

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
WATER QUALITY IMPACT EVALUATION CHECKLIST

650-050-37
ENVIRONMENTAL
MANAGEMENT
07/20

PART 1: PROJECT INFORMATION

Project Name:	SR 35 (US 98) PD&E Study From North of West Socrum Loop Road to South of CR 54
County:	Polk
FM Number:	436673-1
Federal Aid Project No:	
Brief Project Description:	Widening SR 35 (US 98) from an existing two-lane undivided roadway to a four-lane divided roadway from north of W Socrum Loop Road to south of CR 54 in Polk County. From W Socrum Loop Road to Rockridge Road, the typical section will include curb and gutters and a closed drainage system. From Rockridge Road to south of CR 54, the typical section will include open, roadside ditches. A 10-foot shared use path is also proposed along the west side of US 98.

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or ground water? ☒ Yes ☐ No

Does project alter the drainage system? ☒ Yes ☐ No

Is the project located within a permitted MS4? ☐ Yes ☒ No
Name: _____

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS

Surface Water

Receiving water names: Port Lonesome Ditches (WBID 1445), Orange Hammock Drain (WBID 1449B), Fox Branch (WBID 1454)

Water Management District: Southwest Florida

Environmental Look Around meeting date: N/A (see pre-app meeting minutes)

Attach meeting minutes/notes to the checklist.

Water Control District Name(s) (list all that apply): N/A

Groundwater

Sole Source Aquifer (SSA)? ☐ Yes ☒ No

Name _____

If yes, complete Part 5, D and complete SSA Checklist shown in Part 2, Chapter 11 of the PD&E Manual

Other Aquifer? ☒ Yes ☐ No

Name Florida Aquifer

Springs vents? ☐ Yes ☒ No

Name _____

Well head protection area? ☐ Yes ☒ No

Name _____

Groundwater recharge? ☒ Yes ☐ No

Name Green Swamp

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: 6/3/2021

PART 4: WATER QUALITY CRITERIA

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in [Table 1](#). This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed. Attach notes or minutes from all coordination meetings identified in [Table 2](#).

EST recommendations confirmed with agencies? ☐ Yes ☒ No

BMAP Stakeholders contacted? ☐ Yes ☒ No

TMDL program contacted? ☐ Yes ☒ No

RAP Stakeholders contacted? ☐ Yes ☒ No

Regional water quality projects identified in the ELA? ☐ Yes ☒ No

If yes, describe:

Potential direct effects associated with project construction and/or operation identified? ☒ Yes ☐ No

If yes, describe:

The existing drainage conveyances are open (ditch) drainage systems. From W Socrum Loop Road to Rockridge Road, the proposed typical section will include curb and gutters and a closed drainage system. From Rockridge Road to south of CR 54, the proposed typical section will include open, roadside ditches.

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements.

The proposed project will not discharge to impaired waters or an OFW. Conservation lands associated with the Green Swamp and Gator Creek Reserve that abut US 98 will not be impacted. The central and north portion of US 98 is located within a Sensitive Karst Area (SKA) (see attached pre-app meeting minutes). Coordination with the FDOT regarding proposed stormwater management facilities is currently on-going.

PART 5: WQIE DOCUMENTATION

- ☐ A. No involvement with water quality
- ☐ B. No water quality regulatory requirements apply.
- ☒ C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- ☐ D. EPA Ground/Drinking Water Branch review required. ☐ Yes ☒ No
Concurrence received? ☐ Yes ☒ No
If Yes, Date of EPA Concurrence: [Click here to enter a date..](#)
Attach the concurrence letter

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Evaluator Name (print): Tia Norman

Title: Sr. Environmental Specialist (Faller, Davis & Associates, Inc.)

