

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT TECHNICAL STAFF REPORT
25-Oct-2016
APPLICATION #: 98863-7

Applicant: Casey Lyon
Florida Department of Transportation, District 5
719 S Woodland Blvd
Deland, FL 32720-6834
(386) 943-5436

Owner: Casey Lyon
Florida Department of Transportation, District 5
719 S Woodland Blvd
Deland, FL 32720-6834
(386) 943-5436

Consultant: Clint Smith
Hanson Professional Services, Inc.
Ste 204
8075 Gate Pkwy W
Jacksonville, FL 32216-3685
(904) 737-0090

Project Name: I-95 @ Ellis Road Interchange
Acres Owned: 73.0
Project Acreage: 73.0
County: Brevard
STR:

Section(s):	Township(s):	Range(s):
26,27,34,35	27S	36E

Receiving Water Body:

Name	Class
Indian River Lagoon	III Marine, IW
Saint Johns River	III Fresh, IW

Authority: 62-330.020 (2)(a), 62-330.020 (2)(j)
Transportation (8100), Agricultural(2000), Roads and
Highways(8140), Electrical Power Transmission Lines(8320),
Existing Land Use: Reservoirs less than 10 acres (4 hectares) which are dominant
features.(5340), Freshwater Marshes(6410), Wet Prairies(6430),
Streams and Waterways(5100), Willow and Elderberry(6180), Mixed
Wetland Hardwoods(6170), Exotic Wetland Hardwoods(6190)
Mitigation Drainage Basin: Southern St. Johns River, Central Indian River Lagoon
Special Regulatory Basin:
Final O&M Entity: FDOT

ERP Conservation**Easements/Restrictions** No

:

Interested Parties: No**Objectors:** No**Authorization Statement:**

Construction of a Stormwater Management System with stormwater treatment by wet detention for I-95 @ Ellis Road Interchange, a 73.0-acre project to be constructed as per plans received by the District on May 31, 2016. This permit authorizes 37.01 acres of wetland impact and 9.62 acres of surface water impact with associated offsite mitigation plans.

Recommendation: Approval**Reviewers:** Eric Muldowney; Nathan Ottoson**Staff Comments**

Project Applicant and Sufficient Real Property Interest: The applicant, FDOT District 5, is a State agency that owns and controls the right-of-way and has the power of eminent domain for areas of acquired property to be incorporated into the roadway and associated drainage ponds.

Project Location and Brief Description: The project is located in Melbourne along the I-95 corridor, just west of the Ellis Road and John Rodes Boulevard. Said project involves the construction of a new interchange of I-95, connecting to Ellis Road on the eastern border of the project and the future St. Johns Heritage Parkway west of I-95 (north of US 192).

Permitting History: For this area of Interstate 95 (I-95), the District issued ERP 98863-1 on November 7, 2006 for construction of I-95 roadway widening improvements and a six-lane configuration from south of Malabar Road to north of SR 528. Upon approval, ERP 98863-7 shall modify a portion of the previous permit. This permit modification shall be supplemental to the original permit, modifying a portion of the stormwater management system in the vicinity of the new interchange, and shall not supersede the prior permit(s).

Engineering

Description of Project (Surface Water Management System): The proposed I-95 Interchange at Ellis Road is located in Brevard County west of the existing Ellis Road and John Rodes Boulevard intersection. The proposed project will include a stormwater management system consisting of collection and conveyance systems, drainage inlets and pipes and two wet detention systems. Along the west side of I-95, the interconnected wet ponds (1A and 1B) are to be controlled at 15.25 Feet NAVD. The east side of this interchange shall include wet ponds (2A and 2B) controlled at 15.60 Feet NAVD. Portions of the project include the collection and proposed stormwater treatment of runoff generated from previously untreated lanes of I-95 (built prior to District

permitting without existing treatment). Treatment volume calculations for the overall basin have been provided, which clearly demonstrate an overall net benefit and net improvement in stormwater treatment of impervious areas associated with the proposed interchange.

As proposed, the project and stormwater management system will meet all applicable criteria for permit issuance pursuant to sections 62-330.301 and 62-330.302, F.A.C.

