ENVIRONMENTAL IMPACT STATEMENT

For:

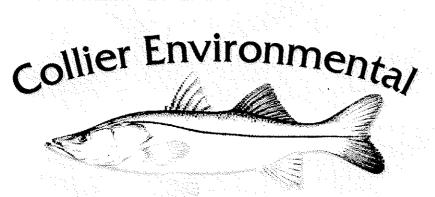
ESPERANZA PLACE RPUD

Collier County, Florida

November 2007

Prepared By:

Collier Environmental Consultants, Inc. 3880 Estey Avenue Naples, Florida 34104 (239) 263 - 2687 Fax (239) 263-6616



Consultants Inc.

COLLIER COUNTY ENVIRONMENTAL IMPACT STATEMENT

10.02.02(4) APPLICANT INFORMATION:

A

i. Responsible agent who wrote EIS and his education and job related environmental experience.

Marco A. Espinar, B.S. Biology, University of South Florida Collier Environmental Consultants, Senior Biologist Turrell & Associates, Senior Environmental Planner SFWMD, Natural Resource Regulation Collier County Government, Development Services Department

ii. Owner(s)/agent name and address, phone number & e-mail address.

Florida Non-Profit Services, Inc. Real Estate Technology 900 Broad Avenue South, Suite # 2C Naples, Florida 34102 Mr. Carl Kuehner

Empowerment Alliance of SW Florida 750 S. Fifth St. Immokalee, Fl. 34142 Ms. Dottie Cook- Executive Director

Agent: Q. Grady Minor & Associates

3800 Via Del Rey

Bonita Springs, Florida 34134

Contact: Mike Delate

B MAPPING AND SUPPORT GRAPHICS:

i. General Location Map.

Item #1

ii. Native habitats and their boundaries identified on an aerial photo of site extending at least 200 feet outside the parcel boundary. Habitat identification consistent with the Florida Department of Transportation Florida Land Use Cover and Forms Classification System (FLUCFCS) shall be depicted on an aerial photograph having a scale of one inch equal to at least 200 feet when available from the County.

Item #2

iii. Topographic map, and existing drainage patterns if applicable.

Item #3

iv. Soils map

The site has #22 Hydric- Chobee, Winder and gator soils Depressional, #15 Pomella FS a hydric soil and #8 Myakka FS.

Item #4 Hydric Soils Map and associated attachments

v. Drainage plan

The site currently is situated between several single family subdivisions and Immokalee Drive to the south. This has severed any historical sheet flow. In addition, the site has been cleared and used for cattle grazing. These issues have contributed to the decline of the hydrological regime of the area.

The on site wetland show signs of degradation due to its excavation for use as a cattle pond and the amount of nuisance and exotic plant species present.

The proposed use is for an affordable housing. The parcel will have both single and multifamily units. Approximately 144 multifamily units and 61 single family units are proposed. The proposed site plans calls for the use of valley gutters and grass swales to convey storm water runoff towards the detention lake area. Once the storage reaches the control elevation of 32.0 NGVD storm water will be discharged to a swale along the northern side of Immokalee Drive, which has an elevation of 31.5 NGVD.

See Engineering Plans

vi. Development plan including phasing program, service area of existing and proposed public facilities, and existing and proposed

transportation network in the impact area.

The transportation system and drainage infrastructure will be completed concurrently. There will be no phasing.

vii. Site plan showing preserves on-site, and how they align with preserves on adjoining and neighboring properties.

This parcel was used as cattle grazing. As such no native habitats are on site. No native habitat requirements are required for this project. The neighboring properties are currently developed. As such, they do not have any dedicated preserve areas aligning with this project. Since this project does not have any native habitats a tree count was conducted. Approximately, 121 Slash pines and 11 oaks were identified. These will be incorporated into our landscape plan.

See Engineering Drawings

viii. For properties in the RLSA or RFMU District, a site plan showing the location of the site and land uses designations and overlays as identified in the Growth Management Plan

This parcel is located and identified as Agriculture

Zoning / Future Land Use Map Item # 5

C PROJECT DESCRIPTION AND GMP CONSISTENCY DETERMINATION:

i. Description of proposed project with respect to environmental and water management issues.

The proposed site plans calls for the use of valley gutters and grass swales to convey storm water runoff towards the detention area. Once the storage reaches the control elevation of 32.0 NGVD storm water will be discharged to a drainage ditch that runs parallel to Immokalee Drive.

ii. Explain how the project is consistent with each of the Objectives and Policies in the Conservation and Coastal Management Element of the Growth Management Plan, where applicable.

The project as proposed is consistent with Policies in Objective 6.1 and 6.2 of the Conservation Coastal Management Element, for the following reasons:

The stormwater management system is designed to meet water quality and quantity as per SFWMD standards. The discharging of stormwater will not degrade any receiving waters as per Policy 2.2.2

Jurisdictional wetlands have been identified as required in Policies 6.2.1 and 6.2.2.

A wildlife survey for listed species in accordance with Policy 7.1.2 is included.

D NATIVE VEGETATION PRESERVATION

i. Identify the acreage and community type of all upland and wetland habitats found on the project site, according to Florida Land Use Cover and Forms Classification System (FLUCFCS). Provide a description of each of the composition (canopy, midstory and ground cover) and vegetation dominance (dominant, common and occasional).

<u>FLUCFCS</u>	HABITAT UPLAN	D/WETLAND	<u>ACREAGE</u>	<u>IMPACT</u>
111	Single Family Home	U	2.0 acres	2.0 acres
261	Fallow Farm Field	U	27.90 acres	27.90 acres
618	Willow-Disturbed	W	1.71 acres	1.71 acres

Total Site 31.61 acres
Total Impacts 31.61 acres

TOTAL WETLANDS 1.71 acres

618 Willow-Disturbed W 1.71 acres

Item #2 Vegetation Community Description

ii. Explain how the project meets or exceeds the native vegetation preservation requirement in Goal 6 of the Conservation and Coastal Management Element of the Growth Management Plan, and Division Chapters 3 and 10. of the Land Development Code. Provide an exhibit illustrating such. Include calculations identifying the acreage for preservation and impact, per FLUCFCS category.

15% of the existing native vegetation will not be retained on-site and set aside as preserve areas with conservation easements prohibiting further development. The waiver of the preservation areas, are consistent with criteria listed in Policy 6.1.1

Jurisdictional wetlands have been identified as required in Policies 6.2.1 and 6.2.2. The site has approximately 1.71 acres of poor quality Jurisdictional wetlands. The proposed site plan will impact the entire wetland area and appropriately mitigate these impacts.

Item #2

iii. For sites already cleared and in agricultural use, provide documentation that the parcel(s) are in compliance with the 25 year rezone limitation in Policy 6.1.5 of the Conservation and Coastal Management Element of the Growth Management Plan and Chapter 4 and 10 of the Land Development Code. For site cleared prior to January 2003, provide documentation that the parcel(s) are in compliance with the 10 year rezone limitation previously identified in the Growth Management Plan and Land Development Code.

See Attached Letter **ITEM # 6** Dated August 24, 2007 from William D. Lorenz Jr. P.E.- Environmental Services Director

iv. Have preserves or acreage requirements for preservation previously been identified for the site during previous development order approvals? If so, identify the location and acreage of these preserves, and provide an explanation if they are different from what is proposed.

Not applicable

v. For properties with Special Treatment (ST) overlays, show the St overlay on the development plan and provide an explanation as to why these areas are being impacted or preserved.

Not applicable

E WETLANDS

i. Number of acres of Collier County jurisdictional wetlands according to the Florida Land Use Cover and Forms Classification System (FLUCFCS). Include a description of each of the FLUCFCS categories identified on site by vegetation type (species), vegetation composition (canopy, midstory and ground cover) and vegetation dominance (dominant, common and occasional). Wetland determinations are required to be verified by South Florida Water Management District or Florida Department of Environmental Protection, prior to submission to the County.

See Item #2 Vegetation Community Descriptions

The Jurisdictional verification by the agencies will be conducted. A copy of the areas identified, as Jurisdictional has been included and has also been submitted to SFWMD as part of our ERP resubmital. When a permit is available it will be provided to county staff.

ii. Determine present seasonal high water levels and historical high water levels by utilizing lichens lines or their biological indicators. Indicate how the proposed project design improves/affects predevelopment hydroperiods resulting from the project. Provide a narrative addressing the anticipated control elevation(s) for the site.

The wet season water table is estimated to be approximately 32.0 feet NGVD. These observations were taken from the center of the wetland areas utilizing lichen / water marks, neighboring properties and past permits. The proposed changes will not affect the existing hydroperiod.

iii. Indicate the proposed percent of the defined wetlands to be impacted and the effects of proposed impacts on the functions of the wetland areas. Provide an exhibit showing the location of wetlands to be impacted and those to be preserved on-site. Describe how impacts to wetlands have been minimized.

Approximately 1.71 acres of poor quality wetlands are on-site. 100 % of the estimated wetland acreage will be mitigated off site. These wetlands are of poor quality and exotic infested. The wetland is primarily vegetated with Carolina and primrose willow. The area had been excavated in the past as a watering hole for cattle.

Item # 2 provides a complete acreage breakdown by habitat type, impacts proposed and preserved.

Item # 7- Mitigation/Monitoring Plan

iv. Indicate how the project design shall compensate for the wetland impacts pursuant to the Policies and Objectives in Goal 6 of the Conservation and Coastal Management Element of the Growth Management Plan. For sites in the RFMU District, provide an assessment, based on the South Florida Water Management District's Uniform Mitigation Assessment Method, that has been accepted by either the South Florida Water Management District or the Florida Department of environmental Protection. For site outside the RFMU District, and where higher quality wetlands are being retained on-site, provide justification based on the UMAM.

Approximately 1.71 acres of wetland impacts are proposed with this

project. A MWRAP score of .40 was sent to SFWMD. MWRAP stands for Modified Wetland Rapid Assessment Procedure. However, since all wetlands will be impacted, a UMAM score will not be used to calculate mitigation. Off site mitigation is calculated based on the MWRAP. UMAM is used when wetlands are being preserved on site. A pre and post assessment using UMAM is utilized to examine the wetland. Since Panther Island was permitted utilizing MWRAP, offsite mitigation is also calculated utilizing MWRAP. Approximately .69 credits will be purchased at Panther Island Mitigation Bank.

