



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT  
701 SAN MARCO BOULEVARD  
JACKSONVILLE, FLORIDA 32207-8915

May 16, 2019

CESAJ-RD-WT  
Regulatory Division  
West Branch  
Tampa Permits Section

## ***PUBLIC NOTICE***

Permit Application No. SAJ-2006-07526 (SP-RGH)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Williams Reeder  
Willow Lane Holdings, LLC  
4925 Greenville Ave., Suite 1400  
Dallas, Texas 75206  
creeder@reederenergy.com

WATERWAY AND LOCATION: The project would affect waters of the United States associated with McMullen watershed. The project site is located at 4900 36th Avenue East NCT/East side of Ellenton/Gillette at Experimental Farm Road (aka 49th Street East). Intersection in Sections 28, 29, 32 and 33, Township 33 South, Range 18 East, and in Section 5, Township 34 South, Range 18 East, Manatee County, Florida.

Directions to the site are as follows: Travel east to Ellenton Road (36th Avenue East). The southwest corner of the parcel is located due east of the intersection of Experimental Farm Road and Ellenton Gillette Road.

APPROXIMATE CENTRAL COORDINATES: Latitude 27.560641°  
Longitude -82.520976°

PAST PERMIT HISTORY: On October 29, 2008, a Department of the Army (DA) Permit (SAJ-2006-07526) was issued authorizing impacts to 0.829 acres of jurisdictional wetland and surface water impacts for the construction of a residential development. The mitigation offered by the applicant was sufficient to offset impacts on the values and functions of the wetland resource. Wetland impacts were to be mitigated by herbaceous wetland restoration (0.37 acres) and enhancements (3.34 acres) within Wetlands A, J, and G.

On August 19, 2013 a modification was issued extending the expiration date until August 19, 2015. On September 23, 2015, a second permit modification was issued extending the expiration date until August 19, 2018. No work has been conducted on

the project site. The 188.31 acre project remains in an undeveloped state and contains ten (10) wetlands comprised of freshwater marshes and mixed forested wetlands, some of which have been hydrologically altered by historical agricultural ditches.

#### PROJECT PURPOSE:

Basic: Residential Development

Overall: To construct a residential development in Manatee County, Florida.

#### EXISTING CONDITIONS:

The subject parcels are unoccupied open land and mixed open land, whereby past and current land uses include agriculture on the southern (pasture and cattle grazing) and central (horticultural tree farm) portions of the site, and disturbed forested habitat in the northern portion of the project area with a Florida Power and Light (FPL) powerline/easement traversing through it.

#### FLUCCS Code: 510 – Streams and Waterways

Vegetation: An excavated meandering drainage feature (ditch) is present within the southern pasture property area which receives drainage from offsite properties located to its south and eastern offsite limits, eventually draining through the project area, and continuing offsite to its north. Vegetation present and along banks of this excavated feature consists mostly of primrose willow (*Ludwigia peruviana*), cattails (*Typha* spp.), Brazilian pepper (*Schinus terebinthifolia*), and bahia grass (*Paspalum notatum*), however does have occasional pockets of fireflag (*Thalia geniculata*), softrush (*Juncus effusus*), pickerelweed (*Pontederia cordata*), and arrowhead (*Sagittaria lancifolia*), with cabbage palm (*Sabal palmetto*) and laurel oaks (*Quercus laurifolia*) located outside along the top of its banks. A series of agricultural ditches are also located throughout the project area and consist mostly of cattails (*Typha* spp.), primrose willow (*Ludwigia peruviana*), Brazilian pepper (*Schinus terebinthifolia*), and/or other miscellaneous grasses and sedges.

Impacts: The ditched areas function as drainage features draining and lowering water tables and hydroperiods of wetlands they connect to and/or are in close proximity to.

Hydrology: These upland cut drainage features have an intermittent hydrology, subject to rainfall, fluctuations in water table, and the receiving surface water runoff which drains to them.

#### FLUCCS Code: 524 – Lakes Less than 10 Acres

Vegetation: Several excavated ponds/features (classified as other surface waters) are located throughout the project area with varying degrees of undesirable vegetative species composition. In the southern pasture areas, 5 hydric excavated features and 2 upland cut excavated ponds are present with vegetative species composition consisting of a variety of species such as primrose willow (*Ludwigia peruviana*), rattle-box (*Sesbania punicea*), broomsedge (*Andropogon virginicus*), spikerush (*Eleocharis* spp.), softrush (*Juncus effusus*), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria*

*lancifolia*), fireflag (*Thalia geniculata*), smartweed (*Polygonum punctatum*), floating water lettuce (*Pistia stratiotes*), Carolina willow (*Salix caroliniana*) and other miscellaneous grasses and sedges. In the central horticultural tree farm area, 2 excavated hydric-cut ponds are present with the southern one having a vegetative species composition of Guinea grass (*Urochloa maxima*), and the northern one having a vegetative species composition of cattails (*Typha spp.*), primrose willow (*Ludwigia peruviana*), and Brazilian pepper (*Schinus terebinthifolia*). In the northern forested / FPL easement area is an excavated hydric-cut pond with an open water component covered by floating duckweed (*Lemna spp.*), and species composition along its side bank consisting of primrose willow (*Ludwigia peruviana*), and Brazilian pepper (*Schinus terebinthifolia*).

#### FLUCCS Code: 630 – Wetland Forested Mixed

Vegetation: Several forested wetlands containing a mix of hardwood tree species are located within the project areas southern pasture and northern forested areas. Canopy species found in these forested wetland areas included laurel oak (*Quercus laurifolia*), American elm (*Ulmus americana*), swamp tupelo (*Nyssa sylvatica*), ash (*Fraxinus spp.*), water hickory (*Carya aquatica*), red maple (*Acer rubrum*), cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolia*), and primrose willow (*Ludwigia peruviana*).

#### FLUCCS Code: 641 – Freshwater Marshes

Vegetation: Freshwater marshes are located within the project limits which include varying degrees of undesirable vegetative species composition. Vegetative species composition and species coverage vary among each of the freshwater marsh systems, however generally consist of primrose willow (*Ludwigia peruviana*), rattle-box (*Sesbania punicea*), broomsedge (*Andropogon virginicus*), smartweed (*Polygonum punctatum*), spikerush (*Eleocharis spp.*), softrush (*Juncus effusus*), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), fireflag (*Thalia geniculata*), floating water lettuce (*Pistia stratiotes*), other miscellaneous grasses and sedges, wax myrtle (*Morella cerifera*), and Brazilian pepper (*Schinus terebinthifolia*). One of the freshwater marshes proposed for enhancement is largely infested by nuisance exotic species such as primrose willow and Brazilian pepper.

