

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
WATER QUALITY IMPACT EVALUATION CHECKLIST

650-050-37
 ENVIRONMENTAL
 MANAGEMENT
 08/22

PART 1: PROJECT INFORMATION

Project Name:	Malabar Road PD&E Study
County:	Brevard
FM Number:	437210-1-28-01
Federal Aid Project No:	N/A
Brief Project Description:	The City of Palm Bay is conducting a Project Development and Environment (PD&E) Study for the proposed widening of Malabar Road from St. Johns Heritage Parkway to Minton Road. The project will analyze widening Malabar Road from two to four lanes, evaluate intersection alternatives, and provide improved drainage facilities including new treatment and attenuation ponds.

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: FDOT District Five's NPDES MS 4 Phase II C

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: MTWCD Canals C-7, C-8, C-9, C-10, C-20, and C-37. All canals drain to MTWCD Canal C-1 and ultimately to the Indian River Lagoon.

Water Management District: St. Johns River Water Management District (SJRWMD)

Environmental Look Around meeting date: 8/5/2020, 3/31/2021, and 12/9/2022

Attach meeting minutes/notes to the checklist.

Water Control District Name(s) (list all that apply): Melbourne-Tillman Water Control District (MTWCD)

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 Floridan

Springs vents? Yes No
Name _____

Well head protection area? Yes No
Name _____

Groundwater recharge? Yes No
Name Rainfall, Infiltration

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: [Click here to enter a date.](#)

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
See Table 2

TMDL program contacted? Yes No

RAP Stakeholders contacted? Yes No

Regional water quality projects identified in the ELA? Yes No

If yes, describe:

C-1 Canal Rediversion Project (cannot be used for stormwater quality credit)

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

If yes, describe:

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

SJRWMD water quality criteria for wet detention ponds applies, which specifies treatment for the greater of one inch (1") of runoff over the drainage area or two and a half inches (2.5") of runoff from the impervious areas. SJRWMD water quality criteria for dry retention ponds applies, which specifies treatment for the greater of one half inch (0.5") of runoff over the drainage area or one and a quarter inches (1.25") from the impervious areas. The City of Palm Bay has more stringent criteria for dry retention ponds which is to provide treatment for the greater of one half inch (0.5") of runoff over the drainage area or one and one half inches (1.5") from the impervious areas.

Additionally, nutrient loading analysis is required for all basins because the eventual outfall is the Indian River Lagoon, which is impaired for nutrients and subject to a TMDL.

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 the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

Evaluator Name (print): Renato Chuw

Title: Senior Drainage Engineer

Signature:

Date: 7/10/2023

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
Melbourne-Tillman C-1 Canal	Group 3 Upper St. Johns	3090	III		Stream	Yes	No	TN/TP	BMAP Central Indian River Lagoon

* 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

Receiving Water Name (list all that apply)	Contact and Title	Date Contacted	Follow-up Required (Y/N)	Comments
MTWCD Canals (C-7, C-8, C-9, C-10, C-20, and C-37)	MTWCD (Mike McCabe)	8/5/2020 and 3/31/2021	No	Pond Site Review Meeting (ELA) and Preferred Pond Site Review Meeting
MTWCD Canals (C-7, C-8, C-9, C-10, C-20, and C-37) and City of Palm Bay Canals (Canals 26-06, 14-03b and 13-05)	City of Palm Bay (Frank Watanabe, Stephanie Kelly, Vincent Colombo)	8/5/2020 and 3/31/2021	No	Pond Site Review Meeting (ELA) and Preferred Pond Site Review Meeting
MTWCD Canals (C-7, C-8, C-9, C-10, C-20, and C-37) and City of Palm Bay Canals (Canals 26-06, 14-03b and 13-05)	Brevard County (Corrina Gumm)	8/5/2020 and 3/31/2021	No	Pond Site Review Meeting (ELA) and Preferred Pond Site Review Meeting
C-10 Reservoir	SJRWMD	12/9/2022	No	ELA regarding C-10 Reservoir Project
MTWCD Canals (C-7, C-8, C-9, C-10, C-20, and C-37) and City of Palm Bay Canals (Canals 26-06, 14-03b and 13-05)	Brevard County (Rachel Gerena)	1/9/2023	No	Regional Project Email Coordination



Meeting Minutes

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Project: Malabar Road – PD&E Study

Date: August 5th, 2020

FPID: 437210-1-28-01

Time: 11:00 AM

Description: From St. Johns Heritage Pkwy. To Minton Rd.