Item #7 - Mitigation / Monitoring Plan

F SURFACE AND GROUND WATER MANAGEMENT

i. Provide an overall description of the proposed water management system explaining how it works, the basis of design, historical drainage flows, off-site flows coming in to the system and how they will be incorporated in the system or passed around the system, positive outfall availability, Wet season Water Table and Dry Season Water Table, and how they were determined, and any other pertinent information pertaining to the control of storm and ground water.

A Surface Water Management Permits will be obtained from South Florida Water Management District. The system will be designed in accordance with the established SFWMD and/or Collier county water quality/quantity criteria. There are no known existing pollution sources on site.

The site has an estimated Wet Season Water Table is 32.0 NGVD. As such control was established at 32.0 NGVD. This was based on neighboring properties and past permits, lichen lines and downstream control.

ii. Provide an analysis of potential water quality impacts of the project by evaluating water quality loadings expected from the project (post development conditions considering the proposed land uses and stormwater management controls) compared with water quality loadings of the project area, as it exists in its pre-development conditions. This analysis is required for projects impacting five (5) or more acres of wetlands. The analysis shall be performed using methodologies approved by Federal and State water quality agencies.

A copy has been provided by the Engineer.

iii. Identify any Wellfield Risk Management Special Treatment Overlay Zones (WRM-ST) within the project area and provide an analysis for

how the project design avoids the most intensive land uses within the most sensitive WRM-STs. Describe the measures that are proposed to mitigate for impact to state and federal listed species.

Not applicable

G LISTED SPECIES

i. Provide a plant and animal species survey to include at a minimum, species of special status that are known to inhabit biological communities similar to those existing on site and conducted in accordance with the guidelines of the Florida Fish and Wildlife Conservation Commission and US Fish and Wildlife Service. State Actual survey times and dates, and provide a map showing the location(s) of listed species identified on-site.

See Item #8 Listed Species Survey

ii. Identify all listed species that are known to inhabit biological communities similar to those existing on the site or that have been directly observed on the site.

No listed species have been identified on or utilizing the subject parcel.

iii. Indicate how the project design minimizes impacts on species of special status. Describe the measures that are proposed as mitigation for impacts to listed species

No listed species have been identified on or utilizing the subject parcel.

iv. Provide habitat management plans for each of the listed species known to occur on the property. For sites with Bald eagle nests and/or nest protection zones, Bald eagle management plans are required, copies of which shall be included as exhibits attached to the PUD documents, where applicable.

Not applicable

v. Where applicable, include correspondence received from Florida Fish and Wildlife Conservation Commission (FFWCC) and US fish and Wildlife Service (USFWS), with regards to the project. Explain how the concerns of these agencies have been meet.

No listed species have been identified on or utilizing the subject parcel.

H OTHER

i. For multi-slip docking facilities with ten slips or more, and for all marina facilities, show how the project is consistent with the Marina Sitting and other criteria in the Manatee Protection Plan.

Not applicable

ii. Include the results of any environmental assessments and/or audits of the property. If applicable, provide a narrative of the cost and measures needed to clean up the site.

No environmental audits have been conducted on this parcel. In addition, clean up is not required.

iii. For site located in the Big Cypress Area of Critical Concern-Special Treatment (ACSC-ST) overlay district, show how the project is consistent with the development standards and regulations established for the ACSC-ST.

Not applicable

iv. Soil sampling or ground water monitoring reports and programs shall be required for sites that occupy old farm fields, old golf courses or are suspected of previously having contamination on site. The amount of sampling and testing shall be determined by the Environmental Services staff along with the Pollution Control Department and the Florida Department of Environmental Protection

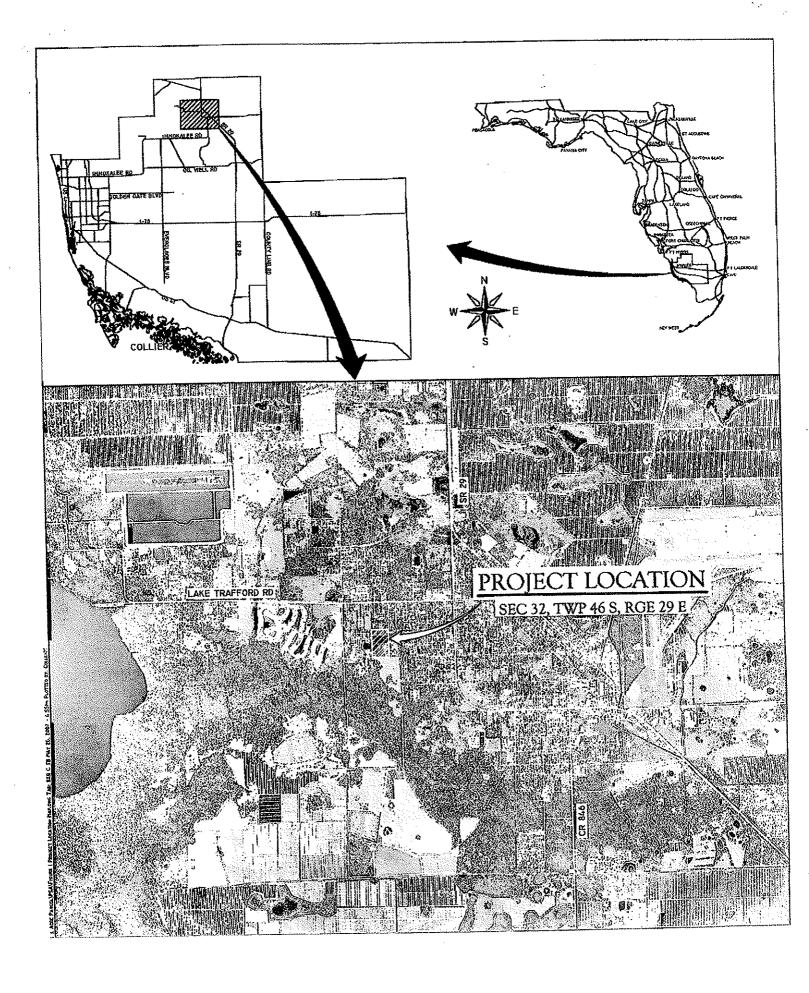
Soil samples have not been conducted.

v. Provide documentation from the Florida Master Site File, Florida Department of State and any printed historic archaeological surveys that have been conducted on the project area. Locate any known historic or archaeological sites and the relationship to the proposed project design. Demonstrate how the project design preserves the historic/archaeological integrity of the site.

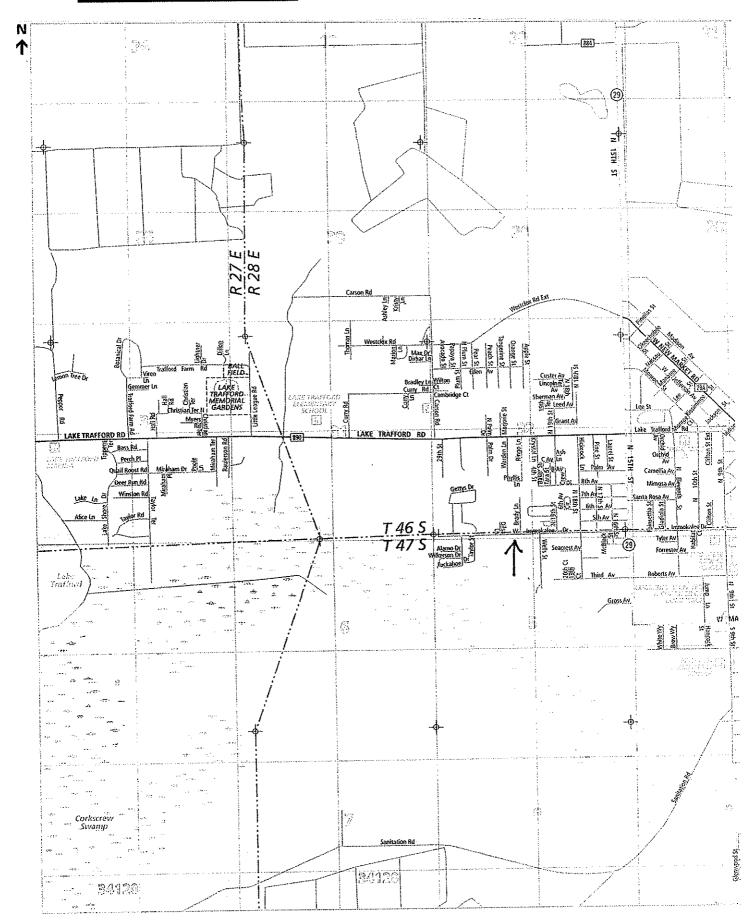
Several archaeological sites have been identified within this section. However, there are not on or near this project site.

