Due to special adaptations to anaerobic soils, mangroves can grow in areas of very low dissolved oxygen concentrations. Since photosynthesis is occurring above the water column, mangroves can grow in waters of relatively high color and turbidity. Mangroves contribute to the tannin colors of estuarine waters while stabilizing and settling turbidity. Mangroves can contribute total organic carbon to surrounding waters as part of the net primary production export to the food web.

Productivity

The primary production ability of mangrove leaves varies. The upper canopy contains “sun leaves” which are smaller with heavy cuticle and tannin cells which protect against the heat and ultraviolet (UV) radiation encountered in the upper parts of the tree. The lower canopy is composed of “shade leaves” which have larger surface area, more chlorophyll, less cuticle, and which are oriented to obtain maximum light in shade conditions. Once a leaf is formed to one of these morphologies, it cannot be changed. Lugo *et al.* (1975) demonstrated that in the red and black mangrove, sun leaves demonstrated twice the photosynthetic rate of shade leaves. At night, shade leaves have four times the respiration rate of sun leaves. Because of these morphologic differences, when a red or black mangrove is topped, frozen, or defoliated the tree loses its most efficient leaves. Exposed leaves not adapted to the heat, light, and UV rays are exposed to adverse conditions. As a result, both gross primary production and net primary production are severely reduced until new sun leaves are set if the tree lives. It is occasionally observed that shade leaves on surviving branches will wither, die, and drop under the heat of the sun when cutting is performed in the summer.

The detrital food base in natural mangrove systems follows seasonal cycles of leaf growth, chemical changes in leaf composition, and natural leaf drop. Although it is not yet fully investigated, a sequence of leaf chemistry changes occurs in the mangrove leaf which the red mangrove naturally drops. The

naturally dropped leaf is the oldest leaf in the red mangrove leaf cluster, has had chlorophyll removed rendering a yellow coloration from carotenes and xanthophylls, and has other substances including excess sodium and chloride. It is suspected that in most mangroves, the annual properly timed leaf fall is also a mechanism for the removal of excess salt prior to and concurrent with new growth and fruiting (Joshi *et al.* 1975, Saenger 1982). It is not unlikely that essential limited nutrients and trace elements are mobilized and removed from a leaf before it is dropped for use in the growth of new leaf.

Studies of South Florida estuarine food webs have found that 85 percent of the detrital food base is from red mangroves (Lewis *et al.* 1985). This detritus is predominantly leaves, but also includes leaf and propagule stalks, small twigs, roots, flowers, and propagules. These are fragmented by processors into detritus, decaying organic material coated and created by algae, fungi, bacteria, and protozoa. This detritus is further fragmented, consumed, and excreted by a number of primary consumers dominated by small crustaceans. The leaf base material itself is not directly consumed, but the algal, fungal, bacterial, and protozoal biomass is. This results in the excretion of a smaller detrital particle which again becomes the base for a detrital garden of microorganisms. This process is repeated many times utilizing the detrital particle to its full nutritive value to the estuarine ecosystem. Eventually, the particle attains a small enough size for use by filter and deposit feeders.

Entire trunks and large branches are not available to this system directly but have to be processed by a much slower system of marine and terrestrial borers and slow decay. If large volumes of cut material enter the aquatic or intertidal system in a short period, one of two things occur. If an abundant resident population of borers is present in the mangrove system and the weather is sufficiently warm at the time of cutting, unnaturally high abundances of wood-boring animals develop in the slash and, through time, their dispersed offspring attack the cut ends of the trimmed mangroves and healthy uncut trees. If the weather is cold and the local population of borers is low or absent, then the slash sits, does not decay, and can mineralize into unavailable cellulose. This has been directly observed in Lee County, where mangrove branches cut in 1979 remain intact and mineralized today and the area where these piles are located has not recruited new mangroves.

