PALENCIA

Section 3, Township 39 South, Range 19 East Sarasota County, Florida

Ecological Narrative for the City of Venice

September 2019

Prepared for:

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INTRODUCTION

The $80.01\pm$ acre project is located within a portion of Section 3, Township 39 South, Range 19 East, Sarasota County, Florida (Figure1). The property consists of two parcels (PID 0339-01-0001 0001 and 0399-09-0001). The main parcel is bordered by Border Road to the north, Jacaranda Boulevard to the east, Ewing Drive to the south, and North Clermont Road to the west. The second parcel is bordered by Ewing Drive to the north, Jacaranda Boulevard to the east, the Curry Creek Canal to the south, and single family homes on large lots to the west.

SITE CONDITIONS

Two large borrow pits were excavated on the main parcel prior to 1985. This parcel is also bisected by an FPL easement. A storm water treatment pond constructed by the County, and contained within a drainage easement, is located adjacent to Border Road east of the FPL Easement. The second parcel also includes a portion of a borrow pond that extends off-site to the west.

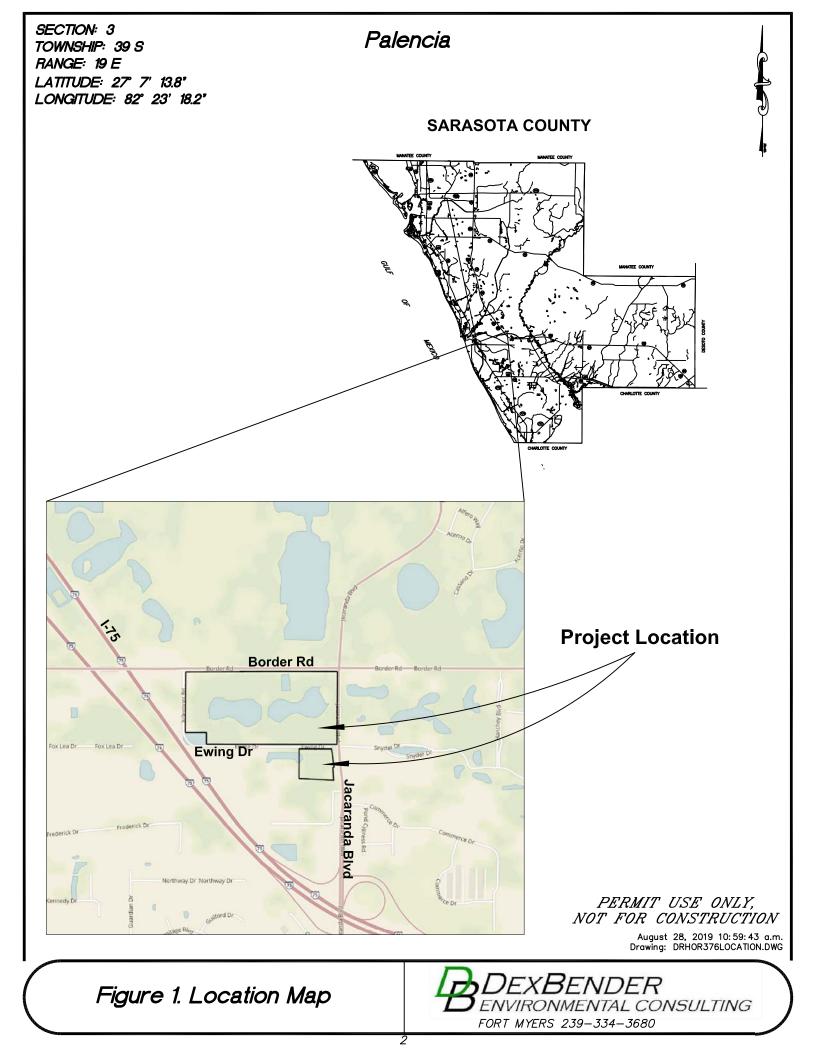
As part of the expansion of Border Road, both the Southwest Florida Water Management District (SWFWMD) and U.S. Army Corps of Engineers (COE) issued permits requiring that a 1.57± acre "mitigation/floodplain compensation area" be created south of Border Road just east of the power line. Based on a review of historical aerials, the wetland was created in late 2005 or early 2006.