Location: Microsoft Teams (Virtual)

Meeting Title: Alternative Pond Site Review

MEETING ATTENDEES:

- Frank Watanabe, City of Palm Bay
- Corrina Gumm, Brevard County
- Mike McCabe, MTWCD
- Dayna Duffy, Inwood Consulting Engineers
- Renato Chuw, Inwood Consulting Engineers
- Jack Freeman, Kittelson
- Brandon Kelley, Kittelson

MEETING SUMMARY

Renato Chuw began the meeting with a brief overview of the purpose of the meeting which was to present preliminary pond site locations to the City, County and MTWCD. Dayna Duffy presented a CADD file to show the proposed alternative pond sites that were developed by Inwood. Pond sizing was based on the most conservative ROW width concept (110' at the time of developing these sites but has since been reduced to 102') and ICPR models to ensure that MTWCD discharge criteria is met. Each pond site was discussed and changes were proposed by the various stakeholders. The changes emphasize consolidating pond sites into parcels that are already owned by the City of Palm Bay and reducing residential impacts within the Port Malabar subdivisions. Please see the attached basin maps for an overview of the pond sites that were presented. The following is a summary of comments and recommendations:

- In Basin C-7, there has been discussion of a future commercial development on the site of C-7 Alt. A. No permits or plans have been filed; however, C-7 Alt. B will be considered a viable site for this basin. Alternative options for Alt. A include:
 - Relocate the pond to the south side of Malabar Rd. and move it closer to the C-8 Canal. In the pond graphics presented during the meeting, this location was also identified as a potential floodplain compensation site. The new Alt. A option would abut the floodplain comp. site. Mike is ok with changing the outfall for this basin from the C-7 to the C-8 canal, if discharge criteria can still be met.
 - Look into expanding/utilizing the pond at the Palm Bay Regional Park to the north, adjacent to the C-7 Canal. Renato mentioned that this might trigger Section 4(f) and further investigation will be conducted.
- In Basin C-8, it is preferable to use the City parcel that is surrounded by the residential lots and add an easement instead of using the residential parcels for C-8 Alt. B. Frank mentioned that this would be supported by the City Council. This pond site will be relocated. It was mentioned there is an existing ditch running through the City

parcel to collect runoff from the adjacent surrounding residential homes. Locating a proposed pond within the City parcel will also require examining replacement of the ditch so that the existing drainage patterns remain. Alternatively, the pond could be sized to accept the offsite runoff from the residential lots.

- Both proposed pond sites in Basin C-9 have significant residential impacts. Inwood will look at options to combine this basin with one or both of the adjoining basins to eliminate these impacts. The C-8 Canal merges with the C-9 Canal just north of the project, so Mike is conceptually ok with discharging to the C-8 instead.
- Mike mentioned that there is a large parcel at the NE corner where the C-8 and C-9 Canals merge. The parcel is owned by Brevard County Schools but might revert to County ownership. Mike suggested the use of this parcel for regional or secondary treatment. Renato indicated that one option would be for Malabar Road to discharge directly into one of the canals and to provide compensating treatment using this parcel. However, since this parcel is not currently available, we would still need to provide pond sites specifically for the Malabar Road PD&E Study. This parcel's potential for regional stormwater use will be documented in the PSR but not investigated further.
- In the C-10 West Basin, the City parcel is a viable site for a pond (Alt. A). Inwood will determine whether this parcel is suitable to also treat runoff from some or all of basin C-9. Alt. B site (currently shown located within residential lots) will be eliminated for further evaluation.
- In the C-10 East Basin, the swale option (Alt. A) is a viable option. It was recommended to utilize the rest of the remnant parcels as additional swale area to provide compensation for other basins. For Alt. B, there is already a City canal easement along the west side that can be used as access for the pond. Mike mentioned that there might be plans to enclose/pipe this canal due to the Avery Springs development.
- In the C-20 West Basin, several changes were suggested. Neither of the proposed pond site alternatives shown in the meeting were desirable due to the residential impacts.
 - One option is to eliminate the pond sites in this basin and compensate in either of the adjacent basins. Discharging to the C-10 or C-20 would be acceptable, but discharge criteria would still need to be met.
 - Utilize the remnant parcels on the south side of Malabar Road for swales, even if they are not large enough to provide the full amount of treatment. They can be used to supplement the compensation options.
 - Depending on the selected concept around the Post Office, the church parcel on the north side of Malabar Road might be impacted. If so, there could be potential for a pond site or even a regional pond site in this location. This will be investigated further once the concept is more finalized.
- Mike mentioned that the C-20 backs up into some of the residential properties during large storm events. This should be taken into consideration when sizing side drain replacements or developing concepts to relocate the canal.
- Both pond alternatives for the C-20 East Basin are viable and can be expanded to compensate for the C-20 West Basin.
- For Basin A (the last basin at the terminus with Minton Road), Inwood discussed their intent to avoid any modifications to the existing Palm Bay pond located between the 7-11 and C-37 Canal (east of Minton Road). The existing pond treats runoff from Malabar Road but is located on private property and there have been past disputes over property ownership and easements (per Mike). Additionally, the 7-11 is planning to expand in the near future. Inwood will move the basin boundary as needed to ensure the pond continues to receive the same