Status and Trends

The Coastal Coordinating Council estimated a total of between 162,000 ha (400,000 acres) to 219,000 ha (540,000 acres) of mangroves remaining in central and south Florida in 1974 (Lewis *et al.* 1985). The National Wetlands Inventory estimated a total of 272,973 ha (674,241 acres) of mangroves in 1982 (Lewis *et al.* 1985). By 1989, approximately 224,500 ha (554,515 acres) of mangroves remained in central and south Florida. These mangroves are a unique and critical component of Florida's estuarine ecosystems. The loss of mangrove productivity to Florida estuarine food chains is well documented for certain locations. Since the early 1900s, mangrove communities in South Florida have steadily disappeared (Lugo and Snedaker 1974). Most of the shoreline of South Florida's estuaries have been bulkheaded for development or impounded by dikes for mosquito control activities. Along the Indian River

Lagoon, 13,083 ha (32,315 acres) (92 percent) of red and black mangroves were impounded to control mosquito populations between 1955 and 1974 (Odum and McIvor 1990). Lake Worth Lagoon experienced an 87 percent loss of mangrove wetlands due to shoreline development occurring between 1940 and 1975 (P. Davis, Palm Beach County, personal communication 1998). Northern Biscayne Bay has lost 82 percent of its mangrove acreage (Harlem 1979). Lee County has lost 19 percent of its original mangroves (Estevez 1981). In the Upper Florida Keys, over 8,306 ha (15 percent) of the original mangrove forests were cleared for residential and commercial construction purposes by 1991. Statewide estimates vary on total mangrove losses. Conservative values of 3 to 5 percent were derived by Lindall and Saloman (1977); more recent work indicated a 23 percent loss (Lewis *et al.* 1985). This figure includes areas such as Charlotte Harbor where there has been a 19 percent increase in mangrove coverage due to the conversion of high marsh and salt flats through mosquito ditching.

Natural mangrove ecosystems provide a number of ecological functions that benefit humans. The economic importance of mangroves to the State income is significant. From 1980 to 1981, 5,224,539 recreational saltwater anglers spent 58,528,081 angler days fishing, which generated over $5 billion in direct and indirect income to the State economy (Bell *et al.* 1982). Using National Wetland Inventory acreage data, the value of an acre of mangroves in the Indian River Lagoon is $416 per acre ($1,027/ha) per year for commercial fisheries and $1,093 per acre ($2,700/ha) per year for sport fisheries. Using acreage data from the Coastal Coordinating Council (1974), the value of an acre of mangrove is $723/acre/year for commercial fisheries and $1,902/acre/year for sport fisheries. The annual economic estimates for the Indian River Lagoon fisheries dependent upon mangroves are $10,644,695/year for commercial fisheries and $28 million/year for sport fisheries.

Smaller, shorter mangrove canopies contribute less to fishery values than taller, natural canopies due to the reduction in net primary production. Utilizing conservative estimators, an evaluation of mangroves in Lee County found that, in 1970 dollars, a mature 6 m (20-foot) high canopy of red mangroves contributed $2,041/acre/year in commercial fisheries landings. In 1975 dollars, a 1.5 m (5-foot) high red mangrove canopy contributed $144/acre/year; whereas a 11 m (35-foot) high mangrove canopy contributed $6,514/acre/year. The values do not reflect recreational fisheries values which are six times the primary sales of commercial fisheries (Lewis *et al.* 1985).

The in-kind replacement value of a dead mature red mangrove is in the thousands of dollars. One nurseryman estimated the cost to raise a red mangrove from seedling to age 15 prior to transplanting would be over $11,000 with survival as low as 30 percent. The total replacement cost for one acre of dead mangroves to age 15 would be approximately $4.4 million at 100 percent survival or $14.7 million at 30 percent tree survival.

Management

Natural mangrove ecosystems do not require management other than being left alone. Mature mangrove systems are self-renewing and respond to perturbations of the natural cycles of freeze, flood, and storm without the need

for significant human intervention. Unfortunately, in South Florida, most mangrove systems have been degraded by human impacts either directly, as in spoil pile deposition or impoundment, or indirectly by alteration of basin hydrology, as in Florida Bay and the Everglades. Most management efforts require the removal of past effects as well as the prevention of continued or future human impacts.