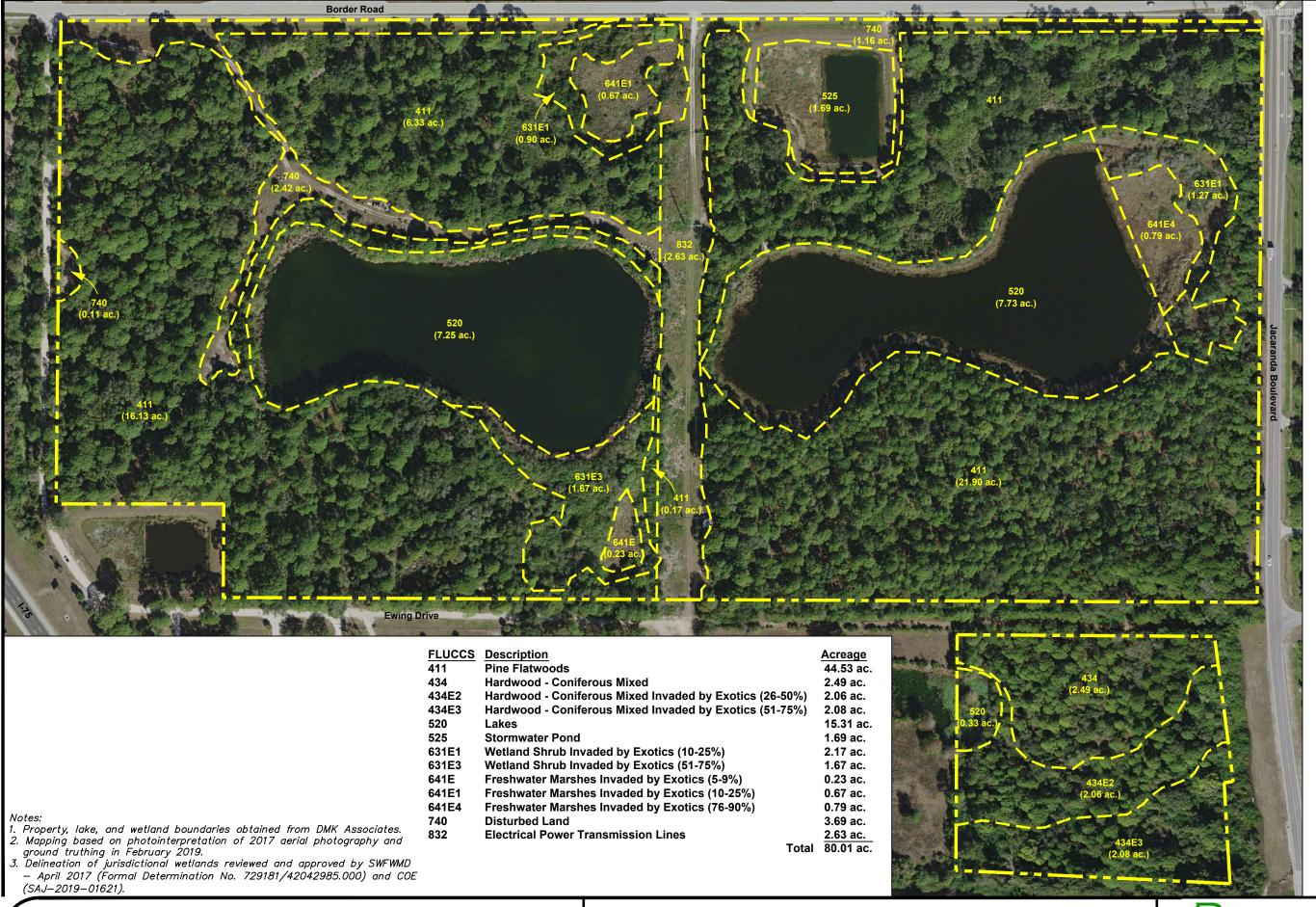
VEGETATIVE CLASSIFICATIONS

The predominant vegetation associations were mapped in the field on 2017 digital 1" = 200' scale aerial photography. The property boundary was obtained from DMK Associates and inserted into the digital aerial. Twelve vegetation associations were identified using the Florida Land Use, Cover and Forms Classification System (FLUCCS). Figure 2 depicts the approximate location and configuration of these vegetation associations and Table 1 summarizes the acreages by FLUCCS Code. A brief description of each FLUCCS Code is also provided below.

