



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BLVD, RM 372
JACKSONVILLE, FLORIDA 32207-8175

Robert

REPLY TO
ATTENTION OF

January 13, 2016

Regulatory Division
North Permits Branch
Jacksonville Permits Section
SAJ-2015-02153(NW-RLT)

Mr. Colby Cleveland
Florida Department of Transportation
District 3
1074 Highway 90
Chipley, FL 32428

Dear Mr. Cleveland:

The U.S. Army Corps of Engineers (Corps) assigned your application for a Department of the Army permit, which the Corps received on July 6, 2015; the file number is SAJ-2015-02153. A review of the information and drawings provided indicates that the proposed work would result in the discharge of fill material into 0.47 acre of waters of the United States to construct a multi-use path. The impacts to waters of the United States consist of 0.26 acre of tidal marsh and 0.21 acre of roadside ditches. The project is located along the east side of SR 300 (Island Drive) in Section 31, Township 8 South, Range 6 West, Eastpoint, Franklin County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) Number 14. In addition, project specific conditions have been enclosed. This verification is valid until **March 18, 2017**. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. Please access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory Internet page to access Internet links to view the Final Nationwide Permits, Federal Register Vol. 77, dated February 21, 2012, specifically pages 10270 – 10290, the Corrections to the Final Nationwide Permits, Federal Register 77, March 19, 2012, and the List of Regional Conditions. The Internet page address is:

<http://www.saj.usace.army.mil/Missions/Regulatory.aspx>

Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there you will need to click on "Source Book"; and, then click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP 14. Enclosed is a list of the six General Conditions, which apply to all Department of the Army authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

- 1. Self-Certification:** Within 60 days of completion of the work authorized, the attached *Self-Certification Statement of Compliance* must be completed and submitted to the following address: U.S. Army Corps of Engineers, Enforcement Section, 41 N. Jefferson St., Suite 301, Pensacola, FL 32602-57948. The Permittee shall reference this permit number, SAJ-2015-02153, on all submittals.
- 2. Erosion Control:** Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work has been completed and the site has been stabilized.
- 3. Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.
- 4. Compensatory Mitigation and Mitigation Work Plan:** Within 60 days from the date of initiating the work authorized by this permit, the Permittee shall complete all construction and implementation of the mitigation work. The mitigation activity consists of enhancing 6.49 acres of sawgrass-dominated marsh wetlands. The mitigation area is depicted in the enclosed drawings.

Construction Sequence and Details: Siltation curtains and/or hay bales shall be erected between the restoration area and any adjacent wetlands, prior to grading, in order to control/avoid adverse impacts to water quality in the adjacent wetlands.

The enhancement area will be monitored and inspected during and immediately following construction to ensure compliance with the mitigation design and to determine final ground and surface water elevations. Minor modifications may be necessary at the time of construction. The siltation curtains and/or hay bales shall be removed after the soil in the mitigation area has stabilized.

5. Success Criteria: The mitigation will be deemed successful when the following success criteria are met:

- a. Hydrological conditions are such that the water elevation is equal on both sides of the low water crossings (LWC) as specified in the mitigation plan;
- b. No greater than 10 percent cover by invasive or exotic species; and
- c. The above criteria have been achieved by the end of a 3-year monitoring period.

6. Monitoring and Reporting Timeframes: To document achievement of the performance standards identified in the mitigation plan the Permittee shall complete the following:

- a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of the compensatory mitigation construction and implementation activities identified in the mitigation plan.
- b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include at least one paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the compensatory mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.
- c. Subsequent to completion of the compensatory mitigation objectives, perform semi-annual monitoring of the wetland mitigation areas for the first year and annual monitoring thereafter for a total of no less than 3 years of monitoring.
- d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event. Semi-annual monitoring will be combined into one annual monitoring report.
- e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with the **Mitigation Release** Special Condition of this permit.

Reporting Format: The Permittee shall submit all monitoring documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

- a. Project Overview:
 - (1) Department of the Army Permit Number
 - (2) Name and contact information of Permittee and consultant
 - (3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted
 - (4) A brief paragraph describing the purpose of the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.
 - (5) Written description of the location, any identifiable landmarks of the compensatory mitigation project including information to locate the site perimeter(s), and coordinates of the mitigation site (expressed as latitude, longitude, UTM, state plane coordinate system, etc.).
 - (6) Dates compensatory mitigation commenced and/or was complete.
 - (7) Short statement on whether the performance standards are being met.
 - (8) Dates of any recent corrective or maintenance activities conducted since the previous report submission
 - (9) Specific recommendations for any additional corrective or remedial actions.

Requirements: List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success. A table is a recommended option for comparing the performance standards to the conditions and status of the developing mitigation site.

Summary Data: Summary data should be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Photo documentation may be provided to support the findings and recommendations referenced in the monitoring report and to assist the PM in assessing whether the compensatory mitigation project is meeting applicable performance standards for that monitoring period. Submitted photos should be formatted to print on a standard 8½-inch x 11-inch piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

Maps and Plans: Maps shall be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan. In addition, the submitted maps and plans should clearly delineate the mitigation site perimeter(s). Each map or diagram should be

formatted to print on a standard 8½-inch x 11-inch piece of paper and include a legend and the location of any photos submitted for review. As-built plans may be included.

Conclusions: A general statement shall be included that describes the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee or sponsor, including a timetable, shall be provided. The District Commander will ultimately determine if the mitigation site is successful for a given monitoring period.

7. Maintenance plan: Maintenance inspections/events will occur on a semi-annual basis during the first year and annual afterwards in order to determine the presence of any Florida Exotic Pest Plant Council (FEPPC) listed exotic or invasive species. Any species present will be controlled through the most appropriate methodology and may include mechanical, physical or chemical removal such that coverage will not exceed 10 percent total coverage of the proposed enhancement area.

8. Performance standards: The mitigation site will be deemed successful if the total aerial coverage of appropriate species is 80 percent or greater with less than 10 percent coverage of any FEPPC listed species. In addition success will be determined by the appropriate signs of hydrology.

9. Remediation: If the compensatory mitigation fails to meet the performance standards for 2 consecutive years after completion of the compensatory mitigation objectives, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the compensatory mitigation is unsuccessful, the Permittee shall submit to the Corps an alternate compensatory mitigation proposal sufficient to create the functional lift required under this permit. The alternate compensatory mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland functions associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

10. Mitigation Release: The Permittee's responsibility to complete the required compensatory mitigation, as set forth in the Special Conditions of this permit will not be considered fulfilled until mitigation success has been demonstrated and written verification has been provided by the Corps. A mitigation area which has been released will require no further monitoring or reporting by the Permittee; however the Permittee, Successors and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.

