

ITEM 5:

Consider a 10-year update to the Four Mile Cove Ecological Preserve Management Plan (Lease No. 3577).

LOCATION:

Lee County

APPLICANT:

City of Cape Coral

STAFF REMARKS:

Background

The Four Mile Cove Ecological Preserve (FMCEP) is comprised of approximately 365 acres of land located along the northwestern shore of the Caloosahatchee River in the City of Cape Coral. FMCEP is the second largest preserved green space within Cape Coral, providing residents access to walking trails, a visitor center, the Veterans Memorial Area and seasonal kayak rentals to explore scenic southwest Florida coastal habitats.

FMCEP was purchased in August of 1977 from GAC Properties, Inc. by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (BOT) as a wilderness area under Chapter 258, Florida Statutes (F. S.) and has been maintained by Cape Coral as a natural preserve and park for 40 years.

Management Plan Overview

FMCEP is one of the largest remaining natural wetland areas within Cape Coral and is the only natural wetland area open for public enjoyment in the city. FMCEP is also one of the only preserves in the area where visitors can walk into a mangrove forest and experience this unique coastal environment up-close, without the need for a boat. It is home to one of the few remaining needle rush (*Juncus roemerianus*) marshes in southwest Florida. FMCEP is also the home of the Veteran's Memorial Park, which pays tribute to U.S. armed service men and women through the years. FMCEP is located adjacent to Veteran's Memorial Parkway and the Midpoint Bridge providing convenient access for visitors and residents. Kayak rental and launch facilities at FMCEP allow patrons to explore winding creeks and mature mangrove forests. The unique environmental and geographical characteristics of FMCEP have led to its incorporation into the Great Calusa Blueway paddling trail, which provides canoe and kayak routes through scenic areas of Bonita, Cape Coral, Estero, Fort Myers, and Pine Island.

FMCEP is a brackish water wetland preserve that features an elevated boardwalk, gravel walking trails, visitor center, Veterans Memorial Area, picnic area, kayaking and seasonal kayak rentals. The visitor center includes 26 paved parking spaces, two restrooms, and access to the walking trail and fishing piers within the southeastern portion of the preserve. The kayak rental facility is located along the western boundary of the preserve and includes five paved parking spaces and about 20 unpaved parking spots. This area provides canoe and kayak access to meandering canals and waterways within the preserve, terminating at the Caloosahatchee River. The City recently allocated \$11,378 to update the kayak rental shack. The update provides secure, covered storage for the kayaks protecting them from the elements. The park offers guided tours, veteran

ceremonies, hiking, kayaking, fishing, bird watching, geocaching, wildlife observation and educational opportunities.

The Division of Historical Resources maintains a Master Site File that documents many of Florida’s archaeological and historical features. A review of information obtained from the Florida Master Site File disclosed there are no known archaeological resources associated with Four Mile Cove Ecological Preserve.

The Florida Legislature requires that all land management plans include long and short-term (ST) goals. These goals must be measurable objectives, and ST goals must be achievable within a two-year planning period. Pursuant to Section 253.034, F. S., the Division of State Lands tracks the status of ST goals in each land management plan approved since July 1, 2016. The ST goals from this management plan are included as part of this item.

Public Involvement

Advisory group meetings to discuss stakeholder input were held on May 19, 2017, February 5, 2018, March 14, 2018, April 5, 2019, and May 19, 2019. Upon incorporation of comments received from the advisory group meetings a first draft of the plan for FMCEP was prepared for public input. A public hearing was held on August 21, 2020 at Cape Coral Council Chambers, Cape Coral, Florida.

Surplus Lands

The evaluation of this site has determined that no portion of the Four Mile Cove Ecological Preserve is to be declared surplus.

State Land Management Review Team

This property has not been subject to a recent review by an inter-agency land management review team.

STAFF RECOMMENDATION:

Approve the management plan.

