MARTIN COUNTY, FLORIDA

PRESERVE AREA MANAGEMENT PLAN

For:

HOBE SOUND STORAGE

Martin County

Gomez Grant, Township 39S, and Range 42E

Prepared by:

EW Consultants, Inc.

Approved by/Date:_____

A Preserve Area Management Plan (PAMP) is required of all applicants for development approval on sites which contain wetland or upland preserve areas, pursuant to provisions of Section 4.36.A.1 of the Martin County Land Development Regulations, Martin County Code.

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1.0 GENERAL

The owner(s) of the lands to be preserved and maintained by this Preserve Area Management Plan (PAMP) and/or the developer of *Hobe Sound Storage* successors and assigns, and their environmental consultants and contractors, will implement and comply with all portions of this PAMP. This PAMP is referred to as "Hobe Sound Access Storage PAMP" and is intended to cover the areas preserved in native habitat (upland and wetland) in the areas designated as "Preserve Area" on the Master Site Plan.

Compliance with the terms of this PAMP includes submittal of all Monthly Monitoring Reports on PAMP compliance throughout all phases of project construction and submittal of all Annual Monitoring Reports following completion of project construction, pursuant to Section 10.17 of the Martin County Land Development Regulations. The owner(s) of the lands to be preserved/maintained shall have ultimate responsibility for the submittal of all Monthly and Annual Monitoring Reports, according to the format and schedule requirements of Section 10 of this PAMP.

As noted in Section 9 of this PAMP, the Martin County Environmental Planning Administrator shall be notified in writing within thirty (30) days of transfer of ownership of any lands to be preserved/maintained under the terms of this PAMP. Failure to notify shall be considered as non-compliance with the terms of this PAMP.

This PAMP will not be altered or amended by either Martin County or the owner(s) and/or developer of <u>Hobe Sound Storage</u> except by an alteration or amendment agreed to by both the Martin County Environmental Planning Administrator and the owner(s) and/or developer of <u>Hobe Sound Storage</u>. Such alterations and amendments shall be inserted into the PAMP and the final revised document shall be recorded by the Martin County Clerk of Courts. The revised PAMP will be labeled with the appropriate O.R. Book and Page Number. Three copies of the revised document shall be provided to the Martin County Environmental Planning Administrator within thirty (30) days of the Recording date.

INTRODUCTION

The <u>Hobe Sound Storage</u> project site is located in southeast Martin County, Florida. The overall Hobe Sound Storage property covered by this PAMP comprises 4.0 +/- acres and is generally situated on the east side of U.S. 1, south of Bethel Lutheran Church and west of the drainage canal adjacent to Heritage Ridge Golf Community. The subject parcel is located within Gomez Grant, Township 39S, and Range 42E.

2.0 ENVIRONMENTAL ASSESSMENT

The Environmental Assessment Report appended to the PAMP includes maps and text, which accurately depict the site location, soils, wetlands, uplands, potential listed species, previous impacts, and any other significant environmental features of the overall Hobe Sound Storage property.

- **2.1** Location Please refer to the Location Map provided in the Appendix of the Environmental Assessment.
- **2.2** Soils Soil types on the property were classified using a Soils Survey of Martin County Area, Florida and a custom soil map depicting the property boundary and soils is included in the Appendix of the Environmental Assessment.

- **2.3** Habitats A detailed description of wetland, upland and non-native habitats can be found in the attached Hobe Sound Storage Environmental Assessment Report REVISED May 2024.
- 2.4 Listed Species Evaluation A detailed discussion regarding observed and potential listed species on and near the project site is provided in the attached Hobe Sound Storage Environmental Assessment Report REVISED May 2024.
- **2.5** Previous Impacts Historic impacts on the site are discussed in the attached Hobe Sound Storage Environmental Assessment Report REVISED May 2024.
- **2.6** Agency Correspondence The Environmental Assessment Report contains documentation of our preliminary wetland delineation. Formal verification of the wetland boundary is pending with the ERP Application in process with SFWMD.

3.0 IDENTIFICATION OF PRESERVE AREAS

3.1 Site Plan – The Hobe Sound Storage Preserve Areas subject to this PAMP comprise wetlands, their associated upland buffers, and a native upland area designated as preserve and shown on the <u>Site Plan</u>, a copy of which is included in this PAMP. The Site Plan included in this PAMP provides a summary of the following: acreage of wetlands under preservation; acreage of native upland habitat under preservation.

The Site Plan will contain the notation: "PRESERVE AREAS ARE NOT TO BE ALTERED WITHOUT WRITTEN PERMISSION OF THE MARTIN COUNTY BOARD OF COUNTY COMMISSIONERS."

3.2 Legal Recording – Once fully approved by Martin County, the <u>Hobe Sound Storage PAMP</u> will be recorded with the Martin County Clerk of Courts. The Site Plan and the PAMP will be labeled with the appropriate O.R. Book and Page Number and copies of each recorded document will be provided to the Martin County Environmental Planning Administrator within thirty (30) days of the Recording date.

4.0 SURVEYING, MARKING AND BARRICADING REQUIREMENTS

All Preserve Areas shown in this PAMP for <u>Hobe Sound Storage</u> will be surveyed and marked in the field with appropriate survey markers and signage. During the clearing and construction phases of the project, Preserve Area boundaries will be marked by physical barriers. No plant material will be removed from the Preserve Areas to facilitate surveying, fencing or soil boring/sampling without prior permission from the Martin County Environmental Planning Administrator.

4.1 Preserve Area Surveying Requirements – The boundary of the Preserve Areas will be surveyed and marked with permanent monuments at each corner and at other sites necessary for locating the boundary of the Preserve Area. These permanent monuments will be constructed under the supervision of a Registered Land Surveyor and will be shown on the Maps for the Preserve Areas.

Map coordinates of the Preserve Areas will be provided to the Martin County Environmental Planning Administrator, in a form compatible for use in the County's GIS mapping system.

- **4.2** Preserve Area Boundary Markers and Signs Preserve Areas will be posted with permanent signs and boundary markers. Boundary Markers will be placed at the corners of the designated preserve area. Preserve Area signs will be at least 11 x 14 inches in size and posted in conspicuous locations along the Preserve Areas, at a frequency of no less than one sign per 500 feet. All boundary markers and signs will be approved by the Martin County Environmental Planning Administrator. Illustrations of the signs and markers to be used for this project are included in the Appendix to this PAMP.
- **4.3** Barricading Requirements Prior to clearing, the owner(s) and/or developer will ensure that all Preserve Areas are protected with physical barriers during all clearing and construction activities in accordance with the following guidelines. Barricades will be inspected by County Environmental Division staff prior to work approval. Removal of the barricade materials will be completed upon issuance of the final Certificate of Occupancy with authorization from appropriate County staff.

Barricades (not including turbidity screens) will be high-visibility safety fence or rope extending from the ground to a height of at least 4 feet. Barricades will not be attached to vegetation. All barricades and turbidity screens will be upright and maintained intact for the duration of construction.

Where areas are proposed for clearing (i.e. building envelope, utilities, drainage, road right-of-way, etc.), the high visibility barricades and silt fences will be offset at least 5 feet outside the Preserve Area or placed at the dripline of the canopy trees, whichever is greater. All native vegetation not slated for removal as part of the development plans will be retained in their undisturbed state and will be barricaded at or outside the dripline of the trees. Cut or fill will meet existing grade without encroaching into Preserve Areas.

Wetlands will be protected from possible surface water and sediment runoff by the placement of silt screens, hay bales or other turbidity control measures, at or beyond the delineation line prior to any land clearing or construction.

It is the responsibility of the owner(s) and/or developer of <u>Hobe Sound Storage</u> to inform all contractors of these Marking and Barricading Requirements. Failure to comply with these Marking and Barricading Requirements will be considered a violation of the Site Plan approval. Further work on the project may be stopped until compliance with the Marking and Barricading Requirements is achieved, and the owner(s) and/or developer may be required to appear before the Code Enforcement Board.

5.0 USE OF PRESERVE AREAS

5.1 Activities Allowed in the Preserve Areas – Activities allowed in preserve areas are bird watching, nature enjoyment, temporary impacts for the construction of the water control structures which include a culvert and spreader swale as indicated on the master site plan, and restoration activities, as detailed in this PAMP. Mechanized equipment for the strict purpose of implementing restoration and maintenance activities as detailed in Section 6 below is allowed on a limited basis with concurrence from Martin County.