11. Cultural Resources/Historic Properties:

a. No structure or work shall adversely affect impact or disturb properties listed in the *National Register of Historic Places* (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition ; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. Prior to the initiation of any construction.

projects qualifying for this Nationwide permit must qualify for an exemption under section 403.813(1), Florida Statutes or 373.406, Florida Statutes, or otherwise be authorized by the applicable permit required under Part IV of Chapter 373, Florida Statutes, by the Department of Environmental Protection, a water management district under section 373.069, Florida Statutes, or a local government with delegated authority under section 373.441, Florida Statutes, and receive Water Quality Certification and applicable Coastal Zone Consistency Concurrence or waiver thereto, as well as any authorizations required for the use of state-owned submerged lands under Chapter 253, Florida Statutes, and, as applicable, Chapter 258, Florida Statutes. You should check State-permitting requirements with the Florida Department of Environmental Protection or the appropriate water management district.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (<http://www.myfwc.com/license/wildlife/>) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (<http://www.fnai.org/>) also maintains updated lists, by county, of documented occurrences of those species.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Bev Lawrence by telephone at 904-232-2517.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Please be aware

this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Sincerely,

A handwritten signature in black ink, appearing to read "Kelly E. Unger". The signature is fluid and cursive, with the first name "Kelly" and last name "Unger" clearly distinguishable.

Kelly E. Unger
Chief, Jacksonville Permits Section

Enclosures

Copies Furnished:

Ms. Audra Hayden, Environmental and Geotechnical Specialists, Inc., 104 North
Magnolia Dr., Tallahassee, FL 32301

✓ Mr. Robert Lide, NFWFMD, 81 Water Management Dr., Havana, FL 32333-4712
CESAJ-RD-PE (Wells – Pensacola)

GENERAL CONDITIONS

33 CFR PART 320-330

PUBLISHED FEDERAL REGISTER DATED 13 NOVEMBER 1986

1. The time limit for completing the work authorized ends on **March 18, 2017**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2015-02153(NW-RLT)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

(TRANSFeree-SIGNATURE)

(SUBDIVISION)

(DATE)

(LOT)

(BLOCK)

(NAME-PRINTED)

(STREET ADDRESS)

(MAILING ADDRESS)

(CITY, STATE, ZIP CODE)

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: SAJ-2015-02153

Permittee's Name & Address (please print or type): _____

Telephone Number: _____

Location of the Work: _____

Date Work Started: _____ Date Work Completed: _____

PROPERTY IS INACCESSIBLE WITHOUT PRIOR NOTIFICATION: YES _____ NO _____

TO SCHEDULE AN INSPECTION PLEASE CONTACT _____

AT _____

Description of the Work (e.g. bank stabilization, residential or commercial filling, docks, dredging, etc.): _____

Acreage or Square Feet of Impacts to Waters of the United States: _____

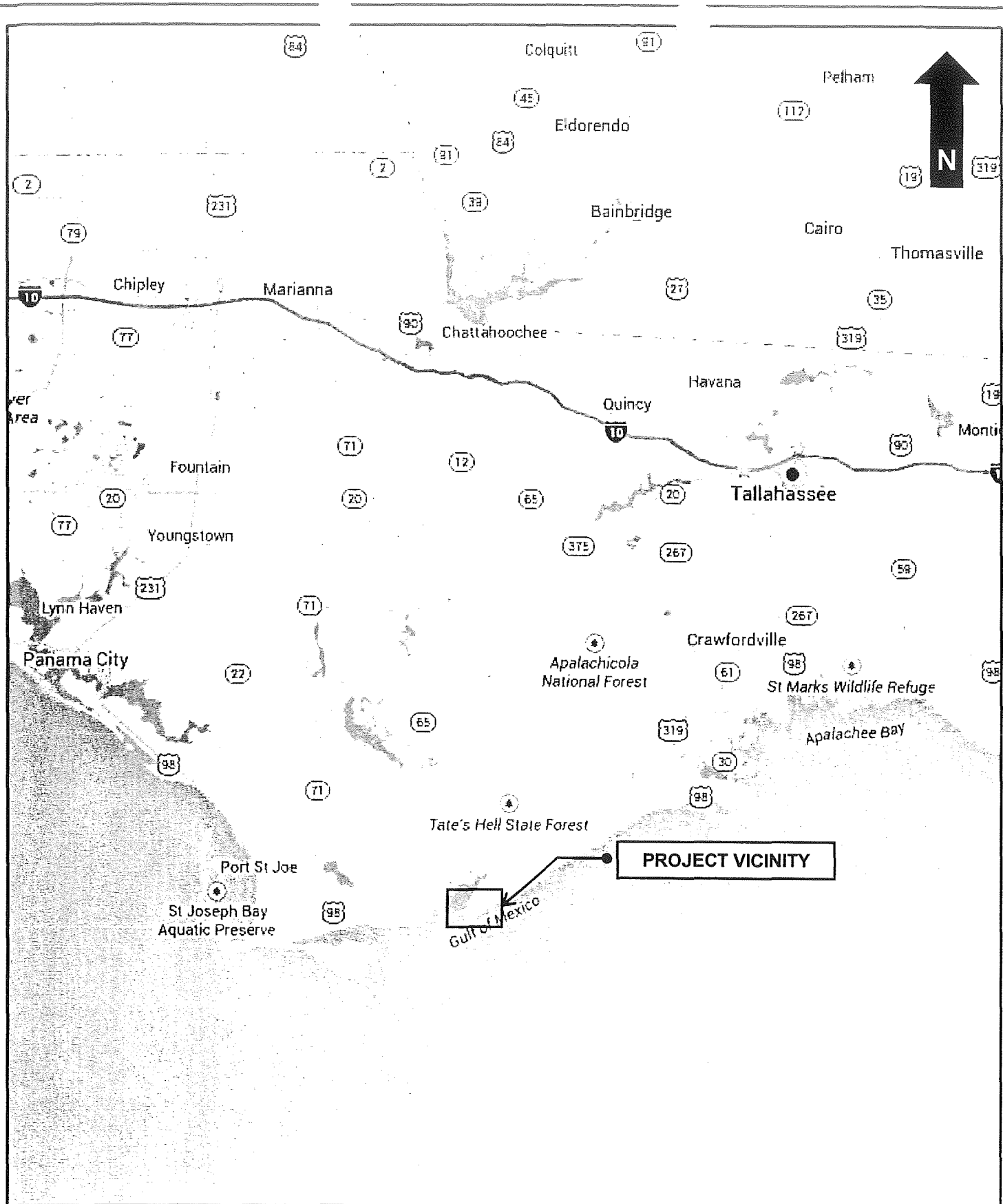
Describe Mitigation completed (if applicable): _____