See Item #9 Archaeological Resources

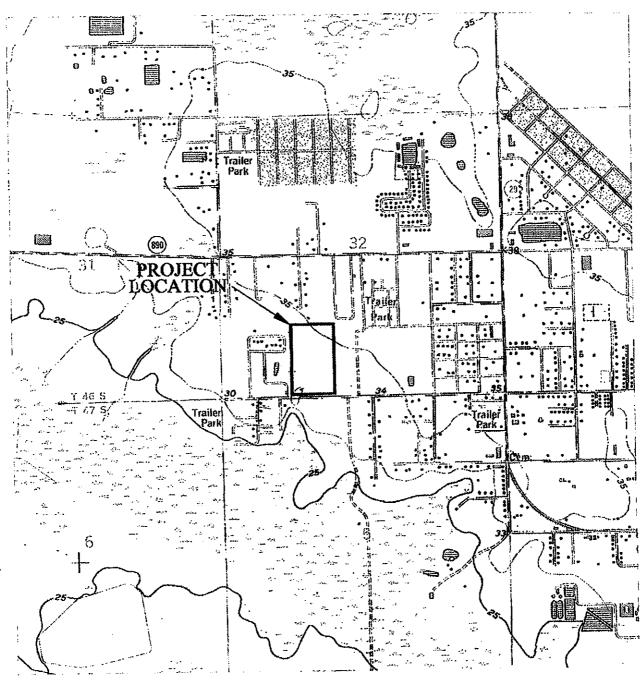
LOCATION MAP



LOCATION MAP





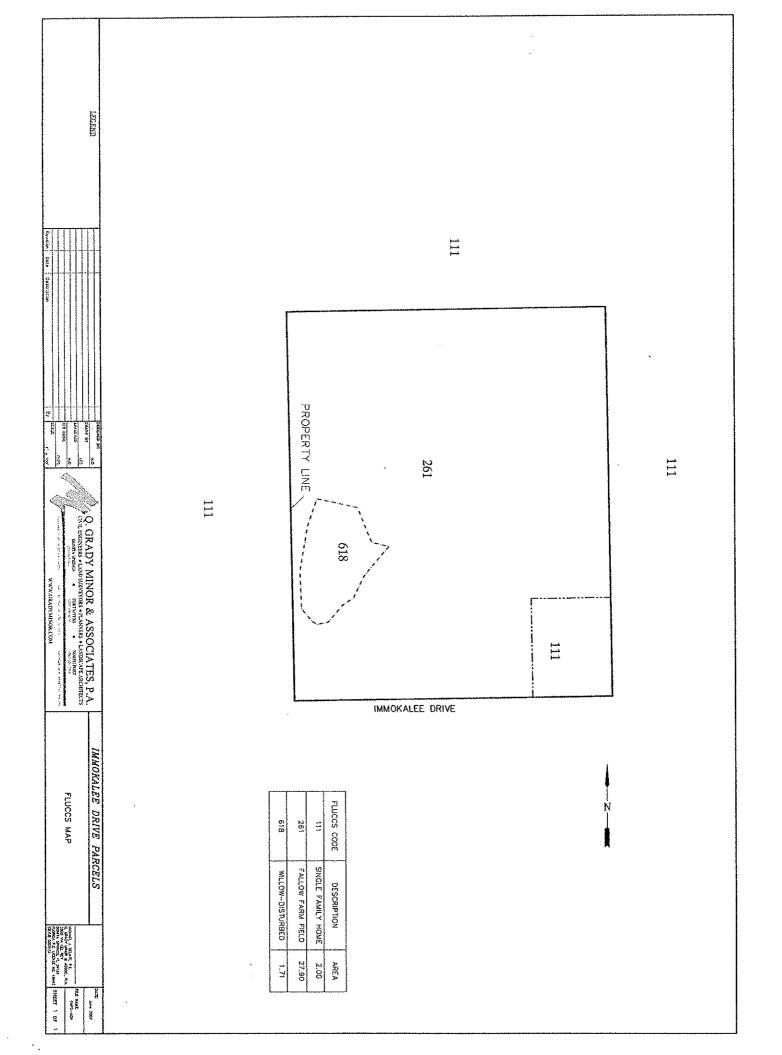


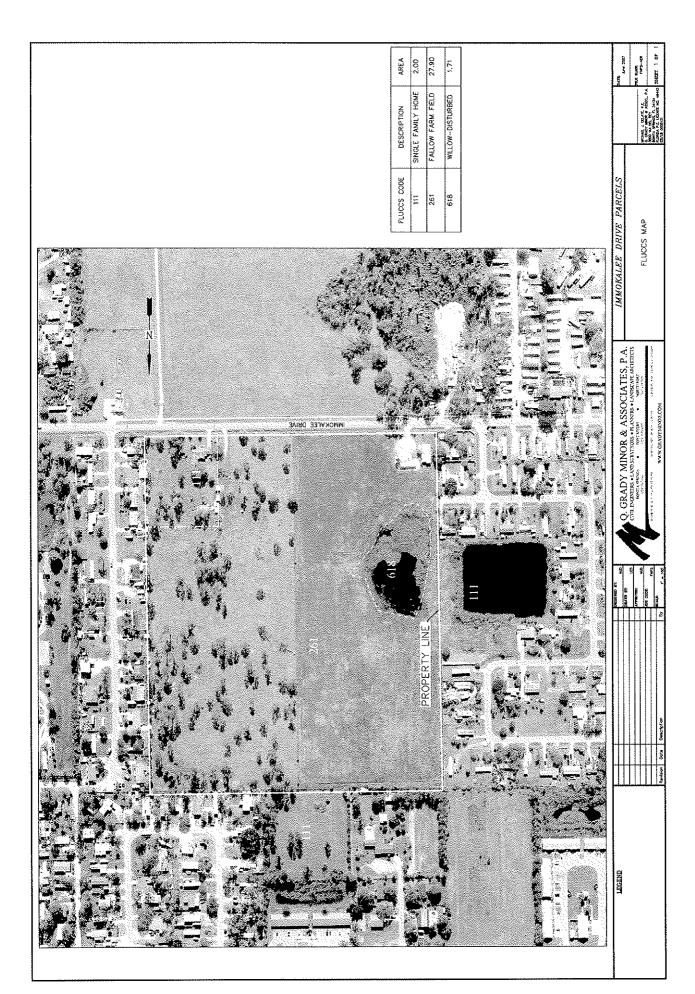
NOTE:

QUAD SHEET SCANNED FROM FORT MYERS USGS QUAD SHEET PHOTOREVISED 1987.

PROPERTY BOUNDARY ESTIMATED FROM THE COLLIER COUNTY PROPERTY APPRAISER'S GIS WEBSITE.

FLUCCS CODE VEGETATION INVENTORY





FLUCCS CODE AND VEGETATION INVENTORY

FLUCCS CODE

(Description)

Common Name

Scientific Name

Indicator Status

111 Single Family House

This designation is for established single family homes. In addition to the primary structure there are other associated impacts. These include but not limited to such things as: Garden/ Tool sheds, extra cars, boats, vegetable gardens.

261 Fallow Farm Field Uplands

This are consists of a fallow farm field. This habitat encompasses the largest habitat type of this project site. The area has secondary growth such as Slash pines and cabbage palms. The area is dominated with Bahiagrass. This area is surrounded with a ditch and furrows bisect this area.

Slash Pine	Pinus elliotti	FACW	Cp,O
Cabbage Palm	Sabal palmetto	FAC	M,O
Live oak	Quercus virginiana	FACU	M,C
Brazilian pepper	Schinus terebinthifolius	Exotic	M,O
Winged Sumac	Rhus copallina	UPL	M,O
Wax myrtle	Myrcia cerifera	FAC+	M,O
Gallberry	Ilex glabra	FACW	M,O
buckthorn	Bumelia reclinata	FAC	M,O
Fetterbush	Lyonia lucida	FACW	M,O
Palmetto	Serona repens	FACU	G,O
Broom sedge	Andropogon virginicus	FAC-	G,C
Blue Maidencane	Amphicarpum muhlenbergianum	FACW	G,C
Beak rush	Rhynchospora microcarpa	FACW+	G,C
Knotgrass	Setaria geniculata	FAC	G,C
Caesar weed	Urena lobata	FACU	G,C
Bahiagrass	Paspalum notatum	FACU	G,D
blackroot	Pterocaulon virgatun	FAC	G,O
Ragweed	Ambrosia artemissiifolia	FACU	G,C
Paw-paw	Asimina reticulata	UPL	G,O
Whitehead broom	Spermacoce verticillata	UPL	G,C
umbrella sedge	Cyperus ligularis	FACW	G,O
sedge	Cyperus globulosus	FAC	G,O
Wire grass	Aristida stricta	FAC-	G,O
Dog Fennel	Eupatorium capillifolium	FACU	G,C
Toad flax	Linaria Canadensis	UPL	G,C

Smutgrass	Sporobolius indicus	FACU	$_{G,C}$
Cudweed	Gnaphalium falcatum	UPL	$_{G,C}$

618 Willow-Disturbed

Wetland

This area is located towards the western end of the subject parcel. The area would be considered Jurisdictional wetlands by the regulatory agencies. The area is of poor quality mainly consisting of Carolina and primrose willow. Other associated plant species within this area are:

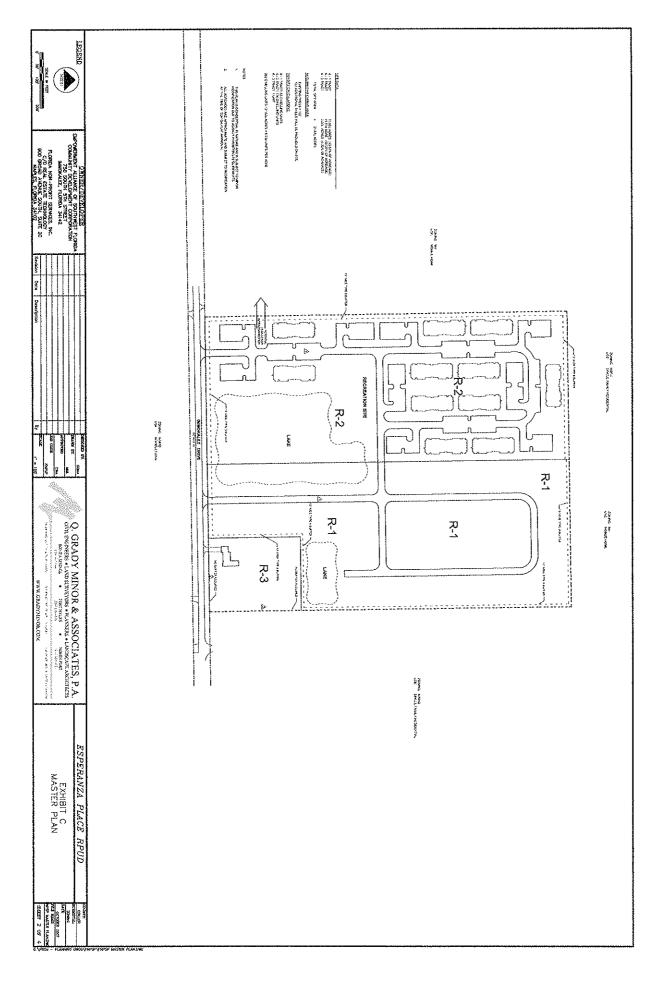
Putter Push Cephalanthus occidentalis OBL G.	i,C i,O i,O i,O i,O i,C i,C i,O i,C
Button Bush Cephalanthus occidentalis OBL G,	•
Dog Fennel Eupatorium capillifolium FACU G, Rabbit tobacco Gnaphalitum obtusifolium UPL G, Asiatic pennywort Centella asiatica FACW G,	3,C 3,C 3,C 3,C