5.2 Activities Prohibited in Preserve Areas - Activities prohibited in Preserve Areas include, but are not limited to: construction or placing of building materials on or above the ground; dumping or placing soil or other substances such as garbage, trash, and cuttings; removal or destruction of native trees, shrubs or other native vegetation except for the strict purpose of implementing restoration and maintenance activities as detailed in Section 6 below; excavation, dredging or removal of soil materials except for the strict purpose of implementing restoration and maintenance activities as detailed in Section 6 below; vehicular traffic by recreational motorized vehicles including golf carts; permanent irrigation; trimming, pruning, or fertilization; and any other activities detrimental to drainage, flood control, water conservation, erosion control or fish and wildlife conservation and preservation.

No hazardous material other than fuel for refueling on-site heavy equipment will be stored during the construction phases. On-site temporary fuel tanks shall not be located within twenty-five (25) feet of any Preserve Areas and shall be removed upon completion of construction work.

Buildings proposed to be located adjacent to Preserve Areas shall be set back a minimum of ten (10) feet to allow for construction and maintenance without encroaching into the Preserve Area. All other structures (e.g. pools, sheds, decks, fences) shall be set back a minimum of five (5) feet from the Preserve Area boundary.

Development activities such as the construction of building pads for associated structures, swales, or culverts for surface water management shall not alter the hydrology of adjacent Preserve Areas. Nor shall any activities increase non-point source pollution in Preserve Areas.

6.0 **RESTORATION AND MAINTENANCE ACTIVITIES**

Except for approved restoration and maintenance activities, Preserve Areas will be left undisturbed. All maintenance of Preserve Areas will be in accordance with this PAMP for <u>Hobe Sound Storage</u>. Maintenance and management activities will be performed by or under the supervision of a qualified environmental professional and must be approved by the Martin County Environmental Planning Administrator. The following restoration and maintenance activities may be allowed within Preserve Areas with prior written approval from the Environmental Planning Administrator: Invasive non-native and nuisance plant removal, prescribed fire, re-vegetation or planting native vegetation, and removal of dead, diseased, or safety hazard plant material.

6.1 Invasive Non-Native Vegetation Removal – Invasive non-native vegetation shall be removed from Preserve Areas by the least ecologically damaging method practical. Such methods include hand pulling, hand spading, cutting with hand or chain saws and in-situ treatment with appropriate herbicides. No debris, including dead plants, plant clippings or wood scraps, shall be disposed of in Preserve Areas. Invasive non-native species treated in place for maintenance control may be left to decompose naturally. Any woody plant material and/or plant debris removed from Preserve Areas may be chipped on site and incorporated in the topsoil fill or as mulch in restoration areas, or may be disposed of in a County-approved recycling facility.

An initial restoration program will be implemented for the existing wetlands and 50-foot upland buffer preserve areas within the Hobe Sound Storage site. The initial restoration will be comprised of invasive non-native and nuisance vegetation eradication from the preserve areas, in accordance with the following specifications:

- Eradication will be through herbicide application, hand clearing, and where appropriate, removal of dead material off-site.
- Eradication of woody invasive non-native and nuisance vegetation will be through the cutting/mulching of the trunk followed by treatment of any stumps with an appropriately labeled herbicide.
- Eradication of non-woody invasive non-native and nuisance vegetation will be through application of appropriately labeled herbicide.
- The criterion for acceptance of eradication of invasive non-native and nuisance vegetation will be 100 percent kill immediately after the completion of the eradication activity. If initial eradication efforts do not achieve this criterion, follow up treatment will be conducted.
- Any 0.25 acre-portion of the preserve area exhibiting invasive non-native or nuisance vegetation coverage of five percent or more will trigger the need for additional invasive vegetation control activities.

Herbicides are required for the treatment of all stumps/trunks of woody vegetation to prevent regrowth, and for eradication of non-woody invasive non-native and nuisance vegetation.

- All herbicide application activity will be conducted under the supervision of a Florida Department of Agriculture licensed applicator, certified for application of aquatic herbicides.
- All herbicides applied within the wetland area must be properly labeled for application in wetlands.
- All herbicide applied must include a visible tracer dye in the mix to facilitate observation of treated vegetation.

A maintenance program will be established to prevent regrowth of the invasive non-native and nuisance vegetation. The specifications for this perpetual maintenance program will follow the specification detailed in the eradication of invasive non-native and nuisance vegetation in the above section

- 6.2 Re-vegetation Any re-vegetation that may be necessary as a result of invasive non-native or nuisance vegetation removal activities or site construction activities shall consist of native plant species representative of the existing native plant community. This will ensure that the Preserve Areas maintain indigenous plant associations. Figure 2 depicts the typical plant palette and configuration for revegetation areas.
- **6.3** Vegetation Removal Dead or diseased plant material may be removed from Preserve Areas upon approval by the Martin County Environmental Planning Administrator. Re-vegetation may be required for any removed plant material. No debris, including dead plants, shall be disposed of in Preserve Areas. Invasive species treated in place for maintenance control may be left to decompose naturally. Any woody plant material and/or invasive non-native or nuisance plant debris removed from Preserve Areas may be chipped on site and incorporated in the topsoil or as mulch in restoration areas, or may be disposed of in a County-approved recycling facility.
- **6.4** Prescribed Burns Martin County considers prescribed burns an acceptable habitat management tool. When approved by the Martin County Environmental Planning Administrator, they will be conducted by a certified burn manager who will be responsible for obtaining all appropriate permits from State and local agencies.
- **6.5** Hydrology Previous or potential drainage impacts will be corrected to the extent technically feasible. Water quality and the rate, timing, and volume of run-off shall recreate natural conditions

for the benefit of onsite wetlands and other waterbodies. Wetlands and waterbodies on adjacent properties shall be protected from adverse impacts.

- **6.6** Mitigation Plan There are no proposed impacts to the existing on-site wetlands, therefore there is no proposed mitigation on-site. There will be activities associated with wetland preservation and enhancement that will involve invasive non-native and nuisance plant eradication and re-vegetation with native species (see 6.1 and 6.2 above).
- 6.7 Re-grading The property exhibits no disturbed features such as man-made berms and ditches.
- **6.8** Temporary Impacts Water control structure will be installed in the buffer and at the fringe of the existing wetlands on site. The control structure will result in the temporary disturbance of this small area. Once the control structure is completed, this areas will be re-graded in accordance with section 6.7 above and replanted in accordance with section 6.2 above.
- **6.9** Heavy Machinery Use The use of heavy machinery in the preserve areas will be limited to the mulching and/or removal of invasive non-native and nuisance vegetation, and the installation of needed water control structures. Areas disturbed by the use of heavy machinery will be re-graded and replanted.

7.0 PROTECTIVE MEASURES FOR LISTED SPECIES

- 7.1 Gopher Tortoises Gopher tortoises could inhabit the Hobe Sound Storage site but were not found during the 100% pedestrian survey. In Florida, gopher tortoises are protected as threatened. Under Florida law, no person may take, possess, transport or sell a Listed Species. No land clearing or construction shall occur until all tortoises within the proposed development areas are relocated to off-site receiver areas as permitted by the FFWCC. During clearing and grubbing operations, equipment operators will be notified of the occurrence of gopher tortoises on-site and instructed to observe for roaming and foraging individuals. Should gopher tortoises be seen during the clearing and grubbing, all equipment operations will be stopped and the gopher tortoises will be captured and relocated accordingly. Once the tortoise(s) have been safely relocated, equipment operation can resume.
- 7.2 Commensal Species If necessary, all gopher tortoise relocation efforts will include trapping of protected commensal species that may live in the burrow. These commensal species include but are not limited to the Florida mouse (*Peromyscus floridana*), gopher frog (*Rana aerolata*) and Eastern indigo snake (*Drymarchon corias couperi*).
- **7.3** Relocation of Tortoises If necessary, the Martin County Environmental Planning Administrator will be notified and will be provided with a copy of the Gopher Tortoise Relocation Permit from the Florida Fish and Wildlife Conservation Commission. All relocations shall be carried out by a gopher tortoise agent licensed by the FFWCC. The responsible party shall have access to literature pertaining to gopher tortoise preservation and shall be encouraged to preserve additional areas and to landscape with native vegetation.