Describe any Deviations from Permit (attach drawing(s) depicting the deviations):

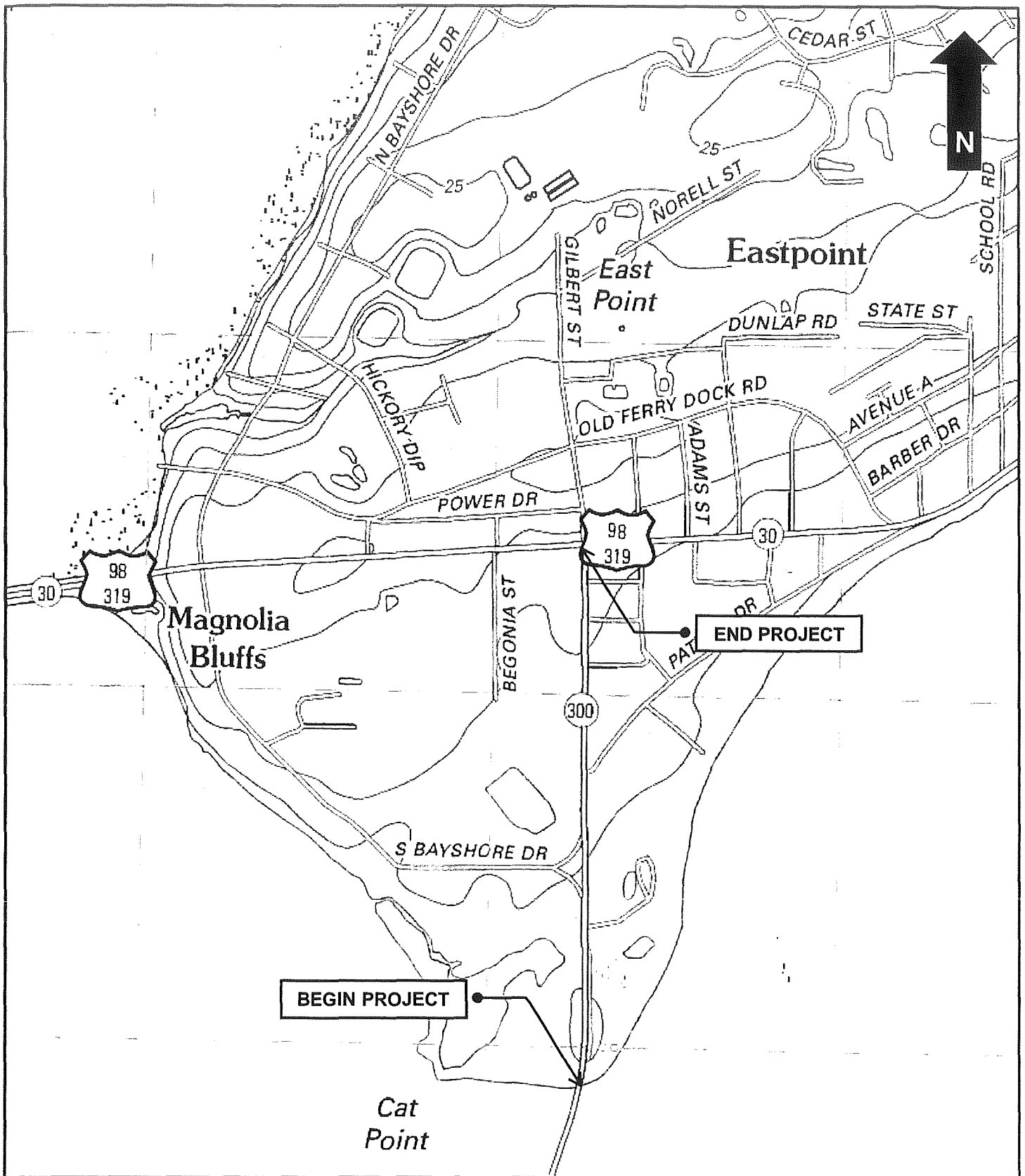
I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