Mangrove ecosystems are susceptible to both natural and human-induced impacts. The two natural forces that may negatively impact mangrove forests are hurricanes and sea-level rise. Large hurricanes are the primary natural factor that can cause extensive damage. In 1960, Hurricane Donna created damage over an area exceeding 40,000 ha (100,000 acres) with 25 to 100 percent loss of mature trees (Craighead and Gilbert 1962). Mangroves were killed by direct shearing at 2 to 3 m (6 to 9 ft) above the ground, by complete washouts of overwash islands, and by strangulation of air exchange from layers of marl, mud, and organic material over the prop roots and pneumatophores. The burial of aerial roots was the largest cause of death. Lugo *et al.* (1976) have hypothesized that severe hurricanes occur in South Florida on intervals of 25 to 30 years and that the mangrove ecosystem has adapted by reaching maturity during this cycle.

The two main human-caused changes affecting mangrove communities today are direct loss of habitat from coastal urbanization (*i.e.*, developing waterfront property and subsequent effects of channel dredging, spoil placement alterations, chemicals, debris, and formal landscaping) and the alteration in freshwater hydroperiod by water management practices (*i.e.*, mosquito control and major flow alterations). Man can alter the distribution and structure of mangrove communities through direct destruction by dredge and fill activities, and cutting those mangroves that remain. Alterations in the natural freshwater flow regime through diking, impounding, and flooding activities affect the salinity balance and encourage exotic vegetation growth. As a result of changing natural sheet flow, mangroves have experienced a change in water and soil salinities. With the decline in natural freshwater flow through the Everglades, red mangroves have invaded freshwater tributaries of the Taylor Slough drainage basin. Australian pine (*Casuarina equisetifolia*) and Brazilian pepper (*Schinus terebinthifolius*) are two exotic plant species that invade mangrove communities as a result of changes in water flow (refer to Appendix E).

Although mangroves often live in areas with rapid sedimentation, heavy loads of fine flocculent material such as suspended dredge spoils that coat aerial roots can kill the trees. Extensive areas of mangrove in Collier County were killed in this way by the actions of hurricanes and by human coastal development with broadcast dredge spoil turbidity (Odum and Johannes 1975). Spoil pile creep is a common phenomenon on barrier islands and in the Florida Keys as adjacent mangroves roots are buried beneath unstabilized shell marl.

The functionality of mangroves in gathering sediments and other material also negatively acts as traps for trash, monofilament, and other marine debris that can significantly harm wildlife and listed bird species in particular. Regular (annual) volunteer clean-ups find tons of debris in mangrove ecosystems with monofilament line from recreational fishing typically in the top two items by

weight. Education will be important in this issue, but this needs to be supplemented by stricter enforcement of marine dumping regulations and perhaps development of biodegradable alternatives to current fishing lines.

Diking and Ditching

Diking (or impounding) mangroves to cut off tidal circulation with long-term flooding causes mass mortality in all species of mangroves, especially when the prop roots or pneumatophores are submerged (Breen and Hill 1969, Odum and Johannes 1975, Patterson-Zucca 1978, Lugo 1981). Impoundment flooding, used as a form of mosquito control, resulted in a 76 percent reduction in mangrove wetlands along the Indian River Lagoon. On the west coast, roadway development has killed thousands of acres of mangroves. Partial impounding by roads and fill for development has killed mangroves in places like Clam Bay in Collier County. When these formerly anaerobic mangrove soils are drained, they experience dramatic increases in acidity (ph=3.5-5.0) due to the oxidation of reduced sulfur compounds in the soils which can kill all vegetation including the mangroves within the impoundment.

The **Subcommittee on Managed Marshes**, an interagency task force, was formed to address management problems of mosquito impoundments (Indian River Lagoon NEP 1996). Under the guidance of this task force, improvements in management techniques were developed and implemented in the mid-1980s by local mosquito control districts. Known as Rotational Impoundment Management (RIM), these techniques involve some form of rotational schedule for alternating the flooding-and-drying cycles of impounded marshes. One RIM alternative consists of the installation of culverts through the dikes to allow natural tidal flows across these impounded wetlands and to provide fishery resources access to and from the diked marshes.