8.0 MISCELLANEOUS PROVISIONS AND RESTRICTIONS

The owner(s) and/or developers of <u>Hobe Sound Storage</u> Preserve Areas are responsible for the completion and maintenance of the required improvements specified in this PAMP for a period of two years. A bond for 100 percent of the cost of invasive non-native and nuisance vegetation removal, replanting, maintenance and monitoring shall be required for a period of two years from the date the planting is completed. The bond and associated paperwork will be required prior to issuance of a Certificate of Occupancy.

9.0 TRANSFER OF RESPONSIBILITIES

The owner(s) and/or developer of <u>Hobe Sound Storage</u> are responsible for implementation of all requirements of this Preserve Area Management Plan until such time as the owner(s) and/or developer transfer(s) responsibility to new owner(s) or a successor(s). The Martin County Environmental Planning Administrator will be notified in writing within thirty (30) days of transfer of ownership of any lands to be preserved under this PAMP. Failure to notify will be considered as non-compliance with the terms of this PAMP. The owner(s) and/or developer will pay his share of total cost of management activities. At such time as the owner(s) and/or developer is ready to transfer control of the <u>Hobe Sound Storage</u> to an approved third-party entity, an environmental professional shall certify, in writing, to the Martin County Environmental Planning Administrator, that the Preserve Areas are in full compliance with this PAMP.

The new owner(s) and/or successor will be responsible for maintaining the Preserve Areas in their existing natural condition with the periodic removal of invasive non-native and nuisance vegetation. After transfer of responsibilities, funding for all maintenance and management programs will be the responsibility of all successors.

10.0 MONITORING, REPORTING AND INSPECTIONS

- 10.1 Monthly Construction Reports During construction of <u>Hobe Sound Storage</u>, the owner(s) and/or developer will be responsible for submitting a monthly report on the progress of <u>Hobe Sound Storage</u>, which will address all aspects of the site construction relative to the Preserve Areas. Information regarding construction and maintenance of the Preserve Areas, such as placement of barriers and signage, removal of invasive non-native and nuisance vegetation, re-vegetation, prescribed burns, etc. will be described and supported with photographs, where appropriate.
- **10.2** Annual Monitoring Reports Monitoring and reporting will be conducted annually by a qualified environmental professional for a period of five years from the date of completion of the project or project phase encompassing the monitored area. Annual monitoring will be conducted at the end of the wet season (usually by November 30) and a report of the monitoring will be submitted to the Martin County Environmental Planning Administrator within 30 days of the completion of the monitoring.

The Annual Monitoring Reports will document changes in vegetation including encroachment and/or overgrowth of invasive nuisance or non-native vegetation. Fixed-point panoramic photos of Preserve Areas will be included in each report. The reports will include recommendations for invasive non-native or nuisance vegetation removal, re-vegetation, and any additional enhancement activities necessary to maintain the Preserve Area. A timetable for action within 90 days of the report will be prepared and followed. A copy of the proposed Annual Monitoring Report format is attached to this PAMP in the Appendix. This format may be modified separately from the PAMP, as necessary, upon written approval from the Martin County Environmental Planning Administrator.

Upon request, Martin County Environmental Planning staff may meet with the responsible parties to review the annual monitoring report findings and supply technical assistance and support for stewardship.

The first Annual Monitoring Report due in compliance with this PAMP will be submitted to the Martin County Environmental Planning Administrator no later than 90 days after completion of the restoration activities. Subsequent Annual Monitoring Reports will be due on the same date for the next four years.

After the initial five-year monitoring period, the Preserve Areas may be subject to periodic review and, if conditions warrant, will be subject to further monitoring and maintenance to ensure environmental integrity, consistent with the provisions of this Plan.

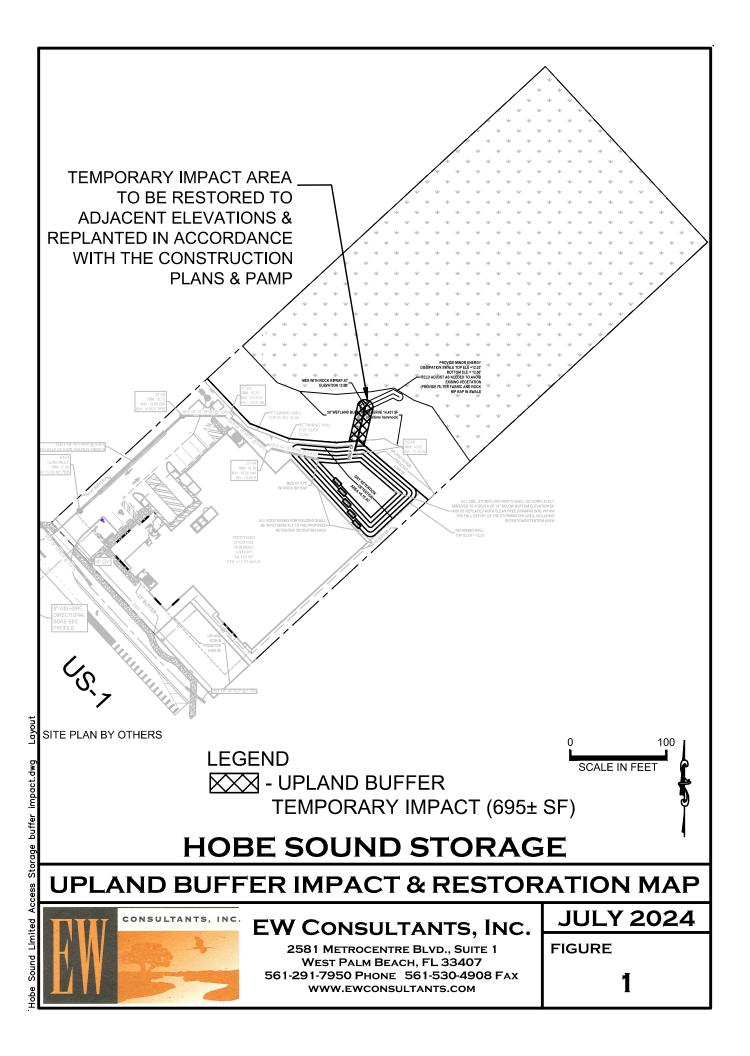
10.3 Inspections - Martin County is authorized to inspect any County regulated site or appurtenance. Duly authorized representatives of Martin County may, at any time, upon presenting proper identification, enter upon and shall be given access to any premises for the purpose of such inspection.

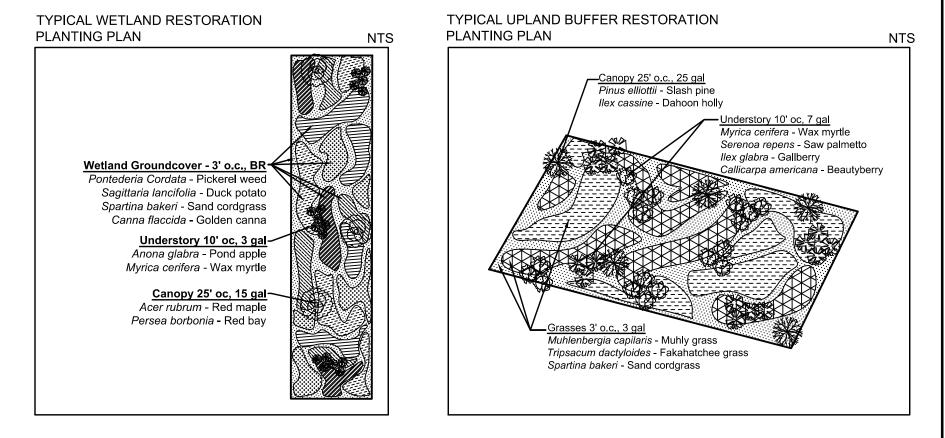
11.0 ENFORCEMENT

Martin County shall have the right to enforce the provisions of this PAMP through any available administrative or civil proceeding, which may result in penalties. Restoration of habitat and other remedies, such as fines and fees covering staff time, may be required of any person, corporation or other entity found in violation of any of the provisions of this PAMP or of Article 10 of the Martin County Land Development Regulations.

APPENDIX

Figure 1. Upland Buffer Impact Map Figure 2. Restoration Plan Environmental Assessment, Rev 05-2024 Site Plan Preserve Area Signage Listed Species Signage/Information





NOTE: PLANTS TO BE INSTALLED AS TO MIMIC NATURAL OCCURRENCE. MATERIAL MAY BE SUBSTITUTED WITH NATIVE LIKE MATERIAL.