Signature of Permittee

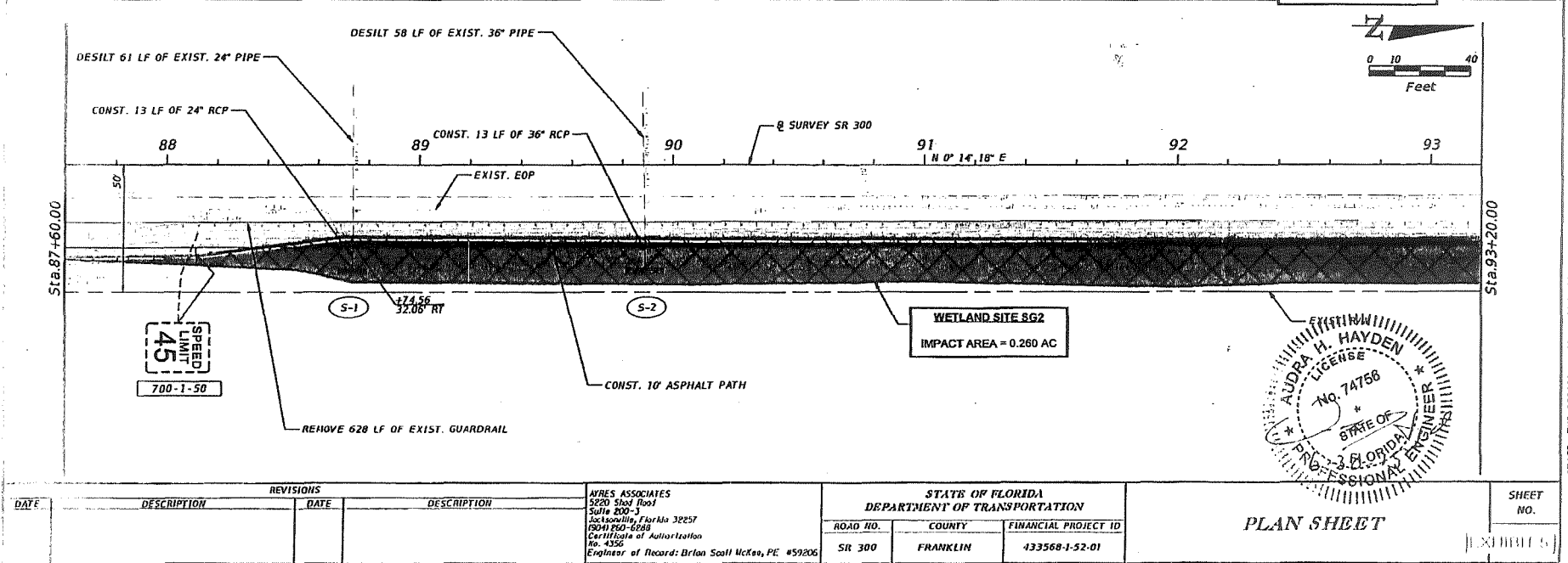
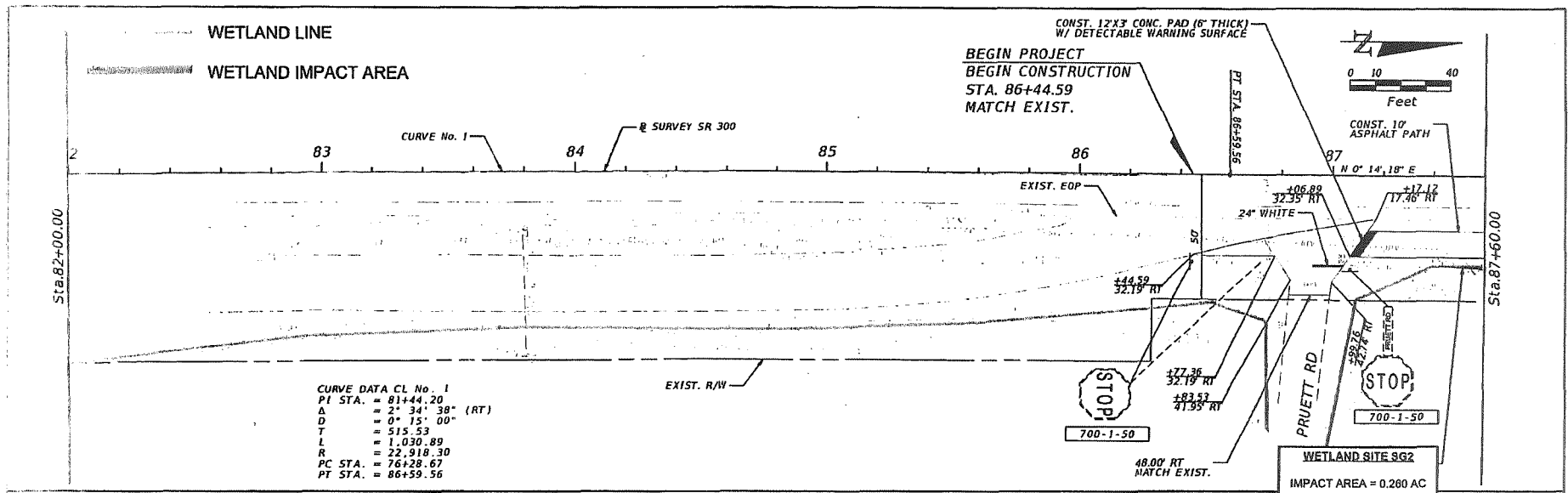
Date



DRAWN: E. PETTIS ENGINEER	CHECKED: A. HAYDEN P.E.	ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC. 1040 N. MIAMI AVENUE, TALLAHASSEE, FL 32301 OFFICE # (850) 386-1253 FAX # (850) 385-8050	TITLE: PROJECT VICINITY MAP SR 300 (ISLAND DRIVE) MULTIPLE PATH FROM ST. GEORGE ISLAND BRIDGE TO SR 30 (US 98) PRD 433568-1-52-01 FIGURE NC
CLIENT: HAYDEN, P.E. AYERS ASSOCIATES 309-101-14-03	SCALE:		



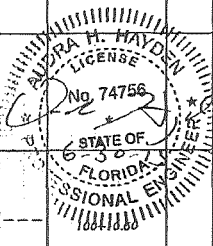
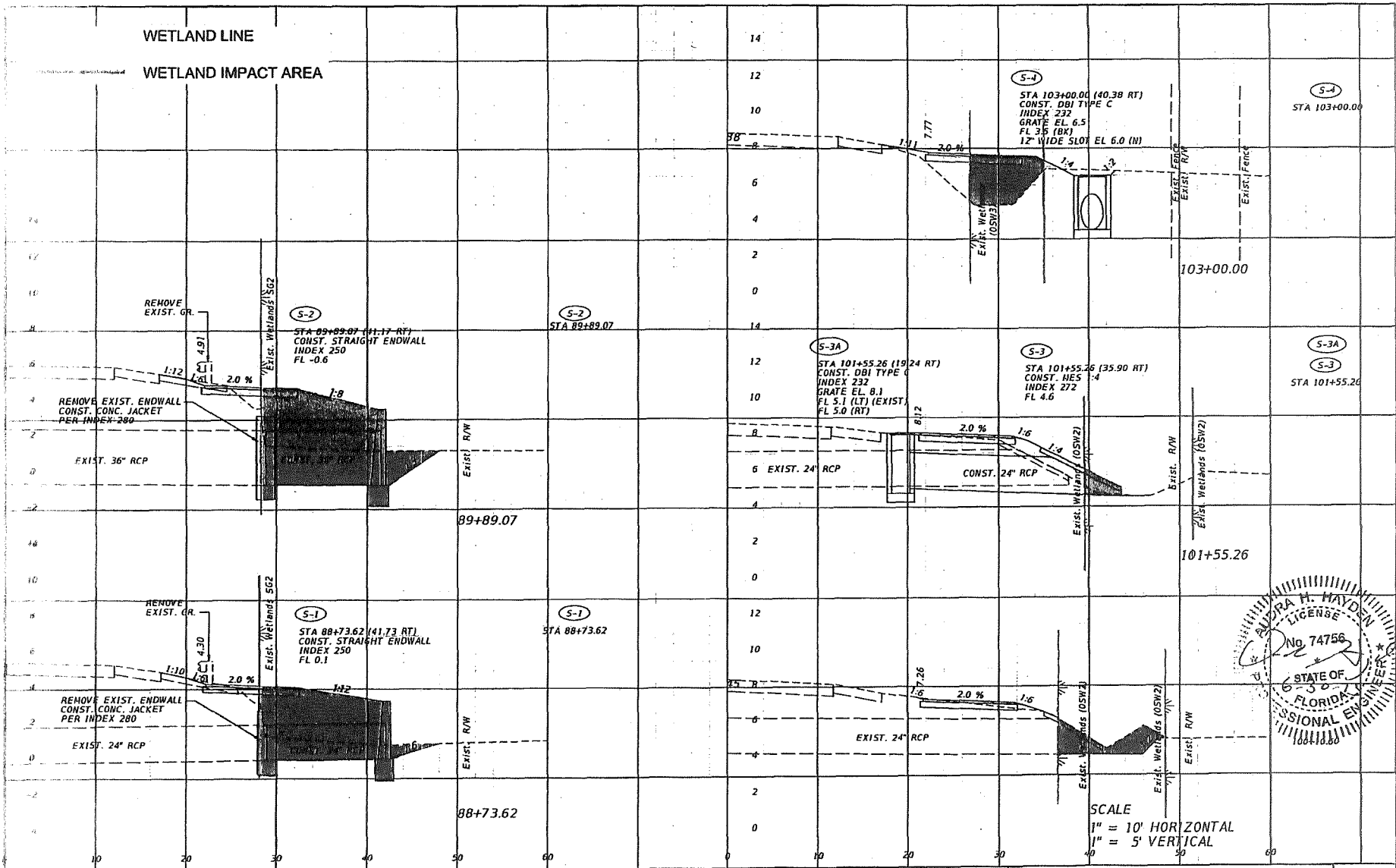
DRAWN: E PETTIS	CHECKED: A HAYDEN P.E.	ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC. 104 N MAGNOLIA DRIVE, TALLAHASSEE, FL 32301 OFFICE # (850) 386-1253 FAX # (850) 385-8050	TITLE: USGS TOPOGRAPHIC MAP SR 300 (ISLAND DRIVE) MULTI-USE PATH FROM ST GEORGE ISLAND BRIDGE TO SR 30 (US 98) FPID: 433568-1-52-01	
ENGINEER: J. HAYDEN, P.E.	CLIENT: AVERS ASSOCIATES		DATE: JUNE 2015	FIGURE NO: 4
PROJ. NO: 309-101-14-03	SCALE:			