Water Quality: The wet detention system provides for stormwater treatment of all runoff generated by the project area. The system on the west side of I-95 discharges to a marsh system that ultimately flows to the St. Johns River. On the east side of I-95, the system discharges to the M-1 canal of Crane Creek and ultimately to the Indian River.

Flood Protection: The system is designed to attenuate the mean annual, 10-year and 25-year storm events having a 24-hour duration.

Special Basin Criteria: n/a

Operation and Maintenance: FDOT District 5

Environmental

Site Description:

The project consists of the construction of an Interstate 95 (I-95) interchange that will connect the northern terminus of the St. Johns Heritage Parkway roadway on the west side of I-95 to the existing Ellis Road on the east side of I-95. The project consists of roadways, entrance and exit ramps, stormwater ponds and a bridge over I-95. The southern terminus of this project on the west side of I-95 connects to a segment of the St. Johns Heritage Parkway roadway that is currently under review under application IND-009-126163-3. The southern end of the project partially overlaps the boundaries of the Spring Lakes residential development project authorized under District permit 40-009-16452-4, which has not been constructed. The west side of the project is located within the Southern St. Johns River Hydrologic Basin 20 and the east side is located within Central Indian River Lagoon Hydrologic Basin 22. The hydrologic basin divide runs along I-95.

The construction of the parkway on the west side of I-95 is located primarily within the floodplain marsh wetlands of the St. Johns River. Other existing land uses within the project area on the west side of I-95 include graded uplands associated with the previously mentioned Spring Lakes parcel and an existing FDOT stormwater pond with maintained sodded side slopes and unimproved access roads. The project boundaries on the west side of I-95 are bordered by two existing off-site FDEP conservation easements over floodplain marshes to the north and west. The project boundaries do not extend into these off-site conservation easements.

The central portion of the project consists of a bridge crossing over I-95 and the widening of I-95 to the north and south of the bridge. The proposed I-95 improvements will result in impacts to low quality roadside ditches and wetlands along the interstate. The roadside wetlands and surface waters contain significant amounts of Brazilian

pepper and wetland sedges and rushes. Wetlands within the I-95 right of way are subject to routine maintenance.

On the east side of the I-95 the project area consists of forested wetlands, ditches, spoil berms and borrow pond surface waters. The forested wetlands contain significant amounts of Brazilian pepper with cabbage palm, elm, red maple and loblolly bay. The area contains several surface water ditches and the spoil banks associated with these ditches contain high densities of Australian pine, an exotic species. The surface water ditches and borrow ponds contain control structures and act as a regional drainage system for the surrounding residential, commercial and industrial developments. There are two surface water borrow ponds within the eastern project area. One is less than one acre in size and the other is less than 7 acres in size. The larger borrow pond contains a shallow 25' littoral zone along the eastern boundary. The remaining borrow pond boundaries contain steep side slopes with overhanging Brazilian pepper, Australian pine and a variety of native and exotic palms associated with a historical plant nursery land use in the area. Most of the surface water ditches within this project area contain steep side slopes and are overgrown with exotic vegetation.

Impacts: *Subsection 10.2.2, ERP A.H. Volume I, states that an applicant must provide reasonable assurances that a regulated activity will not impact the values of wetland and other surface water functions so as to cause adverse impacts to: (a) the abundance and diversity of fish, wildlife and listed species; and (b) the habitat of fish, wildlife and listed species.*

The roadway and interchange project will result in a total of 37.01 acres of wetland impact and 9.26 acres of surface water impact. Of these impacts, 22.69 acres of herbaceous wetland impacts and 3.85 acres of surface water ditch impacts will occur within the Southern St Johns Hydrologic Basin 20 and 14.31 acres of forested wetland impact and 6.04 acres of surface water ditch and borrow pond impacts will occur within the Central Indian River Lagoon Basin 22.

The proposed elevated parkway will isolate approximately 38.2 acres of marsh wetlands from the remaining floodplain marshes to the west and north. This 38.2 acres of wetlands will maintain a hydrologic connection to the floodplain marsh via three (3) 24"x38" cross-drains. The parkway design was modified to include fencing along the entire northern and western boundaries as a barrier to wildlife to minimize road mortality. The marshes on the east side of I-95 provide suitable nesting habitat for sandhill cranes, a listed species. A condition requiring a survey for sandhill cranes during the nesting season prior to the commencement of construction has been added to this permit as requested in the letter from the Florida Fish and Wildlife Conservation Commission (FWC), received by the District on May 17, 2016.