#### UPLAND HABITATS:

##### FLUCCS Code: 190 – Open Land

Areas of undeveloped open land are located in the northern most project limits (refer to attached FLUCCS map). These once forested areas have been previously disturbed due to understory clearing/thinning, filling activities, and some meandering 'jeep' trails/roads. Please refer to FLUCCS Code 438 – Mixed Hardwoods for descriptions on what appears to once have been in this/these areas. Some vegetative debris piles, mulch, and overburden soil were observed in this/these areas.

##### FLUCCS Code: 211 – Improved Pasture

The improved pasture area is located in the southern portion of the project area. It is primarily made up of improved pasture vegetated with low growing cattle foraging vegetative species such as bahia grass (*Paspalum notatum*), which also includes scattered cabbage palms (*Sabal palmetto*) and live oaks (*Quercus virginiana*) in the pasture providing shade for the cattle.

#### FLUCCS Code 241 – Tree Nurseries

This area contains agriculturally grown in-ground ornamental palms/trees planted in rows, and container stocked nursery trees.

#### FLUCCS Code 438 – Mixed Hardwoods

These areas have interspersed tree canopy characteristics of mixed hardwoods (likely due to a lack of prescribed burns) interspersed within pine trees. Canopy species include a mix of slash pine (*Pinus elliottii*), laurel oak (*Quercus laurifolia*), and cabbage palm (*Sabal palmetto*). Understory vegetation present includes cabbage palm, and wax myrtle (*Morella cerifera*). Many areas of saw palmetto, wax myrtle and oaks would be considered overgrown compared to more natural managed community types of this classification. Clusters of Brazilian pepper (*Schinus terebinthifolia*) are also found recruiting throughout.

#### FLUCCS Code: 820 – Communications

One cleared strip of land located in the northern most project limits includes wood pole utility structures and overhanging distribution power lines within an easement traversing in a southeast to northwest alignment.

**PROPOSED WORK:** The applicant seeks authorization to impact 0.056 acres of jurisdictional wetland and 4.463 acres of jurisdictional surface water impacts for the construction of a residential development.

**AVOIDANCE AND MINIMIZATION INFORMATION** – The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The current site plan avoids and minimizes impacts to jurisdictional waters to the greatest extent possible. The 0.056 acres of impacts to Wetland C will be mitigated onsite through the enhancement and restoration of Wetland A.

**COMPENSATORY MITIGATION** – The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

The proposed project is in receipt of the State Water Quality Permit from the Southwest Florida Water Management District for "Silverstone North Phase 1" (Permit No. 43030391.004) (187.67 acre area). The overall Silverstone boundary is 289.64 acres, which includes Phase I, Phase IIB – IID, and Phase IID North. This State permit does not consider Phase IIB – IID, and Phase IID North (approximately 101.97 acres) of

the proposed project which has proposed impacts to 5 upland cut ditches. As part of the State review process, the Uniform Mitigation Assessment (UMAM) analysis identified a total functional loss of 0.38 for the permanent wetland impacts associated with Phase 1 of the project. Wetland impacts will be mitigated by herbaceous wetland creation (0.21 acres) and herbaceous wetland enhancement (2.62 acres) within Wetland A. The result of the UMAM analysis indicates a functional gain of 0.38 for the proposed mitigation for the project. The State is not requiring wetland mitigation for impacts to the upland cut ditches or hydric cut ponds.

#### CULTURAL RESOURCES:

The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

#### ENDANGERED SPECIES:

The Corps has determined the proposed project may affect, but is not likely to adversely affect the Wood stork (*Mycteria americana*) and the Eastern Indigo Snake (*Drymarchon corais couperi*).

Wood stork: Potential effects to the threatened Wood stork were assessed using the Programmatic Concurrence Key dated May 18, 2010. Use of this key produced the sequential determination of A>B>C>D>E> “May Affect, but is Not Likely to Adversely Affect” (MANLAA). The project site is within 2 Wood stork core foraging areas and supports marginally Suitable Foraging Habitat (SFH) in the form of the 5.36 acres of on-site wetlands, of which more than 0.5 acres is SFH. The project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration matching the hydroperiod of the wetlands affected, and provides foraging value similar.

The Corps has determined the project “May Affect, but is Not Likely to Adversely Affect” the Wood Stork. By letter dated 18 May 2010, the USFWS stated that for proposed activities analyzed with the May 2010 version of The Wood Stork Effect Determination Key that reach a no effect or MANLAA determination, the FWS concurs with the Corps determination and requirements of Section 7 of ESA are fulfilled. Therefore, no further consultation with USFWS is required.

Eastern indigo snake: The project site is located in an area where the Eastern indigo snake may occur, potential effects to the species were assessed using the Programmatic Effect Determination Key provided by the USFWS South Florida Ecological Services Office (Revised July 2017). Use of this key produced a sequential determination of A>B>C>D>E>MANLAA. This determination is based on the lack of suitable habitat for the Eastern indigo snake as defined by the effect determination key,

as the project site is composed of urban developed uplands that lack suitable vegetation or refugia, and contain 5.36 acres of wetlands. This determination will also require that the applicant utilizes Standard Protection Measures for the Eastern Indigo Snake (2013) during all construction activities. Therefore, the Corps has determined the project "May Affect, but is Not Likely to Adversely Affect" the Eastern indigo snake. By letter dated 1 August 2017, the USFWS stated that for proposed activities analyzed with the July 2017 version of the Eastern Indigo Snake Programmatic Effect Determination Key that reach a MANLAA, the USFWS concurs with this determination and no further consultation is necessary for the effects of the proposed action.

**ESSENTIAL FISH HABITAT (EFH):** This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. Due to the project's location in freshwater artificial surface waters, upland cut ditches, and natural wetlands, the proposed action would not have an impact on EFH or Federally managed fisheries in the South Atlantic Region. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**NOTE:** This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line [has/has not] been verified by Corps personnel.

**AUTHORIZATION FROM OTHER AGENCIES:** Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

**COMMENTS** regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610-8302 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

**QUESTIONS** concerning this application should be directed to the project manager, Ryan Hendren, in writing at the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610-8302; by electronic mail at [Ryan.G.Hendren@usace.army.mil](mailto:Ryan.G.Hendren@usace.army.mil) or, by telephone at 813-769-7075.