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION	APPROVED	STATE OF FLORIDA	DEPARTMENT OF TRANSPORTATION	FINANCIAL PROJECT ID	SHEET NO.
					AYRES ASSOCIATES 5220 Shad Road Suite 200-1 Jacksonville, Florida 32257 (904) 680-0288 Certificate of Authorization No. 4356 Engineer of Record: Brian Scott McKee, PE #59206	SR 300	FRANKLIN	433568-1-52-01	1

WETLAND LINE

WETLAND IMPACT AREA



SCALE
1" = 10' HORIZONTAL
1" = 5' VERTICAL

REVISIONS				AYRES ASSOCIATES 5220 Shad Road Suite 200-3 Jacksonville, Florida 32257 (904) 260-6200 Certificate of Authorization No. 4256 Engineer of Record: Brian Scott McKee, PE #59206	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		DRAINAGE STRUCTURES [EXHIBIT 9]	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY		
					SR 300	FRANKLIN	FINANCIAL PROJECT ID 433568-1-52-01	

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

Mitigation Attachment

State Road 300 Multiuse Path (from St. George Island Bridge to US 98)

FDOT 433568-1

December 7, 2015

Wetland

Impact: 0.26 acres of tidal marsh wetlands / 0.16 UMAM functional loss

Proposed

Mitigation: Southgate / Sandridge Road Hydrologic Enhancement (one Low-Water-Crossing) of Sawgrass Marsh Wetlands at St. Joseph Bay State Buffer Preserve (29.6865° N, -85.3017° W)

USACE

Permit: SAJ-2015-02153

Scope

The St. Joseph Bay State Buffer Preserve (Buffer Preserve) owns and manages for ecological integrity over 5,000 acres of generally high-quality natural habitat for the express purpose of protecting the aquatic resources of St. Joseph Bay (St. Andrew Bay watershed; HUC 03140101) and Money Bayou (Apalachicola Bay watershed; HUC 03130014). Conservation and restoration of environmentally sensitive ecosystems is the key goal of the Buffer Preserve.

Southgate / Sandridge Road, a dirt road raised above natural grade and necessary for Buffer Preserve management access, bisects a sawgrass-dominated wetland marsh and disrupts the natural hydrology of adjacent wetlands by restricting surface flows within the marsh system. Construction of this road predates establishment of the Buffer Preserve, and was apparently installed for silviculture activities.

This mitigation project seeks to offset the wetland functional loss (reported by the USACE as a UMAM functional value of 0.16) associated with FDOT construction of a multiuse path adjacent to SR 300 (from St. George Island Bridge to US 98) by enhancing the hydrologic function of 6.49 acres of sawgrass-dominated marsh wetlands. Enhancement of wetland function will be accomplished by replacing approximately 150 linear feet of road fill within the marsh wetland with installation of one (1) low-water-crossing at the Southgate / Sandridge Road site. Installation of this low-water-crossing will lower the road surface elevation to that of the adjacent wetlands and will remove constrictions to surface water flows within the sawgrass

marsh. These wetlands are contiguous with tidal marsh wetlands in Money Bayou.

Development of this plan is guided by compliance with the 12 components of a compensatory mitigation plan as outlined in 33 CFR §332.4(c)(2)–(14) of the 2008 EPA Final Rule (Compensatory Mitigation for Losses of Aquatic Resources).

1—Objectives [§332.4(c)(2)]

The objective of this project is to enhance the hydrologic function of an estimated 6.49 acres of sawgrass-dominated marsh wetlands (FLUCCS 6410 – Freshwater Marshes) by removing a manmade barrier to natural surface water flows. Enhancement will be accomplished by removing approximately 150 linear feet of existing road fill and constructing one (1) low-water-crossing on Southgate / Sandridge Road, a raised dirt road used for Buffer Preserve management access.

Pre-Restoration Habitat Cover—Freshwater Marshes Wetlands (FLUCCS 6410); 6.49 acres. The site is dominated by sawgrass (*Cladium jamaicense*), although there are inclusions of cattail (*Typha spp.*, <5% cover) and willow (*Salix spp.*, <10% cover).

Post-Restoration Habitat Cover—Freshwater Marshes Wetlands (FLUCCS 6410); 6.49 acres. Post-restoration cover is not expected to change to any significant degree in the near term. However, improved hydrologic function will enhance the existing sawgrass marsh system.

Delineating the area enhanced by construction of the low-water-crossing is based on the expectation that approximately 6.49 acres of sawgrass marsh wetlands will be hydrologically enhanced by construction of the low-water-crossing. This assumption is based on extensive experience by the NFWMD implementing hydrologic enhancements in Tates Hell State Forest and other locations, as applied to the specific conditions onsite, and has been previously accepted by the USACE for multiple restoration projects including two prior projects at the Buffer Preserve.