ABREVIATIONS -

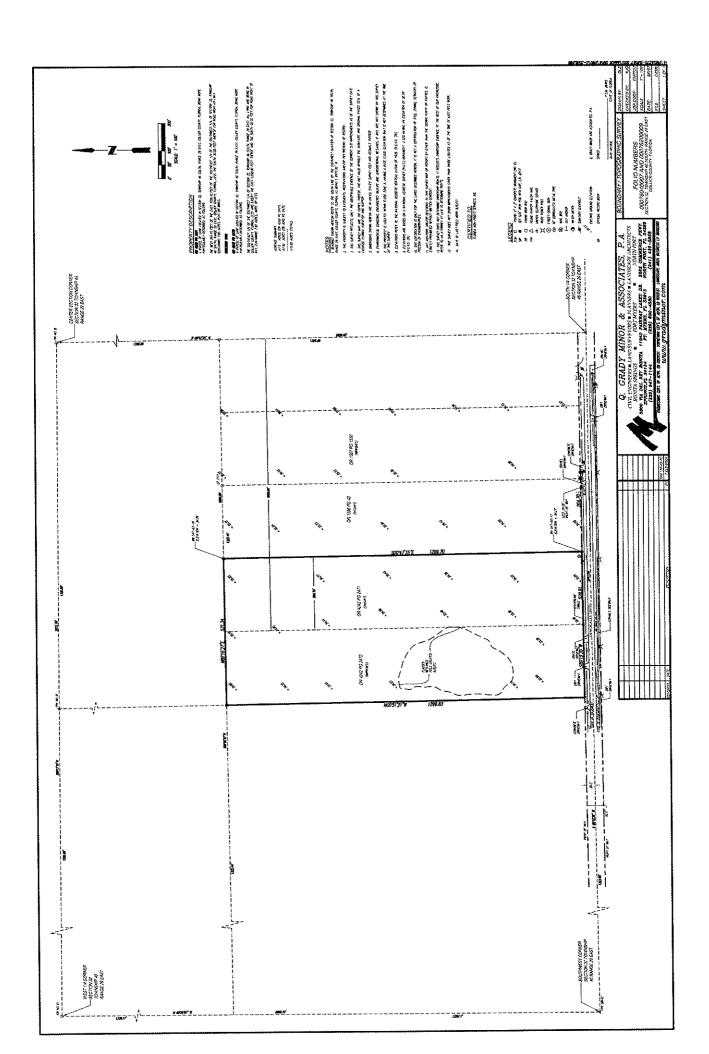
Canopy (Cp), Midstory (M), Ground Cover (G) Dominant (D), Common (C), Occasional (O)

INDICATOR STATUS -

Obligate (OBL), Facultative wet plants (FACW), Facultative plants (FAC), Upland (UPL)



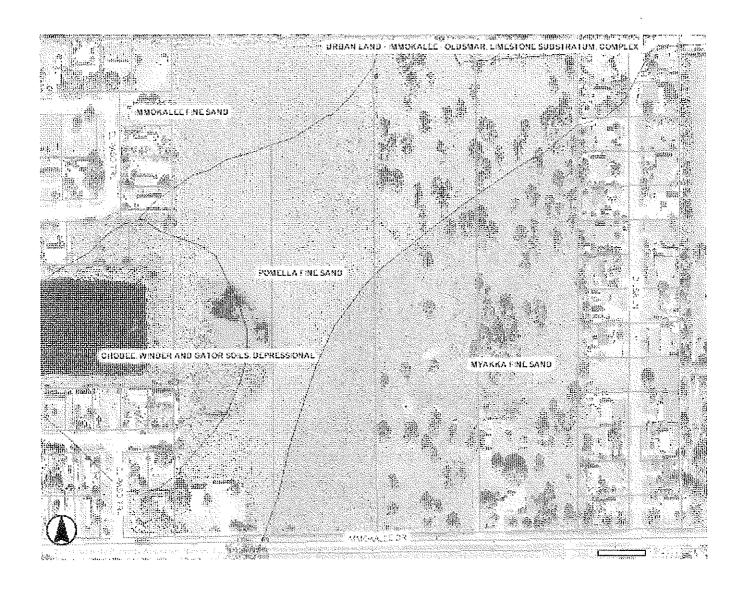
TOPOGRAPHIC MAP

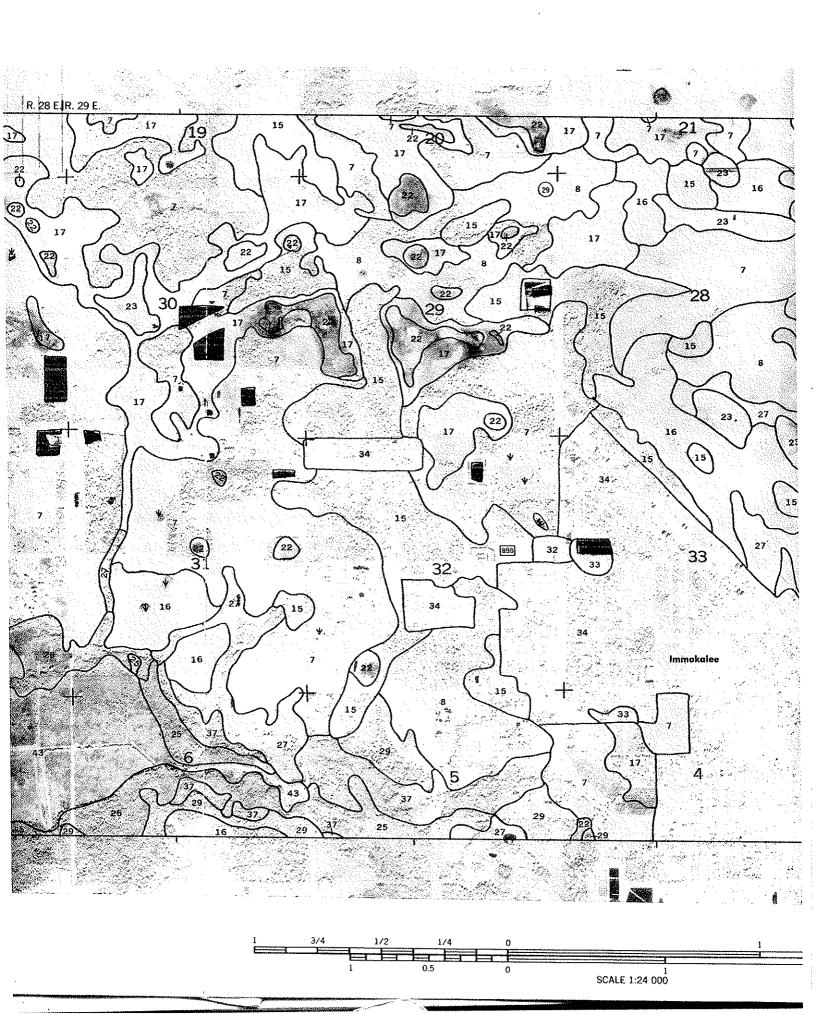


SOILS

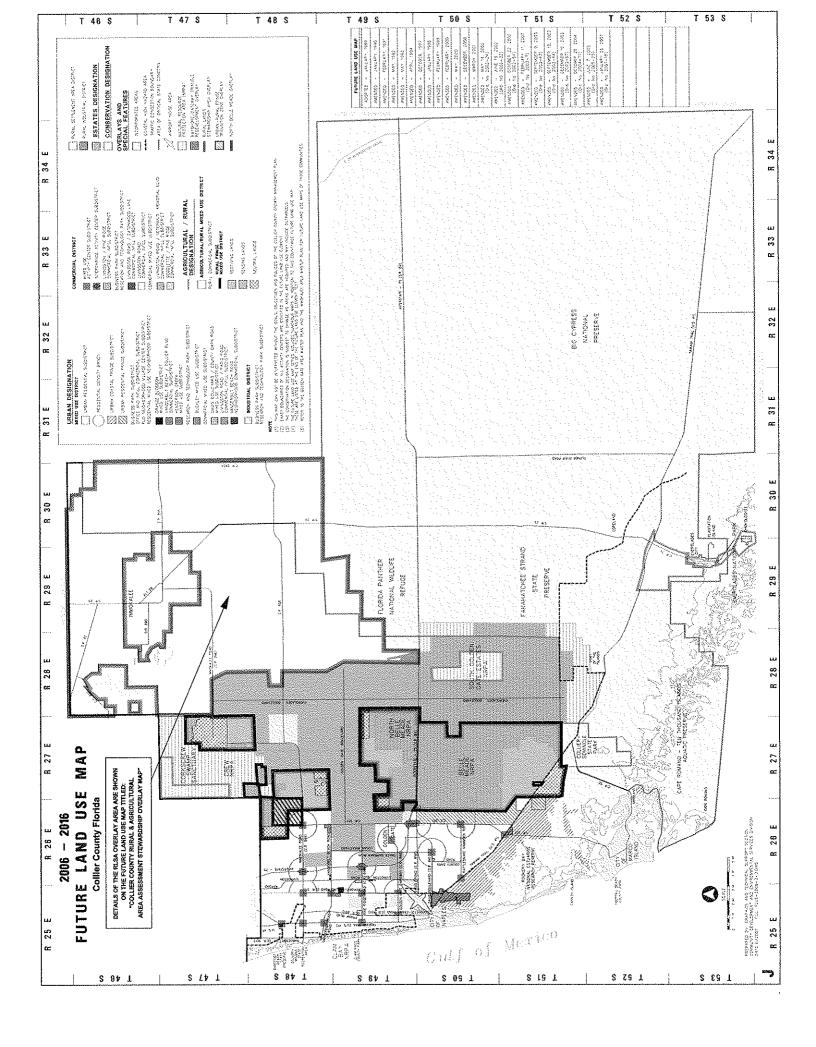
COLLIER COUNTY SOIL LEGEND REVISED 1/90 H. YAMATAKI

