



This report and the enclosed information are submitted to support an Application for an Environmental Resource Permit from the South Florida Water Management District (SFWMD). To help facilitate SFWMD review, the following supporting exhibits are attached:

1. Location Map, Aerial Map, Soils Map, FLUCFCS Map
2. Section C Table 1

The following narratives provide further project information.

## 1.0 PROPERTY LOCATION

The project contains approximately 37.65 acres of land on both the north and south sides of the existing alignment of Cyrils Drive. The project begins just east of the previously permitted Cyrils Drive and Narcoossee Road Intersection Permit No. 49-103660-P and terminates within the previously permitted Sunridge NED Cyrils Drive Phase I Permit No. 49-02681-P.

A location map and an aerial photograph have been provided to identify the project area.

## 2.0 SURVEY METHODOLOGY

Prior to visiting the site, Austin Environmental Consultants, Inc. (AEC) conducted a review of available soil information, National Wetlands Inventory GIS layers, South Florida Water Management District (SFWMD) land use shapefiles, and available listed species locality records, including the Florida Fish and Wildlife Conservation Commission's (FWC) bald eagle nest database. Finally, a desktop review of U.S. Fish and Wildlife Service (USFWS) shapefiles was conducted to determine whether the project site occurs within the Consultation Area of any federally-listed species.

A professional biologist and authorized Gopher Tortoise Agent from AEC conducted a comprehensive review of the subject property in January of 2021 to investigate the presence of jurisdictional wetlands, as well as state and federally-listed species. Pedestrian transects were established within all onsite habitats. The presence of wildlife was determined by direct observation or signs of their presence (burrows, tracks, etc.). In addition, onsite vegetation and soil characteristics were reviewed in order to determine the extent and current condition of onsite wetlands. The limits of all onsite wetland areas were staked and/or flagged. The established wetland boundaries are identified on the enclosed Wetland Flagging Map.

## 3.0 SOILS

The onsite soil types were classified according to the Soil Survey for Osceola County, Florida (USDA, 1976) and available USDA Natural Resource Conservation Service (NRCS)

GIS layers. The soil survey identifies eleven (11) onsite soil types. The onsite soil types are summarized in the following Table 1 and identified on the Soils Map.

**Table 1. Onsite Soil Types**

ID#	Soil Name	Permeability	Hydric
5	Basinger fine sand, 0 to 2% slopes	Poorly drained	Yes
6	Basinger fine sand, depressionnal, 0 to 1 percent slopes	Very poorly drained	Yes
15	Hontoon muck, frequently ponded, 0 to 1 percent slopes	Very poorly drained	Yes
16	Immokalee fine sand, 0 to 2 percent slopes	Poorly drained	No
22	Myakka fine sand, 0 – 2% slopes	Poorly drained	No
32	Placid fine sand, frequently ponded, 0 to 1 percent slopes	Very poorly drained	Yes
34	Pomello fine sand, 0 to 5% slopes	Moderately well drained	No
40	Samsula muck, frequently ponded, 0 to 1 percent slopes	Very poorly drained	Yes
42	Smyrna fine sand, 0 to 2% slopes	Poorly drained	No
43	St. Lucie fine sand, 0 to 5% slopes	Excessively drained	No
44	Tavares fine sand, 0 to 5% slopes	Moderately well drained	No
99	Water		

#### 4.0 VEGETATIVE COMMUNITIES

The onsite land uses and vegetative community types were classified according to the Florida Land Use, Cover and Forms Classification System (FLUCFCS). One upland plant community and urban areas exist within the project area, and two wetland plant communities exist within the project area; refer to the FLUCCS Map. Representative photographs have been provided as an Appendix.

##### 4.1 Uplands

###### 100 - Urban and Built Up

The areas described as Urban and Built Up include the existing Cyrils Drive and its associated right of way, as well as disturbed and natural areas associated with single family residences. This land use contains vegetated areas that are mostly bahia grass (*Paspalum notatum*) adjacent to the roadway and throughout the single-family residences. However, there are a few natural areas within the residences with vegetation including slash pine (*Pinus elliottii*), long leaf pine (*P. palustris*), laurel oak (*Quercus laurifolia*), live oak (*Q. virginiana*), red maple (*Acer rubrum*), Brazilian pepper (*Schinus terebenthifolius*), and wax myrtle (*Myrica cerifera*).

###### 400 – Upland Forest

The western upland forested area includes a canopy of live oak, laurel oak, long leaf pine, slash pine, red bay (*Persea borbonia*), and southern magnolia (*Magnolia grandiflora*). A patchy shrub layer of saw palmetto, gallberry (*Ilex glabra*), and wax myrtle provides a transition to the adjacent forested wetland community.

Another upland forested area is found at the far east end of the project area. This area resembles a scrubby pine flatwood community with long leaf pine, slash pine, and live oak comprising the canopy. Myrtle oak (*Q. myrtifolia*), saw palmetto, rusty lyonia (*Lyonia ferruginea*), and tarflower (*Bejaria racemosa*) are found throughout the shrub stratum.

## 4.2 Wetlands & Surface Waters

### 500 – Other Surface Water

One upland cut, other surface water exists in the western portion of the project area. The OSW contains a mix of exotic species including Cuban bulrush (*Oxycaryum cubense*), primrose willow (*Ludwigia spp.*), and smartweed (*Polygonum spp.*).

### 630 – Wetland Forested Mixed

Areas described as Wetland Forested Mixed contain a diverse canopy including pond pine (*P. serotina*), slash pine, water oak (*Q. nigra*), sweetbay magnolia (*M. virginiana*), loblolly bay (*Gordonia lasianthus*), dahoon holly (*I. cassine*), red maple, and laurel oak. Ground cover includes a variety of ferns such as cinnamon fern (*Osmunda cinnamomeum*), swamp fern (*Blechnum serrulatum*), and royal fern (*O. regalis*).

### 640 – Freshwater Marsh

Areas described as freshwater marsh contain a diverse ground cover including saw grass (*Cladium jamaicense*), chalky bluestem (*Andropogon glomeratus*), soft rush (*Juncus effusus*), pickerel weed (*Pontederia cordata*), duck potato (*Sagittaria spp.*), St. John's Wort (*Hypericum cistifolium*, and *H. fasciculatum*), and spatterdock (*Nuphar spp.*).

## 5.0 LISTED WILDLIFE SPECIES

During the site review, AEC conducted pedestrian surveys for state and federally listed species with the potential to occur onsite.

### 5.1 Bald Eagle (*Haliaeetus leucocephalus*)

Although the bald eagle is no longer listed under the Endangered Species Act, it is still afforded protection by the USFWS under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Site reviews did not identify any bald eagle nests on or immediately adjacent to the property. Additionally, a review of the FWC bald eagle nest database determined that there are no known nests within the

vicinity of the project that would affect the timing or nature of construction within the project area.

## **5.2 Gopher Tortoise (*Gopherus polyphemus*)**

All onsite uplands are considered potential habitat for gopher tortoises. AEC conducted an informal survey within portions of the property and did not discover any gopher tortoise burrows.

A comprehensive survey throughout the upland areas should be conducted prior to development to determine exact gopher tortoise densities (should any burrows be discovered) and state permitting requirements.

The gopher tortoise is a state-listed, threatened species of reptile that occupies nearly all upland community types throughout the state of Florida. Gopher tortoises, their eggs, and their burrows are protected from harm or harassment. Any gopher tortoise burrows that have the potential to be impacted as a result of land clearing, construction, or other disturbance must be relocated out of harm's way to an approved offsite recipient site. Any gopher tortoise relocation activities will be permitted through the Florida Fish and Wildlife Conservation Commission (FWC).

## **5.3 Audubon's Crested Caracara (*Polyborus plancus audubonii*)**

The project area falls within the USFWS Consultation Area (CA) for this federally-listed, threatened species. Caracara utilize open grasslands, including pastures, palmetto prairies, wet prairies, and freshwater marshes for foraging. The species prefers to nest in cabbage palms (*Sabal palmetto*), although they have been known to nest in other tree species. Due to the lack of suitable habitat, it is not anticipated that the project would result in any adverse impacts to this species.

## **5.4 Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)**

The project area occurs within the USFWS CA for this federally-listed, endangered species. This small raptor's diet consists almost exclusively of apple snails (*Pomacea paludosa*). Snail kites require shallow freshwater marsh habitats that are capable of supporting healthy apple snail populations. They are found along the shorelines of freshwater lakes and marshes within the upper St. Johns River and Kissimmee River basins. No snail kites were observed with the project area, however suitable forage and nesting habitat occurs within the project vicinity. In particular, the emergent wetlands associated with Lake Ajay support apple snail populations, and contain suitable nesting habitat along the shoreline. According to 2021 survey data from the Florida Fish and Wildlife Conservation Commission there are currently no Everglades Snail Kites utilizing Lake Ajay for nesting. Additionally, there are no historical records of Everglades Snail Kites utilizing Lake Ajay. Therefore, it is unlikely that the proposed project will negatively affect this species.

## **5.5 Red Cockaded Woodpecker (*Picoides borealis*)**

The USFWS CA for this federally-listed, endangered species encompasses the entire subject property. This species of woodpecker constructs nest cavities within living, old-growth pine. Although they prefer longleaf pine, nest cavities have been documented in other pine species. No individuals of this species were observed on or adjacent to the project area during AEC's field reviews, and suitable habitat (i.e., stands of old-growth pines) does not occur onsite. Therefore, it is not anticipated that the project will result in adverse impacts to this species.