EW CONSULTANTS, INC. NATURAL RESOURCE MANAGEMENT, WETLAND, AND ENVIRONMENTAL PERMITTING SERVICES



HOBE SOUND STORAGE PARCEL

ENVIRONMENTAL ASSESSMENT REPORT

Prepared for:

LIVE OAK CAPITAL PARTNERS

Prepared by:

EW CONSULTANTS, INC.

February 2022 (Revised May 2024)

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INTRODUCTION

EW Consultants, Inc. (EW) conducted an environmental assessment of the Hobe Sound Storage property located in Hobe Sound, Florida. The subject site covered by this environmental assessment consists of undeveloped land approximately 4.0 acres in size. The site is within Gomez Grant, Township 39 south, and Range 42 east, in unincorporated Martin County. The site is rectangularly shaped and is bordered on the north by Bethel Lutheran Church; on the east by a drainage canal and Heritage Ridge Golf Community; on the west by U.S. 1; and on the south by undeveloped land. Location maps and a 2021 aerial photograph are provided in the Appendix as Figures 1 through 3.

PROPERTY DESCRIPTION AND METHODS

The property currently comprises temperate hardwood hammock, scrub, and wetland habitats. Except for the scrub habitat, the parcel is largely dominated by invasive exotic and nuisance species of vegetation.

Chronological review of historical aerial imagery dating back to 1968 indicates that the subject property had not been previously impacted by development prior to the construction of the adjacent church in the early 1980s in addition to the drainage ditch along the northeast boundary, and the golf course community adjacent to the east side of the drainage ditch. The property to the south has existed in its current undeveloped state. The southwestern property line adjoins U.S. 1 which was constructed prior to 1952. Subsequent imagery from 1984 depicts the approximate current conditions of the site with some shifts in vegetation over time.

UPDATE: the property to the south is under construction as a storm water treatment area by Martin County.

Prior to the site visit, the U.S. Geological Survey 7.5-minute Quadrangle Topographic Map 'Gomez Quadrangle' and a soil survey report for the property, obtained from the USDA (U.S. Department of Agriculture, Natural Resources Conservation Service – Web Soil Survey) were reviewed to determine topographic features and site soil mapping units. Copies of the 2021 Martin County aerial photographs of the parcel were obtained and reviewed to determine potential locations of environmental features.

Pedestrian transects of the parcel were conducted to map approximate locations and boundaries of significant environmental resources, vegetative communities, exotic vegetation, and potential jurisdictional wetland areas. The survey was also conducted to note any occurrence of listed plant or animal species and vegetative communities which would require protection or identification by Martin County or any State or Federal agency.

Wetland protection is mandated under federal, state, and local regulations. The U.S. Army Corps of Engineers (CE) regulates activities in Waters of the United States pursuant to the Clean Water Act (PL92-500 Section 404) as further defined in the CE regulatory program (33 CFR 320-330). The State of Florida Department of Environmental Protection (DEP) has established wetland identification and permitting processes at Chapter 62-330, 62-340, and 62-312 of the Florida Administrative Code (FAC). Current federal and state wetland definitions are derived from the original definition found in 33 CFR 328.3, identifying wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions". Delineation of federally regulated jurisdictional wetlands is determined by the Corps of Engineers Wetlands Delineation Manual (USAE Waterways Experiment Station Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (USAE Research and Development Center 2010). Delineation of wetlands regulated by DEP and South Florida Water Management District (SFWMD) is done according to Chapter 62-340 FAC, Delineation of the Landward Extent of Wetlands and Surface Waters. The Florida Wetlands Delineation Manual (Gilbert et al. 1995) serves as a guide to Chapter 62-340. Both manuals, which emphasize the identification of hydric soils, hydrophytic vegetation, and wetland hydrologic conditions in making wetland determinations, were used in this investigation.

<u>SOILS</u>

The soils on the site are mapped as Waveland and Lawnwood fine sands depressional, Archbold sand, and Salerno sand. A description of the soil type in its natural condition is listed below. This description is based upon the general characteristics for the soil types as illustrated in the Soils Survey of Martin County Area, Florida and are not necessarily indicative of the exact characteristics of the parcel. A soils map with the site boundary is included in the Appendix as an attachment.

<u>Archbold sand (14) 1.3 acres</u> – This is a deep, nearly level sandy soil that is moderately well drained. The water table is at a depth of 40 to 60 inches for six to nine months in most years. The soil is often found in elevated ridges and knolls in the flatwoods

<u>Salerno Sand (35) 1.2 acres</u> – This soil is a nearly level, poorly drained soil in broad areas of flatwoods. The water table is typically at a depth of less than 10 inches for two to four months during wet seasons, and at a depth of greater than 40 inches for 1 to 4 months during the dry season. The typical natural vegetation is slash pine, saw palmetto, gallberry, fetterbush, wax myrtle, creeping bluestem, broomsedge bluestem, chalky bluestem, pineland three-awn, and panicums.

Waveland and Lawnwood fine sands, depressional (5) 1.5 acres - This poorly drained soil is in depressions typically within flatwoods areas. The soil is ponded for six to nine months or more

in most years. The typical natural vegetation is St. John's wort, needlerush, pipewort, ferns, panicums, maidencane, and other water tolerant grasses.

NATURAL COMMUNITIES AND LAND COVERS

The Guide to the Natural Communities of Florida (Florida Natural Areas Inventory 2010 FNAI) provides classification of natural communities of Florida and was used in this investigation. Approximate location of vegetative community cover type boundaries and other features of the site were mapped in accordance with Florida Land Use Cover and Forms Classification Systems Handbook (Florida Department of Transportation 1999) (FLUCFCS).

Field reconnaissance and aerial photograph interpretation were employed in the mapping effort of the vegetative communities on the subject site. The vegetative community descriptions include discussions of potential wildlife habitat in those communities. A land cover map of the observed community types with acreage is included as Figure 4 in the Appendix.

425—Temperate Hardwood Hammock 0.60 acres

This area meets the FNAI designation of a Maritime Hammock (1650) and is mapped as Temperate Hardwood Hammock as the prevailing FLUCFCS upland habitat on the central portion of the site. The canopy is dominated by red bay, and dahoon holly with occurrences of cabbage palm, slash pine and non-native earleaf acacia and melaleuca. The subcanopy includes a combination of dahoon holly, myrsine, wax myrtle and red bay, with numerous non-native earleaf acacia, java plum, Brazilian pepper, and scattered melaleuca. The understory and groundcover are dominated by saw palmetto with scattered gallberry, gumbo limbo saplings, cocoplum, wild coffee, cinnamon fern, swamp fern, grape vine, and smilax vine. Non-native species within this lower stratum include downy rose myrtle and Brazilian pepper. This habitat is subject to upland preservation requirements.

436 – Upland Scrub, Pine, and Hardwoods – 1.26 acre

This area meets the FNAI designation of Scrub (1210) and is mapped as Native Upland Scrub, Pine, and Hardwoods as the prevailing FLUCFCS habitat within the most westerly portion of the property. This area is dominated by scattered sand pine, scrub oak, sand live oak, chapman's oak with a dense understory and groundcover of saw palmetto, sand pine, hog plum, love vine, sparse grape vine, lichen, wild coffee, rusty lyonia, fetterbush, scattered flag pawpaw, and tar flower. This habitat is subject to upland preservation requirements.

619/630 - Exotic Wetland Hardwoods /Wetland Forested Mixed - 2.14 acres

This area meets the FNAI designation of an Exotic Wetland Hardwood habitat and Other Wetland Forested Mixed habitat (7400/2240) and are mapped as Exotic Wetland Hardwoods /Wetland Forested Mixed as the prevailing FLUCFCS habitat on this portion of the site. This wetland habitat is dominated by non-native species, particularly Brazilian pepper. Brazilian pepper often develops into a monoculture because of the dense canopy coverage and root structures which restricts the establishment of native vegetation. In addition, parts of the eastern

portion of the site consist of mixed wetland forest habitat. The canopy and subcanopy contains occurrences of native red bay, red cedar, red maple, dahoon holly, Carolina willow, wax myrtle, saltbush, and buttonbush. Non-native canopy and subcanopy vegetation include clumps of Brazilian pepper, and melaleuca. Other vegetation present in these areas includes some areas of native royal fern, swamp fern, giant sword fern, cinnamon fern, saw grass, lanceleaf arrowhead, grape vine, very dense occurrences of dead grapevine, and smilax vine, as well as non-native lygodium, and downy rose myrtle. This habitat is subject to wetland preservation requirements.