2—Site Selection Criteria [§332.4(c)(3)]

This site was selected as offsetting mitigation for the SR 300 Multiuse Path (from St. George Island Bridge to US 98) impacts for the following reasons:

- The impacts are not within the service area of any existing or planned mitigation bank or in-lieu fee program.
- The mitigation is hydrologically connected to tidal marsh wetlands in the watershed that the impacts occur (HUC 03130014).
- The mitigation addresses ecological needs of St. Joseph Bay and Money Bayou (a component of HUC 03130014).
- The mitigation will enhance sawgrass marsh wetlands by removing manmade restrictions to surface water flows; will improve natural hydrology, especially during high water; will

improve wildlife connectivity within the marsh; and may improve water quality functions by removing a manmade barrier between the east and west portions of the marsh.

- The mitigation enables the St. Joseph Bay State Buffer Preserve to implement wetland enhancements to a marsh system that would otherwise be unfunded.

When complete, the mitigation will be self-sustaining and managed for ecological integrity in perpetuity by a Florida Acquisitions and Restoration Council (ARC)-approved St. Joseph Bay State Buffer Preserve management plan.

3—Site Protection Instrument [§332.4(c)(4)]

The mitigation area is located on state-owned (fee simple) preservation lands. It will be preserved in perpetuity in a natural condition, and will be managed for ecological integrity in accordance with an ARC-approved St. Joseph Bay State Buffer Preserve management plan. The Buffer Preserve (>5,000 acres) was acquired by the Florida Department of Environmental Protection's (FDEP) Office of Coastal and Aquatic Managed Areas (CAMA) with a "designated single use of the property" as conservation and preservation. Per Florida Statutes, CAMA has assessed the property and determined that no lands at the Buffer Preserve would be suitable for surplus. The Buffer Preserve limits public access to uses that do not conflict with the goals of conservation and preservation.

4—Baseline Information [§332.4(c)(5)]

The Southgate / Sandridge Road mitigation area at the St. Joseph Bay State Buffer Preserve consists of a dirt road raised above natural grade with fill material (up to three feet thick) that bisects a sawgrass-dominated freshwater marsh wetland. This road disrupts natural hydrologic functions by restricting surface flows within the marsh. Existing road fill in the marsh wetland is up to three feet thick. One 18" diameter concrete culvert is present.

The marsh to be hydrologically enhanced is dominated by sawgrass, with <10% willow cover and <5% cattail cover. A total of 23 vegetation species were identified (see table below).

Vegetation Species List for Southgate / Sandridge Road Mitigation Area (11/12/2015)					
Scientific Name	Common Name	Tree	Shrub	Vine	Herb
<i>Acer rubrum</i>	Red maple	X			
<i>Andropogon virginicus</i>	Broom sedge				X
<i>Cephalanthus occidentalis</i>	Buttonbush		X		
<i>Cladium jamaicense</i>	Sawgrass				X
<i>Eleocharis sp.</i>	Spikerush				X
<i>Helianthus angustifolia</i>	Swamp sunflower				X
<i>Hibiscus moscheutos</i>	Crimson-eyed rosemallow		X		
<i>Ipomoea sagittata</i>	Salt marsh morning glory			X	
<i>Ludwigia sp.</i>	Rattlebox				X
<i>Myrica cerifera</i>	Wax myrtle		X		
<i>Osmunda regalis</i>	Royal fern				X
<i>Pinus elliotii</i>	Slash pine	X			
<i>Pluchea purpureascens</i>	Annual salt marsh fleabane				X
<i>Polygonum punctatum</i>	Dotted smartweed				X
<i>Sabal palmetto</i>	Sabal palm	X			
<i>Sagittaria lancifolia</i>	Lance-leaved arrowhead				X
<i>Salix caroliniana</i>	Coastal plain willow		X		
<i>Solidago stricta</i>	Wand goldenrod				X
<i>Smilax sp.</i>	Greenbriar			X	
<i>Stillingia aquatica</i>	Corkwood		X		
<i>Typha latifolia</i> *	Cattail				X
<i>Vitis rotundifolia</i>	Muscadine grape			X	
<i>Woodwardia virginica</i>	Virginia chain fern				X

*Nuisance native species

Observed wildlife (11/12/2015):

- Great blue heron
- Kingfisher
- Fish crow

The NRCS classifies the soil of the sawgrass marsh (i.e. the area to be hydrologically enhanced) as Maurepas muck, frequently flooded (Gulf County, Florida; Map Unit Symbol 23). This soil type is set on marine terraces, has slopes of 0-1%, and has a salinity profile of nonsaline to slightly saline (0.0 to 4.0 mmhos/cm).

Maps and Figures (see attached)

- Location of the proposed Southgate / Sandridge Road hydrologic enhancement project at the St. Joseph Bay State Buffer Preserve, in relation to the SR 300 Multiuse Path impact site.
- Wetland hydrologic enhancement area polygons for UMAM scoring.
- Map of mitigation area with photo insets (A – D).
- Enlargements of photos insets (A – D).
- 2013 DOQ of Southgate / Sandridge Road mitigation area.

- 1953 B&W aerial of Southgate / Sandridge Road mitigation area.
- 1942 B&W aerial of Southgate / Sandridge Road mitigation area (low resolution).
- LiDAR of Southgate / Sandridge Road mitigation area.
- Soils (NRCS) for Southgate / Sandridge Road mitigation area.
- Low-water-crossing engineering drawing typical.

Historically, the Buffer Preserve was primarily a mix of hydric pine flatwoods, saltmarsh, and mesic flatwoods. During the 20th century, forestry, turpentine operations, and open range cattle grazing were conducted on portions of the property. Acquired by the state of Florida in multiple purchases from 1995 – 2002, management has included prescribed fire, thinning of pine, treatment of exotic vegetation, and hydrologic enhancements.

5—Determination of Credits [§332.4(c)(6)]

The estimated lift to wetland function that this project will generate was derived using the Uniform Mitigation Assessment Method (UMAM), and is based on hydrologic enhancement to the existing sawgrass marsh system. Assessments by NFWFMD staff suggest that enhancements to the hydrology of this wetland will yield 0.19 UMAM credits of functional lift.

Determination of wetland area enhanced for UMAM scoring purposes is based on extensive experience in Tates Hell State Forest and at other locations using protocols previously accepted by the USACE. NFWFMD staff estimate the LWC would enhance 6.49 acres. The USACE has accepted similar methods and estimates for other hydrologic enhancement projects implemented by the NFWFMD at the Buffer Preserve.