#### **5.6 Florida Scrub-Jay (*Aphelocoma coerulescens*)**

The project area falls within the CA for this federally-listed, threatened species. The species is native to Florida's xeric scrub communities, although it is known to utilize altered habitats including citrus groves and even residential areas. The USFWS considers the presence of scrub oaks to be the key indicator of suitable habitat. Preliminary, informal surveys conducted by AEC did not identify the presence of this species on or adjacent to the property, and suitable scrub-jay habitat does not occur onsite. Based on a lack of onsite suitable habitat, it is not anticipated that the project will result in adverse impacts to this species.

#### **5.7 Eastern Indigo Snake (*Drymarchon corais couperi*)**

The eastern indigo snake is a federally-listed, threatened species that utilizes various upland and wetland habitats throughout the state. Conservation measures required by the USFWS typically include the inspection and excavation of all gopher tortoise burrows prior to construction, posting signage throughout the construction site, educating contractors on the identification of the species, and measures that must be taken to avoid disturbance if one is encountered during site work. Utilizing the USFWS *Eastern Indigo Snake Programmatic Effect Determination Key* (2013), the following effect determination is made: A>B>C>D=NLAA (Not Likely to Adversely Affect).

#### **5.8 Wood Stork (*Mycteria americana*)**

The wood stork is listed as threatened by the USFWS. This species utilizes various wetland habitats for foraging and nesting. Although wood storks were not observed during the field review, suitable foraging habitat (non-forested wetlands and ditches) occur onsite. The project is located within the Core Foraging Area (CFA) of five (5) wood stork colonies. The CFA for active wood stork colonies within south Florida is defined as a circular area with an 18.6-mile radius from the colony. For projects that occur within the CFA of a known wood stork colony, any impacts to suitable foraging habitat may require habitat compensation. Mitigation involves the creation of suitable foraging habitat of similar type and hydroperiod as the areas that are impacted, and can often be satisfied through appropriate wetland mitigation. All impacts to onsite wetland habitat will be offset using mitigation credits purchased from a mitigation bank within the same watershed. Therefore, habitat compensation is within the service area of a Service-approved mitigation bank and allows for an A<B<C<D<E "NLAA" determination using the wood stork programmatic key.

#### **5.9 Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*)**

The project area is within the USFWS Consultation Area for this federally-listed, endangered species. However, the subject property does not contain suitable habitat (dry prairie) to support this species. As such, it is anticipated that the proposed project will have no effect on this species.

## 6.0 ECOLOGICAL IMPACT ANALYSIS

### 6.1 Project Purpose

Project Purpose: The Cyrils Drive / Narcoossee Road to Absher Road Widening Project proposes a four-lane divided roadway, curb and gutter, a 5-foot sidewalk on the north side, a 10-foot multi-use trail on the south side, and one stormwater pond in Osceola County, Florida

### 6.2 Wetland Impacts and Mitigation

There are eight (8) wetlands and one (1) other surface water that occur within the project area. Overall, the project will directly impact 5.70 acres of wetlands and 0.13 acres of other surface water. An additional 4.18 acres of secondary impacts have also been assessed.

**Table 2. Wetland Mitigation Analysis**

SUMMARY OF WETLAND FUNCTION AND MITIGATION						
WETLAND ID	IMPACT ACRES	LANDSCAPE	HYDROLOGY	COMMUNITY STRUCTURE	UMAM Score	UMAM Credits Needed
W-1 Herbaceous	1.27	5	8	8	0.70	0.89
W-1 Forested	0.29	6	7	7	0.67	.19
W-1 Secondary	1.19	5	7	6	Delta = .07	0.08
W-2 Herbaceous	1.33	5	8	8	0.70	0.93
W-2 Forested	0.31	6	7	7	0.67	0.21
W-2 Secondary	1.64	5	7	6	Delta = .07	0.11
W-3	0.12	NA	NA	NA	NA	NA
W-4	0.11	NA	NA	NA	NA	NA
W-5	0.12	NA	NA	NA	NA	NA
W-6	0.17	NA	NA	NA	NA	NA
W-7	1.97	5	7	7	0.63	1.24
W-7 Secondary	1.35	4	7	6	Delta = 0.06	0.08
W-8	0.01	NA	NA	NA		
OSW	0.13	NA	NA	NA		

TOTALS	10.01		3.73

The estimated functional losses associated with the proposed direct and secondary impacts were assessed utilizing the Uniform Mitigation Assessment Methodology (UMAM), see Exhibits. The UMAM analysis determined that the proposed direct and secondary impacts would result in a functional loss of 3.73 UMAM units.

No mitigation is being proposed for Wetlands W-3 through W-6 and W - 8, as well as the other surface water, as they are below 0.50 acres in size. The proposed direct wetland impacts yield a functional loss of 1.82 herbaceous UMAM units and 1.91 forested UMAM units. W-9 impacts have been previously mitigated for and approved via SFWMD Application No. 170814-2 / Permit No. 49-02681-P.

Assessing secondary impacts 50' waterward from the direct impact seems logical. Essentially, it is likely that adjacent organisms and habitats have acclimated to the existing roadway and any additional impacts will be tolerated.

Following District approval of the mitigation plan, the applicant will provide a letter of credit reservation from an appropriate mitigation bank.

### **6.3 Elimination or Reduction of Impacts**

The applicant has considered all alternatives to minimize and avoid wetland impacts. There are no alignment alternatives that allow for unavoidable impacts. Any unavoidable impacts to wetlands will be mitigated to achieve a no net loss of wetland function.

Previous design iterations included four (4) stormwater ponds, of which, two proposed wetland impacts. The proposed impacts associated with Pond 102 were approximately 0.64 acres and 0.80 acres for Pond 108. The current design iteration eliminates the pond impacts thereby addressing the criteria of Section 10.2.1 of the Applicant's Handbook. **Please refer to the Elimination and Reduction Exhibits.**

### **7.0 ARCHEOLOGIC AND HISTORIC RESOURCES**

It is unlikely that any Archeologic or Historic resources remain within the existing ROW that is being improved.

### **8.0 CONCLUSION**

The proposed project is not anticipated to result in adverse impacts to any state or federally listed species, however, consultation may be initiated with the US Fish and Wildlife Service to address any survey methodology that may be required.

No listed species were observed within the project area or within the project vicinity. However, the Florida Fish and Wildlife Conservation Commission (FWC) will require a 100% gopher tortoise survey prior to any construction activities.

Wetland and other surface water impacts will require a permit from the SFWMD. Mitigation will be required for the functional loss associated with the direct and secondary wetland impacts. The applicant will provide a total of 3.73 UMAM units / mitigation bank credits to offset the functional loss.

Should you have any questions or need any additional information, please contact me.