FLUCCS CODE	DESCRIPTION	ACREAGE
411	Pine Flatwoods	44.53
434	Hardwood - Coniferous Mixed	2.49
434E2	Hardwood - Coniferous Mixed Invaded by Exotics (26 – 50%)	2.06
434E3	Hardwood - Coniferous Mixed Invaded by Exotics (51 – 75%)	2.08
520	Lakes	15.31
525	Stormwater Pond	1.69
631E1	Wetland Shrub Invaded by Exotics $(10 - 25\%)$	2.17

 Table 1. Acreage Summary by FLUCCS Code





FLUCCS	Description	Acreage
411	Pine Flatwoods	44.53 ac.
434	Hardwood - Coniferous Mixed	2.49 ac.
434E2	Hardwood - Coniferous Mixed Invaded by Exotics (26-50%)	2.06 ac.
434E3	Hardwood - Coniferous Mixed Invaded by Exotics (51-75%)	2.08 ac.
520	Lakes	15.31 ac.
525	Stormwater Pond	1.69 ac.
631E1	Wetland Shrub Invaded by Exotics (10-25%)	2.17 ac.
631E3	Wetland Shrub Invaded by Exotics (51-75%)	1.67 ac.
641E	Freshwater Marshes Invaded by Exotics (5-9%)	0.23 ac.
641E1	Freshwater Marshes Invaded by Exotics (10-25%)	0.67 ac.
641E4	Freshwater Marshes Invaded by Exotics (76-90%)	0.79 ac.
740	Disturbed Land	3.69 ac.
832	Electrical Power Transmission Lines	2.63 ac.
	Total	80.01 ac.



Figure 2. Vegetation Map

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FLUCCS CODE	DESCRIPTION	ACREAGE
631E3	Wetland Shrub Invaded by Exotics (51 – 75%)	1.67
641E	Freshwater Marshes Invaded by Exotics (5 – 9%)	0.23
641E1	Freshwater Marshes Invaded by Exotics $(10 - 25\%)$	0.67
641E4	Freshwater Marshes Invaded by Exotics (76 – 90%)	0.79
740	Disturbed Land	3.69
832	Electrical Power Transmission Lines	2.63
	Total	80.01

Table 1. Acreage Summary by FLUCCS Code (continued)

Uplands

FLUCCS Code 411, Pine Flatwoods

The majority of the property consists upland pine flatwoods vegetated by slash pine (*Pinus elliottii*), live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), and cabbage palm (*Sabal palmetto*) in the canopy and midstory. Species such as wax myrtle (*Myrica cerifera*), staggerbush (*Lyonia* sp.), and gallberry (*Ilex glabra*) are present in the shrub strata. Saw palmetto (*Serenoa repens*) dominates the ground cover. Additional ground cover species include pawpaw (*Asimina* sp.), broomsedge (*Andropogon virginicus*), penny royal (*Piloblephis rigida*), grape vine (*Vitis* sp.), and greenbrier (*Smilax* sp.). Exotics, primarily Brazilian pepper (*Schinus terebinthifolius*), are also present, particularly adjacent to disturbed areas and the wetlands.

FLUCCS Code 434, Hardwood - Coniferous Mixed

This upland habitat is located on the smaller southern parcel. Slash pine and laurel oak dominate the canopy and midstory. Wild coffee (*Psychotria ligustrifolia*), greenbrier, broomsedge, and widely scattered clumps of saw palmetto are present in the ground cover.

<u>FLUCCS Code 434E2, Hardwood - Coniferous Mixed Invaded by Exotics (26 – 50%)</u> A portion of this habitat type contains a moderate density of Brazilian pepper in the midstory.

<u>FLUCCS Code 434E3, Hardwood - Coniferous Mixed Invaded by Exotics (51 – 75%)</u> In the southern portion of the smaller parcel Brazilian pepper forms a moderately dense midstory. In this area, the coverage of native shrub and ground cover species is substantially reduced.