LISTED SPECIES AND WILDLIFE

Listed species of wildlife are found in *Florida's Endangered Species, Threatened Species and Species of Special Concern, Official Lists* (Florida Fish and Wildlife Conservation Commission December 2022) and regulated plants are listed in *Preservation of Native Flora of Florida,* Chapter 5B-40 (Florida Department of Agriculture and Consumer Services, Division of Plant Industry, April 2004). A preliminary series of pedestrian transects were conducted across the property to determine the presence of any listed species. The wetland areas of the property provide significantly reduced foraging and/or nesting habitat for most state and/or federally listed wildlife species, with the adjacent forested uplands as the only remnant natural habitats.

The survey methodologies used for determining the status of State and/or Federally listed wildlife occurrence on the site followed generally accepted protocols as specified in State and Federal guidance documents. The geographic range of the property and its associated habitats, vegetative cover types, and natural or disturbed status were the primary considerations in assessing potential occurrence of listed species.

The protected species evaluations and survey methodologies have been, and will continue to be, addressed on a species-specific basis in accordance with the Florida Fish and Wildlife Conservation Commission (FWC) and U.S. Fish and Wildlife Service (FWS) protocols and techniques relative to the species under consideration.

The State and/or Federally listed wildlife species with potential to occur on the subject site are summarized in the following table. Likelihood of occurrence has been indicated based on species-specific evaluations and best professional judgement, and noted as either observed during site review or likelihood of occurrence as high, medium, or low. A full list of flora and fauna that could potentially occur on or adjacent to the described and surveyed habitats is included in the appendix, all species were considered when surveys were performed.

| Common | | | Someling Mothed | Occurrence* | Listed Status |
|------------------------------|-------------------------------|--|--|-------------|---|
| Name | Scientific Name | Preferred Habitat | Sampling Method | Occurrence* | State/Federal |
| American alligator | Alligator mississippiensis | Wetland and aquatic habitat | Pedestrian transects | L | FT/SA |
| Bald eagle | Haliaeetus leucocephalus | Nest in tall trees (usually pine) near coasts, rivers, lakes and wetlands | Pedestrian transects | М | No longer listed Nest trees protected |
| Eastern indigo snake | Drymarchon corais couperi | A diversity of upland/low land habitat | Pedestrian transects | L | FT |
| Florida bonneted bat | Eumops floridanus | A diversity of forested habitats | Pedestrian transects roost surveys | L | FE |
| Florida Sandhill crane | Grus canadensis pratensis | Breed in emergent palustrine wetlands; forage in pastures/prairies | Pedestrian transects | L | ST |
| Gopher tortoise | Gopherus polyphemus | Sandhills, xeric oak scrub, sand pine scrub, scrubby flatwoods; agricultural lands | Pedestrian transects burrow survey 100% of suitable habitat | М | ST |
| Little blue heron | Egretta caerulea | Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees | Pedestrian transects | L | ST |
| Red-cockaded woodpecker | Picoides borealis | Mature pine woodlands | Pedestrian transects | L | FE |
| Roseate spoonbill | Ajaia ajaja | Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees | Pedestrian transects | L | ST |
| Tricolored heron | Egretta tricolor | Breeding: marshes, swamps, ponds, nest in shrubs and small trees | Pedestrian transects | L | ST |
| Wood stork | Mycteria americana | Estuarine or freshwater wetlands; nest in tops of trees in cypress or mangrove swamps | Pedestrian transects | L | FT |

¹Observed transient ²Observed nesting and/or resident *O=Observed; H= High probability; M= Medium; L= Low;

FE = Federally-designated Endangered FT = Federally-designated Threatened FXN = Federally-designated Threatened Nonessential Experimental Population FT(S/A) = Federally-designated Threatened species due to similarity of appearance ST = State-designated Threatened SSC = State Species of Special Concern

The site does contain scattered gopher tortoise habitat and one potentially occupied gopher tortoise burrow was observed during the initial site reconnaissance. The gopher tortoise is listed as a threatened species by FWC. A formal gopher tortoise survey is required prior to the commencement of construction activities. If gopher tortoise burrows are found, then a plan for preservation or relocation will be required prior to commencement of any site activities. Relocation of gopher tortoises requires a permit from FWC.

The Eastern indigo snake typically occurs in a variety of native upland and freshwater wetland habitats such as those that occur on this site. No agency-accepted survey protocol exists for this species and the potential for presence of this species is evaluated based on habitat and known recent sightings. While no indigo snakes were observed on site at the time of the site assessment, there is some potential for this species to occur in relation to any gopher tortoise population. However, due to the lack of gopher tortoise burrows either active or abandoned there is a low likelihood for the presence of the eastern indigo snake on the subject site. Standardized and specific construction awareness and notification procedures will be required for the protection of this species during any proposed site development.

The American alligator was not observed within the subject property but this species can occur in any waterbody in Florida therefore, this species has the potential to use the adjacent ditch offsite. Usage of this property by the American alligator, if present, is likely transient.

The property falls just outside the designated consultation area for the Florida scrub jay. Although numerous scrub oaks are present within the subject site and constitute scrub habitat, the relatively small size and isolated nature of the on-site scrub habitat does not provide favorable conditions for Florida scrub jays to utilize the site for foraging and/or nesting.

The wood stork is typically found foraging in ditches, canals, and wetlands with shallow areas of open waters, and nests on woody substrate (shrubs and/or trees) surrounded by shallow, open water areas. There are no wetlands on site that offer the required woody substrate surrounded by shallow open water areas, therefore this species is not expected to nest on site due to the lack of nesting habitat or substrate in conjunction with shallow open water. While the single adjacent ditch offers some potential suitable foraging opportunities, no wood storks were observed on site.

Bald eagles, while no longer listed, remain protected under the Bald and Golden Eagle Protection Act. No bald eagles or bald eagle nests were observed on site. According to the FWC database there is no nest within 2 miles of the site. Due to the presence of suitable nesting trees, there is a moderate chance of utilization by this species.

No other listed wildlife species were observed or expected to be present.

Non-listed wildlife and wildlife signs observed include mourning dove, northern cardinal, northern mockingbird, black vulture, dragonflies, Cuban anole, and raccoon.

Listed plant species observed include royal fern, inflated reflex wild pine air plant, and giant wild pine air plants. The royal fern is listed as commercially exploited and the inflated reflex and giant wild pine is listed as threatened by FDACS. While not observed during the site assessment, the four-petal paw-paw, large flowered rosemary, and Florida perforate lichen are known to occur in scrub habitat.

SUMMARY

Native Habitat

The project site is in unincorporated Martin County; therefore, the development of the property would be subject to Martin County's Comprehensive Plan and Land Development Regulations (LDR's). Martin County requires that a minimum of 25 percent of existing native upland habitat be preserved. Where both common habitat and unique, endangered, threatened, or rare habitat exist on the same site, the first requirement to be met shall be the preservation of 25 percent of the total uplands in unique, endangered, threatened, or rare habitat. The subject property includes approximately 1.86 acres of unique habitat, so approximately 0.46 acres of uplands will be required to be preserved within the temperate hardwood hammock and/or upland scrub area.

In addition, Martin County's LDR's also require tree protection for any native hardwood tree having a diameter of eight inches at breast height (DBH) or greater found within the interior of the site, any native hardwood tree four inches DBH or greater, and any native softwood tree eight inches DBH or greater which is located in the perimeter of the development site. Cabbage palms are not protected.

Removal or eradication of non-native plant species that are included in the County's Prohibited Species List and the adopted additional list of species from the Board of County Commissioners will be required as a condition of development approval. Non-native species from this list that were observed to exist within the subject site include Brazilian pepper, earleaf acacia, melaleuca, old world climbing fern, downy rose myrtle, and java plum.