ARC RECOMMENDATION:

- APPROVE**
- APPROVE WITH MODIFICATIONS:** _____
- DEFER**
- WITHDRAW**
- NOT APPROVE**
- OTHER:** _____

Four Mile Cove Eco Preserve

Land Management Plan Short Term Goals

Goal (ST)	Details of Goal	Objective	Details of Objective	Action	Measure
5.1	Habitat restoration and improvements	5.1.1	Exotic Vegetation Removal	The treatment and removal of Brazilian pepper from the uplands of the park and the leather fern marsh and needle rush marshes, reducing coverage of Brazilian pepper and other exotics to less than five percent within these habitats over the next two years.	Less than 5 percent over the next 2 years.
5.1	Habitat restoration and improvements	5.1.2	Prescribed Burning	Prescribed burning within FMCEP is to develop a prescribed burn plan within the next two years. The prescribed burn plan would be developed in accordance with F.S. Chapter 590 – Forest Protection with assistance from FFS.	Developed burn plan within 2 years.
5.4	Capital facilities and infrastructure.	5.4.1	Facilities and Infrastructure	Conducting feasibility studies for the new environmental center in the southwest corner of the property and shell pathway along the north side of SE 24th Street.	Feasibility studies conducted.
5.4	Capital facilities and infrastructure.	5.4.2	Facilities and Infrastructure	Repair and replacement of educational signage damaged by vandalism or natural causes.	Signage repaired or replaced.

Goal (ST)	Details of Goal	Objective	Details of Objective	Action	Measure
5.4	Capital facilities and infrastructure.	5.4.3	Facilities and Infrastructure	Repair or replacement of boardwalk areas damaged by Hurricane Irma.	Boardwalk repaired or replaced.
5.4	Capital facilities and infrastructure	5.4.4	Facilities and Infrastructure	Repair or replacement of the floating docks within Four Mile Cove that were damaged by Hurricane Irma.	Floating docks repaired or replaced.

Source: Florida DEP, Office of Environmental Services, Revised Sept_2019_MWE.

Four Mile Cove Ecological Preserve - Land Management Plan Executive Summary

Lead Agency: City of Cape Coral

Location: City of Cape Coral, Lee County

Common Name of the Property: Four Mile Cove Ecological Preserve (FMCEP)

Acreage: 387.45 (Lee Co. Prop. Appraiser) 387.46 (GIS Calculated)

Land Use and Coverage Summary:

FLUCFCS Code	Description	Aprox. Area in acres
185	Parks and Zoos	4.91
511	Natural river, stream, waterway	47.15
612	Mangrove swamps	257.58
642	Saltwater marsh - Leather fern	3.21
6422	Saltwater marsh -Needlerush	68.49
743	Spoil Areas	6.12
TOTAL		387.46

Date Obtained: August 12, 1977 – Warranty Deed with Restrictions

Use: Ecological preserve, recreation, memorial park, and others.

Management Responsibilities: City of Cape Coral

Designated Land Use: Preservation (PV)

Subleases: None

Contracts: None

Encumbrances: None

Type Acquisition: Warranty Deed

Unique Features: FMCEP provides access to several unique habitats including mangrove swamp and needlerush marsh. The park provides habitat for gopher tortoises, West Indian manatee, smalltooth sawfish, and wading birds along with several plant and animal species listed in the FNAI Biodiversity Index as “Likely” or “Potential” occupants of the area. FMCEP provides access to kayak trails through native mature wetlands and holds ceremonies and celebrations at the Veteran’s Memorial area.

Archaeological / Historical: Communication with the Florida Department of State, Division of Historical Resources indicates that there are no known historical or archaeological resources within the FMCEP.

Management Needs: Current land management needs include increased management of invasive exotic species such as Brazilian pepper, melaleuca and torpedo grass, along with the preparation of a prescribed burn plan. Additionally, damaged boardwalks need maintenance and replacement in some areas.

Potential Acquisition Needs: Vacant land located adjacently north of FMCEP is comprised of valuable uplands, wetlands, and aquatic habitat. This site offers additional opportunities to preserve sensitive mangrove and needlerush habitats, and its acquisition or preservation would benefit FMCEP and the residents of Cape Coral. However, no formal or informal investigation into the acquisition of this property has been made.

Surplus Lands: No portion of FMCEP is considered as surplus Land.