FLUCCS Code 740, Disturbed Land

This FLUCCS Code was used to delineate previously cleared areas located outside of the powerline easement. The areas are vegetated by weedy species such as Bahia grass

(*Paspalum notatum*), broomsedge, tickseed (*Coreopsis* sp.), and whitehead broom (*Spermacoce verticillata*).

FLUCCS Code 832, Electrical Power Transmission Lines

A power line bisects the property. This FLUCCS Code was used to delineate the cleared part of the easement. (Portions of FLUCCS Codes 411, 631E1, 641E1, and 520 are also located within the easement.) The area is vegetated by species such as Bahia grass, smut grass, cogongrass (*Imperata cylindrica*), Caesar weed (*Urena lobata*), broomsedge, and tickseed.

Wetlands and Other Surface Waters

FLUCCS Code 520, Lakes

The two large lakes are primarily open water with a littoral zone vegetated by wetland species such as torpedo grass (*Panicum repens*), cattail (*Typha* sp.), and spikerush (*Eleocharis* sp.). The smaller lake on the southern parcel is dominated by water lily (*Nymphaea odorata*) with a fringe of Brazilian pepper.

FLUCCS Code 525, Stormwater Management Pond

A stormwater pond associated with Border Road is located in adjacent to Border Road east of the powerline. The pond consists of open water and a littoral zone dominated by torpedo grass and spikerush.

FLUCCS Code 631E1, Wetland Shrub Invaded by Exotics (10 – 25%)

The outer fringes of two of the wetlands on-site are dominated by shrubs with scattered trees. This includes wax myrtle, Brazilian pepper, willow (*Salix caroliniana*), cabbage palm, and slash pine. Ground cover species include frog fruit (*Phyla nodiflora*), coinwort (*Centella asiatica*), marsh pennywort (*Hydrocotyle umbellata*), torpedo grass, spikerush, beakrush (*Rhynchospora* sp.), and red ludwigia (*Ludwigia repens*).

FLUCCS Code 631E3, Wetland Shrub Invaded by Exotics (51 – 75%)

The majority of the wetland located west of the power line easement near the south property line is dominated by a dense growth of Brazilian pepper and saltbush (*Baccharis halimifolia*). Widely scattered laurel oaks are also present. Ground cover is typically sparse.

FLUCCS Code 641E, Freshwater Marshes Invaded by Exotics (5 – 9%)

This small wetland are is the central portion of the wetland located west of the power line easement near the south property line described above. The area is vegetated by spikerush, arrowhead (*Sagittaria* sp.), pickerel weed (*Pontederia cordata*), smartweed (*Polygonum* sp.), and cattail.

FLUCCS Code 641E1, Freshwater Marshes Invaded by Exotics (10 – 25%)

The central portion of the wetland located adjacent to Border Road is vegetated by species such as spikerush, fireflag (*Thalia geniculata*), primrose willow (*Ludwigia*)

peruviana), water-hyssops (*Bacopa caroliniana*), and climbing hemp weed (*Mikania scandens*). Scattered sand cordgrass (*Spartina bakeri*) and smartweed are also present.

<u>FLUCCS Code 641E4, Freshwater Marshes Invaded by Exotics (76 – 90%)</u> The marsh located at the east end of the eastern lake is dominated by torpedo grass. Scattered spike rush, smartweed, pickerelweed, and wax myrtle are also present.

The SWFWMD established the limits of the three borrow pits and three wetlands on-site via formal wetland determination number 729181/42042985.000 in 2017. That jurisdictional determination identified 15.32± acres of surface waters and 5.53± acres of wetlands on the property (Figure 3). (The stormwater pond parcel was not included in the delineation.) The COE issued a Jurisdictional Determination and No Permit Required letter (SAJ-2019-01621) in July 2019 verifying the only COE jurisdictional waters on the property is a 1.57 acre wetland located along Border Road just east of the power line.