Signature:

Date: 11/1/2021

Table 1: Water Quality Criteria

Receiving Waterbody Name (list all that apply)	FDEP Group Number / Name	WBID(s) Numbers	Classification (I,II,III,IIIL,IV,V)	Special Designations*	NNC limits**	Verified Impaired (Y/N)	TMDL (Y/N)	Pollutants of concern	BMAP, RA Plan or SSAC
Fox Branch	2/ Tampa Bay Tributaries	1454	III	None	Stream	No	No	N/A	N/A
Port Lonesome	2/ Tampa Bay Tributaries	1445	III	None	Stream	No	No	N/A	N/A
Orange Hammock Drain	4/ Withlacoochee	1449B	III	None	Stream	No	No	N/A	N/A

* ONRW, OFW, Aquatic Preserve, Wild and Scenic River, Special Water, SWIM Area, Local Comp Plan, MS4 Area, Other

** Lakes, Spring vents, Streams, Estuaries

Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed.

Table 2: REGULATORY Agencies/Stakeholders Contacted

[illegible]

DATE: June 3, 2021

TO: All Attendees / Project File

FROM: Renato Chuw, PE

RE: US 98 SWAT FPID 436673-1; SWFWMD Pre Application Meeting

CC: Brent Setchell (FDOT), JJ Jacquin (AIM), Shawn Swets (AIM), Justin Christensen (AIM), Cameron DeWitt (Inwood); Tech Wells (Arcadis), James Barber (Arcadis), Gregg Hamm (Arcadis)

A Pre-Application meeting was held for the US 98 PD&E Study/Design (SWAT) with Southwest Florida Water Management District (SWFWMD) on June 2, 2021 at 2:00 PM. The meeting was held via a Teams meeting. In attendance were:

Dave Kramer (SWFWMD)	Jeffrey "JJ" Jacquin (AIM)
Al Gagne (SWFWMD)	Shawn Swets (AIM)
Richard Oujevolk (FDOT)	Justin Christensen (AIM)
David Turley (FDOT)	Renato Chuw (Inwood)
Brent Setchell (FDOT)	Cameron DeWitt (Inwood)
Sergio Figueroa (FDOT)	Nicole Cribbs (Faller Davis)
Nicole Monies (FDOT)	Tia Norman (Faller Davis)
Ben Shepherd (FDOT GEC)	

The following is a summary of the items discussed in this meeting:

Project overview and description

The project consists of evaluating the widening of US 98 from two to four lanes between just north of W. Socrum Loop Road to CR 54 (Polk/Pasco Co line). Inwood Consulting Engineers is performing the drainage study evaluation as a sub-consultant to AIM Engineering (the prime consultant). The intent of the project is to accommodate the widening of the roadway within the existing 160-ft roadway right of way. The only R/W acquisition anticipated will be for the proposed stormwater and floodplain compensation ponds.

Two proposed typical sections are currently being evaluated. Both typical sections will include curb and gutters and a closed drainage system. A 10-ft shared use path is proposed along the west side of US 98.

Existing Drainage

The project limits traverse two watersheds: the Hillsborough and Withlacoochee River watersheds. There are three WBIDs which are not impaired for nutrients (per FDEP database). These are the Port Lonesome Ditches (WBID 1445), Orange Hammock Drain (WBID 1449B) and Fox Branch (WBID 1454). Hillsborough River is an OFW, but our project does not have a direct discharge to the river or to any other OFWs. Along the project, there are 22 existing cross drains. Three of these are bridge culverts associated with Main Stream, Fox Branch and Cypress Run. Numerous wetlands and floodplains abut the project corridor. The existing drainage conveyances are open (ditch) drainage systems. Conservation lands associated with the Green Swamp and Gator Creek Reserve also abut US 98 along sections of the project.

Proposed Drainage Approach and Criteria

SWFWMD indicated that water quality treatment will be required for the net new impervious areas (1" over DCIA for wet detention ponds). Treatment will be applicable for the travel lanes. Compensating treatment approach will be acceptable. Inwood provided a description of the anticipated roadway drainage basins, which will be four in total. The drainage basins were consolidated/combined, to minimize the number of pond sites. In addition, another option that is being evaluated is consolidating the four basins into two larger basins and two regional/combined ponds (one on each watershed) to maintain drainage patterns and outfalls.