Trimming

The effects of mangrove hedging and improper trimming on productivity can be substantial, with losses of 8.6 tons of C/ha/year when a 6 m (20-foot) high canopy is reduced to 1.5 m (5 ft) in height. In an urbanized estuary where the majority of the shoreline could be subjected to hedging, this could result in the loss of approximately 87 percent of the local annual productivity of that particular mangrove ecosystem.

Of the mangrove species, the red mangrove is the least tolerant to trimming. Cut red mangrove branches do not regenerate well or at all, if they are greater than approximately 2.5 cm (1 in) in diameter (Gill and Tomlinson 1971, Beever 1989). Severe trimming kills mature red mangroves. White and black mangroves are less sensitive to trimming damage than red mangroves because of specific anatomical differences which allow coppicing from trunk and root stock. However, improper severe cutting of both white and black mangroves will kill these trees as well. Recovery potential of mangroves to pruning is as follows: white mangroves, highest recovery; black mangroves, moderate recovery; red mangroves, lowest recovery (Snedaker 1982).

Removing more than 30 percent of a red mangrove canopy produced significantly fewer propagules than those trees pruned less than 30 percent. Trees

pruned more than 50 percent were severely impacted. Red mangroves exhibit difficulty in initiating new shoots when severely disturbed (Snedaker 1982). Trimming of trees immediately preceding and during flower set, propagule growth, and major leaf set can reduce and damage the reproductive success and productivity export for that year.

A comparison of cut and adjacent natural mangrove fringes in seven of the eight southwest Florida aquatic preserves was performed, utilizing standardized methods of measurement of mangrove productivity (Heald 1971, Pool *et al.* 1975, Teas 1979, Beever *et al.* 1979, Twilley 1980). Statistically significant reductions in net primary productivity export, standing leaf crop, flower production, propagule production, and leaf clusters resulted from the cutting of a 5 m (16 ft) tall fringing red mangrove to less than 2 m (6 ft). Similarly, reduction in net primary productivity export, standing leaf crop, propagule production, and terminal branches resulted from cutting a 3 m (10 ft) tall fringing white mangrove area to 1 m (3 ft). Mangrove trimming significantly reduced habitat utilization by associated fauna. For the parameters measured, no net positive benefit of mangrove trimming/cutting could be confirmed. The documented evidence of this study and existing literature (Beever 1989) indicate that mangrove cutting is deleterious to the estuarine environment, the mangrove trees themselves, and the fauna which depend upon mangroves for habitat and primary production (Beever 1996).

Mangrove trimming does not match natural, seasonally timed, physiologically mediated leaf drop. In any trimming method, leaves of all ages and biochemistry are removed from the tree. There is no existing evidence in the literature or from field observation that mangrove trimming enhances the habitat value of the mangroves for any native species. For many of the birds and arboreal arthropods, reduction of canopy height and habitat complexity has deleterious effects. Many mangrove-dependent bird species will not roost overnight or nest in short canopies below 2 to 3 m (6 to 10 ft). When rookeries are cut, they are abandoned. The arboreal arthropod community depends directly on the structural diversity of the mangrove canopy including tree height, abundance of branches, and tree age. Trimming fringing mangroves results in shade reduction along the bank; shaded areas selectively attract a number of fish and other aquatic species.

The compliance level of permitted mangrove trimming in Florida is low (20 percent since Chapter 17-27 Florida Administrative Code was implemented) and violations significantly outnumber permitted projects. Enforcement staffing levels of DEP field personnel for South Florida averages one compliance staff per seven counties and one enforcement (independent of permitting) per 3.5 counties. This staff is responsible for all DEP compliance and violations for all permits in all wetlands in DEP jurisdiction. As a result, the ability of this staff to concentrate on, and the time allotted to, mangrove trimming is small compared to the extent of the resource and the number of permits and enforcement cases.