The project is located within the core foraging areas (CFA) of six (6) mapped woodstork colonies. Four are over 3 miles away to the east and two are over twelve (12) miles away to the southeast. The project will result in impacts to suitable foraging habitat (SFH) but the mitigation plan, which includes mitigation bank credit purchase as well as a Senate Bill Mitigation Project authorized under Section 373.4137 F.S., sufficiently offsets the anticipated loss of SFH associated with the project. The proposed project with the associated mitigation is not expected to cause adverse impacts to the abundance and diversity of fish, wildlife and listed species or their habitat.

Secondary impacts: *Subsection 10.2.7, ERP A.H. Volume I, contains a four-part criterion that addresses additional impacts that may be caused by a proposed activity: (a) adverse impacts to wetland (and other surface water) functions and water quality violations that may result from the intended or reasonably expected uses of a proposed activity; (b) adverse impacts to the upland nesting habitat of bald eagles and aquatic or wetland dependent listed animal species; (c) impacts to significant historical and archaeological resources that are very closely linked and causally related to any proposed dredging or filling of wetlands or other surface waters; and (d) adverse wetland (and other surface) impacts and water quality violations that may be caused by future phases of the project or by activities that are very closely linked and causally related to the project.*

a) The construction of the proposed interchange and connector roads are anticipated to result in adverse secondary impacts to remaining off site wetlands by increasing light, noise and exotic seed sources in adjacent wetlands. The project is also anticipated to result in an increase of vehicle collisions with wildlife utilizing adjacent wetland systems. The applicant has attempted to minimize vehicle collisions by providing fencing along the northern and western boundaries of the project site adjacent to the floodplain marsh. Adverse secondary impacts were assessed 200 feet into adjacent herbaceous wetlands of the floodplain marshes to the north and west. Adverse secondary impacts were assessed to all 38.2 acres of floodplain wetlands that will become isolated from the greater floodplain marsh system as a result of the project. Adverse secondary impacts were also assessed 200 feet into remaining forested wetlands on the western side of the project. The applicant has proposed in-basin mitigation plans sufficient to offset all of the 52.7 acres of adverse secondary impacts within the Southern St Johns River Hydrologic Basin and 9.25 acres of adverse secondary impacts within the Central Indian River Lagoon Hydrologic Basin that are anticipated to occur as a result of the project.

(b) The project was assessed pursuant to the criterion of Section 10.2.7(b), A.H. There are no known Audubon's Crested Caracara and Bald Eagle nests within or adjacent to the project boundaries. The closest known Bald Eagle nest is BE019 which is over 3 miles away to the southeast. No wetland dependent listed species are expected to utilize this site for upland nesting habitat.

(c) Impacts to significant historical and archaeological resources from activities that are related to the proposed wetland impacts are not anticipated based on correspondence from the Florida Department of State, Division of Historical Resources, received by the District on May 5, 2016.

(d) This project will have future phases. The future phase of the St. Johns Heritage Parkway that will connect to this interchange on the west side of I-95 is currently under review under application IND-009-126163-3. Future phases of the St. Johns Heritage Parkway and improvements to Ellis Road are also anticipated. These known and anticipated future phases will have wetland impacts proposed to be offset by a mitigation plan that meets District rule criteria. Therefore, the anticipated future phases causally related to this proposed interchange are not anticipated to result in water quality violations or unacceptable adverse impacts to the functions of wetlands or other surface waters.

Elimination/Reduction of Impacts: *Pursuant to Subsection 10.2.1.1, ERP A.H. Volume I, the applicant must implement practicable design modifications to reduce or*

eliminate adverse impacts to wetlands and other surface waters. A proposed modification that is not technically capable of being completed, is not economically viable, or that adversely affects public safety through endangerment of lives or property is not considered "practicable". Alternatively, an applicant may meet this criterion by demonstrating compliance with subsection 10.2.1.2.a. or 10.2.1.2.b, ERP A.H. Volume I.