6—Detailed Work Plan[§332.4(c)(7)]

The Southgate / Sandridge Road low-water-crossing (LWC) site is located in a low-energy hydraulic environment, will not be subject to significant scour potential, and will typically only contain water under wet weather conditions. Existing road fill at the LWC site will be excavated to natural grade with approaches at a maximum 4% grade, a geotextile woven fabric (conforming to FDOT Design Standards, Index 199, Class D-1 or D2) lain down with a minimum fabric overlap of 2 ft., and covered with a 12 inch thick coarse aggregate base consisting of limestone or granite 2-6 inches in diameter ($D_{50} = 4$ inches). A 12 inch thick rock apron consisting of 6-10 inch diameter material ($D_{50} = 8$ inches) may be placed on each side of the LWC as determined by the project engineer. Road fill excavated from LWC construction will be stored or disposed in an appropriate area on the Buffer Preserve; it will not be placed into any wetland area or upland area that is managed in a natural state. LWC dimensions are estimated at approximately 25 FT x 150 FT. Cut & fill is estimated at approximately ~200-300 yd³.

Construction activities are anticipated to take approximately one week, and to be completed in 2016, depending on weather, site conditions, and other circumstances outside the control of the NWFWM. Construction will be performed during dry weather and will be temporarily suspended during periods of heavy rainfall or high water levels. Grading and excavation activities are anticipated to be performed using heavy equipment such as backhoes, small bulldozers or excavators.

Best Management Practices (BMPs) for turbidity, sedimentation and erosion control will be implemented and maintained at all times during construction to prevent siltation and turbid discharges into waters of the state. Silt and sedimentation control measures may be installed as necessary and properly maintained at all points where runoff from disturbed areas could result in water quality violations of Chapter 62-302, F.A.C.

Staging of Construction Activities. The excavation and moving of soil materials will be scheduled in stages, as necessary or appropriate, to minimize the size of areas disturbed and unprotected from erosion for the shortest reasonable time.

Protection of Desirable Vegetation. Stockpiling, vehicular parking and excessive foot or vehicular traffic will not be allowed within wetland areas. Material storage, fueling and servicing equipment, undertaking equipment maintenance, and cleaning will not be performed in or immediately adjacent to wetland areas. Erosion and sediment controls, such as silt fences, may be implemented as needed around the perimeter of stockpiles to prevent the transportation of soils from the area.

Best Management Practices. Erosion control measures which will minimize impacts to wetlands and wetland vegetation will be used during construction activities. This can be accomplished by various methods including the use of floating turbidity barriers, floating silt screen/curtains, sediment basins, earthen berms, and straw, geotextile or similar bale or log barriers which are free of exotic or noxious weed species. The use of staked silt fences is not recommended except to contain stockpiles in areas such as roadbeds that are outside wetland areas. Erosion controls where flowing water may be present, such as low water crossings, will require best management practices appropriate for the field conditions. Straw or similar bales or logs may not be appropriate where flowing water is present. Floating turbidity barriers or silt screen/curtains and temporary earthen berms are best management practices that may be used to prevent the transport of sediment in ditches, streams, and wetland waterways.

Stabilization of Disturbed Areas. Prompt stabilization of all disturbed areas will be undertaken during and after completion of the project. All disturbed areas will be stabilized within two weeks of disturbance. Suitable methods for stabilization include grading, establishment of a vegetative cover by mulching and/or seeding, and the use of geo-textiles. If seeding and mulching is implemented, Brown Top Millet seed or similar (free of exotic or noxious weed species) will be applied to disturbed areas and covered with approximately one (1) inch thick organic mulch of wheat straw (free of exotic or noxious weed species). Steep slopes are more susceptible to erosion than flatter slopes, so temporary mulching and quick establishment of vegetation may be implemented as appropriate. Jute mats, or similar devices, may be used on steep slopes until the vegetation has become established to prevent erosion.

Suspension of Work During Inclement Weather. Construction will be carried out during dry weather conditions to the extent practical, and appropriate erosion and sedimentation control measures will be implemented. Excavations and other construction activities will be suspended during periods of inclement weather or high water levels if there is potential for environmental damage.

Inspection and Maintenance of Erosion and Sedimentation Control. Routine inspection and maintenance of any erosion and sedimentation control features used will be provided until the project is complete. Barriers, if used, will be regularly maintained to insure their effectiveness. Sediments may be cleaned out periodically and before major predicted rainfall events.

Removal of Sediment and Erosion Control Measures. All temporary erosion control measures, whether temporary sediment basin, silt fence, straw bales, or other measures, will be removed following the successful establishment of vegetation or when otherwise appropriate.

Eastern Indigo Snake Protection/Education Plan. All work will be implemented in accordance with an "Eastern Indigo Snake Protection/Education Plan" approved by the USACE, which shall be compliant with the US Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" (2/12/2004).

7—Maintenance Plan [§332.4(c)(8)]

After hydrologic enhancements are implemented, this site will be maintained in perpetuity by the St. Joseph Bay State Buffer Preserve in accordance with their ARC-approved (Acquisition and Restoration Council) management plan.

The hydrology of the enhanced sawgrass marsh will be maintained solely by natural processes without any human manipulation of water levels.

8—Performance Standard [§332.4(c)(9)]

Hydrological conditions are demonstrated to be in general conformation with those specified in this mitigation plan. Water flows restricted or blocked by the pre-existing road are now freely flowing across the low-water-crossing.

9—Monitoring [§332.4(c)(10)]

Monitoring protocols to ensure that the hydrologic enhancements are maintained will be conducted annually for a minimum of five years from the start of mitigation activities or as required by USACE permit conditions. Monitoring will be performed by NFWFMD staff or qualified consulting firms. All monitoring reports, expected to consist of general photos and site condition notes, will be posted at www.NFWFMDwetlands.com (or any successor website). Corrective measures will be taken if necessary.

10—Long-term Management [§332.4(c)(11)]

The hydrologically enhanced sawgrass marsh wetlands will be managed long-term by the St. Joseph Bay State Buffer Preserve in accordance with their ARC-approved (Acquisition and Restoration Council) management plan. The Buffer Preserve emphasizes prescribed fire and treatment of exotic vegetation as a management tools.

11—Adaptive Management Plan [§332.4(c)(12)]

If changes in the implementation of this mitigation plan become necessary due to the stochastic nature of ecological processes, the NFWFMD will first obtain approvals from the USACE.