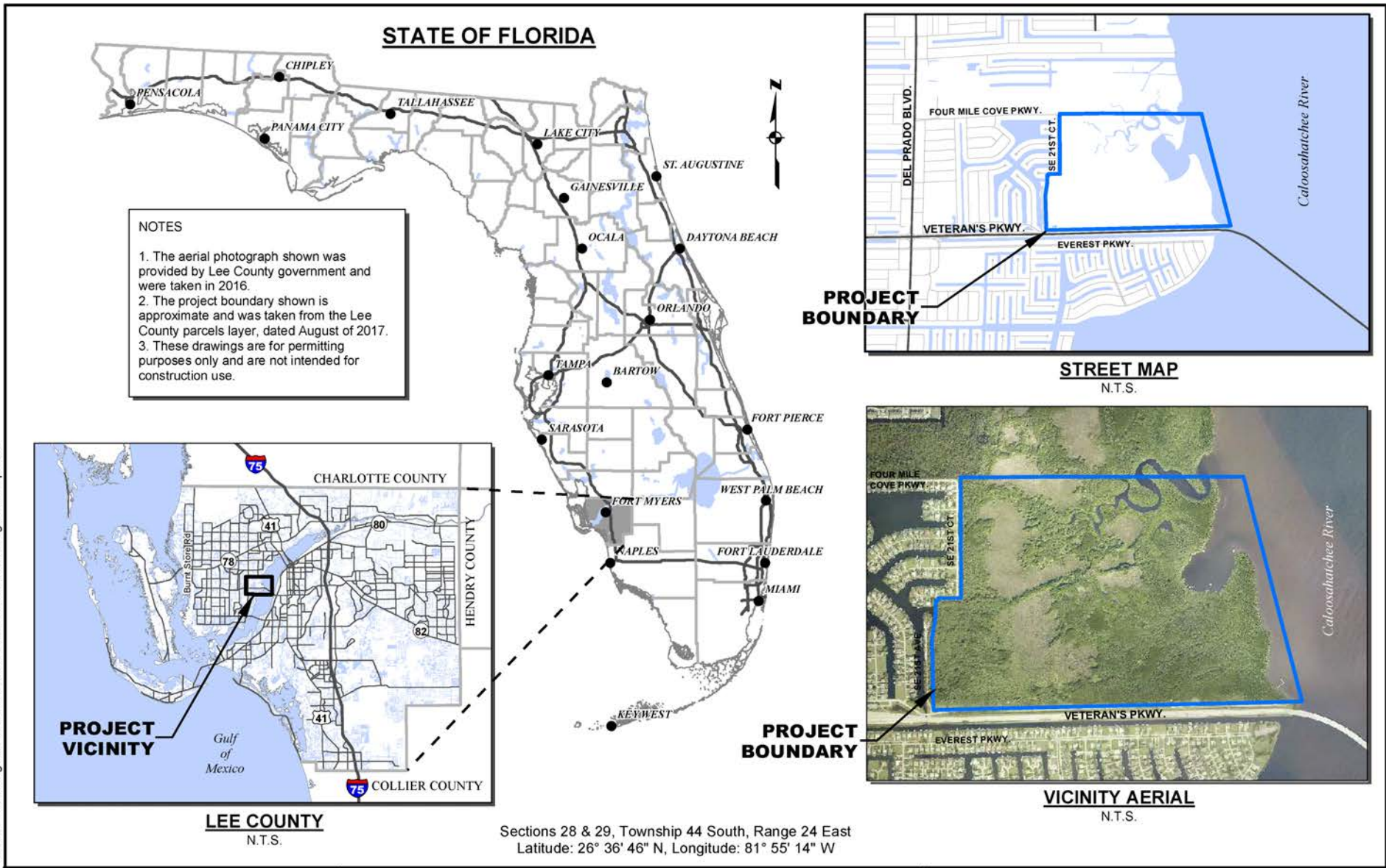
Public Involvement: Advisory group meetings and one public hearing were held in Cape Coral, Lee County.

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)

ARC Approval Date _____ BTIITF Approval Date: _____

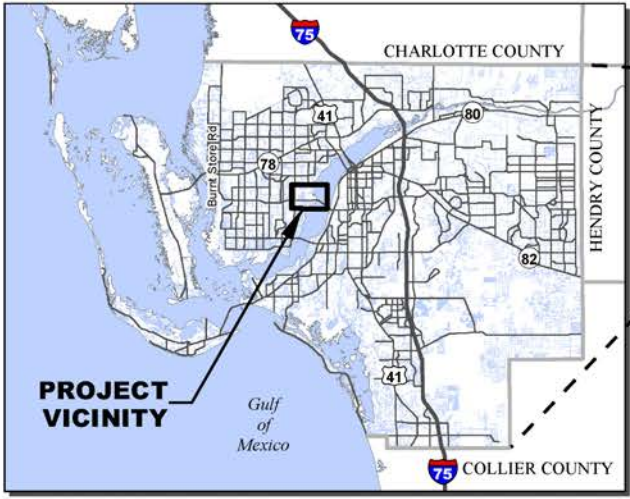
Comments:

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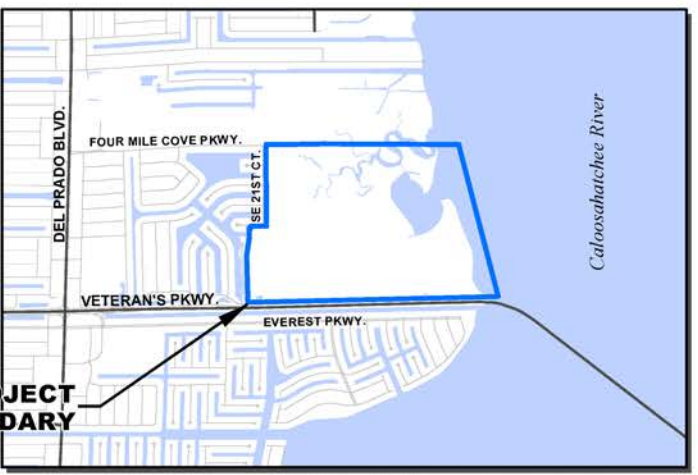
NOTES

1. The aerial photograph shown was provided by Lee County government and were taken in 2016.
2. The project boundary shown is approximate and was taken from the Lee County parcels layer, dated August of 2017.
3. These drawings are for permitting purposes only and are not intended for construction use.



LEE COUNTY
N.T.S.

Sections 28 & 29, Township 44 South, Range 24 East
Latitude: 26° 36' 46" N, Longitude: 81° 55' 14" W



PROJECT BOUNDARY
STREET MAP
N.T.S.



PROJECT BOUNDARY
VICINITY AERIAL
N.T.S.

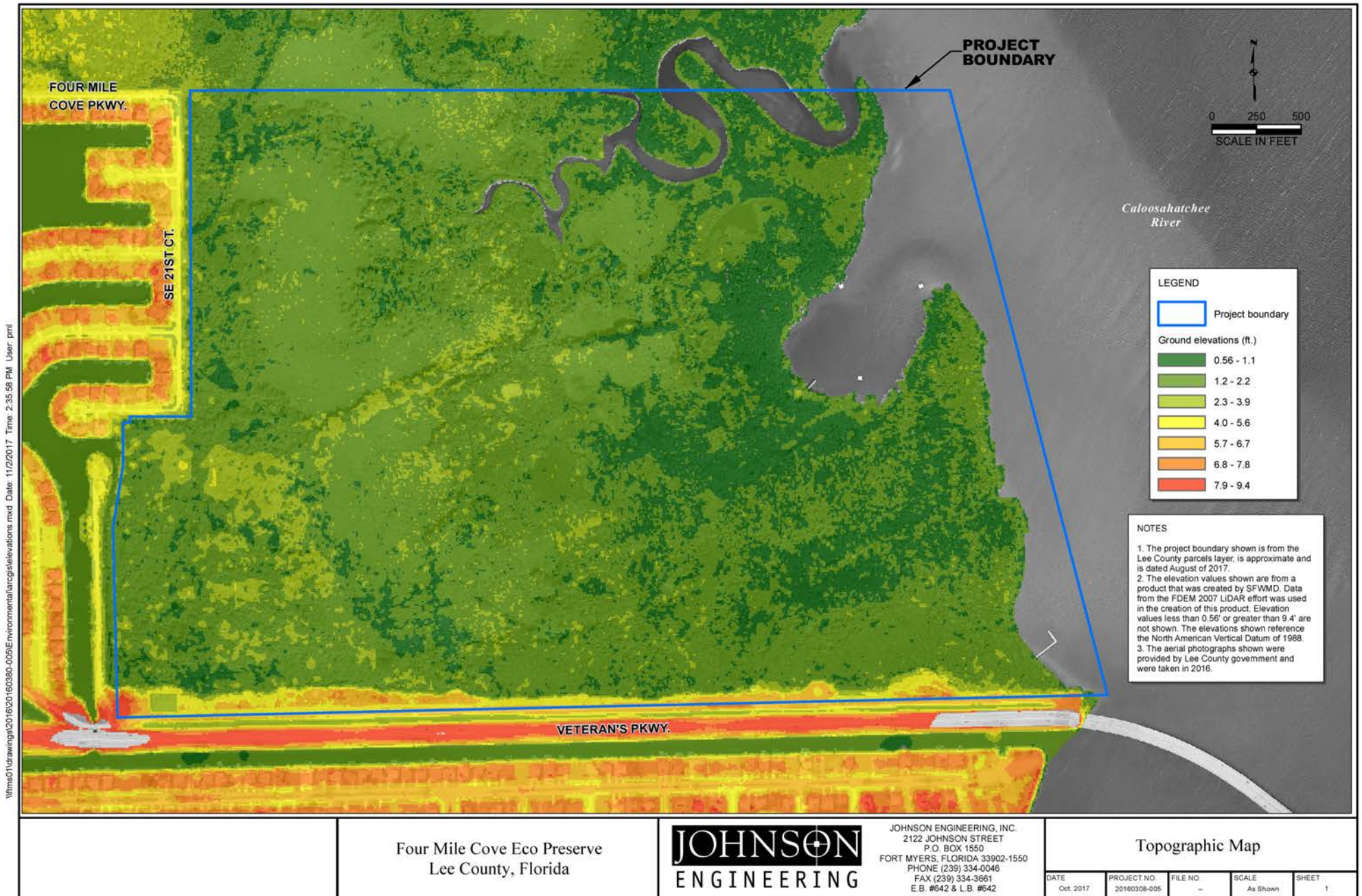
Fourmile Cove Eco Preserve
Lee County, Florida