Meeting Minutes

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amount of stormwater in the widened condition, and route the rest of the runoff back west to the C-20 East Basin. This approach was mutually agreed upon by all stakeholders.

Action Items:

Inwood will review the recommended changes to pond site alternatives and develop new or modified pond site alternatives as appropriate. Inwood will also complete the ICPR modeling of the updated pond alternatives. The revised alternatives will be reviewed again by stakeholders by the end of August, then sent to subconsultants for review. Preliminary pond sites will be shown at the public meeting in September.

*****END OF MEETING*****

Note: The above reflects the writer's understanding of the contents of the meeting. If any misinterpretation or inaccuracies are included, please contact Renato Chuw at (407) 971-8850 as soon as possible for resolution and revisions if necessary.



Meeting Notes

3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 | P: 407-971-8850 | F: 407-971-8955 |
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Project: Malabar Road – PD&E Study

Date: March 31st, 2021

FPID: 437210-1-28-01

Time: 3:00 PM

Description: From St. Johns Heritage Pkwy. To Minton Rd.

Location: Microsoft Teams (Virtual)

Meeting Title: Preferred Pond Site Review

MEETING ATTENDEES:

- Frank Watanabe, City of Palm Bay
- Stephanie Kelly, City of Palm Bay
- Vincent Colombo, City of Palm Bay
- Corrina Gumm, Brevard County
- Mike McCabe, MTWCD
- Dayna Duffy, Inwood Consulting Engineers
- Renato Chuw, Inwood Consulting Engineers
- Jack Freeman, Kittelson
- Brandon Kelley, Kittelson
- Travis Hills, Kittelson

MEETING SUMMARY

Renato Chuw began the meeting with a brief overview of the purpose of the meeting which was to present alternative pond site locations and the locations that have been identified as recommended preferred sites. Dayna Duffy presented a KMZ file to show the proposed alternative pond sites that were developed by Inwood, with the recommended preferred alternatives represented in cyan. Alternative pond sites were shown in orange and the only floodplain compensation site was green. KMZ files containing the pond site locations, text labels, and the recommended preferred roadway concept are attached.

General Notes:

- Inwood explained that all of the pond sites include an upside contingency factor (20%) to account for preliminary data and refinements during the design such as radii around berms, curvatures, etc.
- MTWCD asked how much the roadway would be elevated as part of this project. Kittelson indicated that the roadway will be constructed close to existing grade and no substantial elevation change is expected.

Site Specific Notes:

- The preferred pond site for Basin C-7 is Pond C-7 Alt. 2, located adjacent to Canal 8 and south of Malabar Road. Adjacent to the pond is a proposed floodplain compensation site.
 - *The City, MTWCD or the County did not have any comments on this recommended preferred pond site location.*