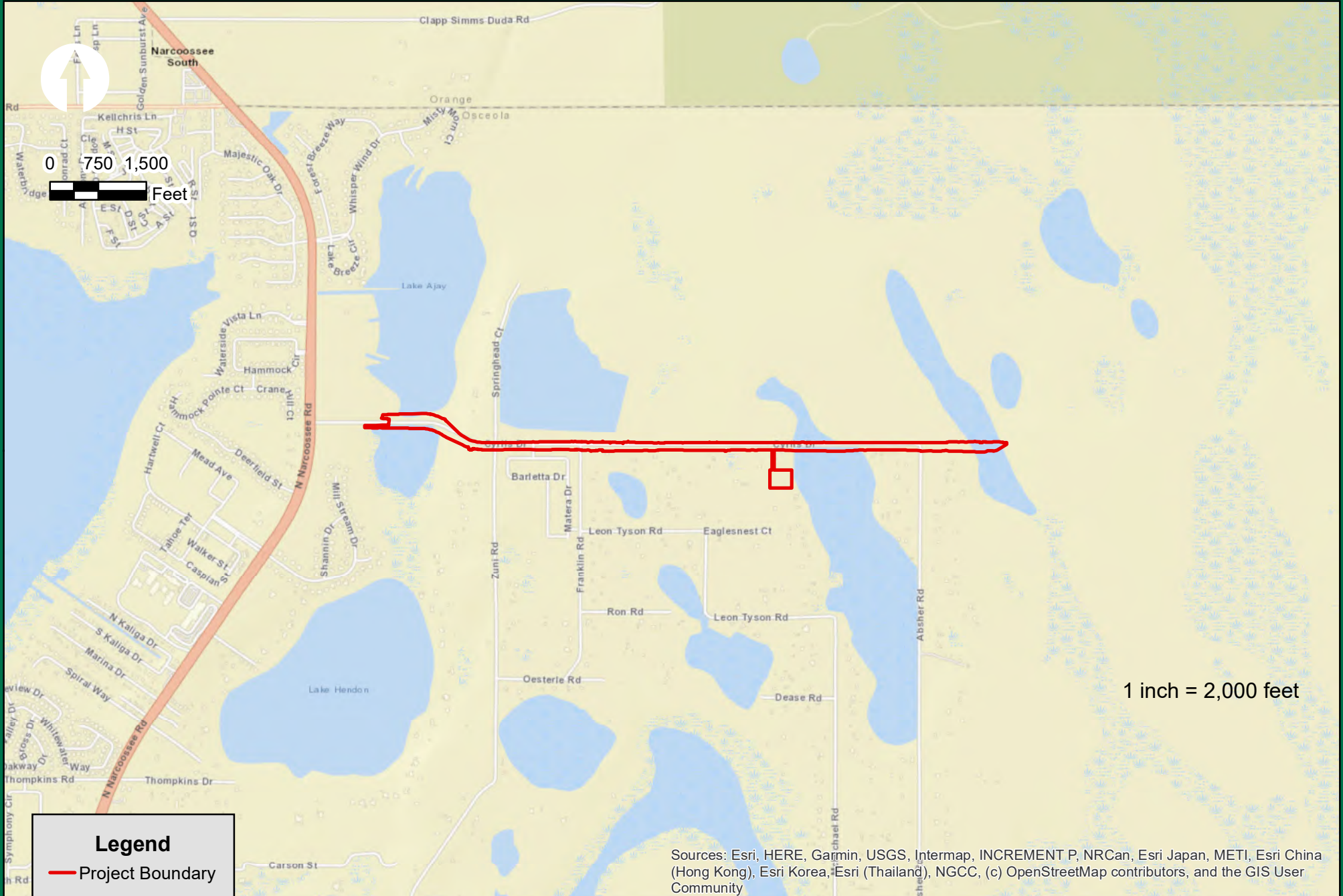
Sincerely,  
**David Melton**

David Melton  
Environmental Consultant



## FIGURES

## **Location Map**



**Legend**

— Project Boundary

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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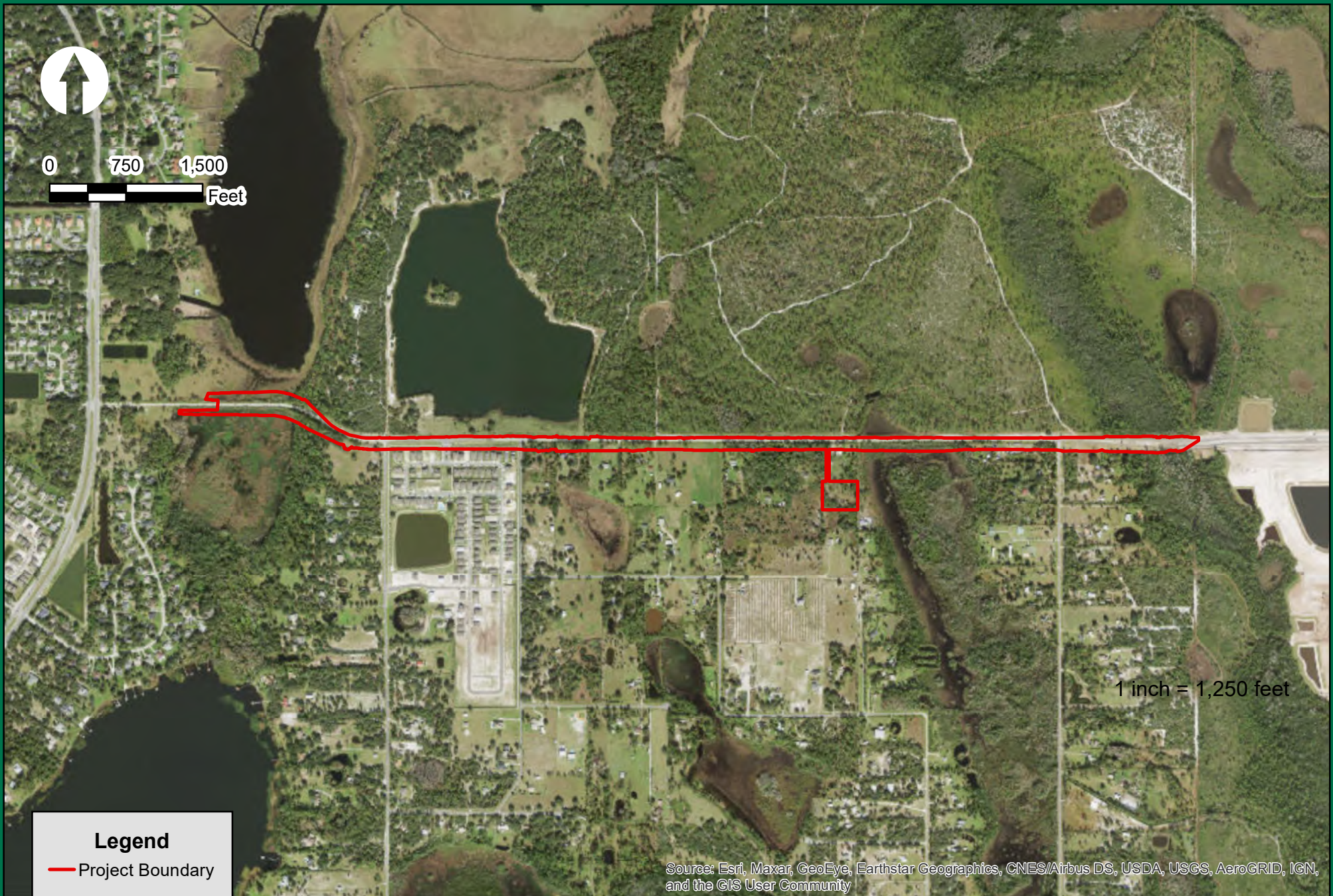
# LOCATION MAP

## Cyrils Drive to Absher Road Road Widening

Osceola County, FL

**Aerial**





**Legend**

— Project Boundary

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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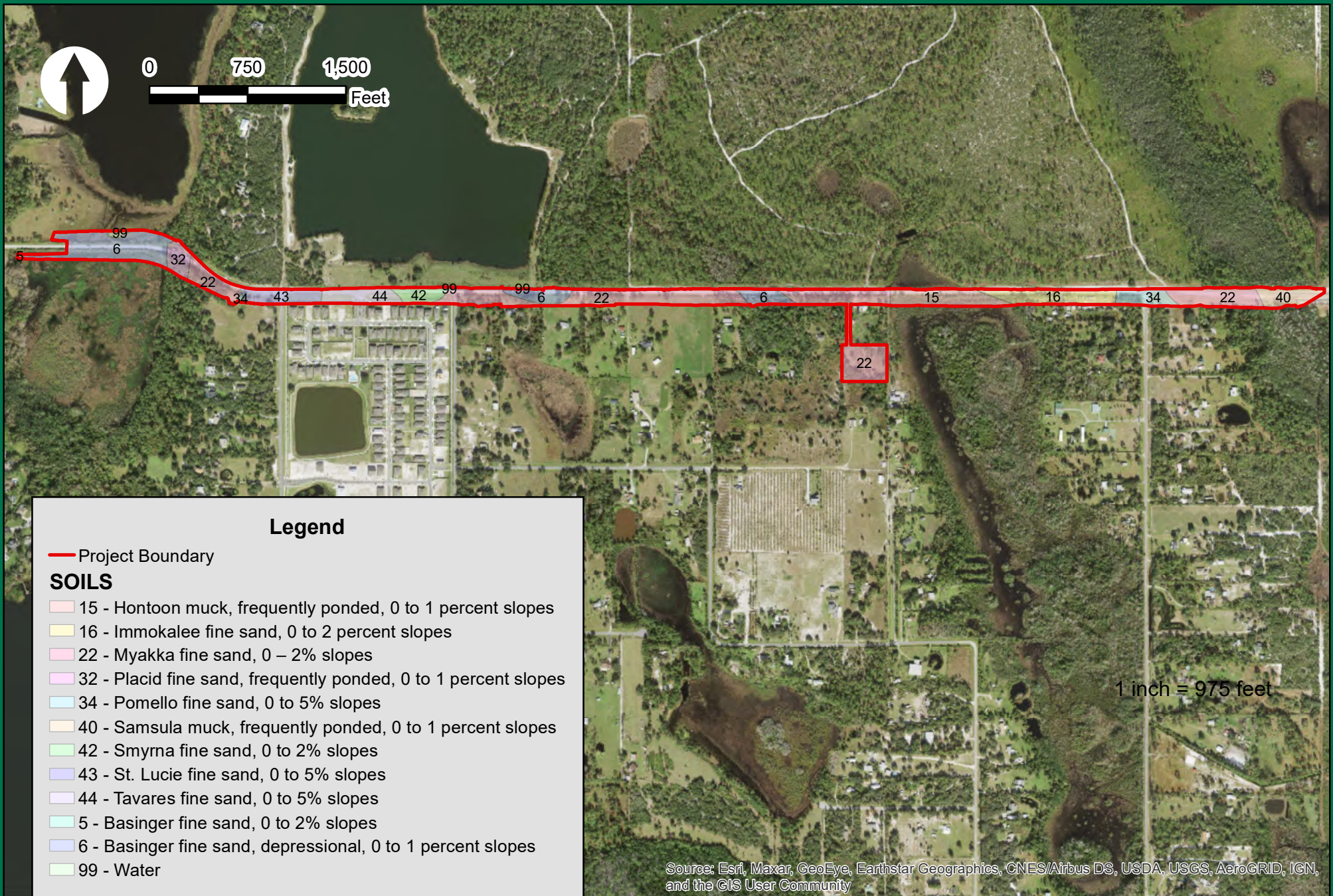
*AERIAL MAP*

**Cyrils Drive to Absher Road  
Road Widening**

Osceola County, FL

## Soils Map





**Legend**

— Project Boundary

**SOILS**

- 15 - Hontoon muck, frequently ponded, 0 to 1 percent slopes
- 16 - Immokalee fine sand, 0 to 2 percent slopes
- 22 - Myakka fine sand, 0 – 2% slopes
- 32 - Placid fine sand, frequently ponded, 0 to 1 percent slopes
- 34 - Pomello fine sand, 0 to 5% slopes
- 40 - Samsula muck, frequently ponded, 0 to 1 percent slopes
- 42 - Smyrna fine sand, 0 to 2% slopes
- 43 - St. Lucie fine sand, 0 to 5% slopes
- 44 - Tavares fine sand, 0 to 5% slopes
- 5 - Basinger fine sand, 0 to 2% slopes
- 6 - Basinger fine sand, depressional, 0 to 1 percent slopes
- 99 - Water