JOHNSON ENGINEERING, INC.
2122 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

Location Map

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
Oct. 2017	20160308-005		N/A	1



Four Mile Cove Eco Preserve
Lee County, Florida

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ENGINEERING

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Topographic Map

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
Oct 2017	20160308-005	-	As Shown	1



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LEGEND

- Project boundary
- Soils polygons
- Hydric soils

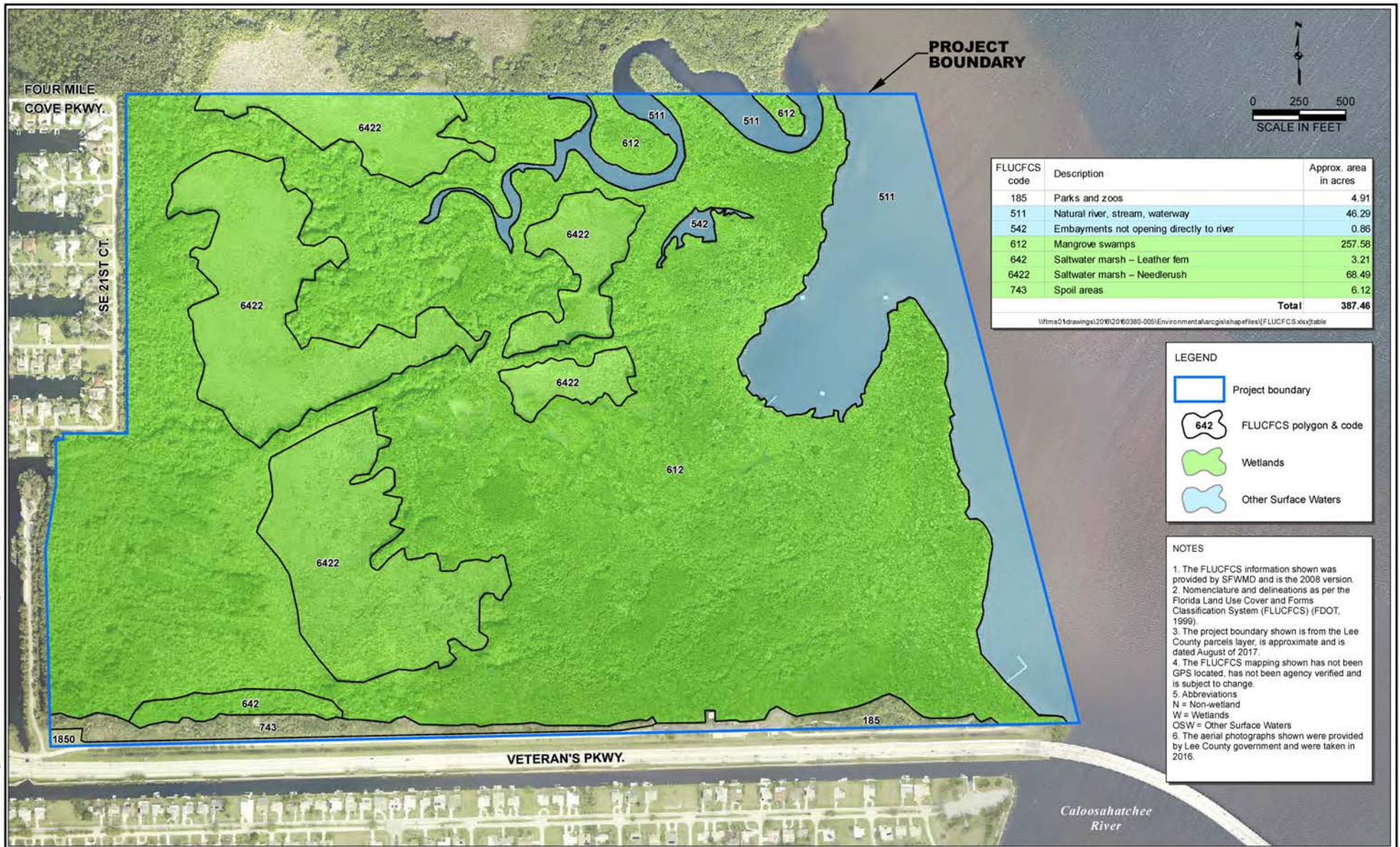
NOTES

1. The soils information shown was provided by Florida Geographic Data Library.
2. The project boundary shown is from the Lee County parcels layer, is approximate and is dated August of 2017.
3. The aerial photographs shown were provided by Lee County government and were taken in 2016.

Soil ID	Description	Hydric status	Approx. area in acres
23	Wulfert muck	Hydric	279.47
24	Kesson fine sand	Hydric	52.01
33	Oldsmar sand	Non-hydric	10.19
69	Matlacha gravelly fine sand	Non-hydric	4.40
99	Water	N/A	41.38
Total			387.45

soils table.xlsx

Four Mile Cove Eco Preserve Lee County, Florida		JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE (239) 334-0046 FAX (239) 334-3661 E.B. #642 & L.B. #642	Soils Map	
DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
Oct 2017	20160308-005	-	As Shown	2



FLUCFCS code	Description	Approx. area in acres
185	Parks and zoos	4.91
511	Natural river, stream, waterway	46.29
542	Embayments not opening directly to river	0.86
612	Mangrove swamps	257.58
642	Saltwater marsh – Leather fern	3.21
6422	Saltwater marsh – Needlegrass	68.49
743	Spoil areas	6.12
Total		387.46

LEGEND

- Project boundary
- 642 FLUCFCS polygon & code
- Wetlands
- Other Surface Waters

NOTES

- The FLUCFCS information shown was provided by SFWMD and is the 2008 version.