**IMPACT ON NATURAL RESOURCES:** Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and

concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

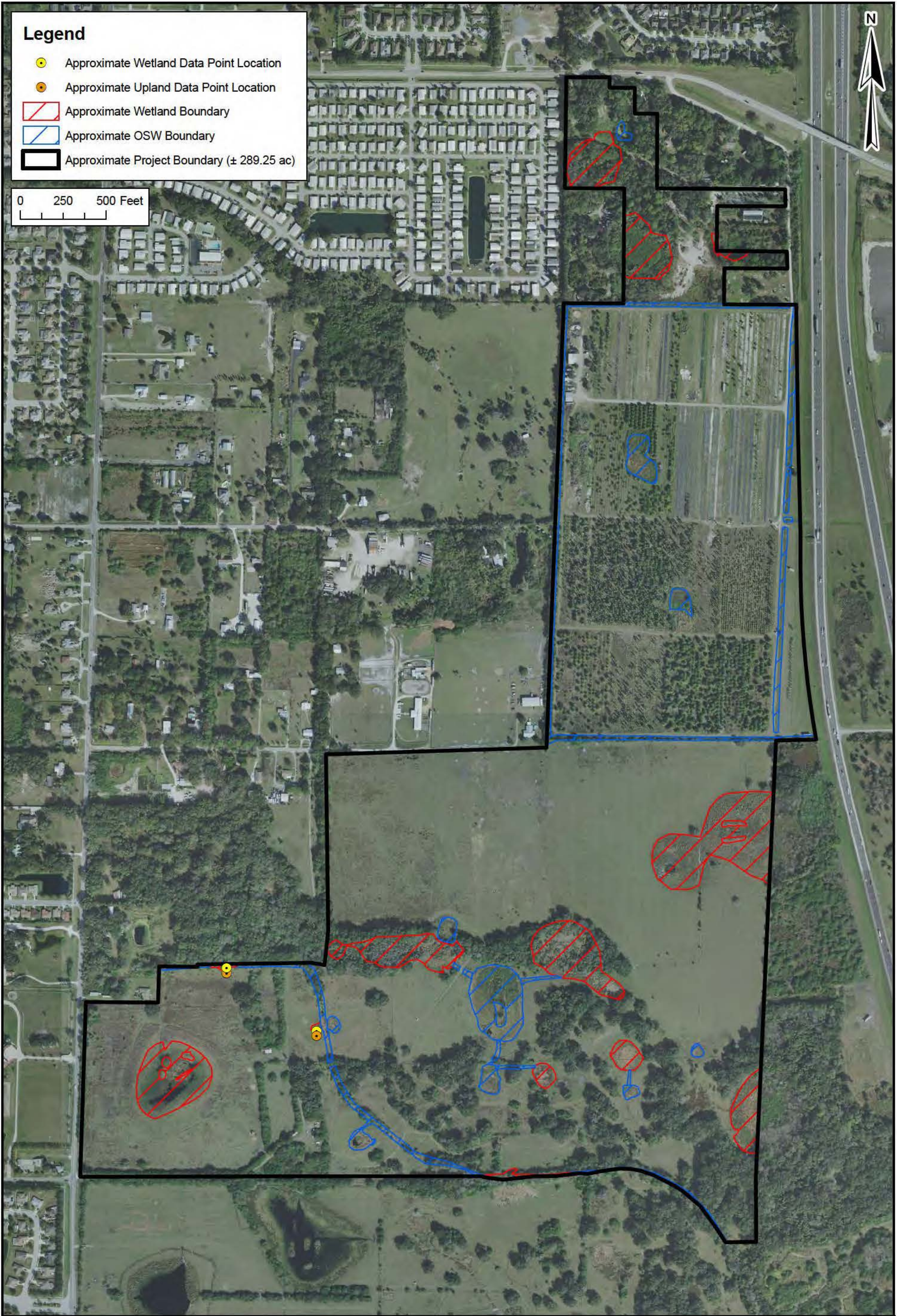
**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COASTAL ZONE MANAGEMENT CONSISTENCY:** In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan.

**REQUEST FOR PUBLIC HEARING:** Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.





**Legend**

- Approximate Wetland Data Point Location
- Approximate Upland Data Point Location
- Approximate Wetland Boundary
- Approximate OSW Boundary
- Approximate Project Boundary (± 289.25 ac)

0 250 500 Feet



**Client:** ZNS Engineering  
**Project:** Silverstone  
**Location:** Manatee County, Florida  
**Title:** Welland & OSW Map

**TRS:** Twp: 33S Rng: 18E Sec: 32,33,19  
**Scale:** 1" = 500'  
**Date:** 4/30/2019  
**Drawn By:** KS  
**Source:** Manatee County Imagery (2017)

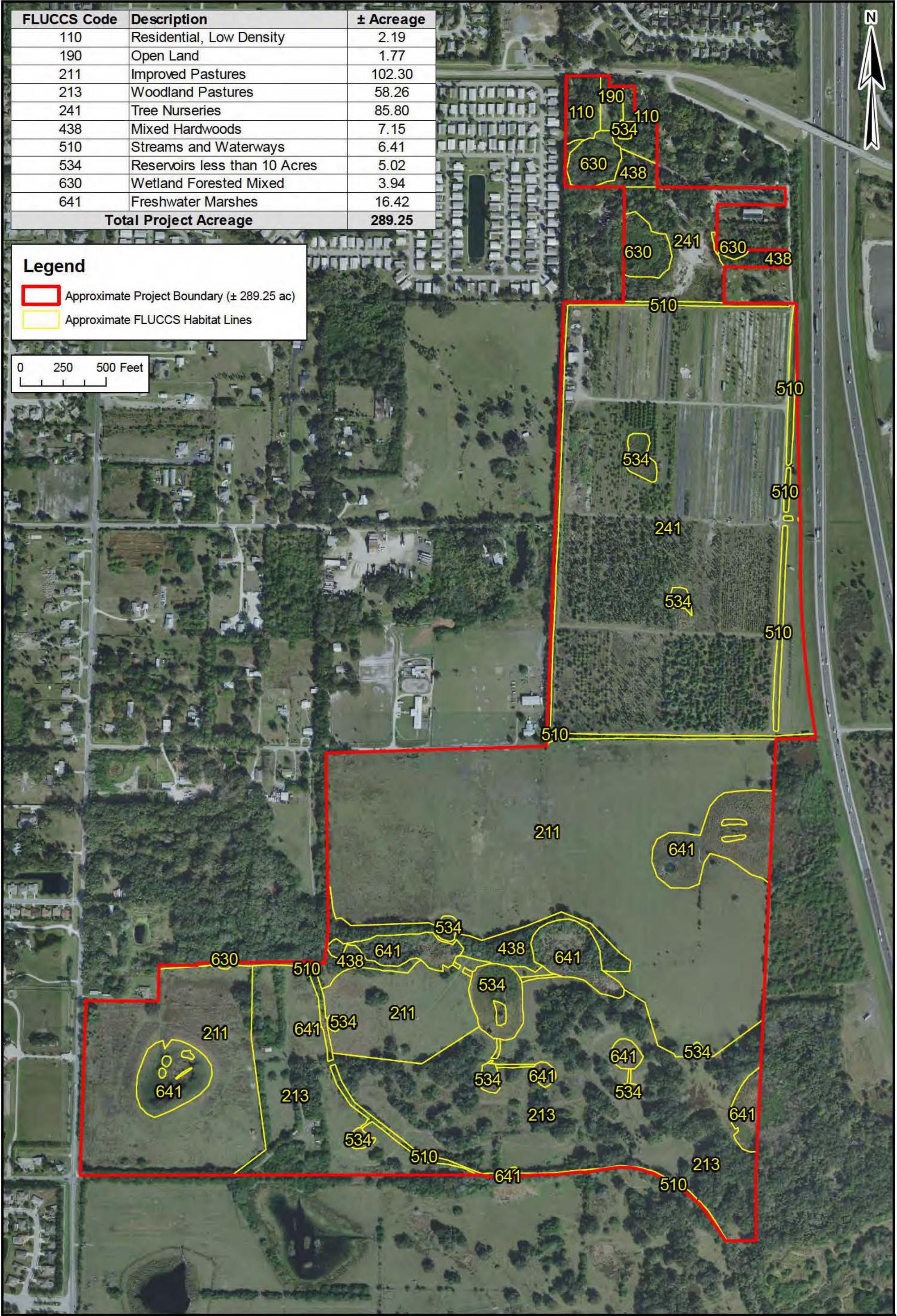
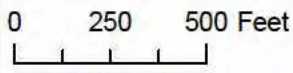