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1 inch = 975 feet



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**SOILS MAP**

**Cyrils Drive to Absher Road  
 Road Widening**

Osceola County, FL

## FLUCFCS Map





0 750 1,500  
Feet



1 inch = 1,206 feet

### Legend

- Project Boundary
- 400 - Upland Forest
- 630 - Wetland Forested Mixed
- 500 - OSW
- 640 - Freshwater Marsh
- 100 - Urban and Built Up

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



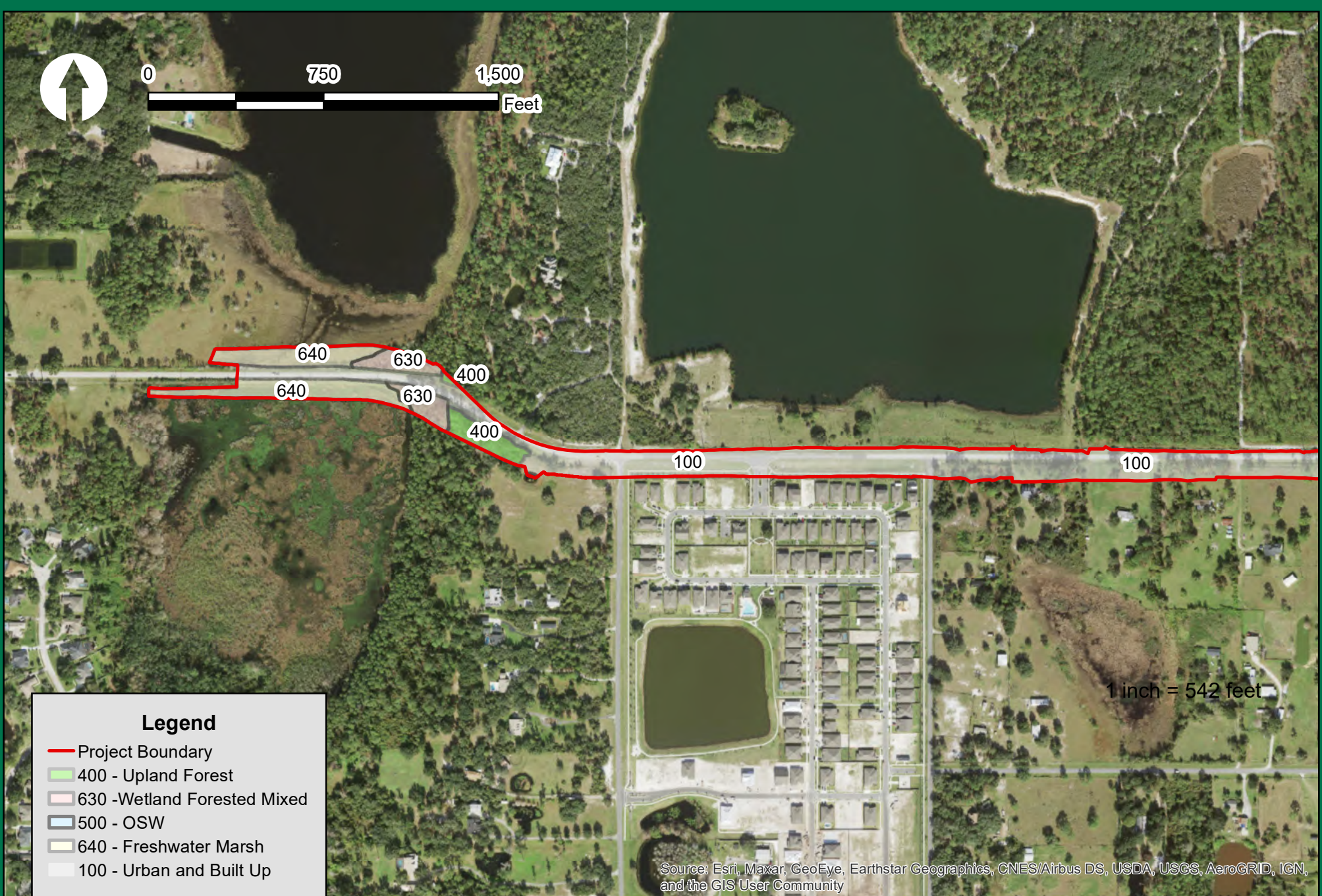
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## FLUCCS MAP OVERALL

## Cyrils Drive to Absher Road Road Widening

Osceola County, FL





**Legend**

- Project Boundary
- 400 - Upland Forest
- 630 - Wetland Forested Mixed
- 500 - OSW
- 640 - Freshwater Marsh
- 100 - Urban and Built Up



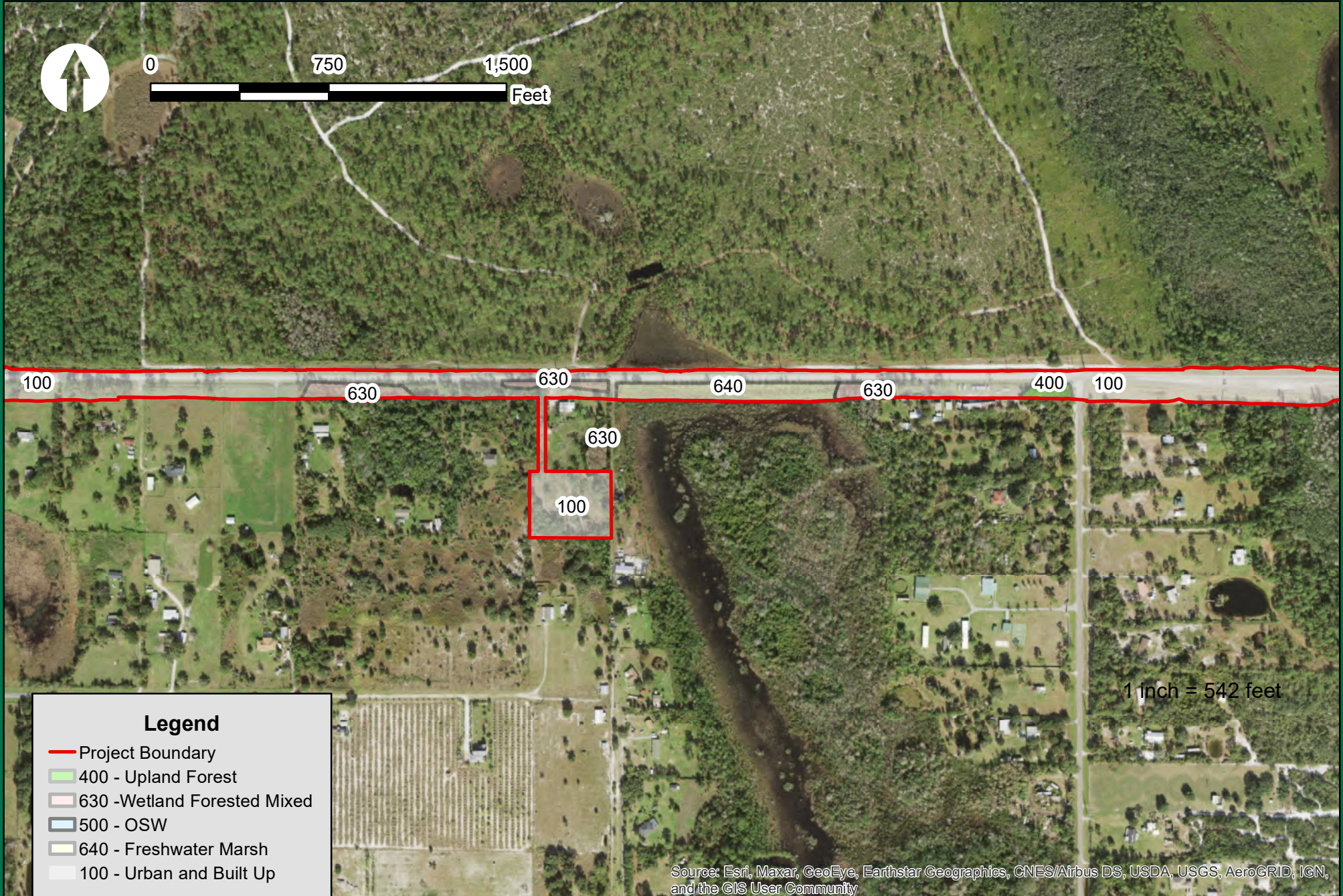
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**FLUCCS MAP  
 WEST**

**Cyrils Drive to Absher Road  
 Road Widening**

Osceola County, FL







1 inch = 542 feet

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Legend**

-  Project Boundary
-  400 - Upland Forest
-  630 -Wetland Forested Mixed
-  500 - OSW
-  640 - Freshwater Marsh
-  100 - Urban and Built Up