Environmental Look Aounds (ELAs) opportunities are limited on this segment of US 98 due to the existing land use characteristics. A parcel identified as a "Tree Farm" was discussed and brought up during the adjacent segment north (District 7 segment of US 98) discussions with SWFWMD. As part of the District 1 segment of US 98, the Tree Farm option will not be explored due to the inability to address direct runoff, pollutants, and attenuation from the roadway improvements. However, FDOT District 7 will continue to explore this option.

OFW criteria (an additional 50% water quality treatment) will not be applicable for this project since there is not a direct discharge to an OFW. However, the treatment approach and the pond sizing are based on treating the runoff from all four lanes plus the shoulders. This approach is more conservative than the required SWFWMD criteria and provides a higher level of treatment. During the design phase, compensating treatment may be applied on constrained areas or hydraulically difficult areas to take to the ponds. Compensating treatment is also preferred upstream, as more of the receiving waters will see the benefit. Nutrient loading analysis will not be required for this project since there are no discharges to impaired waters.

For attenuation, because the project falls within open systems, the 25yr/24hr SWFWMD storm event will be used for the proposed ponds. Pre vs. Post discharge attenuation was discussed and whether it was required to meet local pre vs. post at each cross drain outfall even if multiple outfalls connected at a single point location not far from US 98. SWFWMD indicated that no adverse impacts or rise in flood stages will need to be demonstrated. SWFWMD suggested to look at existing flood studies in the area for stages and discharges to evaluate pre vs. post discharges. Inwood indicated that there are no current flood studies that include our segment of US 98 and the only studies available are outside of the project limits. The Hillsborough River/Tampa Bypass Canal study is within FDOT District 7 segment and the New River Flood Study is west of US 98. During the design phase, strategically placing inlets to collect certain portions of runoff to the pond and directly to the cross drain outfall is an approach that could meet the pre vs. post discharge requirements.

The central and north portion of US 98 is located within a Sensitive Karst Area (SKA). Inwood asked if specific requirements were necessary for stormwater pond construction within the SKA. SWFWMD indicated that construction should be avoided through the confining layer. FDOT mentioned that the geotechnical engineer will evaluate this as they investigate the pond sites chosen for the project. If construction through the layer is inevitable, mitigation options should be investigated such as an impermeable liner or other forms of containment to prevent interaction between stormwater and groundwater.

Floodplain impacts are anticipated for this project. Compensation is proposed in Floodplain Compensation (FPC) sites using a "cup for cup" approach. Flood elevations are estimated based on the latest available information (FEMA flood maps dated 2016). These floodplain boundaries correlate well with existing 1' ground contours. FPC sites will consist of scrape down areas adjacent to the impacted floodplain.

Environmental and Permit Discussions

The anticipated permit will be an Individual Permit and not a permit modification unless our design proposes to modify the existing permitted systems. Wetland delineation is still early in the process but will occur once

preliminary pond sites are identified. Mitigation for wetland impacts will need to occur within the same watershed that the impacts take place (Hillsborough or Withlacoochee). The Green Swamp within the project limits is designated as an area of "Critical State Concern". The rule exemption regarding not mitigating for isolated wetland impacts less than 0.5 acres does not apply. For this project, most of the wetlands are connected and not isolated.

The proposed ponds are adjacent to wetland systems and biological indicators (seasonal highs) will be obtained as the wetlands are delineated. This information will be used to set the control elevations for the ponds. Controlling the ponds below the seasonal high of the wetlands will require analysis/modeling of the wetlands including various storm events to make sure there are no adverse impacts.

Wildlife crossings are also being explored for this project, mainly where the Green Swamp Conservation Lands are located.

Schedule

The schedule for this project is ahead of the other US 98 segments to the north and south of this one. Right of way acquisition is anticipated by October 2022 followed by this project going Design/Build.

These are the author's understanding of the discussions and decisions reached at this meeting. If there are comments or questions, please contact Renato Chuw at rchuw@inwoodinc.com or 407-971-8850.