FLUCCS Code	Description	± Acreage
110	Residential, Low Density	2.19
190	Open Land	1.77
211	Improved Pastures	102.30
213	Woodland Pastures	58.26
241	Tree Nurseries	85.80
438	Mixed Hardwoods	7.15
510	Streams and Waterways	6.41
534	Reservoirs less than 10 Acres	5.02
630	Wetland Forested Mixed	3.94
641	Freshwater Marshes	16.42
Total Project Acreage		289.25

Legend

- Approximate Project Boundary (± 289.25 ac)
- Approximate FLUCCS Habitat Lines



Client: ZNS Engineering  
Project: Silverstone  
Location: Manatee County, Florida  
Title: FLUCCS Habitat Map

TRS: Twp: 33S Rng: 18E Sec: 32,33,19  
Scale: 1" = 500'  
Date: 4/30/2019  
Drawn By: KS  
Source: Manatee County Imagery (2017)





# PERMANENT IMPACTS WITHIN PREVIOUSLY PERMITTED PROJECT LIMITS

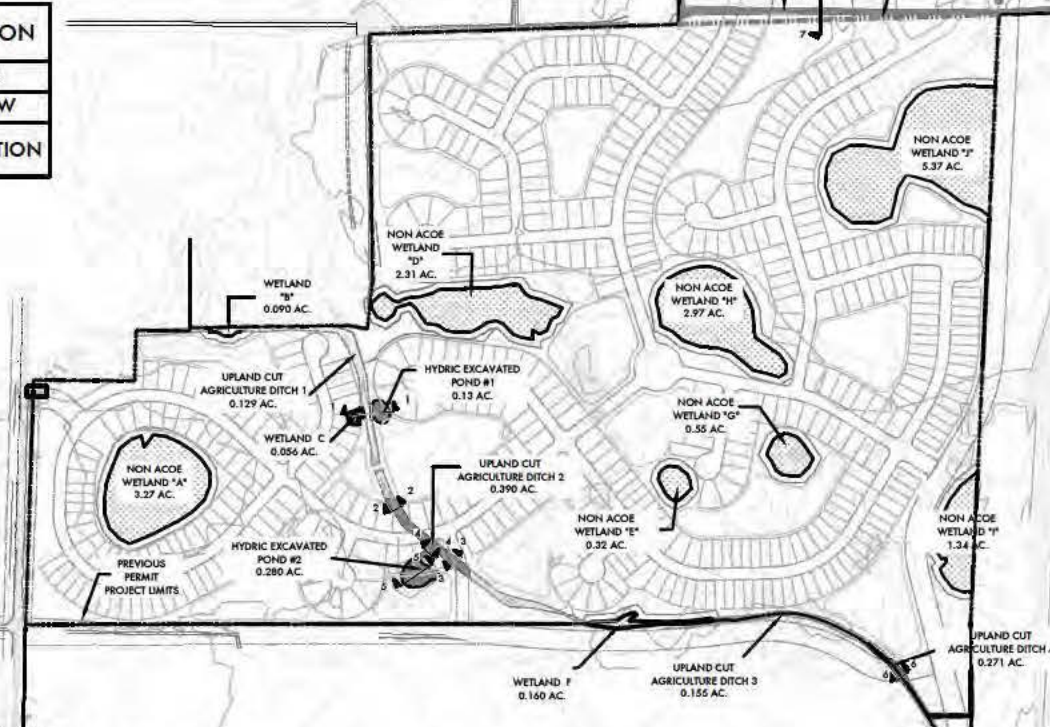
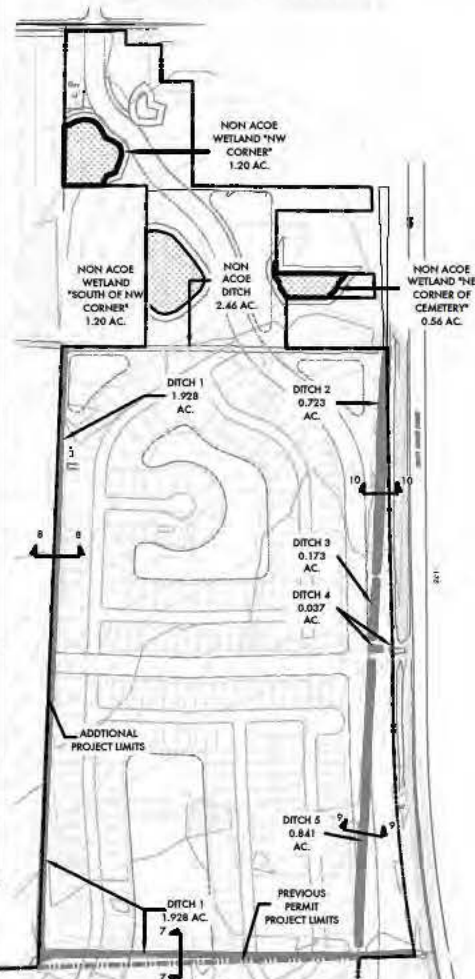
JURISDICTION	LOCATION	AREA (AC)	AREA (AC) PREVIOUSLY PERMITTED IMPACTS	AREA (AC) PROPOSED IMPACTS
ACOE	WETLAND B	0.090	0.000	0.000
ACOE	WETLAND C	0.056	0.056	0.056
ACOE	WETLAND F	0.160	0.032	0.000
ACOE	UPLAND CUT AGRICULTURE DITCH - 1	0.129	0.129	0.000
ACOE	UPLAND CUT AGRICULTURE DITCH - 2	0.390	0.225	0.297
ACOE	UPLAND CUT AGRICULTURE DITCH - 3	0.155	0.004	0.000
ACOE	UPLAND CUT AGRICULTURE DITCH - 4	0.271	0.004	0.057
ACOE	HYDRIC EXCAVATED POND 1	0.130	0.099	0.130
ACOE	HYDRIC EXCAVATED POND 2	0.280	0.280	0.280
SUBTOTAL		1.661	0.829	0.820