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**FLUCCS MAP  
EAST**

**Cyrils Drive to Absher Road  
Road Widening**

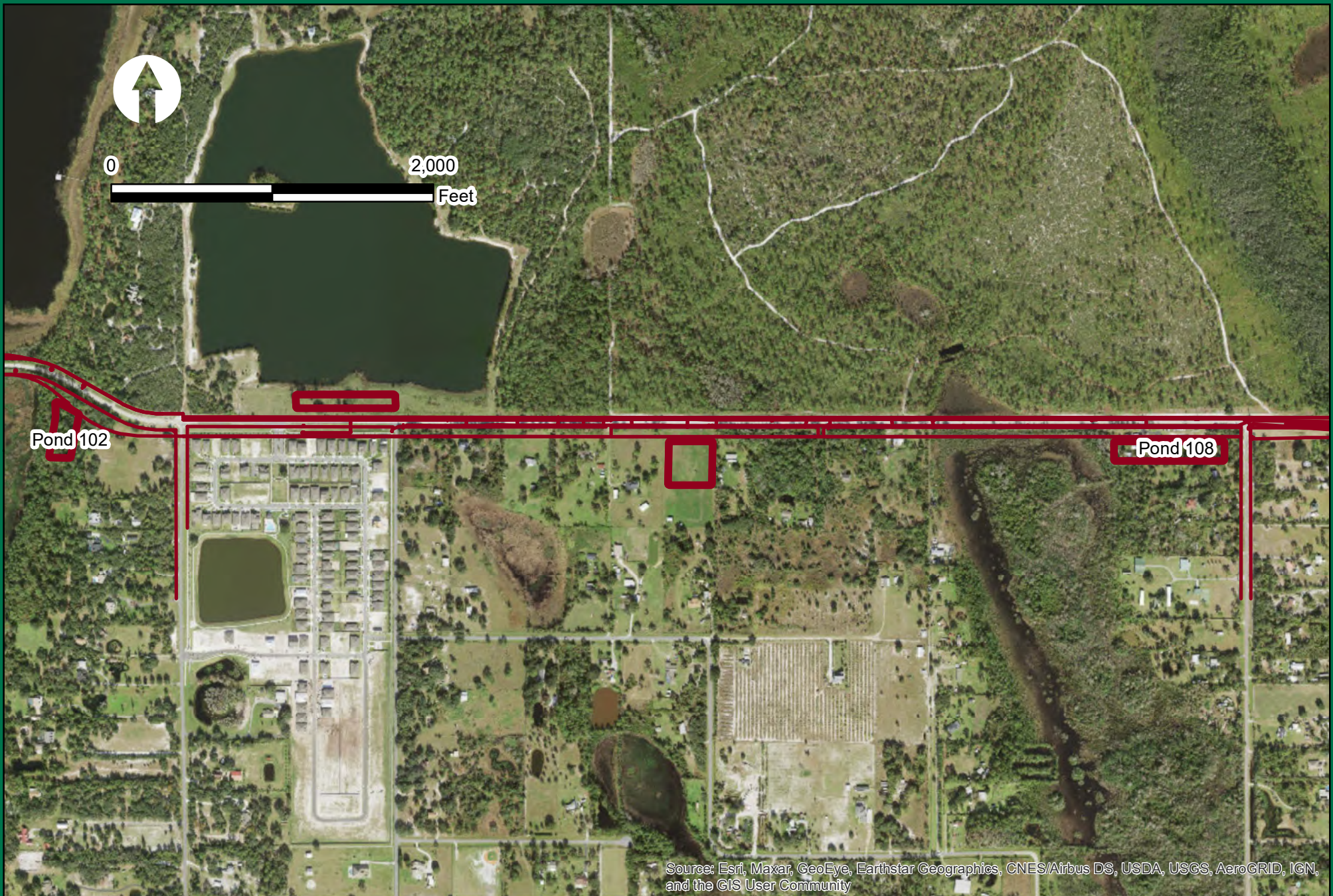
Osceola County, FL



## **Exhibits**

## **Appendix**





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



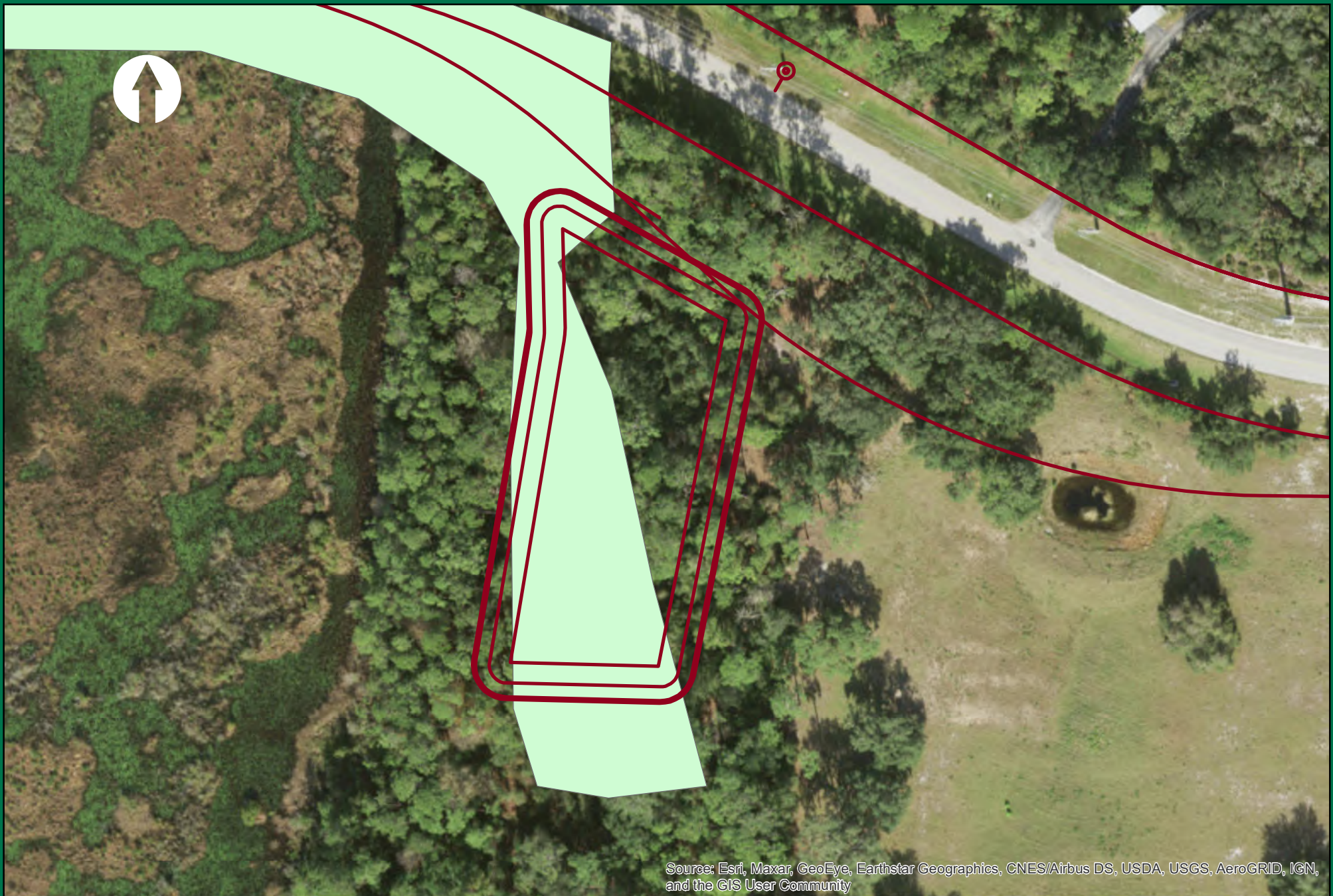
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*Elimination and Reduction  
Previous Iteration Pond Locations*

**Cyril Drive to Absher -  
Proposed Ponds**

Osceola County





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



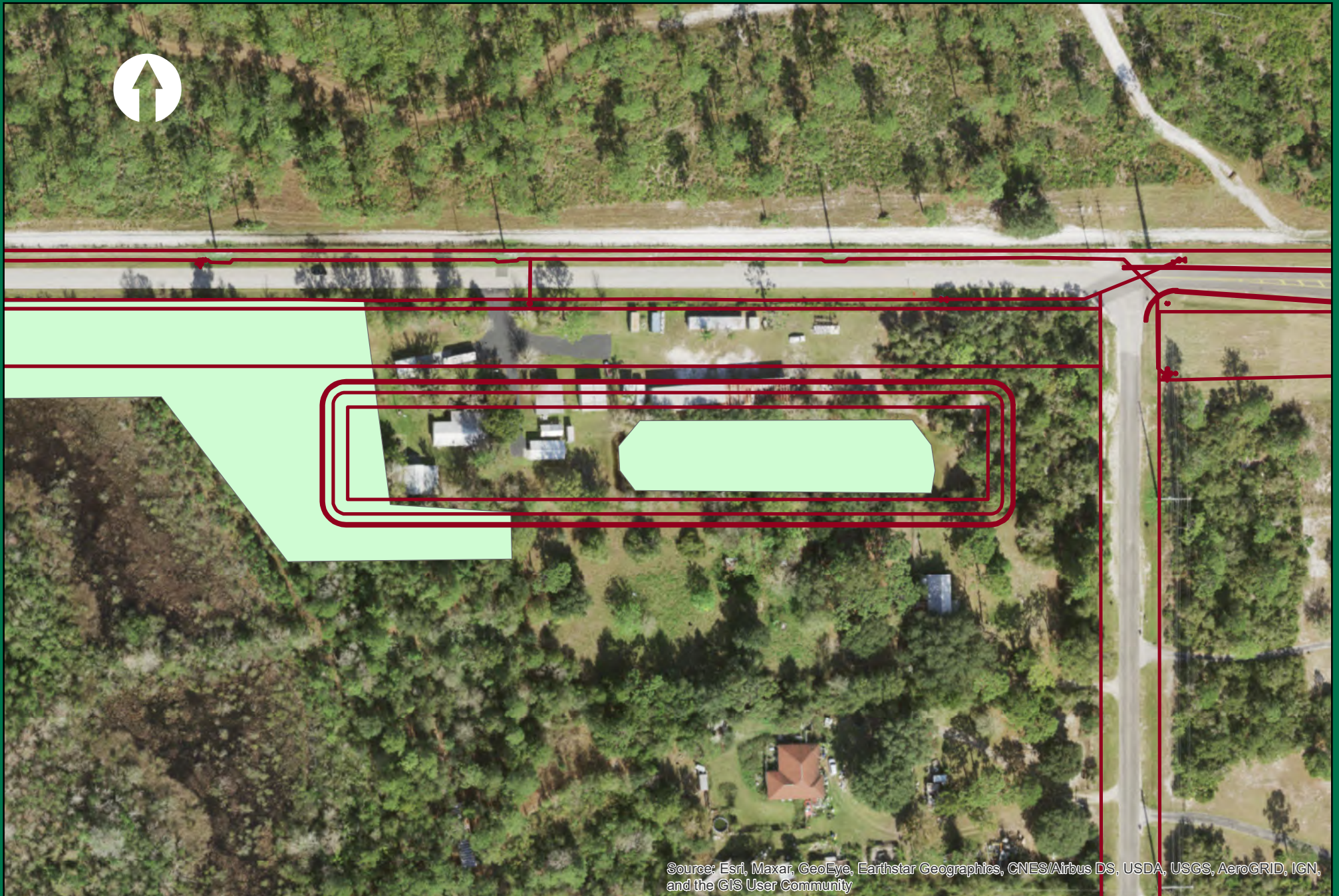
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*Elimination and Reduction*  
**Pond 102**  
*0.64 Acres of Wetland Impact Eliminated*