- Basins C-8 and C-9 were combined per comments from the previous pond alternatives meeting. They are now represented as Basin C-8 & C-9. The recommended preferred site for this basin (Alt. 1) is the City owned parcel centered on the north side of Malabar Road between Canal C-8 and Canal C-9, within a residential neighborhood.
 - A perimeter ditch has been allocated surrounding the recommended preferred site to accommodate offsite runoff from the adjacent neighborhoods that currently flows to the existing ditch in the middle of the parcel. The ditch is shown in dark blue.
 - An easement is required from Malabar Road to the pond for the storm drain conveyance pipe.
 - The pond is anticipated to discharge to the existing ditch to the north.
 - It was explained that this site is slightly more expensive than the Alt. 2 pond site because of the construction cost of the pond and the pipe within the easement.
 - The City asked whether this would be a wet or dry pond. Inwood responded that it would be a wet pond, and the City indicated that they do not anticipate that this pond will get push back from the adjacent residents.
 - Inwood mentioned that this pond could be reshaped to be curvilinear and have aesthetic features during the design phase.
 - *Everyone in the meeting concurred that Alt. 1 is the recommended preferred pond for this basin.*
 - MTWCD asked if the runoff from the eastern limit of Basin C-8 & C-9 would be piped across Canal C-9 to the recommended preferred pond on the City parcel. Inwood responded that a couple of options are available such as crossing under the existing Canal C-9 with a storm drain pipe to the recommended preferred pond or applying compensating treatment by not treating the portion of the basin east of Canal C-9 and overtreating or doing compensating treatment west of Canal C-9.
 - MTWCD mentioned that the existing cross drain under Canal C-9 may be oversized and they are looking at reducing the size, which may allow crossing the canal above the cross drain.
- Basin C-10 is split between C-10 East and C-10 West due to the bridge over Canal C-10 making it difficult to convey stormwater from one side to the other. Some alternatives use a compensating treatment approach to combine the basins. For Basin C-10 West, MTWCD indicated that there are some drainage issues between Krassner Drive and Canal C-10 along the north side of Malabar and the area lacks an outfall to the canal.
 - Inwood mentioned that they anticipate that the C-10 West Basin between Krassner Dr. and Canal C-10 is proposed to be untreated and discharged directly to the canal. An outfall will be proposed for the offsite conveyance north of Malabar Road.
 - Compensating treatment is proposed to be provided for this untreated basin. The recommended preferred stormwater pond for this basin is C-10 East Alt. 1, which is a series of swales along the south side of Malabar Road utilizing remnant parcels created by the roadway widening. Several of these are already City owned. The swales will be approximately 5 feet deep and the bottom width will vary from 9.5 feet to 23 feet.
 - There are three other alternative combinations for these basins. C-10 West Alt. 1 would be a standalone pond located in a City owned parcel. This pond can be used in conjunction with the C-10 East Alt. 1 swales, or with C-10 East Alt. 2. C-10 East Alt. 2 is a standalone pond located north of Malabar Road. This pond also has a potential expansion option (C-10 West Alt. 2, Option 2) which can replace the standalone C-10 West Alt. 1 pond.
 - *Everyone in the meeting concurred that C-10 East Alt. 1, utilizing the swales with compensation for C-10 West, is the recommended preferred alternative.*
- For Basin C-20, Inwood mentioned that the two previous pond site alternatives (Alt. 1 and Alt. 2) had to be slightly adjusted in size due to new geotechnical information for the water table. Control elevations of the ponds were adjusted, however, the parcels where the ponds are situated remained the same.