12—Financial Assurances [§332.4(c)(13)]

The NFWFMD is a governmental entity created by the Florida Water Resources Act of 1972 with the mission of protecting water resources protection and ecosystem integrity. Funds from FDOT are specifically earmarked to implement and maintain mitigation.

As of 8/31/2015, the NFWFMD had \$16,454,513.15 in a dedicated mitigation fund. This fund was established to receive payment from sales of mitigation credits and to ensure adequate funding for the implementation and long-term management of mitigation sites, in accordance with 62-342.850 FAC.

Other Information [§332.4(c)(14)]

Uncertainty and Risk. The uncertainty and risk associated with implementation of this type of hydrologic enhancement is very low. Once the low-water-crossing is in place, the hydrologic enhancement is complete—water levels and flows are controlled by natural processes with no human intervention. Because of the low energy environment, failure of the low-water-crossing is unlikely. Blockage of the low-water-crossing by debris is also unlikely (e.g., non-beaver habitat).

Size and ecological value of parcel / watershed approach. The wetland enhancement polygon (6.49 acres) is part of a larger wetland marsh system that grades from sawgrass marsh to saltmarsh within Money Bayou. In addition to enhancing surface hydrologic flows, construction of the low-water-crossing will also improve habitat connectivity.

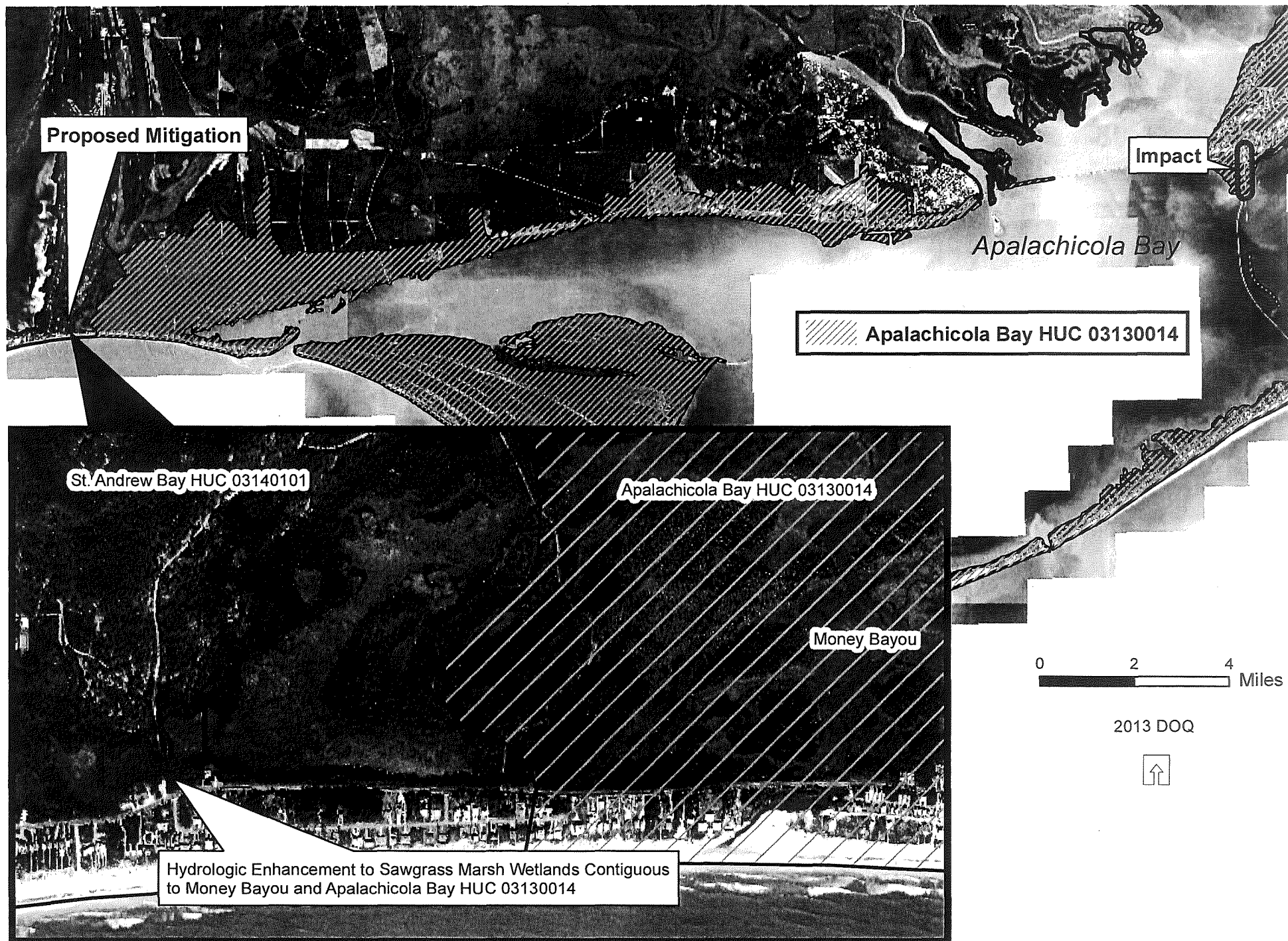
Temporal loss. There will be no temporal lag between installation of the low-water-crossing and attainment of functional lift. Once the low-water-crossing is in place, the hydrologic lift has been obtained.

Scientific/technical analysis, planning, and implementation. Over the past twenty years, the NFWFMD has gained extensive experience installing low-water-crossings to enhance wetland hydrology. Specific to the Buffer Preserve, the NFWFMD has installed seven low-water-crossings as wetlands mitigation projects. Other locations where the NFWFMD has installed low-water-crossings to improve wetland hydrology include Tates Hell State Forest (Apalachicola watershed), and NFWFMD lands on the Choctawhatchee River, Escambia River, and Perdido River floodplains. Staff includes licensed professional engineers, biologists, geographers, planners, and GIS specialists. Contracts are also in place for outside consultants as needed.

Long-term viability of the mitigation site. The Buffer Preserve is being preserved and managed for ecological integrity in perpetuity by the Coastal and Aquatic Managed Areas (CAMA) office, Florida Department of Environmental Protection. Mitigation funds will be available for future monitoring and maintenance as needed.

Any additional information requested by the USACE to determine the appropriateness, feasibility, and practicability of this compensatory mitigation project will be provided.

SR 300 Multiuse Path and Proposed Mitigation at St. Joseph Bay State Buffer Preserve



Southgate / Sandridge Road Hydrologic Enhancement - 2013 DOQ



Southgate / Sandridge Road - Wetland Hydrologic Enhancement Polygons



2013 DOQ

0 250 500 Feet