Herbicides

All mangrove tree species are particularly susceptible to herbicide damage (Tschirley 1969, Orians and Pfeiffer 1970, Westing 1971, Walsh *et al.* 1973, and Odum *et al.* 1982). The red mangrove is particularly sensitive due to the

small reserves of viable leaf buds (Teas and Kelly 1975). The stress of a single defoliation is sufficient to kill the entire tree. Defoliated forests are slow to recover in part because of high rates of siltation, turbidity, and low dissolved oxygen concentrations in the water from the loss of mangrove roots and the decay of dead mangroves (de Sylva and Michel 1974). Both residential landscape practices and ditch clearing by various entities have resulted in the destruction of mangroves.

Oil and Oil Spills

Oil drilling in or near mangrove shorelines has significant adverse impacts (Longley *et al.* 1978). Petroleum oils and their by-products kill mangroves by coating aerial and submerged roots and from direct absorption (Odum and Johannes 1975, Carlberg 1980). Some severe effects, including tree death, can take place months or years after a spill (Lewis 1979, 1980). Little can be done to prevent damage once it has occurred. Common dispersants used to combat oil spills are toxic to vascular plants (Baker 1971). Damage from the actions of mechanical abrasion, trampling, or compaction during cleanup can exacerbate negative environmental impacts. The continued ban on off-shore oil drilling in Florida is the best preventative for oil spill impacts. Double-hulled shipping of oil and other petroleum-based products should be required in and adjacent to mangrove estuaries.

Fire

Mangroves are not fire adapted and should not be burned (Wade *et al.* 1990). Care needs to be taken in land management controlled burning to not carry fire into mangrove systems from adjacent habitats that benefit from fire. There have been situations on public lands where this has happened.

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Restoration of Mangroves

Restoration Objective: Maintain the structure, function, and ecological processes of mangroves and prevent any further loss, fragmentation, or degradation of this habitat type in South Florida.

Restoration Criteria

South Florida can contribute to the preservation of nationally significant wetlands, hydrology, aquifer recharge, and fish and wildlife habitat values by preserving the only geographic extent of this type of habitat within the continental United States. Benefits of restoring mangrove communities include: the conservation and recovery of listed plant and animal species, wide-ranging species, and neotropical birds; the recycling of nutrients and the nutrient mass balance of the estuarine ecosystem, including high primary and associated secondary biological production; the protection of the base arboreal, estuarine, and marine food web; the provision of physical habitat and nursery grounds for a wide variety of marine/estuarine vertebrates and invertebrates significant to sports and/or commercial fisheries; the protection of public and private lands and property by mangrove storm buffers and wind breaks; the stabilization of shorelines and fine substrates; the improvement of water quality and clarity by filtering uplands runoff and trapping waterborne sediments and debris. Finally, preservation of mangrove systems contributes to the overall natural setting and visual aesthetics of Florida's estuarine waterbodies and the economy of the coastal counties of South Florida and the State of Florida.

The restoration objective will be achieved when (1) the geographic extent of mangrove habitat in South Florida is identified; (2) mangrove habitat is preserved through land acquisition or private landowner cooperative agreements consistent with the GFC's *Closing the Gaps in Florida's Wildlife Habitat Conservation System* and Preservation 2000 Act Study (Biodiversity Conservation Analysis), current State and Federal land acquisition proposals, and regional wildlife habitat protection plans; (3) the hydrology and exotic plant management of mangrove wetlands are regionally applied to enhance, restore, and maintain plant and animal biodiversity; and (4) State regulations are adequately enforced resulting in no-net loss of mangrove habitat.

Community-level Restoration Actions

1. **Identify the extent of mangrove habitat.** Although the existing GIS information, aerial photography, and ground-truthed land cover information are available for this community throughout South Florida, a comprehensive regional analysis has not been conducted.

    1.1. **Detail the geographic extent of mangroves in South Florida.** This task should integrate existing GIS and other databases on land cover, soils, and hydrology, to correctly identify and separate mangrove from other wetland types, particularly Brazilian pepper.

1.2. **Update the GIS database for mangroves to monitor cumulative impacts.** As areas of mangroves are converted to other land uses, changes should be mapped to identify and analyze trends in habitat loss.

1.3. **Identify important habitat linkages.** Important areas include connecting the mangroves of north San Carlos Bay to the Estero Bay Buffer Preserve; Rookery Bay National Estuarine Research Reserve north to Gordon Pass; Charlotte Harbor State Buffer Preserves north and south to other preserves.