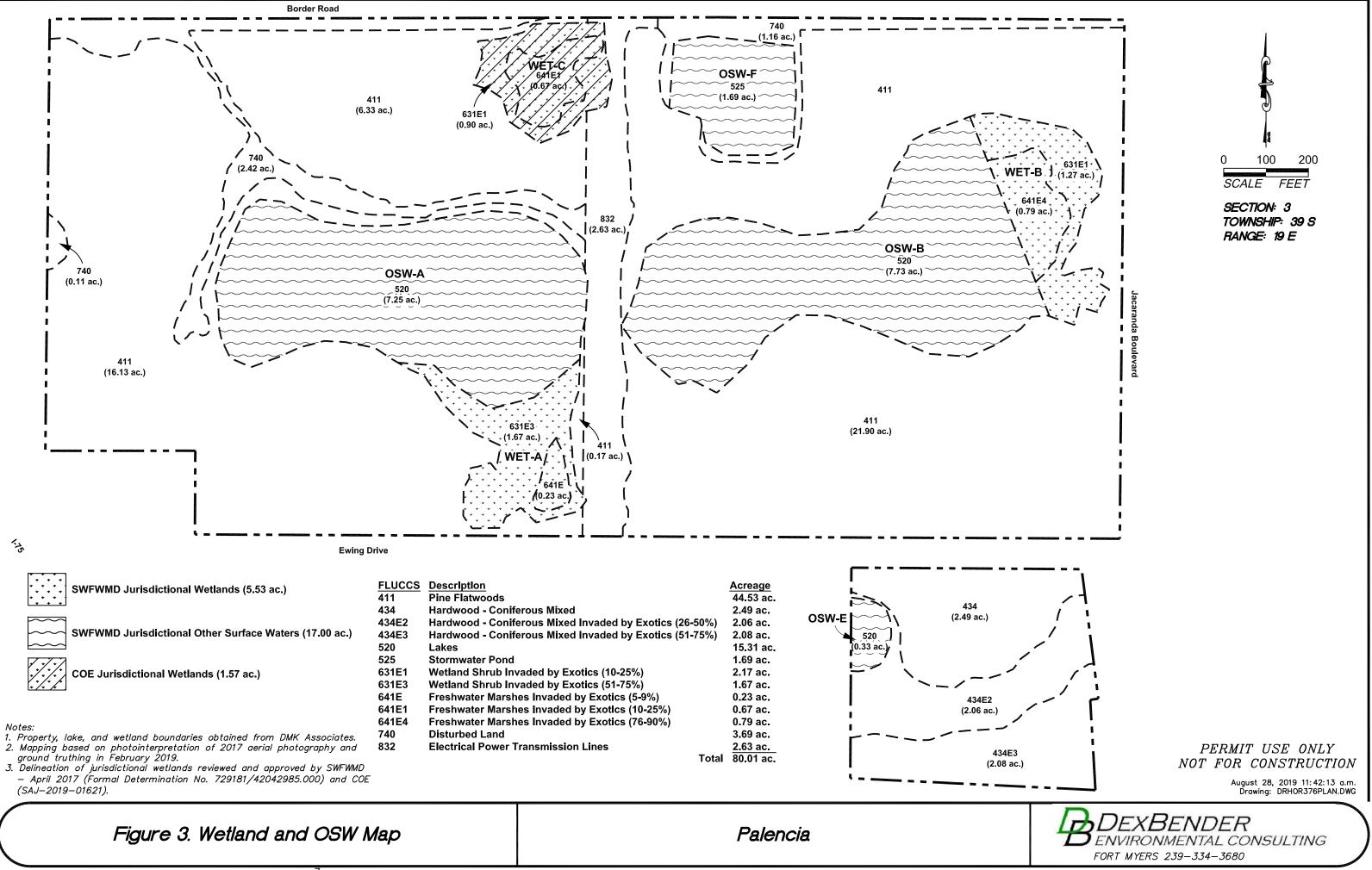
LISTED SPECIES

Based on the general habitat types (FLUCCS Codes) identified on-site there is a potential for a limited number of species listed as endangered, threatened, or species of special concern by the Florida Fish and Wildlife Conservation Commission (FWC) or the United States Fish and Wildlife Service (FWS) to potentially occur on the subject parcel. These species include gopher tortoise (*Gopherus polyphemus*), American alligator (*Alligator mississippiensis*), eastern indigo snake (*Drymarchon corais couperi*), red-cockaded woodpecker (*Picoides borealis*), Florida scrub jay (*Aphelocoma coerulescens coerulescens*), and a variety of wading birds. The bald eagle (*Haliaeetus leucocephalus*), which has been delisted by the FWC and FWS, is still protected by other regulations and was therefore also considered.