The Florida Department of Transportation's (FDOT) interchange and roadway project is limited to the boundaries of obtained right-of-way. The interchange and connector road configuration and location is based existing off-site roadway alignments and on engineering design standards for public safety. The extent of FDOT right-of-way can accommodate the proposed entrance and exist ramps and stormwater treatment ponds to prevent violations of water quality standards. The available right-of-way does not allow for an alignment alternative to reduce wetland impacts. All adverse impacts to wetlands anticipated to result from the proposed works are sufficiently offset with a wetland mitigation plan discussed in detail below.

Mitigation:

Within the Southern St Johns Hydrologic Basin 20 the applicant proposes to offset 22.69 acres of herbaceous wetland impact and 52.7 acres of adverse secondary impacts with the purchase of 52.6 credits at the Mary A Mitigation Bank. Due to limited surface water habitat function, mitigation was not warranted for 3.85 acres of surface water ditch impacts within Basin 20 which include maintained ditches within the I-95 right-of-way.

The herbaceous project impacts are located within the same drainage basin as the mitigation bank and the Mitigation Service Area (MSA) of the Mary A Mitigation Bank. The mitigation bank builds upon the restored wetland/conservation land base in this region and contributes, in conjunction with adjacent resources, to the long-term viability of various listed species that are known to occupy this region such as sandhill cranes, eagles, osprey, white and glossy ibis, little blue and tri-colored herons, wood storks, snowy egrets and crested caracara. The bank is expected to provide typical freshwater marsh and wet prairie functions and as such will offset the proposed adverse impacts to the on-site wetlands. The applicant has already provided documentation of credit purchase.

Within the Central Indian River Lagoon Hydrologic Basin 22 the applicant proposes to offset 14.31 acres of forested wetland impact and 9.25 acres of adverse secondary impacts with mitigation provided through Section 373.4137 F.S., which directs the water management districts to plan and implement mitigation for Florida Department of Transportation (FDOT) projects in the adopted FDOT work program. Mitigation was not warranted for 6.04 acres of surface water impacts to ditches and borrow ponds with control structures that are utilized for regional drainage within Basin 22.

Financial Assurance Mechanism:

No

Off-Site Mitigation:

Yes. Mitigation bank credit purchase and off-site Section 373.4137 F.S Senate Bill mitigation project.

Cumulative Impacts: Subsection 10.2.8, ERP A.H. Volume I, requires applicants to provide reasonable assurances that their projects will not cause unacceptable cumulative impacts upon wetlands and other surface waters within the same drainage basin as the project for which a permit is sought. This analysis considers past, present, and likely future similar impacts and assumes that reasonably expected future applications with like impacts will be sought, thus necessitating equitable distribution of acceptable impacts among future applications. Under section 10.2.8, ERP A.H. Volume, when an applicant proposes mitigation that offsets a project's adverse impacts within the same basin as the impacts, the project does not cause unacceptable cumulative impacts.

The proposed mitigation off-sets the project's adverse impacts and is in the same drainage basin. The project complies with Section 10.2.8 A.H. and no cumulative impacts are expected.

Wetland Summary Table

I-95 @ Ellis Road Interchange Roadway

	<u>Acres</u>
Total Surface Water, Upland RHPZ and Wetlands in Project	
Wetlands	37.010
OSW	12.240
Upland RHPZ	0.000
Total	49.250

Impacts that Require Mitigation

Dredged or Filled	17.280
Dredged or Filled	0.680
Dredged or Filled	13.410
Dredged or Filled	0.910
Dredged or Filled	0.970
Other (secondary impacts)	11.800
Other (secondary impacts)	26.800
Other (secondary impacts)	11.400
Other (secondary impacts)	9.250
Dredged or Filled	2.840
Dredged or Filled	0.860
Dredged or Filled	0.870
Dredged or Filled	0.160
Total	97.230

Impacts that Require No Mitigation

Dredged or Filled	0.900
Dredged or Filled	1.020
Dredged or Filled	0.080
Dredged or Filled	0.030
Dredged or Filled	0.030
Dredged or Filled	1.350
Dredged or Filled	0.830
Dredged or Filled	4.060
Dredged or Filled	0.170
Dredged or Filled	0.010

Dredged or Filled		0.170
	Total	8.650

**Mitigation
On-Site**

	Total	0.000
--	--------------	--------------

Off-Site

	Total	0.000
--	--------------	--------------

Other

**Reserved
Credits**

Mitigation Bank Credits (Mary A,20,General Wetlands)		52.6
--	--	------

Senate Bill Project

Conclusion:

The applicant has provided reasonable assurance that the proposed project meets the conditions for issuance of permits specified in rules 62-330.301 and 62-330.302, F.A.C.