2. **Preserve remaining areas of mangrove habitat.** Direct loss of habitat resulting from land conversion, habitat degradation, and fragmentation continues unabated in South Florida. However, some of the best remaining areas of intact mangrove have been identified for land acquisition.

2.1. **Identify and acquire mangrove habitat critical to the recovery of wide-ranging listed species.** The acquisition and preservation of mangroves, including buttonwood forests, is critical to the recovery of federally and State listed species as well as for augmenting habitat for neotropical migrants.

2.1.1. **Complete purchase of the following CARL projects:** Cape Haze/Charlotte Harbor, Cayo Costa, Charlotte Harbor Buffer, Estero Bay Buffer, Myakka Estuary, Rookery Bay, Bear Point, Middle Cove, Blind Creek, King's Island.

2.1.2. **Complete purchase and management implementation of mangrove habitat within 15 km (9.3 mi) of wading bird rookeries and 30 km (18.6 mi) of wood stork rookeries.** This should include Lemon Bay, Gasparilla Sound, Charlotte Harbor, Pine Island Sound, Matlacha Pass, Estero Bay, San Carlos Bay, Rookery Bay, the Ten Thousand Islands, the Florida Keys, Florida Bay, Biscayne Bay, Lake Worth Lagoon, and the Indian River Lagoon.

2.1.3. **Protect coastal mangroves as raptor and bald eagle nesting habitat as well as neotropical migratory bird habitat.** Bald eagles prefer nest and perch sites on the largest, tallest trees available near large, open waterbodies in coastal South Florida. Neotropical birds require available foraging habitat as close to the coast as possible to facilitate migration across the Gulf of Mexico and Caribbean. Coastal mangroves in urban areas are subject to hedging. Pine Island in Lee County is an example of a mangrove area that should be protected.

2.1.4. **Complete purchase and management implementation of mangrove habitat within Priority I/II areas identified in the Florida Panther Habitat Preservation Plan.**

2.1.5. **Identify and acquire potential shoreline nesting habitat available to the American crocodile and mangrove terrapin in South Florida.**

2.2. **Complete purchase and management implementation of mangrove habitat in contiguous, connected, unfragmented patches for the conservation of biodiversity in South Florida.** Acquiring and preserving mangrove habitat will benefit nongame species, rare and unique species, and keystone species such as the mangrove tree crab, mangrove rivulus, mangrove prairie warbler, and various owl and raptor species.

2.2.1. Develop additions to existing Federal and State land acquisition proposals in areas identified as GFC Strategic Habitat Conservation Areas and in the 1990 Statewide Charrette, including the following: Estero Bay Watershed, San Carlos Bay, Cocohatchee River, West and East Charlotte Harbor, and the Imperial River drainage.

2.3. Use existing regulatory mechanisms to protect mangrove wetlands. Mangroves have significantly declined in areal extent, patch size, and quality in South Florida, primarily because of exemptions, inaccurate rules, lack of compliance review, and inadequate mitigation practices.

2.3.1. Stress avoidance of impacts of this habitat type as a regional wetlands permitting concern. Both consultants and permitting entities need to be educated on the importance of this habitat to fish and wildlife resources and the economy.

2.3.2. Re-evaluate the Federal and State permitting process and permit exemptions to assess impacts on mangrove habitat. Piecemeal development and speculative land clearing in urbanizing areas under exemptions results in fragmentation and loss of mangroves in the South Florida Ecosystem.

2.3.3. Require in-kind on-site and off-site wetland mitigation when avoidance and minimization criteria have been exhausted. Both consultants and permitting entities often assess credit mitigation on the basis of the wetland depth, not the landscape importance or biodiversity value. This results in mitigation plans using red mangroves even when black, white and buttonwoods are being impacted.

2.4. Protect mangrove communities from point source and non-point source pollution.

2.5. Implement cooperative habitat preservation and management programs with private landowners. Some mangrove habitat is in private ownership and some private landowners may not choose to participate in fee-simple land acquisition projects. Protection and management through alternate methods may conserve important ecosystems by providing landowners with economic incentives (*e.g.*, tax relief) and promoting good stewardship by ensuring that landowners view habitat as an asset, not a liability.