A search of the FWC listed species database (updated in June 2018) was conducted to determine the known occurrence of listed species in the project area. This search revealed no known protected species occurring on or immediately adjacent to the site. Sarasota County has created a list of 77 properties (by PID) that require a FWS review for potential Florida scrub jay impacts. The subject property (PID 0339-01-0001 0001 and 0399-09-0001) is not on that list.

A survey for listed species using FWC/FWS survey methodology guidelines was conducted during the mid-day hours of February 25 and 27, 2019. Additional observations were made during other on-site activities in November 2018 and March 2019. A total of 63 potentially occupied gopher tortoise burrows were found in the uplands on-site (Figure 4). The majority of the burrows are located in the northwestern portion of the property. Using the FWC standard burrow occupancy correction factor of 0.5 gopher tortoises per burrow, it is estimated that 32± gopher tortoises are present on-site.

No other species listed by either the FWS or the FWC were observed on the site during the protected species survey or during other site visits. There is the potential for periodic





	FLUCCS	Description	Acreage
Potentially Occupied Gopher Tortoise Burrow (63)	411	Pine Flatwoods	44.53 ac.
	434	Hardwood - Coniferous Mixed	2.49 ac.
Abaonded Gopher Tortoise Burrow (2)	434E2	Hardwood - Coniferous Mixed Invaded by Exotics (26-50%)	2.06 ac.
	434E3	Hardwood - Coniferous Mixed Invaded by Exotics (51-75%)	2.08 ac.
	520	Lakes	15.31 ac.
	525	Stormwater Pond	1.69 ac.
	631E1	Wetland Shrub Invaded by Exotics (10-25%)	2.17 ac.
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	641E	Freshwater Marshes Invaded by Exotics (5-9%)	0.23 ac.
	641E1	Freshwater Marshes Invaded by Exotics (10-25%)	0.67 ac.
Notes:		Freshwater Marshes Invaded by Exotics (76-90%)	0.79 ac.
1. Property, lake, and wetland boundaries obtained from DMK Associates. 2. Mapping based on photointerpretation of 2017 aerial photography and	740	Disturbed Land	3.69 ac.
ground truthing in February 2019.	832	Electrical Power Transmission Lines	2.63 ac.
3. Delineation of jurisdictional wetlands reviewed and approved by SWFWMD		Tota	80.01 ac.
– April 2017 (Formal Determination No. 729181/42042985.000) and COE			
(SAJ-2019-01621).			

Figure 4. Protected Species Assessment Map

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opportunistic foraging by both listed and non listed species of wading birds within the littoral zone of the existing ponds

CONSISTANCY WITH COMPREHENSIVE PLAN

The proposed project has been evaluated for consistency with Section III Open Space Element of the City of Venice 2017 -2027 Comprehensive Plan.

CONSERVATION OPEN SPACES

Strategy OS 1.2.2 - Environmental Impact Mitigation

The City shall utilize the Land Development Code and review processes to ensure that development projects evaluate potential environmental impacts and provide mitigation for negative impacts. Development shall not adversely impact any threatened or endangered species or species of special concern without appropriate permitting and/or mitigation.

As stated above, gopher tortoises are present on the property. Prior to development, the appropriate relocation permit will be obtained from the FWC. Potentially occupied gopher tortoise burrows within the development footprint will be excavated and the resident tortoises relocated pursuant to the FWC January 2017 Gopher Tortoise Permitting Guidelines.

WETLANDS

Intent OS 1.3 - Wetlands

The City shall implement strategies to protect its wetlands, wetland buffers, and aquifer recharge areas.

An upland buffer greater than 25 feet in width will be provided for the preserved wetland on-site.

Strategy OS 1.3.2 - Wetland Encroachments

The City shall require development to identify and delineate wetland boundaries with final wetland delineations to be reviewed and approved by the applicable federal and state review agencies.

Wetland determinations have been received from both the COE and SWFWMD. There are no wetlands 20 acres or more in size on the property.