**Cyril Drive to Absher -  
Proposed Ponds**

Osceola County





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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*Elimination and Reduction*  
**Pond 108**  
*0.80 Acres of Wetland Impact Eliminated*

**Cyril Drive to Absher -  
Proposed Ponds**

Osceola County



**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Cyrllis Drive to Absher		Application Number TBD		Assessment Area Name or Number Wetland Impact 1 Forested	
FLUCCs code 630		Further classification (optional) Wetland Forested Mixed		Impact or Mitigation Site? Direct Impact	Assessment Area Size 0.29 Direct
Basin/Watershed Name/Number	Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)		
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands  The assessment area extends north and rims Lake Ajay.					
Assessment area description  Typical vegetation within the assessment are includes: slash pine, pond pine, laurel oak, water oak, sweet bay mangnolia, dahoon holly, and swamp bay. Subcanopy and ground cover: wax myrtle, scattered saw palm, cinnamon fern, virginia chain fern, and royal fern.					
Significant nearby features  Lake Ajay			Uniqueness (considering the relative rarity in relation to the regional landscape.)  Not unique		
Functions  Water storage and nutrient removal, wildlife habitat and aquifer recharge			Mitigation for previous permit/other historic use  no		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found )  Typical small to medium size mammal, herpatofauna, and avifauna. .			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)  None anticipated		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):  Perching birds					
Additional relevant factors:					
Assessment conducted by: David Melton			Assessment date(s): 26-Jan-21		

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 1 Forested
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	The assessment area is ia adjacent to a roadway. However, quality upland habitat is found to the east of the assessment area.
w/o pres or current 6	with
.500(6)(b)Water Environment (n/a for uplands)	Water levels appear adequate for the assessment area.
w/o pres or current 7	with
.500(6)(c)Community structure	The plant community is appropriate for the assessment area. However, exotic species are found at the edge adjacent to the roadway and near the upland area to the east.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.67	with

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.67 x 0.29 = 0.19

Delta = [with-current]
------------------------

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Cyrilis Drive to Absher		Application Number TBD		Assessment Area Name or Number Wetland Impact 1 Herbaceous	
FLUCCs code 640		Further classification (optional) Marsh		Impact or Mitigation Site? Direct Impact	Assessment Area Size 1.27 Direct
Basin/Watershed Name/Number		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands  The assessment area connects to a larger system that extends north and is contiguous w Lake Ajay.					
Assessment area description  Typical vegetation within the assessment are includes: saw grass, spatterdock, duck potato, pickerel weed, St Johns wort, cattail, primrose willow, wax myrtle, and Carolina willow.					
Significant nearby features  Lake Ajay			Uniqueness (considering the relative rarity in relation to the regional landscape.)  Not unique		
Functions  Water storage and nutrient removal, wildlife habitat and aquifer recharge			Mitigation for previous permit/other historic use  no		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found )  Typical small to medium size mammal, herpatofauna, and avifauna. Native sunfish, minnows, and their allies.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)  None anticipated		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):  Belted kingfisher, mosquito fish, leopard frog					
Additional relevant factors:					
Assessment conducted by: David Melton			Assessment date(s): 26-Jan-21		

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 1 Herbaceous
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	The assessment area is adjacent to a roadway. However, quality upland habitat is found to the east of the assessment area.
w/o pres or current 5	with
.500(6)(b)Water Environment (n/a for uplands)	Water levels appear adequate for the assessment area.
w/o pres or current 8	with
.500(6)(c)Community structure	The plant community is appropriate for the assessment area. However, exotic species are found at the edge adjacent to the roadway and near the upland area to the east.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 8	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.7	with

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.70 x 1.27 = 0.89

Delta = [with-current]
------------------------

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 1 Forested
Impact or Mitigation Secondary Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	There will be a loss of adjacent habitat.
w/o pres or current 6	with 5
.500(6)(b)Water Environment (n/a for uplands)	The proposed activity will most likely not affect this parameter. BMP's will be utilized.
w/o pres or current 7	with 7
.500(6)(c)Community structure	An edge effect will most likely occur post construction.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with 6

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.67	with 0.6

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.07 x 1.19 = 0.08

Delta = [with-current]
0.07

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Cyrilis Drive to Absher		Application Number TBD		Assessment Area Name or Number Wetland Impact 2 Forested	
FLUCCs code 630		Further classification (optional) Forested Wetland Mixed		Impact or Mitigation Site? Direct Impact and Secondary Impact	Assessment Area Size 0.31 Acres Direct and 1.64 Acres Secondary
Basin/Watershed Name/Number	Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)		
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands  The assessment area is part of a larger system that rims Lake Ajay.					
Assessment area description  Typical vegetation within the assessment area includes: pond pine, slash pine, laurel oak, water oak, sweet bay , and swamp bay. Ground cover and shrub include: saw palmetto, sabla palm, cinnamon fern, swamp fern, and royal fern.					
Significant nearby features  Lake Ajay			Uniqueness (considering the relative rarity in relation to the regional landscape.)  Not unique		
Functions  Water storage and nutrient removal, wildlife habitat and aquifer recharge			Mitigation for previous permit/other historic use  no		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found )  Typical small to medium size mammal, herpatofauna, and avifauna.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)  None		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):  Oak toad					
Additional relevant factors:					
Assessment conducted by: David Melton			Assessment date(s): 26-Jan-21		

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 2 Forested
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	The assessment area is ia adjacent to a roadway. However, quality upland habitat is found to the east of the assessment area.
w/o pres or current 6	with
.500(6)(b)Water Environment (n/a for uplands)	Water levels appear adequate for the assessment area.
w/o pres or current 7	with
.500(6)(c)Community structure	The plant community is appropriate for the assessment area. However, exotic species are found at the edge adjacent to the roadway and near the upland area to the east.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.67	with

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.67 x 0.31 = 0.21

Delta = [with-current]
------------------------

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Cyrilis Drive to Absher		Application Number TBD		Assessment Area Name or Number Wetland Impact 2 Herbaceous	
FLUCCs code 640		Further classification (optional) Freshwater Marsh		Impact or Mitigation Site? Direct Impact	Assessment Area Size 1.33 Direct
Basin/Watershed Name/Number		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands  The assessment area is part of a larger system connected to Lake Ajay.					
Assessment area description  Typical vegetation within the assessment area includes: pickerel weed ( <i>Pontederia chordata</i> ), water lily ( <i>Nuphar spp.</i> ), duck potato ( <i>Sagittaria spp.</i> ), maidencane ( <i>Panicum hemitomon</i> ) and some tree / shrub species on the fence line: red maple ( <i>Acer rubrum</i> ), wax myrtle ( <i>Myrica cerifera</i> ), primrose willow ( <i>Ludwigia spp</i> ) and sweet bay magnolia ( <i>Magnolia virginiana</i> ).					
Significant nearby features  Lake Ajay			Uniqueness (considering the relative rarity in relation to the regional landscape.)  Not unique		
Functions  Water storage and nutrient removal, wildlife habitat and aquifer recharge			Mitigation for previous permit/other historic use  no		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found )  Typical small to medium size mammal, herpatofauna, and avifauna, as well as, local fish.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)  Listed wading birds		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):  Mosquito fish, belted kingfisher					
Additional relevant factors:					
Assessment conducted by: David Melton			Assessment date(s): 26-Jan-21		



**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 2 Herbaceous
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	The assessment area is adjacent to a roadway. However, quality upland habitat is found to the east of the assessment area.
w/o pres or current 5	with
.500(6)(b)Water Environment (n/a for uplands)	Water levels appear adequate for the assessment area.
w/o pres or current 8	with
.500(6)(c)Community structure	The plant community is appropriate for the assessment area. However, exotic species are found at the edge adjacent to the roadway and near the upland area to the east.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 8	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.7	with