# PERMANENT IMPACTS WITHIN ADDITIONAL PROJECT LIMITS

ACOE	DITCH 1	1.925	N/A	1.925
ACOE	DITCH 2	0.723	N/A	0.723
ACOE	DITCH 3	0.173	N/A	0.173
ACOE	DITCH 4	0.037	N/A	0.037
ACOE	DITCH 5	0.841	N/A	0.841
SUBTOTAL		3.699		3.699

TOTAL PROJECT 5.360 0.8290 4.519

SHEET	DESCRIPTION
1	COVER
2-7	PLAN VIEW
8-9	CROSS SECTION



Wed, 25 Jul 2018 - 11:04am

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SHEET 1

## SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

**ZNS ENGINEERING**  
Land Planning Engineering Surveying Landscape Architecture  
18 0027476 18 0054982 18 0003365  
201 5th AVENUE DRIVE EAST BRADENTON, FL 34208  
E-MAIL: ZNS@ZNSENG.COM TELEPHONE 941.748.8080 FAX 941.748.3316



		2
4	3	
5	6	7

NON ACOE WETLAND  
"NW CORNER"  
1.20 AC.

NON ACOE WETLAND  
"SOUTH OF NW CORNER"  
1.20 AC.

NON ACOE WETLAND "NE  
CORNER OF CEMETERY"  
0.56 AC.

NON ACOE DITCH 1

ADDITIONAL  
PROJECT LIMIT

DITCH 1
1.928 AC.
PREVIOUSLY PERMITTED IMPACT
N/A
1.928 AC TO BE IMPACTED WITH REVISED PERMIT

DITCH 2
0.723 AC.
PREVIOUSLY PERMITTED IMPACT
N/A
0.723 AC TO BE IMPACTED WITH REVISED PERMIT

SOUTH BOUND LINES

SEE SHEET 3

Wed, 25 Jul 2018 - 11:04am

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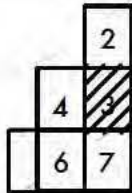
SHEET 2

## SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

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BR 0027476 LB 0004982 LC 0000365  
201 5th AVENUE DRIVE EAST BRADENTON, FL 34208  
E-MAIL: ZNS@ZNSENG.COM TELEPHONE 941.748.8080 FAX 941.748.3316



SEE SHEET 4



SEE SHEET 3

DITCH 3  
0.173 AC.  
PREVIOUSLY PERMITTED IMPACT  
N/A  
0.173 AC. TO BE IMPACTED  
WITH REVISED PERMIT

DITCH 1  
1.928 AC.  
PREVIOUSLY PERMITTED IMPACT  
N/A  
1.928 AC. TO BE IMPACTED  
WITH REVISED PERMIT

ADDITIONAL  
PROJECT LIMIT

DITCH 4  
0.037 AC.  
PREVIOUSLY PERMITTED IMPACT  
N/A  
0.037 AC. TO BE IMPACTED  
WITH REVISED PERMIT

DITCH 5  
0.841 AC.  
PREVIOUSLY PERMITTED IMPACT  
N/A  
0.841 AC. TO BE IMPACTED  
WITH REVISED PERMIT

DITCH 1  
1.928 AC.  
PREVIOUSLY PERMITTED IMPACT  
N/A  
1.928 AC. TO BE IMPACTED  
WITH REVISED PERMIT

PREVIOUS  
PERMIT  
PROJECT LIMIT

NON ACOE  
WETLAND "J"  
5.37 AC.

SEE SHEET 7

175



Wed, 25 Jul 2018 - 11:04am

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SHEET 3

# SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

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18 0027476 18 0056982 18 0003365  
201 5th AVENUE DRIVE EAST BRADENTON, FL 34208  
E-MAIL: ZNS@ZNSENG.COM TELEPHONE 941.748.8080 FAX 941.748.3316

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Wed, 25 Jul 2018 - 11:04am

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SHEET 4

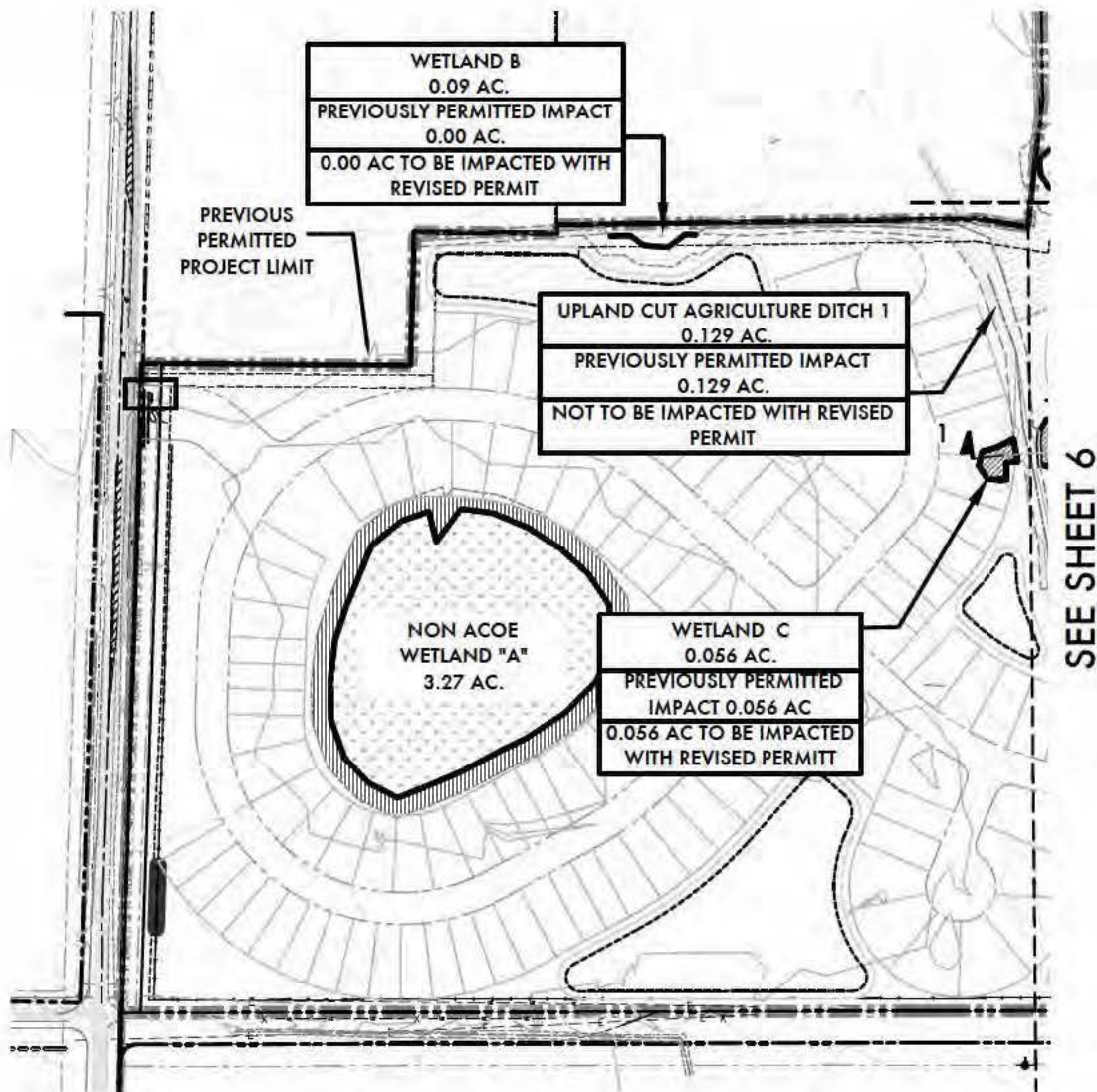
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		2
4	3	
5	6	7