NATIVE HABITATS, CONSERVATION LANDS, AND NATURAL RESOURCES

Intent OS 1.4 - Native Habitats, Conservation Lands, and Natural Resources The City recognizes the importance of its native lands and habitats and shall implement preservation strategies that protect native habitats, conserve environmental lands and natural resources, minimize environmental pollution, and increase public awareness of the harmful effects of non-native species.

The project seeks to allocate areas of native habitats as open space amenities.

Strategy OS 1.4.3 - Endangered or Threatened Species

The City shall protect threatened or endangered native species by requiring that proposed new development and redevelopment (where applicable) be examined for location of Listed Species.

A survey of the site for listed species has confirmed that gopher tortoises are present on the property. Prior to development, the appropriate relocation permit will be obtained from the FWC. Potentially occupied gopher tortoise burrows within the development footprint will be excavated and the resident tortoises relocated pursuant to the FWC January 2017 Gopher Tortoise Permitting Guidelines.

Strategy OS 1.4.4 - Non-Native Invasive Species

The City should prevent the spread of non-native invasive vegetation, wildlife, insects, and other species and protect the health and well-being of the native environment.

Concurrent with initiation of development activities, all non-native invasive species will be removed from the development footprint and the preserve areas as required by SWFWMD, Sarasota County, or the City of Venice

Strategy OS 1.4.5 - Floodplain and Flood Prone Areas

The City will not issue any development order which would permit unmitigated development in 100 year floodplains, as designated on Federal Emergency Management Agency Flood Insurance Rate Maps or adopted County flood studies, or on floodplain associated soils, defined as Soils of Coastal Islands, Soils of the Hammocks, Soils of Depressions and Sloughs, and Soils of the Floodplains that would adversely affect the function of the floodplains or that would degrade the water quality of water bodies associated with said floodplains in violation of any local, State, or federal regulation, including water quality regulations.

The project will have all buildings appropriately located as to meet FEMA guidelines and standards. Areas of raised elevations for flood protection will be balanced with appropriate detention areas sized as to meet onsite storage capacities, as well as address water quality standards, including any location relevant water quality standards established such as Total Maximum Daily Loads (TMDL) or Site Specific Alternative Criteria (SSAC).

UNIQUE HABITATS

Intent OS 1.5 - Unique Habitats

The City recognizes the importance of its unique habitats and shall implement preservation strategies that protect and conserve their environments consistent with applicable laws and regulations.

Strategy OS 1.5.5 - Florida Scrub-Jay, Gopher Tortoise, and Other Sensitive Habitats The City shall continue to coordinate with Sarasota County on the implementation of a countywide Habitat Conservation Plan (HCP), including scrub-jay, gopher tortoise, and other sensitive habitats.

Sarasota County has created a list of 77 properties (by PID) that require a U.S. Fish and Wildlife Service review for potential Florida scrub jay impacts. The subject property (PID 0339-01-0001 0001 and 0399-09-0001) is not on that list. No evidence of Florida scrub jay utilization of the property has been observed.

A survey of the site for listed species has confirmed that gopher tortoises are present on the property. Prior to development, the appropriate relocation permit will be obtained from the FWC. Potentially occupied gopher tortoise burrows within the development footprint will be excavated and the resident tortoises relocated pursuant to the FWC January 2017 Gopher Tortoise Permitting Guidelines.

OPEN SPACE CORRIDORS

Intent OS 1.6 - Open Space Corridors

The City will establish open space corridors to facilitate the movement of people and wildlife.

Strategy OS 1.6.2- Open Space Corridor System

The project's wetlands and created storm water management lakes are anticipated to attract wetland dependent species. This in combination with upland open space components will allow refuges for species to reside in and move through the project's green and blue space.

SUMMARY

The property contains three borrow pits, a stormwater treatment pond, and is bisected by an FPL easement. The uplands are vegetated by slash pine and saw palmetto. The wetlands are vegetated by a mix of native and non-native invasive species. The limits of the jurisdictional wetlands and other surface waters has been verified by the SWFWMD and COE. Gopher tortoises are present on-site. A permit from the FWC will be obtained to excavate the potentially occupied gopher tortoises and relocate the resident tortoises.

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