Wetlands

The site review identified wetland habitat on site that would likely be considered jurisdictional under State and Federal criteria. However, final regulatory decisions as to the presence or absence and boundaries of jurisdictional wetlands is determined by the relevant agencies (South Florida Water Management District). Prior to finalizing site plans, it is recommended that these agencies be consulted to verify jurisdictional wetland boundaries. Martin County requires a 50–foot buffer setback from wetlands that must be preserved in a natural state. If any impacts to the 2.14 acres of jurisdictional wetlands are proposed, then permits and compensatory mitigation will be required.

Listed Species

While the site contains limited habitat for several listed species, most are transient and none were observed during site reconnaissance apart from the gopher tortoise. Although Florida scrub jays are not anticipated to use the site due to the small size of the suitable habitat, a formal survey may be required to verify absence of the scrub jay since suitable habitat may extend off-site to the south. The site does contain gopher tortoise habitat and one potentially occupied gopher tortoise burrow was observed during the site reconnaissance. The gopher tortoise is listed as a threatened species by FWC. A gopher tortoise survey is required prior to the commencement of construction activities and a gopher tortoise relocation permit is required prior to impact to any potentially occupied burrow.

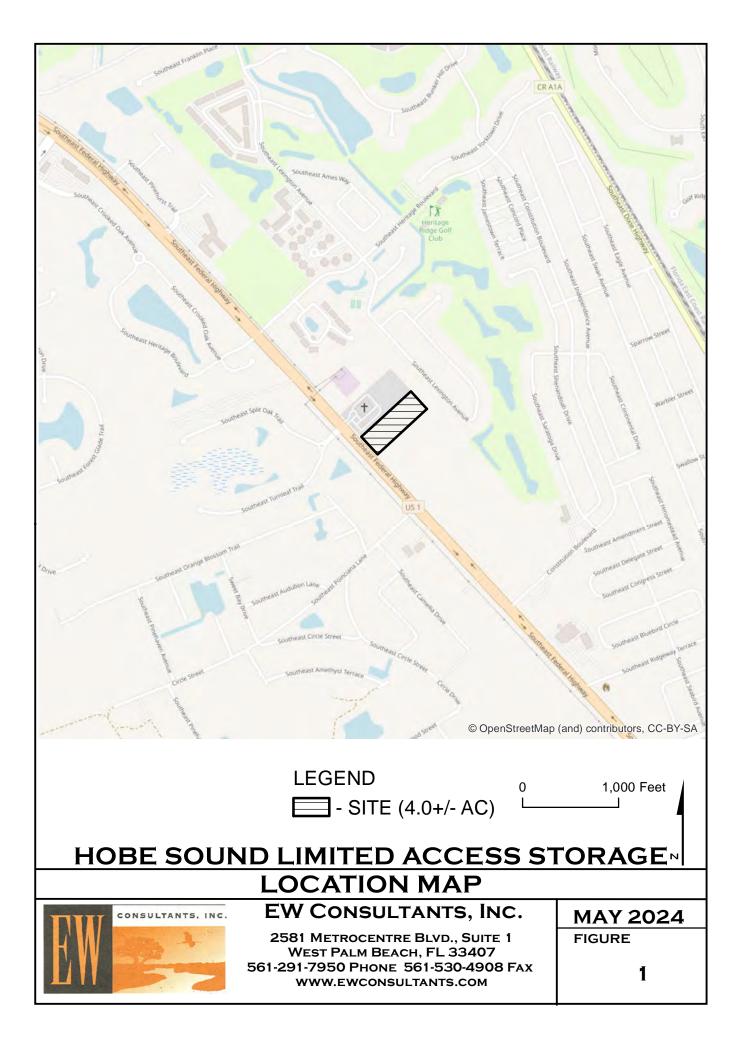
APPENDIX

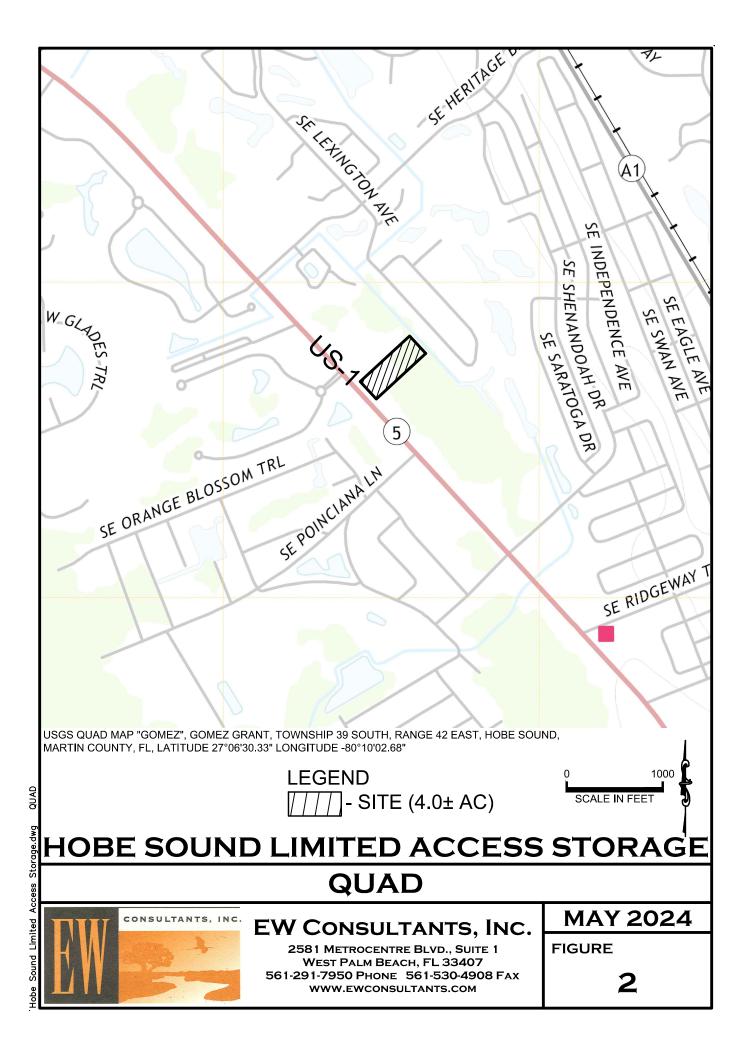
Maps and Figures:

Figure 1: Location Map Figure 2: Quad Map Figure 3: Aerial Map Figure 4: FLUCCS Map Figure 5: Wetland Map