Wed, 25 Jul 2018 - 11:04am

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SHEET 5

## SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

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E-MAIL: ZNS@ZNSENG.COM TELEPHONE 941.748.8080 FAX 941.748.3316



		2
4	3	
5	6	7

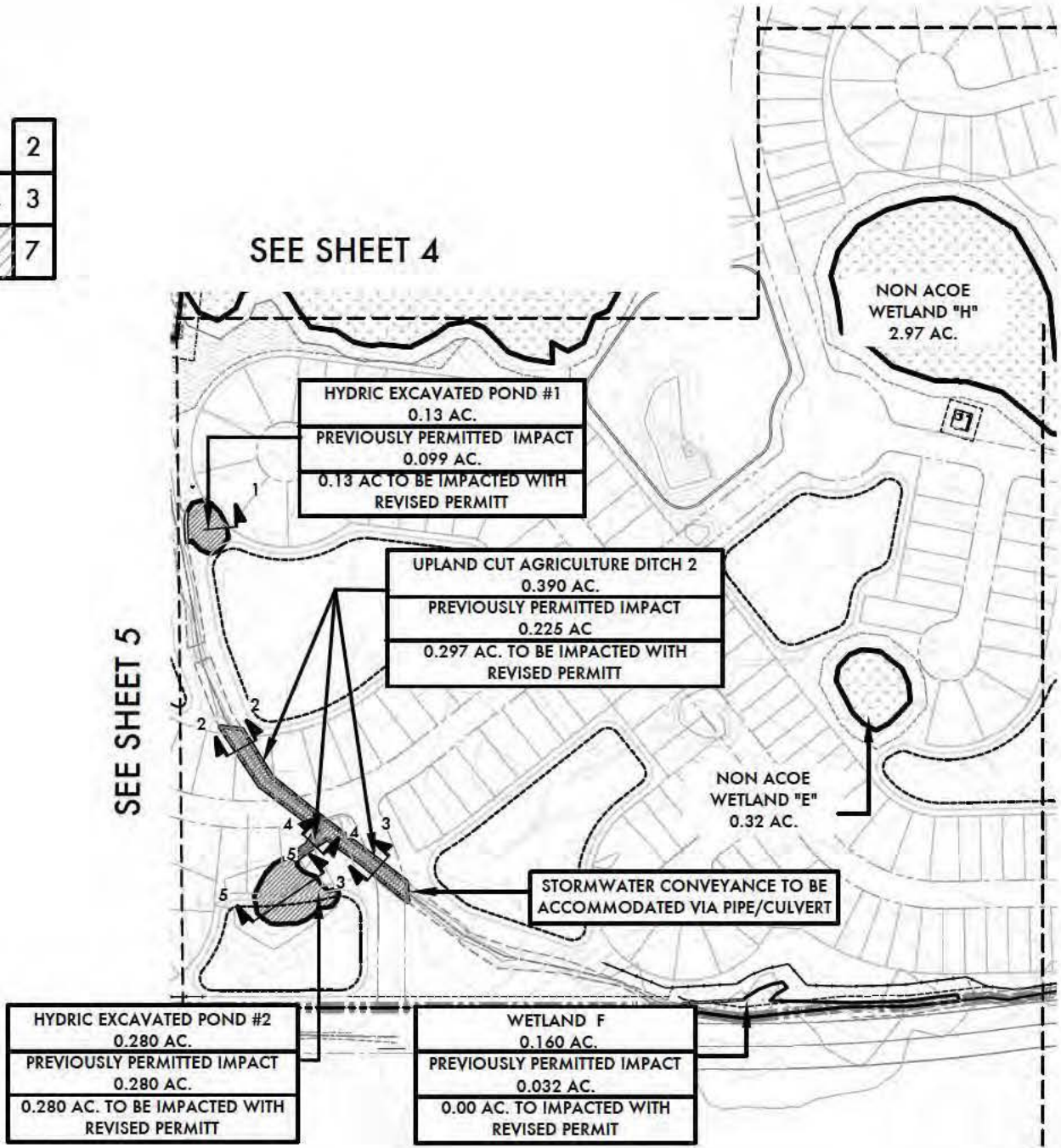
SEE SHEET 3



SEE SHEET 4

SEE SHEET 5

SEE SHEET 7



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SHEET 6

# SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

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		2
4	3	
5	6	7



SEE SHEET 6

SEE SHEET 3

NON ACOE  
WETLAND "G"  
0.55 AC.

NON ACOE  
WETLAND "I"  
1.34 AC.