- Nomenclature and delineations as per the Florida Land Use Cover and Forms Classification System (FLUCFCS) (FDOT, 1999).
- The project boundary shown is from the Lee County parcels layer, is approximate and is dated August of 2017.
- The FLUCFCS mapping shown has not been GPS located, has not been agency verified and is subject to change.
- Abbreviations
N = Non-wetland
W = Wetlands
OSW = Other Surface Waters
- The aerial photographs shown were provided by Lee County government and were taken in 2016.

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Four Mile Cove Eco Preserve Lee County, Florida		JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE (239) 334-0046 FAX (239) 334-3661 E.B. #642 & L.B. #642	FDEP Habitat Mapping	
DATE Nov. 2017	PROJECT NO 20160308-005	FILE NO -	SCALE As Shown	SHEET 3



LEGEND

- Existing park boundary
- Optimal park acquisitions

Status	Map ID	STRAP No.	Folio No.	Owner	Acreage (approx.)
Existing		28-44-24-C4-00001.0000	10176917	TIITF State of Florida	387.45
Potential Acquisition	A	29-44-24-C2-00001.0070	10556831	Ripple Lake LLC	22.33
	B	28-44-24-C1-00002.0000	10176918	Ripple Lake LLC	88.29
	C	28-44-24-C1-00002.0020	10508287	Ripple Lake LLC	10.00
Potential Acquisition Sub-Total					120.62
Total Potential Preserve					508.07

NOTES

- The existing park boundary, optimal park acquisitions and other parcel information are from the Lee County parcels layer, are approximate, and are dated March of 2019.
- The aerial photographs shown were provided by Lee County government and were taken in 2019.

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Four Mile Cove Eco Preserve Lee County, Florida		JOHNSON ENGINEERING, INC. 2122 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE (239) 334-0046 FAX (239) 334-3661 E.B. #642 & L.B. #642	Optimal Boundary Map	
DATE Aug. 2019	PROJECT NO. 20160308-005	FILE NO. -	SCALE As Shown	SHEET 1