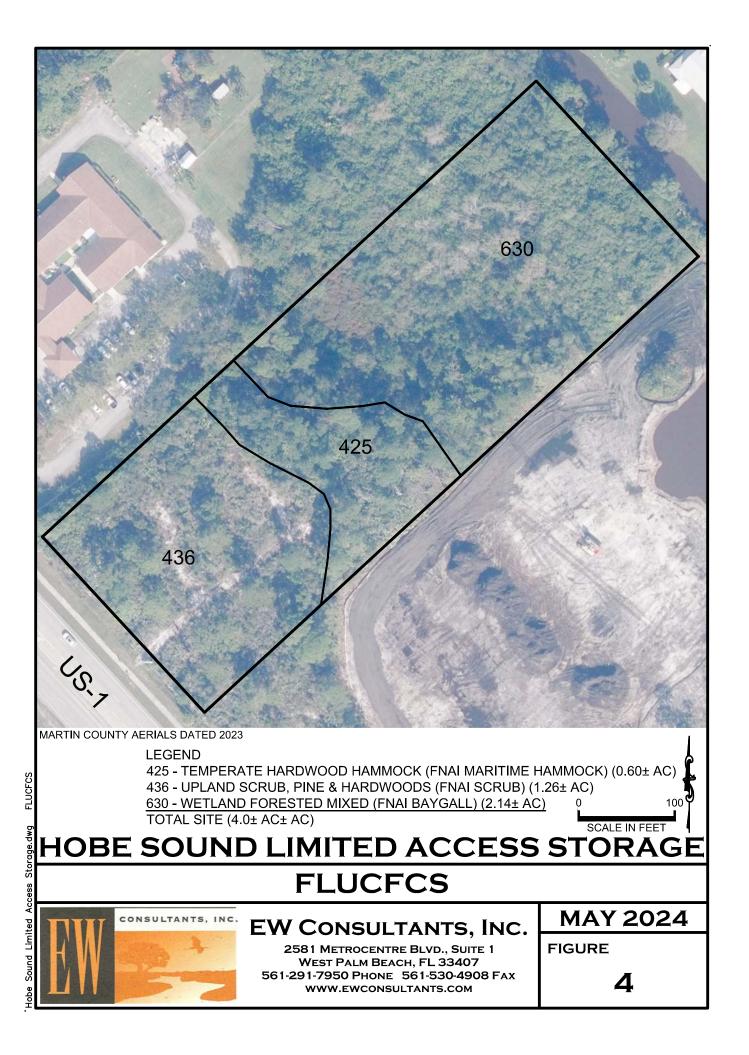
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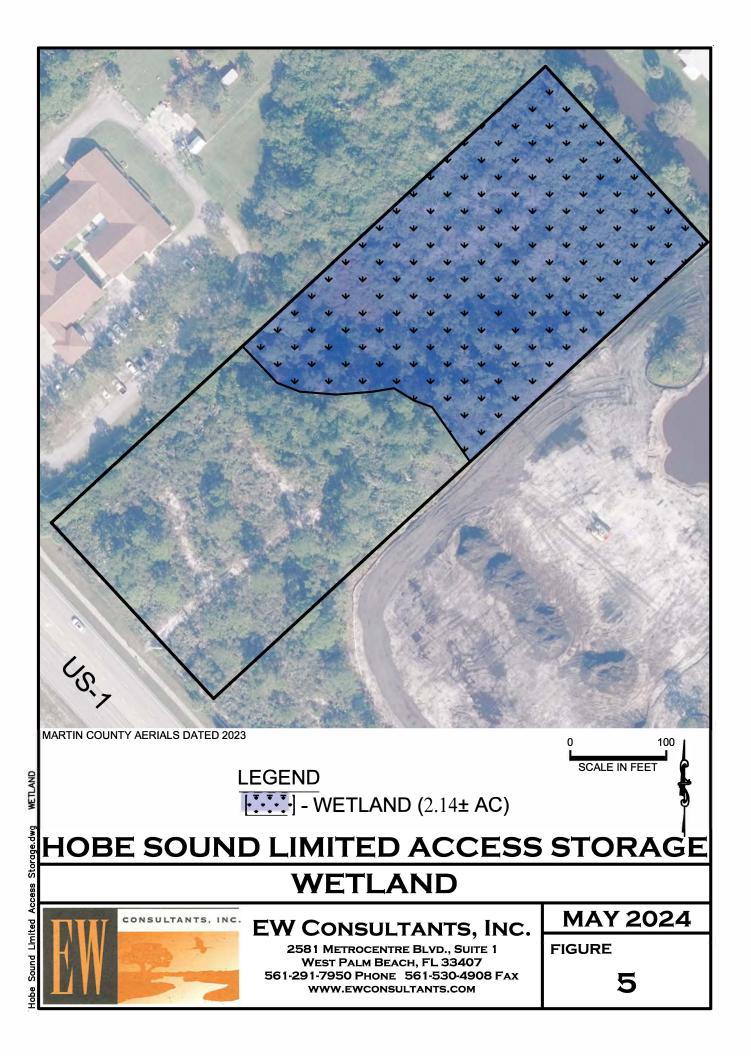
USDA Soils Report Biodiversity Matrix-Rare and Listed Species