UPLAND CUT AGRICULTURE DITCH 3  
0.155 AC.  
PREVIOUSLY PERMITTED IMPACT  
0.004 AC.  
0.000 AC TO BE IMPACTED WITH  
PROPOSED PERMIT

UPLAND CUT AGRICULTURE DITCH 4  
0.271 AC.  
PREVIOUSLY PERMITTED IMPACT  
0.004 AC.  
0.057 AC TO BE IMPACTED WITH  
PROPOSED PERMIT

STORMWATER CONVEYANCE TO BE  
ACCOMMODATED VIA PIPE/CULVERT

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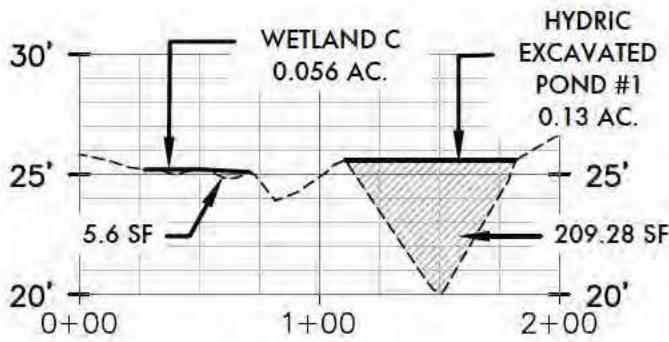
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SHEET 7

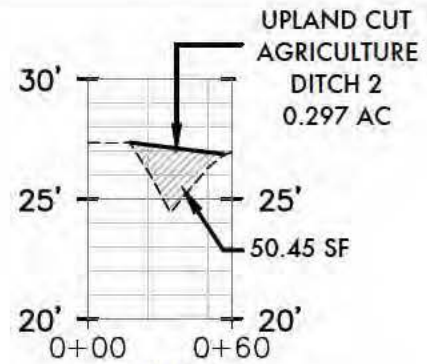
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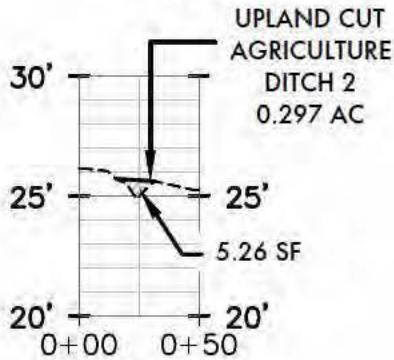




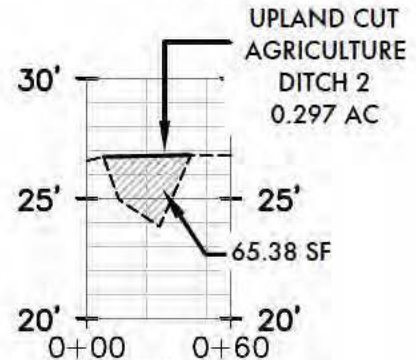
**SECTION 1-1**  
SCALE V: 1" = 80'  
H: 1" = 8'



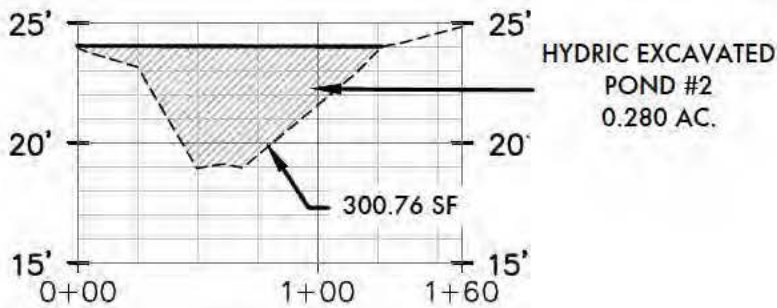
**SECTION 2-2**  
SCALE V: 1" = 80'  
H: 1" = 8'



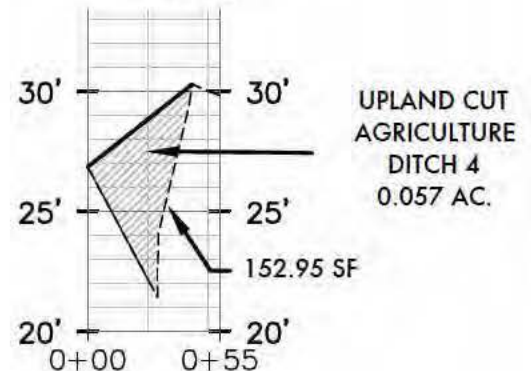
**SECTION 3-3**  
SCALE V: 1" = 80'  
H: 1" = 8'



**SECTION 4-4**  
SCALE V: 1" = 80'  
H: 1" = 8'



**SECTION 5-5**  
SCALE V: 1" = 80'  
H: 1" = 8'



**SECTION 6-6**  
SCALE V: 1" = 80'  
H: 1" = 8'

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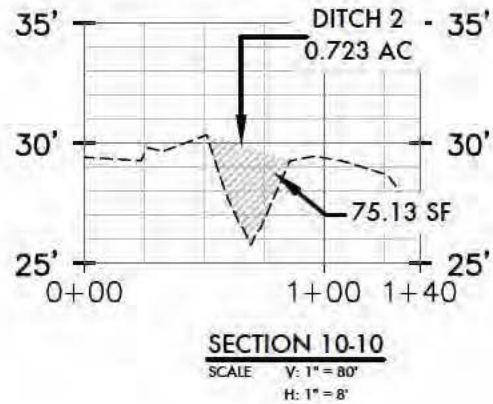
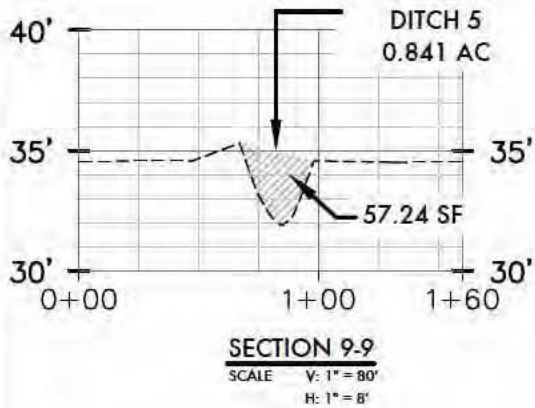
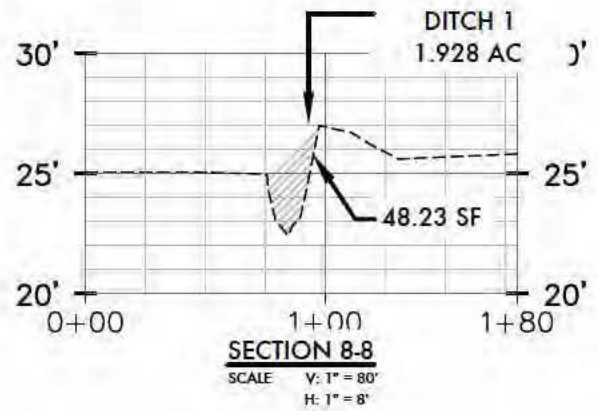
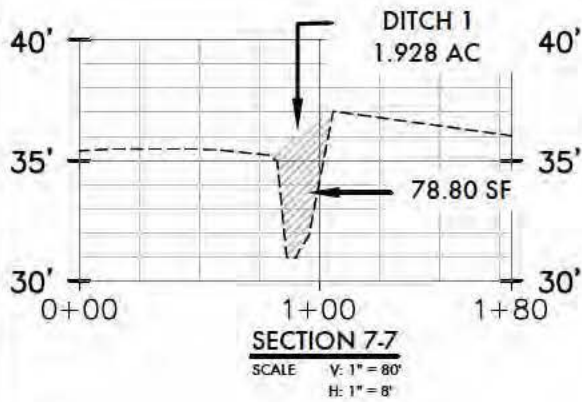
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SHEET 8