2.6. Support and implement cooperative regional greenways programs with landowners and other agencies. Greenways planning has successfully developed cooperative, local conservation plans that will establish, maintain, and manage landscape connections between important resource areas.

2.7. Promote the protection of mangroves by local governments. Use the GIS database to provide local governments with the location and areal extent of mangrove habitat to promote and improve resource planning within local comprehensive plans.

3. Manage and maintain mangrove habitat on public lands.

3.1. Implement effective habitat management techniques to maximize the biodiversity of the mangrove community. Mangrove may benefit from alternate management practices that are sensitive to hydrology, herbicide susceptibility, and

subtropical vegetation. Diversification of management techniques may increase biodiversity of impounded and marsh managed systems. Management of mangroves on a landscape scale will benefit listed species, wide-ranging species, wading birds, neotropical migrants, and endemic bird species, including the mangrove cuckoo, black-whiskered vireo, and Florida prairie warbler. Effective management techniques should include controlling exotic plants and animals without impacting non-target native species and preventing collection of rare plant species, such as bromeliads and orchids, on public lands.

3.2. **Ensure the continuance of habitat management on public lands.** State and Federal land managers are faced with funding deficits that prevent or reduce management actions. Perpetual funding sources for staff and equipment should be secured.

3.3. **Maintain important habitat linkages.** Public landowners should coordinate land acquisition and habitat management activities to ensure the protection of large, contiguous tracts of land that include a mosaic of native habitat types, including mangroves.

3.4. **Identify and prohibit incompatible public uses that degrade mangrove habitat.** Incompatible public uses that disrupt hydrology, pollute, encourage exotic plant or animal invasion, overharvest resources, or destroy habitat beyond the ability for effective management should be identified and eliminated.

3.5. **Monitor compatible adjacent land uses to protect the ecological function of mangroves.** Secondary and cumulative impacts to public lands can result from adjacent development, including loss of habitat, litter, chemical discharges, dumping, promoting exotic plant and animal invasion, alteration of adjacent hydrology, use of pesticides/herbicides, and noise/light pollution. Implementing land-use regulations to establish a wide buffer between mangrove habitat and upland development can eliminate or minimize these secondary and cumulative effects.

4. **Restore and enhance mangrove habitat, where feasible.**

4.1. **Identify locations of mangrove habitat that can be restored.**

4.1.1. Coastal areas where mangrove restoration efforts are either currently being conducted or should be considered include Indian River Lagoon, Lake Worth Lagoon, Biscayne Bay, Florida Keys, Charlotte Harbor, and Sarasota Bay.

4.2. **Restore the natural hydroperiod and tidal regime of mangrove communities.**

4.3. **Restore sheetflow hydrologic conditions by restoring the regional landscape to natural contour.** Much of South Florida has been significantly altered by public and private drainage projects that have resulted in both overdrainage and flooding of natural systems. Where possible, off-site, regional hydrological restoration actions may be necessary to restore mangrove functions. Areas where restoration should occur include the South Golden Gate Estates and Camp Keais Strand in Collier County, the Estero Bay Watershed in Lee County, and the Babcock-Webb Wildlife Management Area in Charlotte County and the Charlotte Harbor Flatwoods CARL project in Lee and Charlotte counties.

4.4. Re-establish important habitat links by constructing wildlife crossings. A wide variety of development and linear infrastructure projects fragment mangrove habitats. Future design and retrofit or rebuild of these projects should include culverts, undercrossings, overpasses, and other features that reduce wildlife mortality, preserve hydrology, and increase connectivity to adjacent habitat.

4.5. Encourage mitigation banks that restore and enhance mangrove systems, not monocultures.

5. Perform additional research on mangroves.

5.1. Continue and update studies on the utilization of mangrove communities by endemic and wide-ranging species, including the development of landscape-scale management recommendations for the recovery of these species in South Florida.