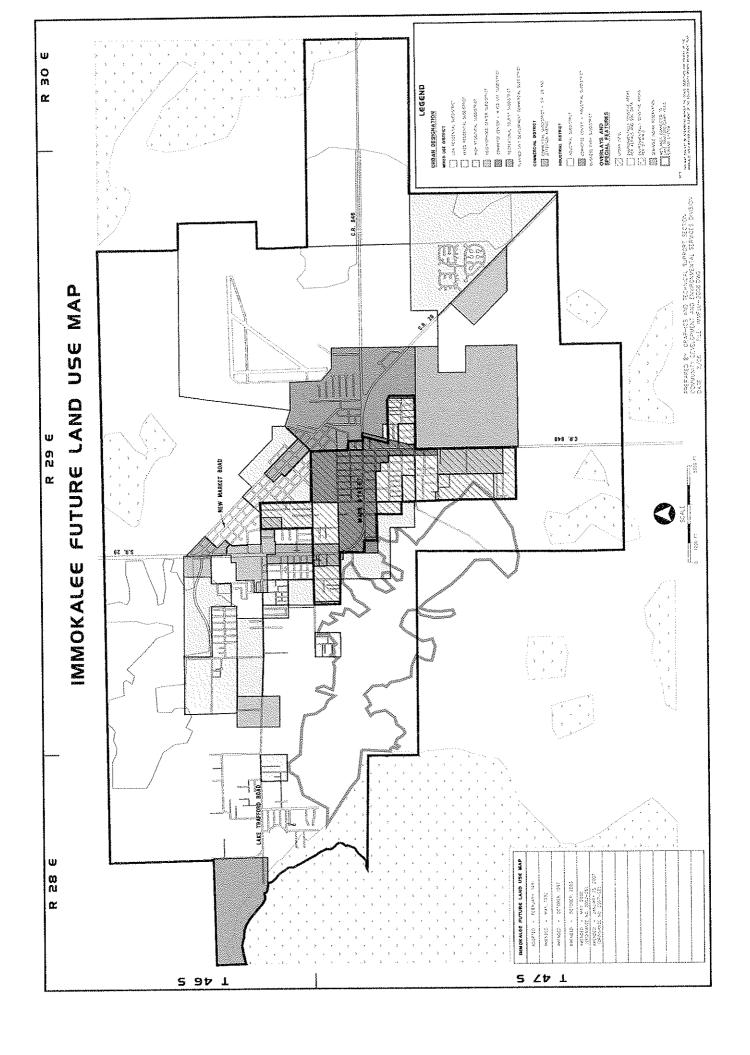
		•	
1	IYDF		\cdot
	\mathbf{H}	2	HOLOPAW FS, LIMESTONE SUBSTRATUM
	H	3	MALABAR FS.
	H	4 .	CHOBEE, LIMESTONE SUBSTRATUM AND DANIA MUCKS
	ΥΥ	_	DEPRESSIONAL SUPERING CONTRACTOR OF THE STATE OF THE STAT
	H	6	RIVIERA, LIMESTONE SUBSTRATUM-COPELAND FS
		7 8	IMMOKALEE FS
		<i>IF</i>	MYAKKA FS
		10	· · · · · · · · · · · · · · · · · · ·
	**	11	HALLANDALE FS
	H		PINEDA FS, LIMESTONE SUBSTRATUM
			POMELLO FS
			OLDSMAR FS
	H		BASINGER FS
	H		RIVIERA FS, LIMESTONE SUBSTRATUM
			FT. DRUM AND MALABAR HIGH FS
		21	
﴾	H	22	
	H	23	
	H	25	BOCA, RIVIERA, LIMESTONE SUBSTRATUM AND
			COPELAND FS DEPRESSIONAL
	H	27	HOLOPAW FS
	H	28	PINEDA AND RIVIERA FS
		29	WABASSO FS
	H	31	
			MARGATE SOILS
		32	URBAN LAND
			URBAN LAND HOLOPAW BASINGER COMPLEX
		34	
			SUBSTRATUM COMPLEX
			URBAN LAND AQUENTS COMPLEX ORGANIC SUBSTRATUM
			UDORTHENTS SHAPED
			TUSCAWILLA FS
			URBAN LAND MATLACHA LIMESTONE SUBSTRATUM
			BOCA COMPLEX
		39	
	H	40	
	••	41	
.:			CANAVERAL BEACHES ASSOCIATION
	H	43	
	**	**	CHOBEE SOILS DEPRESSIONAL
		45	PAOLA FS (1-8 percent slopes)
	Н	48	PENNSUCCO SOIL (marl prairie)
	H	49	HALLANDALE AND BOCA FS (slough)
	H	50	OCHOPEE FSL, PRAIRIE (marl)
	H	51	· · · · · · · · · · · · · · · · · · ·
	H	51 52	
	H	52 53	
		54	
•	H	54	
	H	20	DUSTRICEV LS' OCCUSTORUMITE EMOODED

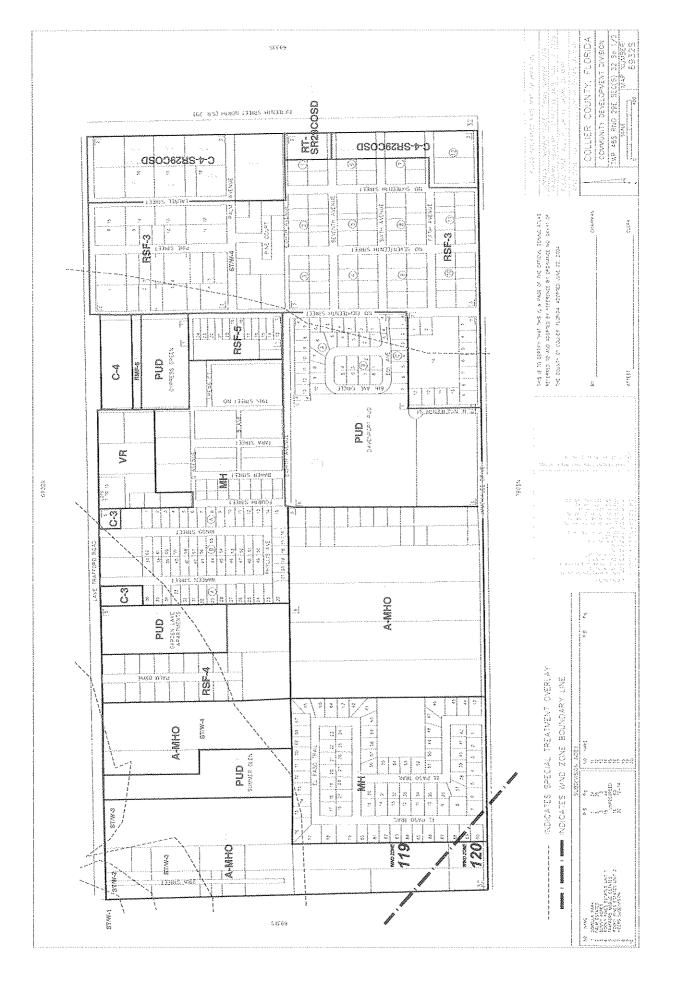




ZONING / LAND USE MAP







LETTER FROM ENVIRONMENTAL SERVICES DIRECTOR



COLLIER COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

2800 North Horseshoe Drive • Naples, Florida 34104 • 239-732-2505 • FAX 239-213-2960

August 24, 2007

Heidi Williams Q. Grady Minor & Associates 3800 Via Del Rey Bonita Springs, Florida 34134

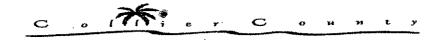
Re: Legal Land Clearing Determination

Dear Ms Williams:

The purpose of this letter is to respond to your August 14, 2007 letter regarding Legal Land Clearing Determination – Property Located in Section 32, Township 46 South, Range 29 East.

Based on information contained in this letter and subsequent conversations with Marco Espinar we find the following:

- 1. The site has been in agricultural use prior to the County's agricultural land clearing permitting activity. The site has also been cleared during the time when the County's permit or notification requirements came into place (1976), but the applicant did not apply for a permit.
- 2. Agricultural use has been the use of the property for all of this time, including for the 10 year period from the present back to 1997.
- 3. Policy 6.1.1(8) of the Conservation and Coastal Management Element (CCME) of the GMP states that "Parcels that were legally cleared of native vegetation prior to 1989 shall be exempt" from the native vegetation requirement. In reviewing the information, we conclude that staff could have issued an Agricultural clearing permit for this use and the permit conditions have been adhered to for the life of the permit. Based on this analysis, we can now accept after-the-fact permit fees to consider the site "legally cleared". We do note, however, that there could have been wetland impacts and we would have required the appropriate agency permits for this area to be impacted.
- 4. CCME Policy 6.1.5 states that:
 - Agriculture shall be exempt from the above preservation requirements contained in Policies 6.1.1, and 6.1.2 of this element provided that any new clearing of land for agriculture shall not be converted to non-agricultural development for 25 years. For any such conversions in less than 25 years, the requirements of Policy 6.1.1 and 6.1.2 of this element shall be applied to the site at the time of the conversion. The percentage of native vegetation preserved shall be calculated on the amount of vegetation occurring at the time of the agricultural clearing, and if found to be



deficient, a native plant community shall be restored to re-create a native plant community in all three strata (ground covers, shrubs and trees), utilizing larger plant materials so as to more quickly re-create the lost mature vegetation.

This policy was changed in 2002 from 10 years to 25 years. We therefore will use the 10 year requirement which was applicable at the time of the clearing. Recreation would therefore be required if the agricultural use was converted for a period of less than 10 years. Because of our findings in point #2 above, there will be no requirement for recreation and the vegetation retention requirement will be based on the vegetation currently on site since there is little change from aerials in 1997 to today.