- For Pond C-20 Alt. 1, the size of the pond increased to 7.04 acres. The pond was reshaped and moved toward the back of the parcel and an easement is proposed for pipe conveyance along the eastern side of the parcel, towards Malabar Road.
- For Pond C-20 Alt. 2, the size also increased and now the proposed pond occupies the entire parcel (whole take).
- Two supplemental dry swales are proposed for this basin. These swales will occupy remnant parcels created by the roadway widening. A few of these parcels are owned by the City. The treatment volume available in these swales has been subtracted from the required treatment volume for the Alt. 1 and Alt. 2 ponds, and it is intended that the selected pond would be used in conjunction with the swales.
- Contamination screenings from the Draft CSER show that Pond C-20 Alt. 2 contains an arsenic groundwater plume. If this pond site is chosen as the preferred, remediations for the arsenic plume will be required during excavation and dewatering of the site.
- The total pond costs shown for Alt. 1 are substantially more than Alt. 2. Remediation costs for the arsenic plume are not anticipated to be more than the difference in total pond costs between the two alternatives.
- Therefore, Pond C-20 Alt. 2 will be the recommended preferred stormwater pond for this basin.
- MTWCD asked how the pond will outfall. Inwood mentioned that it is anticipated that the outfall will be to Canal C-20 with a crossing under Malabar Road.
- MTWCD asked if a retaining wall will be needed for Canal C-20 for the proposed bulb out for the road, just across from Sutherland Dr. SW. Kittelson mentioned that this area will be refined and there is a possibility that a retaining wall may not be needed at this location.
- MTWCD advised that it will be good if the maintenance vehicles could use the proposed sidewalk along the north side of Malabar for canal access. It is also noted along Canal C-20, the existing sidewalk along the canal's north side will be maintained and can be used for canal access.
- *Everyone in the meeting concurred that Pond C-20 Alt. 2 and the two supplemental swales will be the recommended preferred stormwater ponds.*
- At the eastern end of the study, a portion of Malabar Road is already collected and conveyed to an existing pond by the 7-11 gas station (west of Canal C-37).
 - Inwood indicated that the additional improvements in this area will have minimal to no impacts to the existing pond capacity. Treatment and attenuation volumes from Malabar Road are anticipated to remain similar to the permitted conditions.
 - Furthermore, existing permitted calculations for the pond show basin areas including the 7-11 gas station and the Cumberland Farms Gas Station site. With the development of the Cumberland Farms Gas Station, contributing areas were removed to the existing pond, thereby creating additional storage capacity for Malabar Road improvements (if needed).
 - *The City indicated that they own and maintain the existing pond and concur with using the pond for the minor improvements in this area.*
 - The 7-11 gas station also discharges to a retention pond south of the site. It is believed this retention pond was constructed as a temporary pond.
 - MTWCD discussed that the 7-11 gas station may want to expand their site. MTWCD asked if we were proposing to expand or modify the existing pond. Inwood indicated that the existing pond is not proposed to be expanded or modified.

Action Items:

Inwood will move forward with the recommended preferred pond sites as identified and begin finalizing draft reports. Kittelson will update the preferred concept documents and maps to show only the recommended preferred sites that have been identified.



Meeting Notes

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*****END OF MEETING*****

Note: The above reflects the writer's understanding of the contents of the meeting. If any misinterpretation or inaccuracies are included, please contact Renato Chuw at (407) 971-8850 as soon as possible for resolution and revisions if necessary.



Meeting Minutes

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Project: Malabar Road – PD&E Study

Date: December 9th, 2022

FPID: 437210-1-28-01

Time: 10:00 AM

Description: From St. Johns Heritage Pkwy. To Minton Rd.

Location: Microsoft Teams (Virtual)

Meeting Title: ELA Discussion with SJRWMD

MEETING ATTENDEES:

- Marc Van Heden, SJRWMD
- Gretchen Kelley, SJRWMD
- Rebecca Trudeau, SJRWMD
- Sheila Theus, SJRWMD
- Frank Watanabe, City of Palm Bay
- Mike McCabe, MTWCD
- Jack Freeman, Kittelson
- Dayna Duffy, Inwood Consulting Engineers
- Renato Chuw, Inwood Consulting Engineers

MEETING SUMMARY

- Renato Chuw began the meeting with a brief overview of the project including a KMZ file showing the proposed roadway concept, project limits, and pond site alternatives. The study plans to widen Malabar Road from two to four lanes starting at St. Johns Heritage Parkway (SJHP) to Minton Road. Pedestrian accommodations and drainage improvements are also proposed.
- Renato then explained the purpose of the meeting and the Environmental Look Arouds (ELA) process established by FDOT. The main goal of the meeting is to discuss with SJRWMD whether their upcoming C-10 Reservoir project has any potential for joint-use/regional stormwater treatment with the Malabar Road study. Additionally, if SJRWMD is aware of any other nearby projects that would satisfy ELA requirements, those can be discussed.
- Renato explained that preliminary plans were provided by MTWCD for the C-10 Reservoir a few months ago. Inwood inquired if more information is available including:
 - What is the purpose of the project?
 - How is the project set up/how does it work?
 - What is the timing for completing design and going to construction?
- Marc first mentioned that it appears the Malabar Road study project will not impact the district lands. Frank explained the intent for the City to do a land swap with the property owner at the SW corner of SJHP and Malabar Road but that also won't affect the district lands.