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18 0027476 18 0054982 18 0003345  
201 5th AVENUE DRIVE EAST BRADENTON, FL 34208  
E-MAIL: ZNS@ZNS-ENG.COM TELEPHONE 941.748.8080 FAX 941.748.3316





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SHEET 9

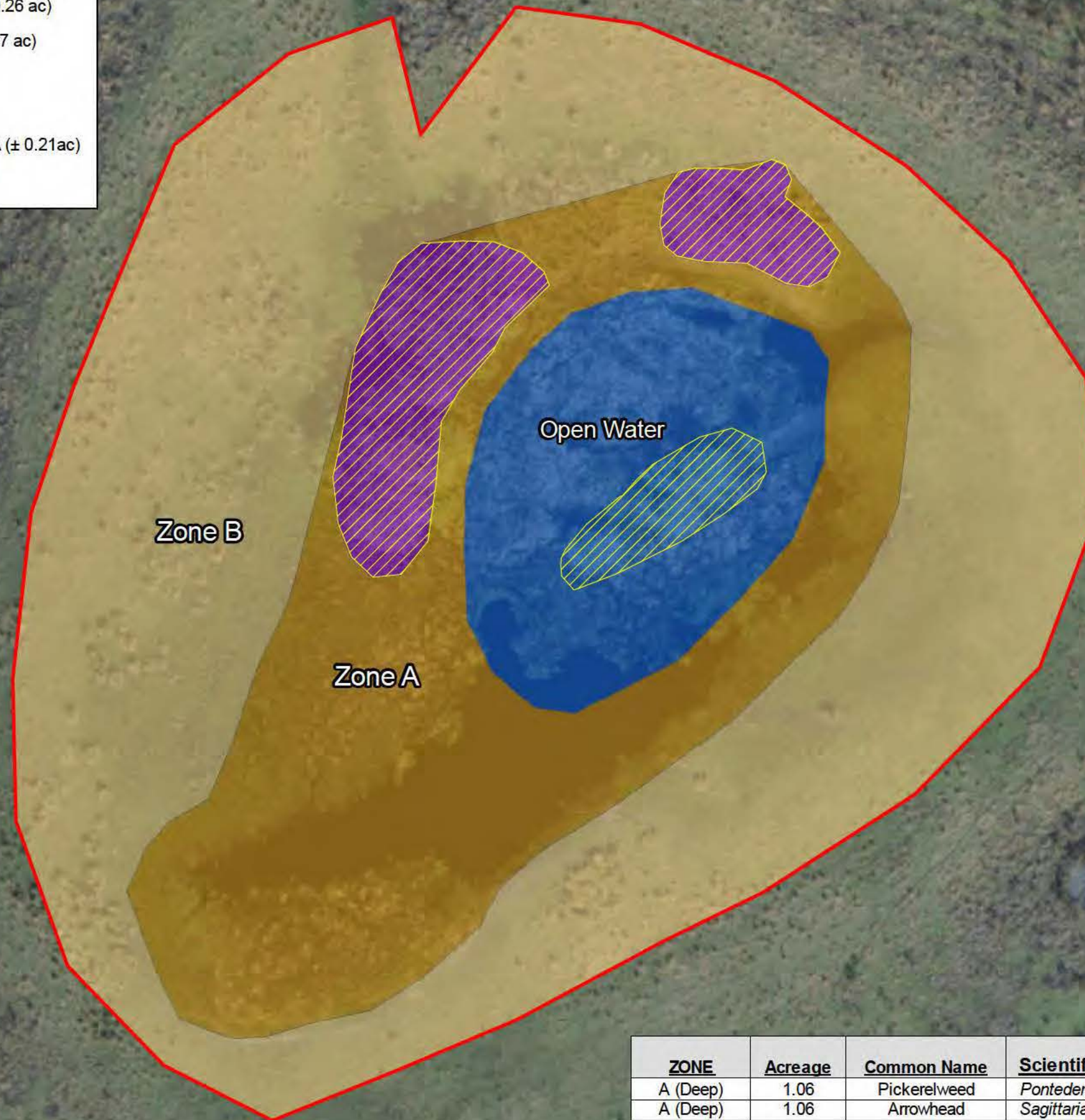
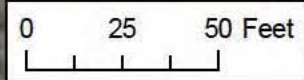
## SILVERSTONE SURFACE WATER / WETLAND IMPACT EXHIBIT

**ZNS ENGINEERING**  
Land Planning Engineering Surveying Landscape Architecture  
ES 00027476 LS 0004982 LC 0003345  
201 56 AVENUE DRIVE EAST BRADENTON, FL 34208  
E-MAIL: ZNS@ZNSENG.COM TELEPHONE 941.748.0090 FAX 941.748.3316



### Legend

- |  |   |
|--|---|
|  | Approximate Spoil Piles to be Removed ( $\pm 0.26$ ac)    |
|  | Approximate Wetland Mitigation Area ( $\pm 3.27$ ac)      |
|  | Approximate Open Water ( $\pm 0.44$ ac)                   |
|  | Wetland Enhancement Zone A ( $\pm 0.86$ ac)               |
|  | Approximate Wetland Creation Area Zone A ( $\pm 0.21$ ac) |
|  | Wetland Enhancement Zone B ( $\pm 1.77$ ac)               |



<u>ZONE</u>	<u>Acreage</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Size</u>	<u>Spacing</u>	<u>Approximate Numbers</u>
A (Deep)	1.06	Pickernelweed	<i>Pontederia cordata</i>	Bare root	3' o.c.	2565
A (Deep)	1.06	Arrowhead	<i>Sagittaria lancifolia</i>	Bare root	3' o.c.	2565
B (Outer)	1.77	Soft Rush	<i>Juncus effusus</i>	Bare root	3' o.c.	2855
B (Outer)	1.77	Sand Cordgrass	<i>Spartina bakeri</i>	Bare root	3' o.c.	2855
B (Outer)	1.77	Spikerush	<i>Elocharis interstincta</i>	Bare root	3' o.c.	2855



**TRIS:** Twp: 33S Rng: 18E Sec: 32,33,19  
**Scale:** 1" = 50'  
**Date:** 1/24/2019  
**Drawn By:** KS  
**Source:** Manatee County Imagery (2017)

**Client:** ZNS Engineering  
**Project:** Silverstone  
**Location:** Manatee County, Florida  
**Title:** Post-Development Wetland A