We will therefore review the proposed petition as follows:

- 1. The vegetation retention requirement will be based on the vegetation currently found on site.
- 2. After-the-fact clearing fees will be required in order for staff to make the determination that the clearing is "legal" as required by Policy 6.1.1 (8).
- 3. Both previous and proposed impacts to the wetland on site will require written permits or exemptions from appropriate wetland agencies at the time of the first development order.

Should you have any further questions please do not hesitate contacting Susan Mason or myself.

James

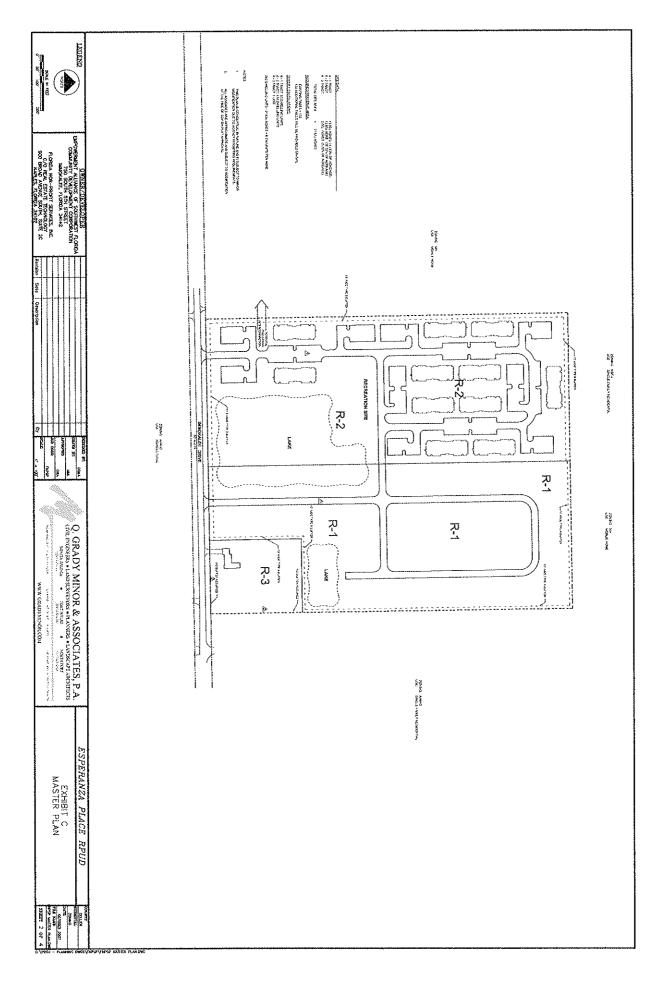
William D. Lorenz Jr., P.E. Environmental Services Director

Copy: Joseph Schmitt, Administrator CDES

Susan Mason, Principal Environmental Specialist

Marco Espinar WDL Read File

MITIGATION / MONITORING PLAN



Modify Wetland Rapid Assessment Procedure (MWRAP)

The wetland area proposed to be impacted consists of 618 Disturbed Willow - 1.71 acres

Permit Number

Project Name Esperanza Place RPUD Evaluator Marco Espinar

Wildlife Utilization

1.5

The area is bordered by single family homes on three sides There is some evidence of small mammal utilization: raccoons, rabbits The area has been used as cattle grazing Sparsely vegetated

Wetland Canopy & Ground Cover

1

The site has some limited desirable vegetation Exotic and/or nucisance species present Limited natural recruitment of desirable species

Wetland Hydrology

1.5

Wetland area excavated and used for cattle watering

Water Quality Input and Treatment

Road Single Family Residential

LU
$$(.25 \times 1) + (.75 \times 1.5) = .25 + 1.125 = 1.375$$

PT $(.25 \times 1) + (.75 \times 0) = .25 + 0 = .25$

LU+PT/2 = WQIT $1.625/2 = .813 = WQIT$

pre
$$4.813 / 12 = .40$$
 units

$$.40 \times 1.71 \text{ acres} = .69 \text{ credits}$$

WETLAND MITIGATION / MONITORING / MAINTENANCE PLAN

Introduction

The following outlines the wetland mitigation plan for a 31.61 acre project known as Esperanza Place RPUD. The project is located in Section 32, Township 46 S, Range 28 E in Immokalee, Collier County, Florida. The following outlines the acreage figures for this proposed project.

FLUCFCS	<u>HABITAT</u> <u>UP</u>	LAND/WETL	AND IMPACT A	CREAGE
111	Single Family Ho	me U	2.0 acres	2.0 acres
261	Fallow Farm Field	d U	27.90 acres	27.90 acres
618	Willow-Disturbed	i W	1.71 acres	1.71 acres

Total Site 31.61 acres
Total Impacts 31.61 acres

Total Site	31.61 acres
Total Wetlands	1.71 acres
Total Upland	29.90 acres

Total Wetlands	USACOE / SFWMD	1.71 acres

WETLAND IMPACTS

	618 Wil	llow/Disturbed	W	1.71 acre
--	---------	----------------	---	-----------

TOTAL WETLAND IMPACTS 1.71 acres SFWMD

The applicant is proposing to mitigate the wetland impacts with on site mitigation. The on-site wetlands proposed for preservation are the best quality habitat on site. The wetland preserve will be enhanced by the removal of exotics. As part of the mitigation program for the SFWMD, the wetland preserved will be placed in a conservation easement.

Off- Site Mitigation Plan

The applicant is proposing to impact approximately 1.71 acres of Jurisdictional Wetlands. The applicant is proposing to mitigate the remaining wetland impacts with off site mitigation. The off site mitigation will be at an approved mitigation bank such as; Panther Island Mitigation Bank / Big Cypress Mitigation Bank.

LISTED SPECIES SURVEY

LISTED SPECIES SURVEY

ESPERANZA PLACE RPUD Collier County, Florida

SEPTEMBER 2007

Prepared For:

GRADY MINOR ENGINEERING

Prepared By:

Collier Environmental Consultants, Inc. 3880 Estey Avenue Naples, Florida 34104 (239) 263 - 2687

I Introduction / Purpose

This report is an account of a Listed Species Survey recently performed on a 31.61 acre tract called Esperanza Place RPUD. Required to meet county review requirements its purpose is to identify and describe key habitats and report any listed species using the site that would be at risk due to possible future development actions on the site. This survey and report are based on fieldwork performed during September / October 2007.

II Site Description

Esperanza Place RPUD is a 31.61 acre project located in Section 32, Township 46 S, Range 28 E in Immokalee, Collier County, Florida. The parcel is on the north side of Immokalee Drive west of SR 29. The parcel is surrounded by single family homes.

See Item #1 - Location Map

The primary habitat is that of a fallow farm field. The site does have a small wetland on site. This wetland is vegetated with Carolina and Primrose willow. This small wetland has been previously excavated as a watering hole for cattle. This habitat offers very limited habitat for any vertebrates.

In total the site consists of approximately 31.61 acres. The following is how the acreage figures breakdown.

<u>FLUCFCS</u>	<u>HABITAT</u> <u>UPL</u>	<u>AND/WETLANI</u>	<u> IMPACT A</u>	ACREAGE
111	Single Family Hom	ne U	2.0 acres	2.0 acres
261	Fallow Farm Field	U	27.90 acres	27.90 acres
618	Willow-Disturbed	W	1.71 acres	1.71 acres

Total Site 31.61 acres

See Item #2 - FLUCCS Map

III Listed Species Survey

The required survey for a Listed Species Survey calls for a survey covering 100 % of the site, at prescribed transect distances per site acreage. Such a survey was conducted in September / October 2007. Established transects were oriented north - south and east - west and superimposed on an aerial map of the site. These transects were ground - located and walked by compass bearing. Early morning (0730 - 1000), mid-day (1100 -

1500) and late-day (1500 - 1800) time periods were chosen to survey these transects. All possible species of plants and animals listed by state and federal agencies were noted. Concurrently, notes for FLUCCS mapping purposes were kept.

IV Results & Discussions

Listed Flora

None found

See Item #3 - FLUCCS Plant List

Listed Fauna

None found

See Item #4 - Wildlife Species Observed

Conclusions

Focused searches were conducted over five days. Transects were walked on straight compass bearings along a grid spaced at approximately 10 yards apart for the entire parcel. Other transects were primarily meandering transects through areas of prime habitat. All transects were walked at varying times from post-dawn & mid-day to presunset hours.

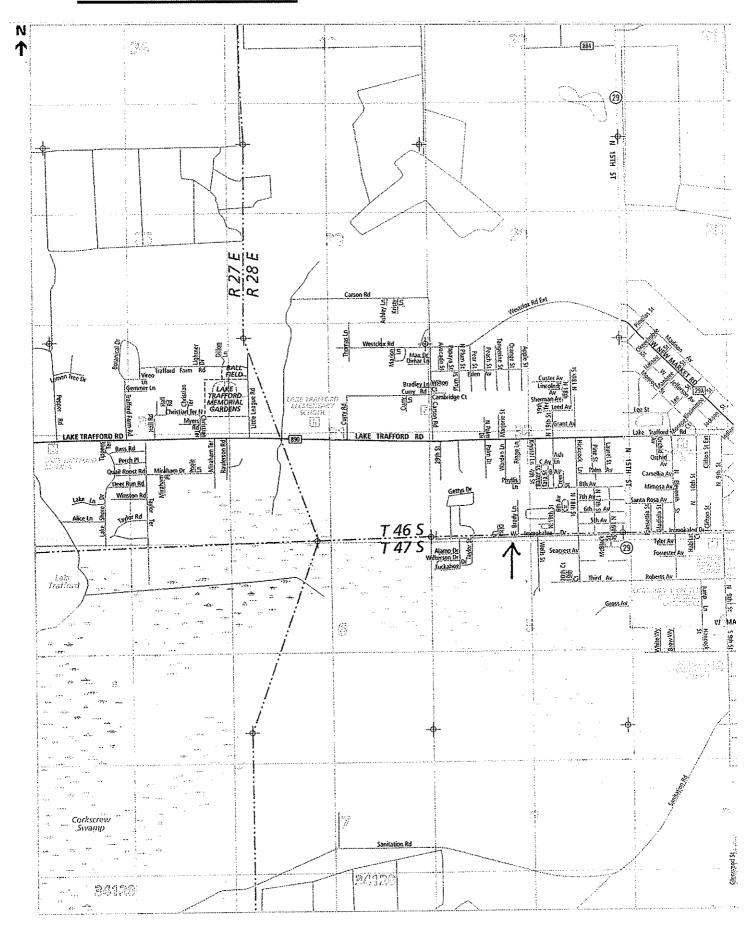
This parcel is bordered by a paved road to the south and near by single family homes. The subject parcel is located in the urban area. The heavy traffic patterns and associate noise has a limiting factor on this parcel as suitable habitat. In addition, the parcel was used as a cattle operation. The site consists of a single family home, pasture and a small wetland. The wetland, through historical aerials, was excavated for a cattle watering hole. This wetland offered the "best" habitat on site. The wetland is primarily vegetated with Carolina and primrose willow. The primary vertebrates encountered were birds traversing the subject parcel. The main species encountered were cattle egrets.