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.70 x 1.33 = 0.93

Delta = [with-current]
------------------------

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 2 Secondary
Impact or Mitigation Secondary Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	There will be a loss of adjacent habitat.								
<table border="1"> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>6</td> <td>5</td> </tr> </table>	w/o pres or current	with	6	5					
w/o pres or current	with								
6	5								
.500(6)(b)Water Environment (n/a for uplands)	The proposed activity will most likely not affect this parameter. BMP's will be utilized.								
<table border="1"> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>7</td> <td>7</td> </tr> </table>	w/o pres or current	with	7	7					
w/o pres or current	with								
7	7								
.500(6)(c)Community structure	An edge effect will most likely occur post construction.								
<table border="1"> <tr> <td>1. Vegetation and/or</td> <td></td> </tr> <tr> <td>2. Benthic Community</td> <td></td> </tr> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>7</td> <td>6</td> </tr> </table>	1. Vegetation and/or		2. Benthic Community		w/o pres or current	with	7	6	
1. Vegetation and/or									
2. Benthic Community									
w/o pres or current	with								
7	6								

Score = sum of above scores/30 (if uplands, divide by 20)	
current	with
or w/o pres	
0.67	0.6

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.07 x 0.1.64 = 0.11

Delta = [with-current]
0.07

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Cyrilis Drive to Absher		Application Number TBD		Assessment Area Name or Number Wetland Impact 7	
FLUCCs code 640		Further classification (optional) Marsh		Impact or Mitigation Site? Direct Impact	
Assessment Area Size 1.97 Acres Direct					
Basin/Watershed Name/Number		Affected Waterbody (Class)		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands  The assessment area is connected to a larger system that extends south.					
Assessment area description  Typical vegetation within the assessment are includes: saw grass, spatterdock, duck potato, pickerel weed, St Johns wort, cattail, primrose willow, wax myrtle, and Carolina willow.					
Significant nearby features  None			Uniqueness (considering the relative rarity in relation to the regional landscape.)  Not unique		
Functions  Water storage and nutrient removal, wildlife habitat and aquifer recharge			Mitigation for previous permit/other historic use  no		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found )  Typical small to medium size mammal, herpatofauna, and avifauna. Native sunfish, minnows, and their allies.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)  None anticipated		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):  Cricket frog					
Additional relevant factors:					
Assessment conducted by: David Melton			Assessment date(s): 26-Jan-21		

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 1 Herbaceous
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	The assessment area is adjacent to a roadway. However, it is contiguous with a larger system extending south.
w/o pres or current 5	with
.500(6)(b)Water Environment (n/a for uplands)	Water levels appear adequate for the assessment area.
w/o pres or current 7	with
.500(6)(c)Community structure	The plant community is appropriate for the assessment area. However, exotic species are found at the edge adjacent to the roadway.
1. Vegetation and/or 2. Benthic Community	
w/o pres or current 7	with

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres 0.63	with

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.63 x 1.97 = 1.24

Delta = [with-current]
------------------------

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Cyrilis Drive and Narcoossee Intersection	Application Number	Assessment Area Name or Number Wetland Impact 1 Herbaceous
Impact or Mitigation Direct Impact	Assessment conducted by: David Melton	Assessment date: 26-Jan-21

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support			
w/o pres or current	with		
5	4		
.500(6)(b)Water Environment (n/a for uplands)			
w/o pres or current	with		
7	7		
.500(6)(c)Community structure			
1. Vegetation and/or 2. Benthic Community			
w/o pres or current	with		
7	6		

Score = sum of above scores/30 (if uplands, divide by 20)	
current	with
or w/o pres	
0.63	0.57

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.06 x 1.35 = 0.08

Delta = [with-current]
0.06

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

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## Section C: Supplemental Information for Works or Other Activities In, On, or Over Wetlands and/or Other Surface Waters

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Instructions: **This section is for applications that do not involve activities associated with an individual single-family residence, duplex, triplex, or quadruplex. For those activities, please use Section B.** This form is to be completed if the proposed work or activity will occur in, on, over, or within 25 feet of a wetland or other surface water. The supplemental information required by this section is in addition to the information required by Section A of the application.

### Part 1: Wetland or Other Surface Water Impact Summary

1. Describe the basic purpose of the project or activity: **This is an application requesting approval to construct roadway improvements to the existing Cyrils Drive.**
2. Total area of work (dredging, filling, construction, alteration, or removal) in, on, or over wetlands or other surface waters:       sq. ft.;**5.83 acres**
3. Total volume of material to be dredged or filled in wetlands or other surface waters:
  - a. to be dredged:
  - b. to be filled:.
4. Identify the seasonal high water level (SHWL) and wetland normal pool elevations for each wetland or surface water within the project site. For tidal wetlands and/or surface waters provide the elevation of mean high and mean low water. Include an aerial photograph showing the location of each sampling location, dates, datum, and methods used to determine these elevations. **See submitted Engineering Plans.**
5. Name of waterbody(ies) (if applicable & if known) in which work will occur? **Wetlands fringing Lake Ajay**
6. Is the activity proposed in an Outstanding Florida Water or Aquatic Preserve?  
 yes, name:                    no                    I don't know
7. Has there ever been a formal or informal wetland determination for the project site? If yes, provide the identifying number and/or a copy of the jurisdictional map. **No.**
8. Provide a map(s) of the project area and vicinity delineating USDA/NRCS soil types. **See submitted Environmental Considerations Report (ECR).**
9. Provide recent aerials, legible for photointerpretation (no photocopies) with a scale of 1" = 400 ft, or more detailed, with project boundaries and wetland boundaries delineated on the aerial. **See submitted ECR.**



10. Provide maps accurately portraying the existing and proposed natural vegetative community types and land cover classifications using recognized classification schemes. Suggested sources include: the Florida Natural Areas Inventory Guide to the Natural Communities of Florida (2010) available at <http://www.fnai.org/naturalcommguide.cfm>, or the Florida Land Use and Cover Classification System (FLUCCS) (FDOT 1999, available at <http://www.dot.state.fl.us/surveyingandmapping/documentsandpubs/fluccmanual1999.pdf>). For vegetated areas dominated by exotic vegetation, use the descriptors representative of the native community type that was present prior to exotic infestation. **See submitted ECR.**
  
11. Impact Summary Tables (located at the end of this section):
  - a. For all projects, complete Table 1, 2 and 3 as applicable. **See submitted ECR.**
  - b. For shoreline stabilization projects, provide the information requested in Table 4. **N/A.**
  
12. If the activity is located on state owned submerged lands and requires a lease or easement, provide a list of names and addresses from the latest county tax assessment roll of all property owners located within a 500 ft. radius of the proposed lease or easement boundary in mailing label format, or you may elect to send notice to those persons by certified mail, with the return-receipt card addressed to the DEP or water management district, as applicable, in accordance with subsection 18-21.005(3), F.A.C., and Section 253.115, F.S. Attach additional sheets if necessary. **No. N/A.**
  1. Name:  
Mailing Address:  
City, State, Zip Code:
  
  2. Name:  
Mailing Address:  
City, State, Zip Code:
  
  3. Name:  
Mailing Address:  
City, State, Zip Code:
  
  4. Name:  
Mailing Address:  
City, State, Zip Code:
  
  5. Name:  
Mailing Address:  
City, State, Zip Code:
  
  6. Name:  
Mailing Address:  
City, State, Zip Code:

## Part 2: Environmental Considerations

Note: for many questions, a state statute/Applicant's Handbook Volume I (AH I) section is cited to assist the applicant in addressing these questions. However, additional federal criteria may apply.

1. Elimination or Reduction of Impacts (Avoidance and Minimization). Describe measures taken to eliminate or reduce impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.1*). **See submitted ECR.**
2. Fish, Wildlife, Listed Species, and their Habitats. Provide results of any wildlife assessments that have been conducted on the project site and provide any comments, biological opinions, formal or informal consultation decisions, or recommended actions you have received pertaining to the project from the Florida Fish and Wildlife Conservation Commission, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. (*Refer to AH I Section 10.2.2*). **See submitted ECR.**
3. Water quantity impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.2.4 and AH II*).
  - a. Does the activity include a proposed surface water management system with a control elevation different than the wetland normal pool elevation(s) of existing or proposed created wetlands or other surface waters? **See submitted ECR and Engineering Plans.**
  - b. If yes to (a), provide documentation (e.g. drawdown assessment or other methods) that shows the proposed surface water management system will not change the hydroperiod of the existing or created wetland or other surface water.
4. Public Interest Test. Please describe how the proposed activity will **not be contrary** to the public interest, OR if such an activity significantly degrades or is located within an Outstanding Florida Water (OFW), that the regulated activity will be **clearly in** the public interest (*Refer to AH I Section 10.2.3*).
  - a. Please describe how the project will be designed to avoid adverse effects to public health, safety, or the welfare or the property of others. **Construction shall utilize Best Management Practices to avoid impacts to upstream or downstream waters.**
  - b. Please describe how the project will be designed to avoid adverse effects to the conservation of fish and wildlife, including endangered or threatened species, or their habitats. **See submitted ECR. The project is not anticipated to adversely affect any listed wildlife species nor significant habitat.**
  - c. Please describe how the project will be designed to avoid adverse effects to navigation or the flow of water or cause harmful erosion or shoaling. **Construction shall utilize Best Management Practices to avoid impacts to upstream or downstream waters.**
  - d. Please describe how the project will be designed to avoid adverse effects to the fishing or recreational values or marine productivity in the vicinity of the activity. **Construction shall utilize Best Management Practices to avoid impacts to upstream or downstream waters.**
  - e. Will the project be of a temporary or permanent nature? **Permanent.**
  - f. Please describe how the project will be designed to avoid adverse impacts to significant historical and archaeological resources, under the provisions of section 267.061, F.S. **The project involves improvements to an existing roadway and all work will occur within the Right-of-Way corridor. It is unlikely significant historical or archaeological resources are present.**
  - g. Please describe how the project will be designed to avoid adverse effects to the current condition and relative value of functions being performed by areas affected by the proposed regulated



activity. **Construction shall utilize Best Management Practices to avoid impacts to upstream or downstream waters.**