Conditions

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the District staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5, F.A.C., unless a project-specific erosion and

sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the District a fully executed Form 62-330.350(1), "Construction Commencement Notice," [10-1-13], incorporated by reference herein (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02505>), indicating the expected start and completion dates. A copy of this form may be obtained from the District, as described in subsection 62-330.010(5), F.A.C. If available, an District website that fulfills this notification requirement may be used in lieu of the form.
5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex — "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 - b. For all other activities — "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
7. If the final operation and maintenance entity is a third party:
 - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the District in writing of changes required by any other regulatory District that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
9. This permit does not:
 - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
11. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
12. The permittee shall notify the District in writing:
 - a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
13. Upon reasonable notice to the permittee, District staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be

associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the District will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.
19. This permit for construction will expire five years from the date of issuance.
20. At a minimum, all retention and detention storage areas must be excavated to rough grade prior to building construction or placement of impervious surface within the area to be served by those facilities. To prevent reduction in storage volume and percolation rates, all accumulated sediment must be removed from the storage area prior to final grading and stabilization.
21. All wetland areas or water bodies that are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity, and dewatering.
22. The operation and maintenance entity shall inspect the stormwater or surface water management system once within two years after the completion of construction and every two years thereafter to determine if the system is functioning as designed and permitted. The operation and maintenance entity

must maintain a record of each required inspection, including the date of the inspection, the name and contact information of the inspector, and whether the system was functioning as designed and permitted, and make such record available for inspection upon request by the District during normal business hours. If at any time the system is not functioning as designed and permitted, then within 30 days the entity shall submit a report electronically or in writing to the District using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," describing the remedial actions taken to resolve the failure or deviation.

23. The proposed project must be constructed and operated as per plans and calculations received by the District on May 31, 2016.
24. Thirty days prior to initiation of construction, the permittee shall submit a detailed erosion and sediment control plan to the District for written approval. The plan shall detail all erosion and sediment control measures to be implemented both during and after construction. At a minimum the plan shall include:
 - a. Identification of any areas where any dewatering will be performed during construction;
 - b. Details of specific erosion and sediment control measures to be implemented to control the discharge of turbid water due to any dewatering activities; and
 - c. Construction sequencing and location of all areas of material stockpiling and equipment staging; and
 - d. Details of all erosion and sediment control measures to be implemented during each sequence of construction.

Construction shall not commence until the permittee receives written approval of the plan from the District.
25. Before the start of any construction, the permittee must provide the District with documentation demonstrating that 52.6 herbaceous mitigation credits have been debited from the Mary A Mitigation Bank ledger.
26. In the event that the permittee does not successfully complete the transaction to obtain 52.6 herbaceous mitigation credits from Mary A Mitigation Bank, the permittee must obtain a permit modification to provide alternative mitigation.
27. As requested by Florida Fish and Wildlife Conservation Commission letter received by the District on May 17, 2016, a preconstruction breeding season (January -June) survey for Florida sandhill crane nest sites in the potential nesting habitat on the west side of I-95 must be completed. If nests are identified, the FDOT should contact FWC and the District for consultation and review

concerning conservation measures, preservation plans, and, if needed, mitigation requirements pursuant to Section 373.2291, F.S. and Rule 68A-27.004, F.A.C.

28. Mitigation to offset 8.15 UMAM Functional Loss Units for direct and adverse secondary impacts to wetlands and/or other surface waters authorized by this permit within Basin 22 will be provided through Section 373.4137, F.S. Any construction in wetlands and/or other surface waters shall not occur prior to the approval of the mitigation plan by the District's Governing Board or its designee.