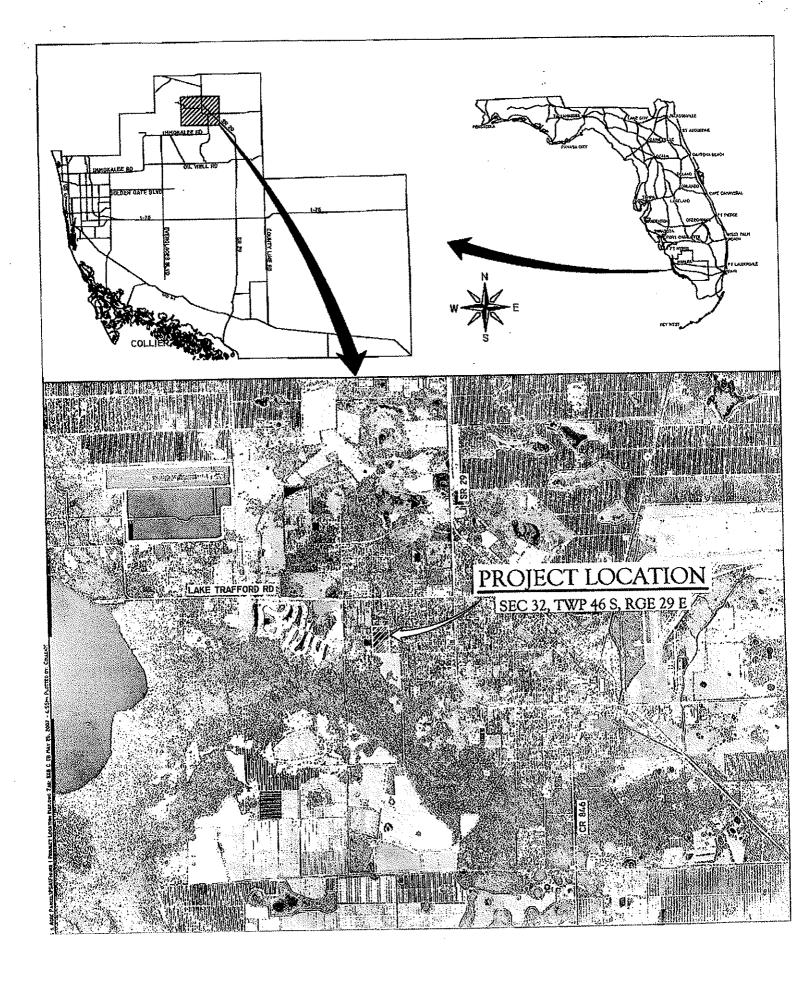
Our survey has found no listed vertebrate species on this site.

Threatened, Endangered and Species of Special Concern

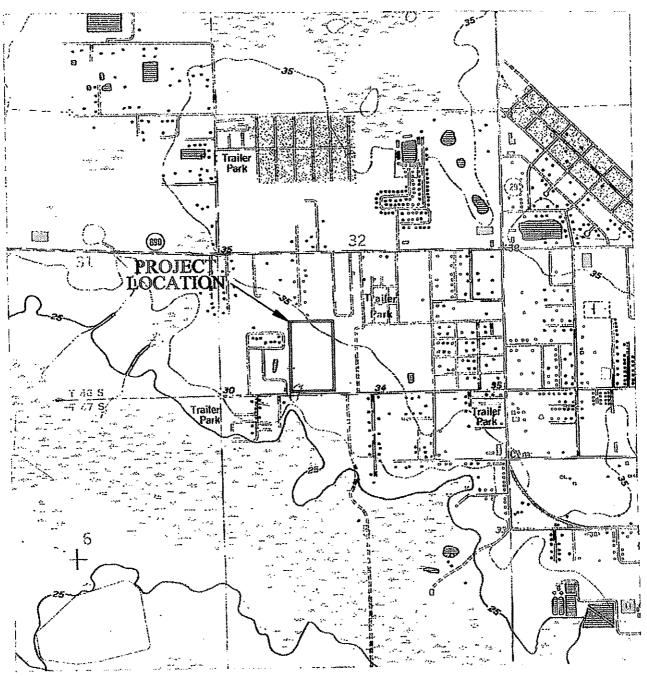
Species	Present	Absent
Black bear		X
Florida panther		X
Everglades mink		X
Big Cypress Fox squirrel		X
Indigo snake		X
American alligator		X
Gopher tortoise		X
Gopher Frog		X
Southeastern American kestr	el	x
Red-Cockaded woodpecker		X
Florida Scrub Jay		X
Wood stork		x
Snail kite		x
Bald eagle		x
Limpkin		X
osprey		X
White ibis		x
Tricolored heron		X
snowy egret		X
Reddish egret		X
Little blue heron		X