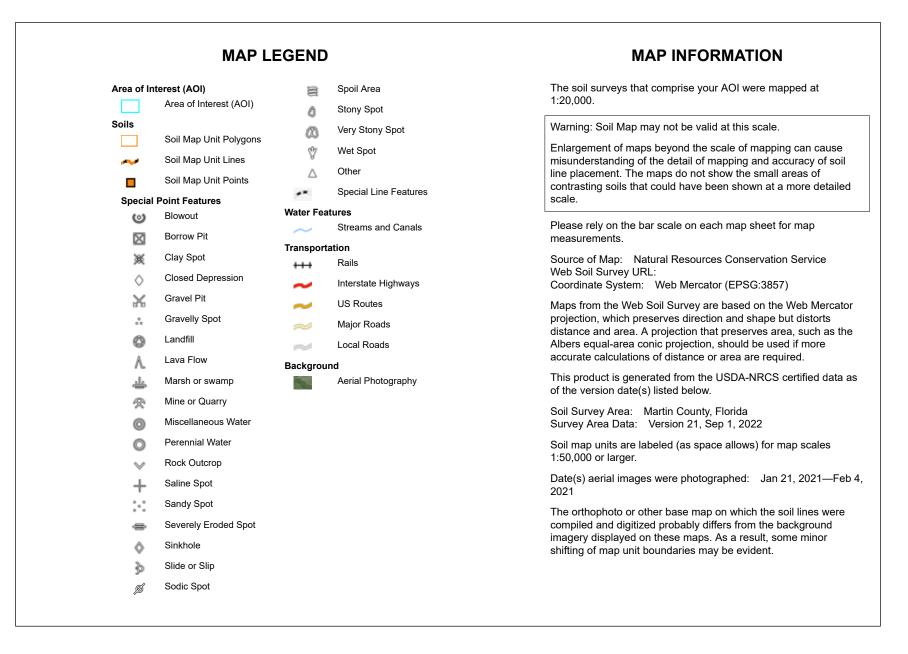






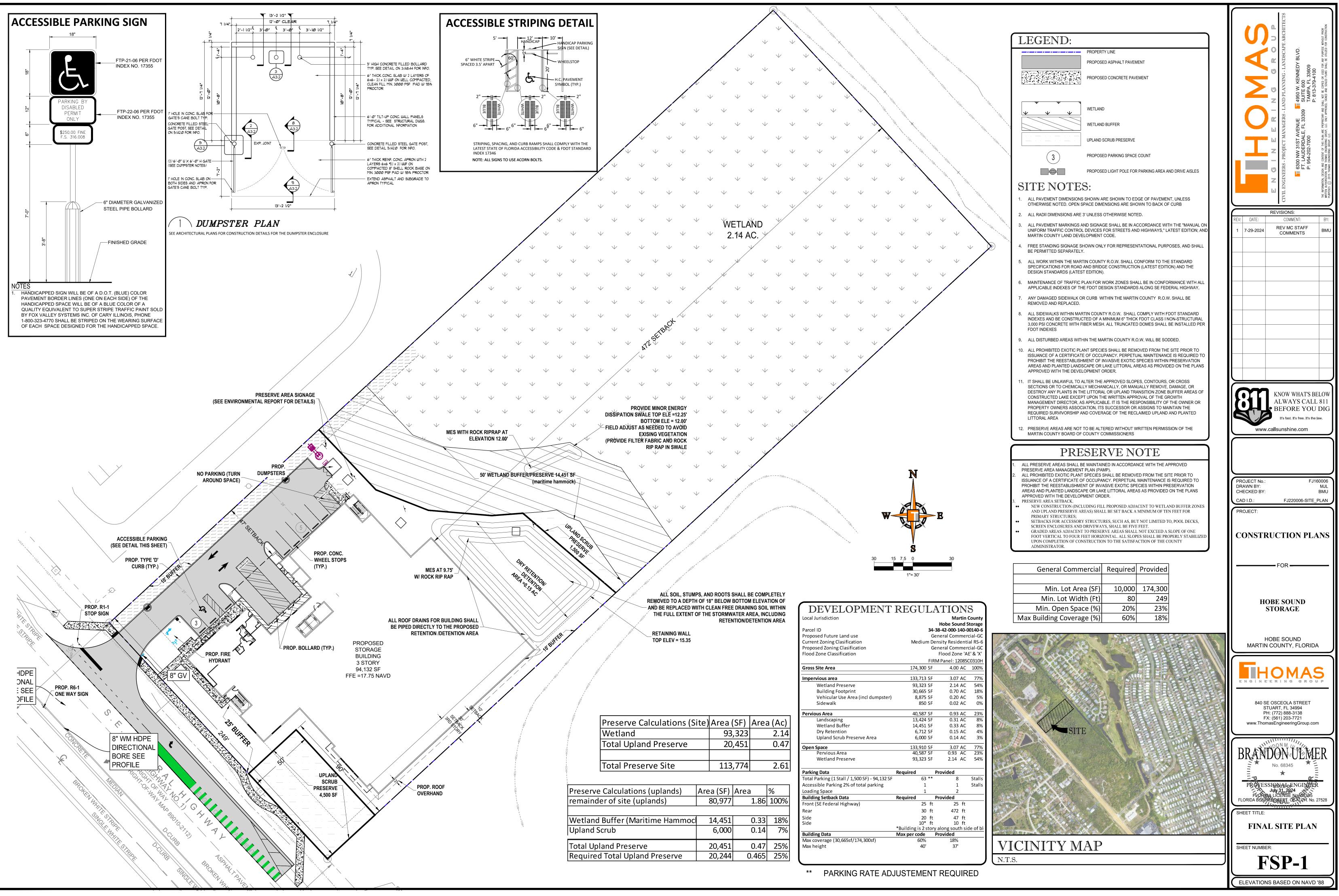


USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey



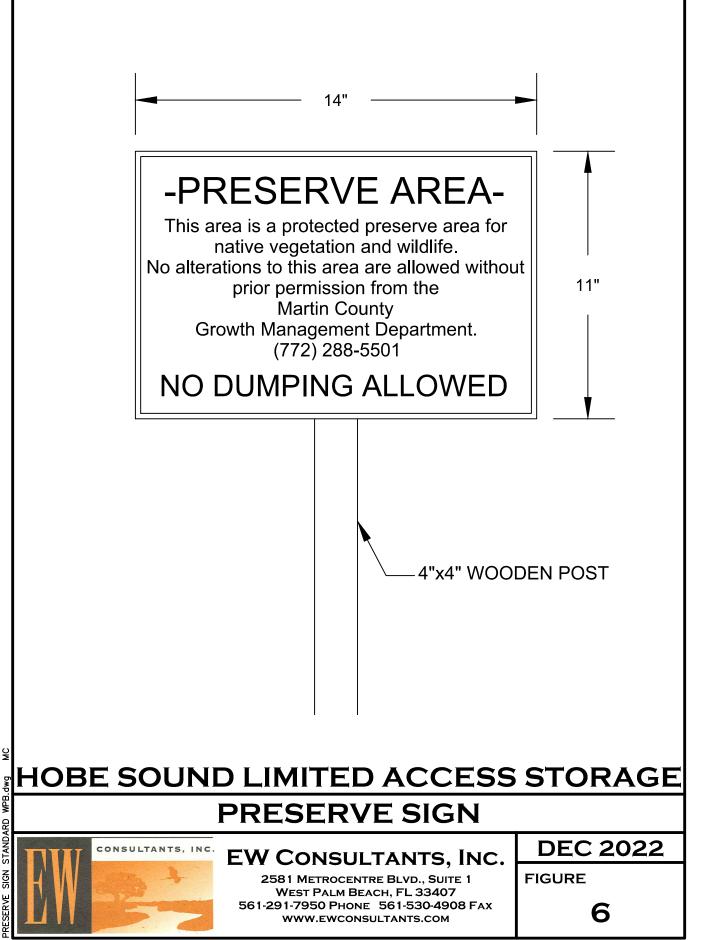
Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|-----------------------------|--|--------------|----------------|
| 5 | Waveland and Lawnwood fine sands, depressional | 1.5 | 38.3% |
| 14 | Archbold sand | 1.3 | 32.2% |
| 35 | Salerno sand | 1.2 | 29.5% |
| Totals for Area of Interest | | 4.0 | 100.0% |



| Preserve Calculations (S | lite) | Area | (SF) | Area | a (Ac) |
|--------------------------------|-----------------------|--------|--------|------|--------|
| Wetland | | 93 | ,323 | | 2.14 |
| Total Upland Preserve | Total Upland Preserve | | 20,451 | | 0.47 |
| | | | | | |
| Total Preserve Site | | 113 | ,774 | | 2.61 |
| | | | | | |
| serve Calculations (uplands) | | a (SF) | Area | 1 | % |
| mainder of site (uplands) | | 80,977 | | 1.86 | 100% |
| | | | | | |
| etland Buffer (Maritime Hammoo | : | 14,451 | | 0.33 | 18% |
| land Scrub | | 6,000 | | 0.14 | 7% |
| tal Upland Preserve | | 20,451 | | 0.47 | 25% |

| Fervious Area | 40,507 |
|--|------------------|
| Wetland Preserve | 93,323 |
| Parking Data | Required |
| Total Parking (1 Stall / 1,500 SF) - 94,132 SF | 63 |
| Accessible Parking 2% of total parking | 1 |
| Loading Space | 1 |
| Building Setback Data | Required |
| Front (SE Federal Highway) | 25 |
| Rear | 30 |
| Side | 20 |
| Side | 10* |
| | *Building is 2 s |
| Building Data | Max per code |
| Max coverage (30,665sf/174,300sf) | 60% |
| Max height | 40' |
| | |
| | |



Florida Biodiversity Matrix FNAI Matrix Units On and Adjacent to Site

FNAI Matrix Rare and Listed Species Occuring Within or Adjacent to FNAI Habitats Delineated Onsite

| Scientific Name | Common Name | Fed | State |
|---|--|-----|-------|
| Antigone canadensis pratensis | Florida Sandhill Crane G5T2 S2 | Ν | ST |
| Aphelocoma coerulescens | Florida Scrub-Jay G2? S1S2 | Т | FT |
| Asimina tetramera | four-petal pawpaw G1 S1 | Е | Е |
| Chamaesyce cumulicola | sand-dune spurge G2 S2 | Ν | Е |
| Cladonia perforata | perforate reindeer lichen G2G3 S2S3 | Е | Е |
| Coelorachis tuberculosa | Piedmont jointgrass G3 S3 | Ν | т |
| Conradina grandiflora | large-flowered rosemary G3 S3 | Ν | Т |
| Dicerandra immaculata var. immaculata | Lakela's balm G1T1 S1 | Е | Е |
| Drymarchon couperi | eastern Indigo Snake G3 S2? | Е | Е |
| Elytraria caroliniensis var. angustifolia | narrow-leaved Carolina scalystem G4T2 S2 | Ν | Ν |
| Eugenia confusa | tropical ironwood G4G5 S2S3 | Ν | Е |
| Glandularia maritima | coastal vervain G3 S3 | Ν | Е |
| Gopherus polyphemus | gopher Tortoise G3 S3 | С | ST |
| Heterodon simus | southern Hognose Snake G2 S2S3 | Ν | Ν |
| Latrodectus bishopi | red Widow Spider G2G3 S2S3 | Ν | Ν |
| Lechea cernua | nodding pinweed G3 S3 | Ν | т |
| Lechea divaricata | pine pinweed G2 S2 | Ν | Е |
| Linum carteri var. smallii | Small's flax G2T2 S2 | Ν | Е |
| Mycteria americana | Wood Stork G4 S2 | Т | FT |
| Nemastylis floridana | celestial lily G2 S2 | Ν | Е |
| Peucaea aestivalis | Bachman's Sparrow G3 S3 | Ν | Ν |
| Podomys floridanus | Florida Mouse G3 S3 | Ν | Ν |
| Polygala smallii | tiny polygala G1 S1 | Е | Е |
| Pteroglossaspis ecristata | giant orchid G2G3 S2 | Ν | т |
| Sceloporus woodi | Florida Scrub Lizard G2G3 S2S3 | Ν | Ν |
| Schizachyrium niveum | scrub bluestem G1G2 S1S2 | Ν | Е |
| Setophaga discolor paludicola | Florida Prairie Warbler G5T3 S3 | Ν | Ν |
| Tolumnia bahamensis | dancing-lady orchid G3 S1 | Ν | Е |
| Trichomanes punctatum ssp. floridanum | Florida filmy fern G4G5T1 S1 | Е | Е |



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is known to occur in this vicinity, and is considered likely within this Matrix Unit because:
1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; or 2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.



MARTIN COUNTY, FLORIDA

PRESERVE AREA MANAGEMENT PLAN

ANNUAL MONITORING REPORT FOR (Year)

- Name and address of current owner of Preserve Area;
- · Location of Preserve Area
- Date PAMP approved;
- Documentation of vegetation changes, including encroachment of exotic vegetation;
- Fixed-point panoramic photos of all Preserve Areas;
- Synopsis of maintenance activities conducted in compliance with the PAMP requirements such as exotic vegetation removal, re-vegetation, and additional enhancement activities necessary to maintain the Preserve Area;
- A timetable for action within 90 days of the report;
- A list of all violations of the PAMP; and
- Recommendations for remedial actions, with a proposed schedule for the coming year.

Signature/Date : _____

Typed Name/Title : _____

Company Name (if applicable) : _____