5.1.1. Inventory and characterize the importance of mangroves to avian populations, including neotropical migrants and wading birds.

5.1.2. Survey mangroves in southwest Florida for the American crocodile. Updated surveys for the American crocodile have not been conducted. The complete range of this species should be documented in order to recover the population.

5.1.3. Examine reptile and amphibian populations associated with ponded wetlands in mangrove ecosystems. Investigate the habitat requirements for the American crocodile and mangrove terrapin.

5.1.4. Examine invertebrate diversity and life cycles in mangrove habitat.

5.2. Monitor mangrove communities to evaluate biodiversity. Monitor community-level processes, structure, and composition, including rare and imperilled species. Improve reference information for community composition, biodiversity, and site-to-site variability.

5.3. Perform a hydrologic study of the flood attenuation and storm buffering potential of mangrove habitat under natural sheetflow conditions.

5.4. Examine the population dynamics by invasive exotics in the understory of mangrove habitat.

5.5. Examine the habitat value of buttonwood forests in South Florida.

5.6. Identify historical and geological trends in mangrove distribution relative to hydrology and sea-level in the mangrove communities of South Florida.

6. Increase public awareness concerning mangrove habitat. Identify mangroves in text, maps, and on resource presentations to raise public awareness of the different types of mangroves. Stress the important ecosystem function of isolated and ephemeral wetlands included in the mangrove community. Establish the landscape-scale importance of this community to wide-ranging species and the significance of regional losses of this habitat in South Florida.

6.1. Inform the public about the harm caused by marine debris, particularly monofilament line for fishing and polypropylene lines for lobster and stone crab traps, encouraging the use of biodegradable fishing line, proper fishing stewardship, and enforcement of marine dumping regulations.

6.2. **Inform the public about the need to maintain the off-shore drilling ban** in Florida waters with mangrove estuaries, and the need for double-hulled transportation of petroleum products in mangrove estuaries.

6.3. **Inform the public about the need to not trim mangroves** for view on public lands and on private waterfronts particularly in Aquatic Preserves.

River's Edge (aka Gulf Harbour)

Approximate location of Vegetation Preservation Buffer located along the Caloosahatchee River



ATTACHMENT "P"

ES STAFF EXHIBIT 1

ES Staff Recommended Conditions if request is approved:

1. Prior to final resolution approval, the DRI DO Exhibit D Preservation Line Map must be replaced with Sketch of the Preservation Area Within River's Edge Yacht Club stamped "Received JAN 03 1994" in order to be consistent with DRI DO Condition II.G.5.a.

2. Prior to final resolution approval, all DRI DO Exhibit G Boardwalk and Observation Deck/Mangrove Trimming Plan must be revised to reflect the revised trim height.

3. Prior to the first trimming event, the recorded Conservation Easement document, Florida Department of Environmental Protection Permit No. 36-0152741-003, and the 2002 Proposed Management Plan (page 3 and 4 of the Palmas Del Sol Project Narrative dated July 2002 stamped Applicant's Exhibit #8 DRI2001-00005) must be amended to reflect the reduced trim height, changes to red mangrove trimming practices, additional five (5) years of monitoring, and additional monitoring requirements. Additional monitoring requirements include specific mangrove/buttonwood height measurements taken annually at same fixed points (as depicted on the attached aerial) to be flagged in the field, each point is to be numbered and a supplement chart provided indicating the tree species and height at the designated point; and pictures taken from the same 1st floor units of each building depicts views before and after each trim.

SECTION: 30
TOWNSHIP: 45
RANGE: 24

MANGROVE TRIMMING PLAN
CURRENT CONDITIONS



60 30 0 60
SCALE FEET

Notes:
1. Property boundary obtained from Morris-Depew Associates, Inc.
2. Mapping based on photointerpretation of 2008 aerial photography and ground truthing in July 2009.
3. Image shown is 2014 aerial photograph.

W. DEXTER BENDER & ASSOCIATES, INC.
ENVIRONMENTAL & MARINE CONSULTING
FORT MYERS 239/334-3680

PALMAS DEL SOL

SHEET

July 25, 2014 9:11:33 am
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