LOCATION MAP





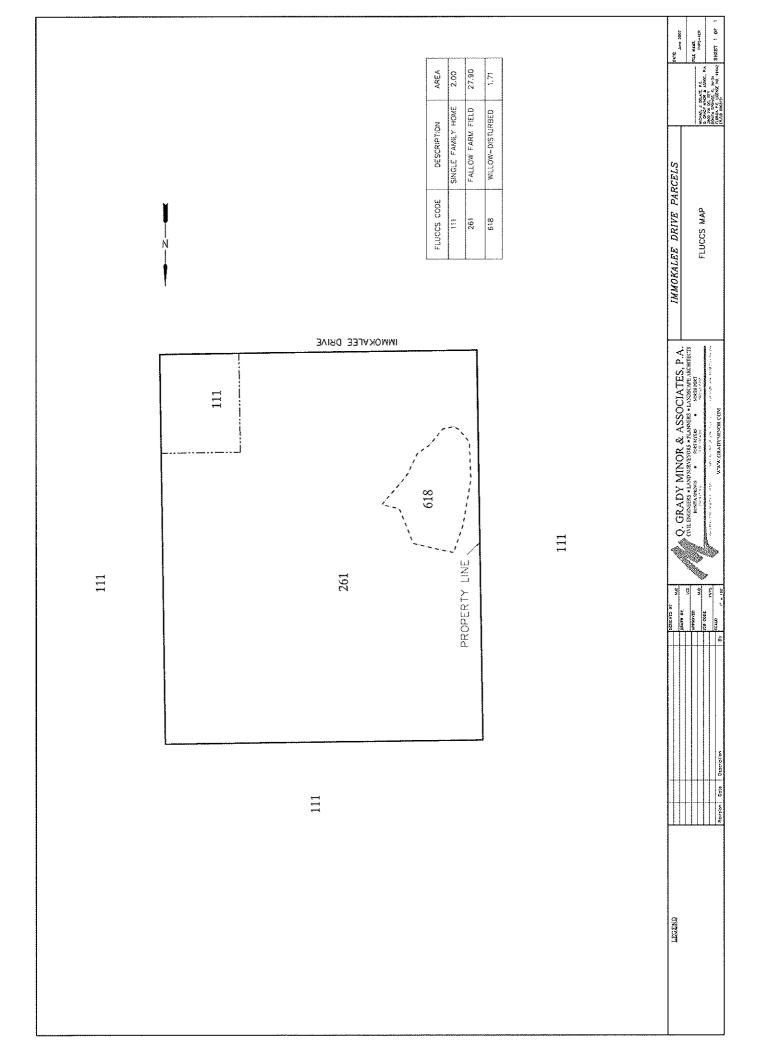


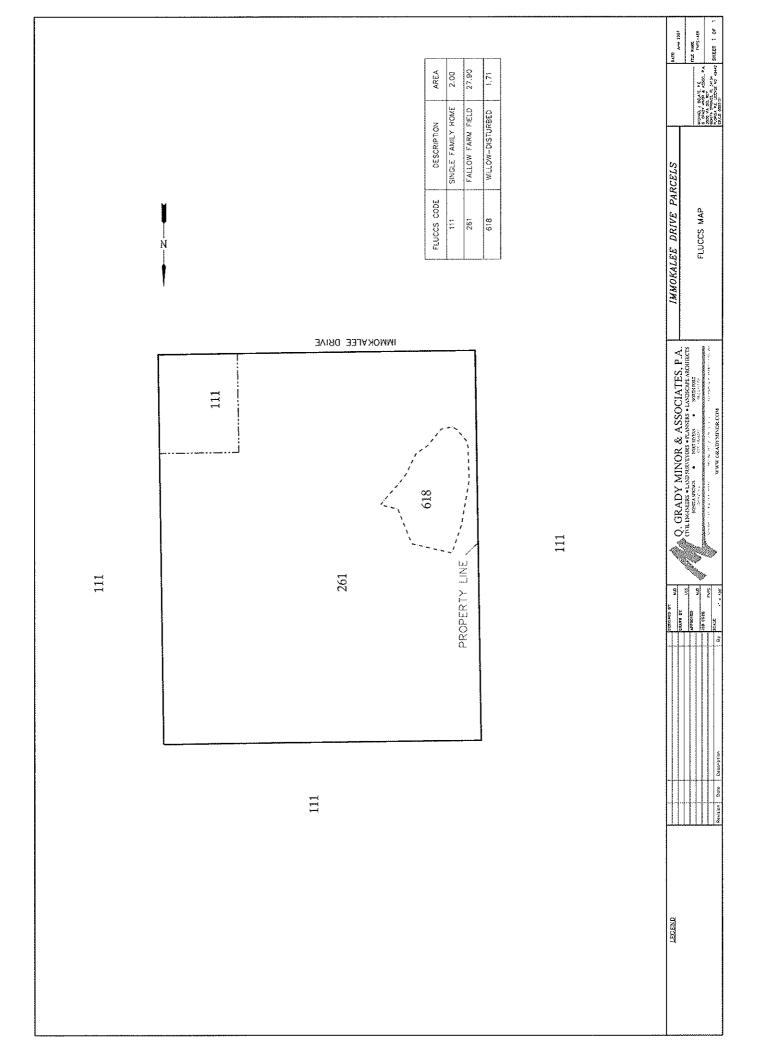


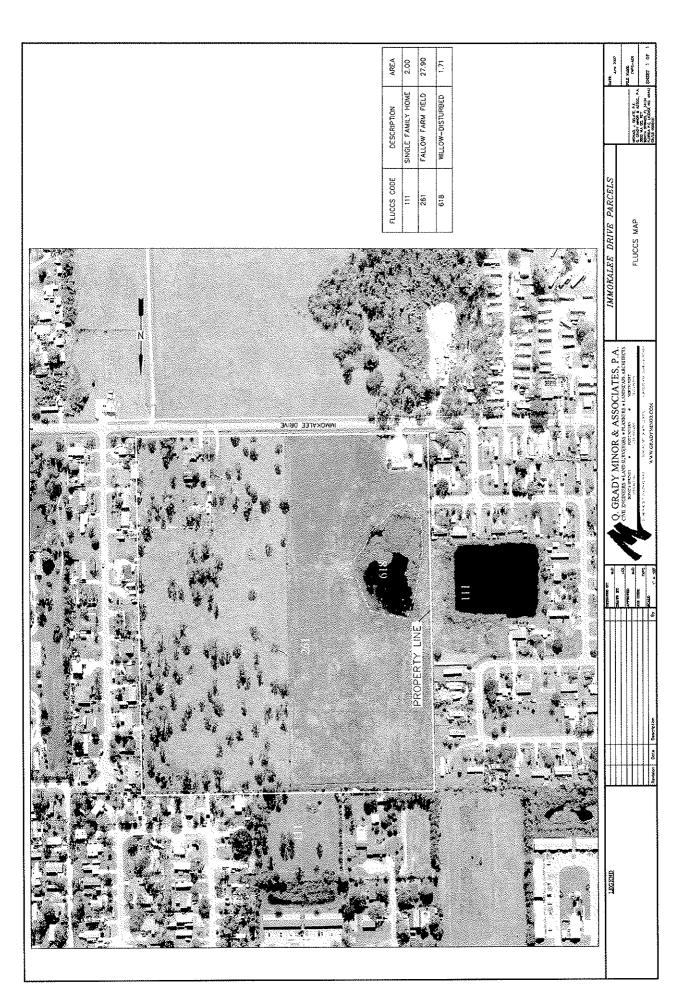
NOTE:

QUAD SHEET SCANNED FROM FORT MYERS USGS QUAD SHEET PHOTOREVISED 1987.

PROPERTY BOUNDARY ESTIMATED FROM THE COLLIER COUNTY PROPERTY APPRAISER'S GIS WEBSITE.







FLUCCS CODE AND VEGETATION INVENTORY

FLUCCS CODE

(Description)

Common Name

Scientific Name

Indicator Status

111 Single Family House

This designation is for established single family homes. In addition to the primary structure there are other associated impacts. These include but not limited to such things as: Garden/ Tool sheds, extra cars, boats, vegetable gardens.

261 Fallow Farm Field Uplands

This are consists of a fallow farm field. This habitat encompasses the largest habitat type of this project site. The area has secondary growth such as Slash pines and cabbage palms. The area is dominated with Bahiagrass. This area is surrounded with a ditch and furrows bisect this area.

Slash Pine	Pinus elliotti	FACW	Cp,O
Cabbage Palm	Sabal palmetto	FAC	M,O
Live oak	Quercus virginiana	FACU	M,C
Brazilian pepper	Schinus terebinthifolius	Exotic	M,O
Winged Sumac	Rhus copallina	UPL	M,O
Wax myrtle	Myrcia cerifera	FAC+	M,O
Gallberry	Ilex glabra	FACW	M,O
buckthorn	Bumelia reclinata	FAC	M,O
Fetterbush	Lyonia lucida	FACW	M,O
Palmetto	Serona repens	FACU	G,O
Broom sedge	Andropogon virginicus	FAC-	G,C
Blue Maidencane	Amphicarpum muhlenbergianum	FACW	G,C
Beak rush	Rhynchospora microcarpa	FACW+	G,C
Knotgrass	Setaria geniculata	FAC	G,C
Caesar weed	Urena lobata	FACU	G,C
Bahiagrass	Paspalum notatum	FACU	G,D
blackroot	Pterocaulon virgatun	FAC	G,O
Ragweed	Ambrosia artemissiifolia	FACU	$_{G,C}$
Paw-paw	Asimina reticulata	UPL	G,O
Whitehead broom	Spermacoce verticillata	UPL	$_{G,C}$
umbrella sedge	Cyperus ligularis	FACW	G,O
sedge	Cyperus globulosus	FAC	G,O
Wire grass	Aristida stricta	FAC-	G,O
Dog Fennel	Eupatorium capillifolium	FACU	G,C
Toad flax	Linaria Canadensis	UPL	G,C

Smutgrass	Sporobolius indicus	FACU	G,C
Cudweed	Gnaphalium falcatum	UPL	G,C

618 Willow-Disturbed

Wetland

This area is located towards the western end of the subject parcel. The area would be considered Jurisdictional wetlands by the regulatory agencies. The area is of poor quality mainly consisting of Carolina and primrose willow. Other associated plant species within this area are:

Carolina willow	Salix caroliniana	OBL	M,C
Primrose willow	Ludwigia peruviana	OBL	M,C
Brazilian pepper	Schinus terebinthifolius	Exotic	M,O
Swamp fern	Blechnum serrulatum	FACW+	G,O
Smartweed	Polygonum spp.	OBL	G,C
Wax myrtle	Myrcia cerifera	FAC+	M,C
Camphor weed	Pluchea rosea	FACW	G,O
Flat sedge	Cyperus ligularis	FACW	G,O
Salt bush	Baccharis halimifolia	FACW	M,C
mat lippa	Phyla nodiflora	FACW	G,O
Broom sedge	Andropogon virginicus	FAC-	G,O
Knotgrass	Setaria geniculata	FAC	G,C
Blue Maidencane	Amphicarpum muhlenbergianum	FACW	G,C
Beak rush	Rhynchospora microcarpa	FACW+	G,O
Button Bush	Cephalanthus occidentalis	OBL	G,O
Dog Fennel	Eupatorium capillifolium	FACU	$_{G,C}$
Rabbit tobacco	Gnaphalitum obtusifolium	UPL	$_{G,C}$
Asiatic pennywort	Centella asiatica	FACW	G,C
Bishop weed	Ptilimnium capillaceum	FACW	G,C

ABREVIATIONS -

Canopy (Cp), Midstory (M), Ground Cover (G) Dominant (D), Common (C), Occasional (O)

INDICATOR STATUS -

Obligate (OBL), Facultative wet plants (FACW), Facultative plants (FAC), Upland (UPL)

WILDLIFE SPECIES OBSERVED

Common Name Species Status

Amphibian & Reptiles:

Brown anole Anolis sagrei

Black racer Columber constrictor

Birds:

Dove- mourning Zenaida macroura

Crow, american Corvus brachyrhynchos

Boat-tailed Grackle
Common grackle
Bluejay

Quiscalus major
Quiscalus quiscula
Cyanocitta cristata

Carolina wren

Gray catbird

Northern mockingbird

Cardinal

Thryothorus ludovicianus

Dumetella carolinensis

Mimus polyglottos

Richmondena cardinalis

Mammals:

Virginia opossum <u>Didelphis virginiana</u>

Raccoon Procyon lotor

Hispid cotton rat

Nine-banded armadillo

Gray squirrel

Sigmodon hispidus

Dasypus novemcinctu

Sciurus carolininsis

ARCHAEOLOGICAL / HISTORICAL RESOURCES



CHARLIE CRIST GOVERNO KURT S. BROWNING Secretary of State

August 23, 2007

Marco Espinar Collier Environmental Consultants, Inc. 3980 Estey Ave. Naples, FL 34104 FAX: 239-263-6616

Mr Espinar.

In response to your inquiry of August 23, 2007, the Plorida Master Site File lists no previously recorded cultural resources in the following parcels:

T465, R28E, Section 32

In interpreting the results of our search, please remember the following points:

- Areas which have not been completely surveyed, such as yours, may contain unrecorded archaeological sites, unrecorded historically important structures, or both.
- As you may know, state and federal laws require formal environmental review for some projects. Record searches by the staff of the Florida Muster Site File do not constitute such a review of cultural resources. If your project falls under these laws, you should contact the Compliance Review Section of the Burcau of Historic Preservation at 850-245-6333 or at this address.

If you have any further questions concerning the Florida Master Site File, please contact us as helow.

Sincerely

Kayla Bielanski

Archaeological Data Analyst, Florida Master Site File

Division of Historical Resources

R. A. Gray Building

500 South Bronough Street

Tallahassee, Florida 32399-0250

Phone 850-245-6440, Fax: 850-245-6439

State SunCom: 205-6440

Email: fmsfile(a) dos.state.fl.us

Web: http://www.dox.state.fl.us/dlir/inst/

R. A. Gray Building • 508 South Bronough Street • Talinhassee, Florida 32399-0250 Telephone: (850) 245-5500 • Facsimile: (850) 245-6125 www.dos.state.fl.us