5. Water Quality.

Provide a description of how water quality will be maintained in wetlands and other surface waters that will be preserved or will remain undisturbed, both on and offsite. Please address both short-term (such as during construction) and long-term water quality considerations (*Refer to AH I Section 10.2.4*). **See submitted ECR and Engineering Plans.**

6. Class II Waters; Waters approved for shellfish harvesting (*Refer to AH I Section 10.2.5*).

- a. Will the project occur in Class II that are NOT approved for shellfish harvesting? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(a)*. **N/A**
- b. Is the project located adjacent to or in close proximity to Class II waters? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(b)*. **N/A**
- c. Is the project located in Class II or Class III waters that are classified as “approved”, “restricted”, “conditionally approved”, or “conditionally restricted”? If yes, demonstrate that the project meets the requirements of *AH I Section 10.2.5(c)*. **N/A**

7. Vertical seawalls. Are vertical seawalls proposed in an estuary or lagoon as part of the project? If yes, please describe how the project meets the requirements of *AH I Section 10.2.6*. **N/A**

8. Secondary Impacts (*AH I Section 10.2.7*).

- a. Will an upland buffer, with a minimum width of 15' and an average width of 25', be provided between the proposed activities and existing wetlands or wetlands to be preserved, enhanced, restored, or created? Provide the location and dimension of all buffers on the plans. **See submitted ECR and Engineering Plans.** If not, demonstrate that secondary impacts will not occur or describe how they will be offset. **See submitted ECR and Engineering Plans.**
- b. If listed species are present or may be present, then coordination with wildlife agencies is needed. Have you coordinated with the FFWCC and/or USFWS? If so, please provide correspondence from the wildlife agencies indicating concurrence with the species management plan(s). **See submitted ECR.**
- c. What measures will be taken to avoid impacts to wetland-dependent wildlife and/or listed species that use uplands for nesting or denning? **See submitted ECR.**
- d. Describe whether there are any other relevant activities that are very closely linked and causally related to any proposed dredging or filling in wetlands or other surface waters that have the potential to cause impacts to significant historical and archaeological resources. **N/A**
- e. Are there additional future phases or extensions of the proposed activities that are not shown? If yes, please describe. **No.**

9. Cumulative Impacts. Is the proposed mitigation located within the same drainage basin (*Refer to AHI Figures 10.2.8.1 – 10.2.8.5*) as the proposed wetland impacts? . If not, please submit a Cumulative Impact Evaluation in accordance with *AHI Section 10.2.8*. **See submitted ECR.**

10. Mitigation Plan (*Refer to AHI Section 10.3*).

a. If a mitigation bank is proposed to offset wetland/other surface water impacts, provide: **N/A**

- i. the name of the bank:. A letter of reservation from the banker will be required once the application has been evaluated.
- ii. If the mitigation bank was assessed using UMAM, provide UMAM worksheets for impact area(s). If the bank was assessed using a method other than UMAM, then prepare the impact assessment using the same method..

b. If mitigation is proposed to offset wetland/other surface water impacts, please provide a mitigation plan that includes, at a minimum, the following:

- i.  Proposed mitigation narrative: **N/A**
  - (1)  Describe the current and proposed condition for each type of mitigation component (restoration, enhancement, creation, preservation), including:
    - (a)  Describe current and proposed vegetation
    - (b)  Describe current and proposed hydrologic conditions for the proposed mitigation.
    - (c)  Describe the soil types from NRCS maps and confirm if actual soil conditions appear to match.
  - (2)  Provide details of the proposed construction/mitigation activities including phasing and timing, as appropriate.
  - (3)  Identify measures that will be implemented during and after construction to avoid adverse impacts related to the proposed activities.
  - (4)  A mitigation implementation and monitoring schedule with dates.
  - (5)  Identify the success criteria.
  - (6)  Describe the anticipated site conditions in and around the mitigation area after the mitigation plan is successfully implemented.
  - (7)  Provide a comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented.
- ii.  Provide a Management Plan that includes, as appropriate, aspects of operation and maintenance, including water management practices, vegetation establishment, exotic and nuisance species control, fire management, and control of access.
- iii.  Maps:
  - (1)  Soil map (include soil names/codes, hydrologic soil groups and hydric soil types).
  - (2)  Topographic map of the mitigation area and adjacent contributing and receiving areas.
  - (3)  Hydrologic features map of the mitigation area and adjacent contributing and receiving areas.
  - (4)  Vegetative communities map (using FLUCCS or other appropriate classification system).
  - (5)  For all maps, identify source.

- iv. Provide the necessary supporting information for the application of sections 62-345.400 - .600 (Uniform Mitigation Assessment Method (UMAM)). To meet this requirement, submittal of UMAM worksheets is acceptable for impact and mitigation areas.
- v. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a draft Conservation Easement document or other form of restrictive covenant that provides for protection of the mitigation area in perpetuity. Standard forms, as described in subsection 62-330.301(6), F.A.C., are available from the Agency or on its website.
- vi. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a cost estimate for completing the mitigation, including monitoring and maintenance.
- vii. If onsite and/or offsite applicant-responsible mitigation is proposed and the proposed mitigation exceeds \$25,000, please provide a draft financial assurance document. Standard forms, as described in subsection 62-330.301(5), F.A.C., are available from the agency or on its website.
- viii. Identify the entity responsible for monitoring, maintenance, and long-term stewardship of the mitigation area (i.e. the landowner or homeowner association, not the consultant or contractor that will do the work).

Note: It is highly recommended that you coordinate the design of any mitigation plan that also may be required for the Corps permit to meet the requirements of both permits. Pre-application meetings with both the applicable Agency and the Corps can help you to choose a mitigation option that is acceptable to both the applicable Agency and the Corps.

### Part 3: Plans

Plans: The information listed in the checklist below represents the typical information required on the submitted project plans. The Plans checklists in each application section are cumulative unless otherwise noted. Separate plans for each application section are not required.

1.  Include the following on the construction plans and cross sections: **See submitted Engineering Plans.**
  - a.  An Existing Conditions sheet showing the entire project and wetland/other surface water boundaries. Include the following: Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water.
  - b.  A Proposed Conditions sheet showing the entire project and wetland/other surface water boundaries with construction plan overlay.
  - c.  A Proposed Wetland Impact sheet that includes the following:
    - i.  Acreage and type (herbaceous, forested, or other surface water) of each wetland/other surface water to be impacted.
    - ii.  Proposed upland buffers with dimensions.
    - iii.  Identify the seasonal high water and wetland normal pool elevations on the plans.
  - d.  Include wetland boundaries on all construction plan sheets.
2.  If onsite and/or offsite applicant-responsible mitigation is proposed, submit mitigation ~~permit~~ plans and cross sections including, at a minimum: **N/A**

- a.  existing conditions plan sheet identifying upland and wetland communities and acreage of each, topography, drainage patterns, and location of cross-section detail.
- b.  proposed conditions plan sheet identifying proposed improvements by type (restoration, enhancement, creation, preservation), acreage of each, topography, drainage patterns, and location of cross-section detail.
- c.  monitoring plan sheet including proposed improvements, monitoring transects, photostations, and mitigation signage (if applicable).
- d.  cross-section and/or profile detail(s) sheet(s) including representative section of each type of mitigation component. Include existing and proposed conditions and representative elevations.
- e.  planting schedule, plant species including common and scientific names divided into three sections (canopy, shrub, herbaceous) by mitigation component, quantity, spacing, size, and elevation range.

**SFWMD TABLE 1 – PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) AND IMPACT SUMMARY**

WL & SW ID	UMAM ASSESSMENT AREA NAME(S)	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS		SECONDARY WL & SW IMPACTS		PERMANENT WL & SW IMPACTS		MITIGATION ID
					IMPACT SIZE (acres)	IMPACT TYPE	IMPACT SIZE (acres)	IMPACT TYPE	IMPACT SIZE (acres)	IMPACT TYPE	
W-1	W-1	640							1.27		
W-1	W-1	630					1.19		0.29		
W-2	W-2	640							1.33		
W-2	W-2	630					1.64		0.31		
W-3	W-3	630							0.12		
W-4	NA	630							0.11		
W-5	NA	630							0.12		
W-6	NA	630							0.17		
W-7	W-7	640							1.97		
W-7 Secondary	W-7	640					1.35				
W-8	W-8	640							0.01		
OSW-1		500							0.13		
<b>PROJECT TOTALS:</b>							<b>4.18</b>		<b>5.83</b>		

COMMENTS: OSW = other surface water  
814 = Stormwater Pond

Codes (multiple entries per cell not allowed):

- Wetland & Surface Water ID: Include ID on submitted wetland and surface water impact maps
- Wetland Type: from an established wetland classification system
- Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other



Western upland forested area.





Forested wetland community.



Typical urban area.





**Typical urban area.**



**Typical urban area.**





**Typical urban area.**