- Renato also mentioned that the current pond alternatives for the basin between the C-7 and C-8 canals are located to the east of the C-7 canal, but planned development on those parcels will impact both pond site alternatives.
- Marc explained that SJRWMD is trying to determine whether or not the C-10 project will meet resiliency criteria to receive state funding and that a meeting will be held to discuss this. If it qualifies for state funding to meet the resiliency criteria, they will be able to move forward and are looking at a 2-year timeline. If not, they will need to re-design the C-10 project, which will take 4-5 years. Marc will follow up next week on the project status.
- Marc indicated that the C-10 was not designed specifically as a regional stormwater management site. It was mostly designed for nutrient reduction to the C-1 Canal and the Indian River Lagoon. It could be possible to have a pumped system coming in from Malabar Road, but it's never been looked at or considered. In addition, a pump system may face regulatory hurdles.
- Renato explained that on other projects with nutrient loading reduction requirements, we would calculate the nutrient load requirements and include them in the design of the regional stormwater project. This is sometimes done as a cost-share. Marc mentioned that there is a rule that allows for this, but it hasn't been considered for this project.
- Renato discussed that there is also the concern of runoff attenuation. MTWCD has discharge criteria for their canal systems that has to be met. In order for this to work as a regional stormwater approach, MTWCD would need to waive the discharge criteria or allow the increased runoff to be accepted in their canals. Another option would be to provide smaller ponds for attenuation only. Marc agreed with attenuation concerns.
- Mike indicated that the MTWCD would not waive the discharge criteria for new impervious area. He believes all the new development in the area will continue to increase flows in the canals. He has not recently looked at the hydraulic models, but he is aware that the C-1 Canal has backed up into the C-7 during peak stages.
- Renato asked if there is a report/narrative available for the C-10 reservoir project. Marc will look and see what is available. He is only aware of the modeling calculations.
- Mike asked if the C-1 reservoir was maxed out and whether it could handle additional runoff/treatment from Malabar Road. He believes that when the C-1 reservoir was completed, it was not fully excavated due to sawgrass being restored in the area. SJRWMD did not know whether this would be an option but the C-1 reservoir is about a mile west of the Malabar study project and doesn't seem very feasible.
- Renato also explained that the middle basins of the project utilize City of Palm Bay owned parcels as well as remnant parcels impacted by the roadway widening and FDOT agreed that it was not necessary to investigate ELA for these basins. The main concerns are the C-7 basin and C-20 basin on each end of the project.

Action Items:

SJRWMD to provide calculations/narrative for the C-10 Reservoir Project. Inwood to document ELA discussion in PSR.

*****END OF MEETING*****

Note: The above reflects the writer's understanding of the contents of the meeting. If any misinterpretation or inaccuracies are included, please contact Renato Chuw at (407) 971-8850 as soon as possible for resolution and revisions if necessary.

Dayna Duffy

From: Hickson, Ferrell <Ferrell.Hickson@dot.state.fl.us>
Sent: Friday, December 16, 2022 3:05 PM
To: Renato Chuw
Subject: RE: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arouds - C-10 Water Management Area (Meeting Minutes)

Thanks Renato...

FERRELL

Ferrell L. Hickson, Jr. P.E.
District Drainage Design Engineer, District Five
Florida Department of Transportation
719 South Woodland Boulevard, MS 2-553
DeLand, FL 32720
Office (386) 943-5433
Cell (386) 956-5087

From: Renato Chuw <rchuw@inwoodinc.com>
Sent: Friday, December 16, 2022 1:59 PM
To: Hickson, Ferrell <Ferrell.Hickson@dot.state.fl.us>
Cc: Freeman, Jack <jfreeman@kittelton.com>
Subject: FW: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arouds - C-10 Water Management Area (Meeting Minutes)

EXTERNAL SENDER: Use caution with links and attachments.

Hi Ferrell,

Just wanted to forward you the email with the attached meeting minutes. This is for the Malabar Road P&E study that we are doing with the City of Palm Bay. About a month ago we had met with you to discuss some ELA comments from ERC on our Pond Siting Report. Just wanted to let you know that we are going through the process.

Thanks,

Renato

From: Renato Chuw
Sent: Friday, December 16, 2022 1:39 PM
To: Marc Van Heden <mvanhede@sjrwmd.com>; stheus@sjrwmd.com; rtrudeau@sjrwmd.com; gkelley@sjrwmd.com; Frank.Watanabe@palmbayflorida.org; Mike McCabe <mike@melbournetillman.org>; Graeber, David <David.Graeber@dot.state.fl.us>; Jack Freeman <jfreeman@kittelton.com>; Travis Hills <thills@kittelton.com>; Dayna Duffy <dduffy@inwoodinc.com>

Subject: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arounds - C-10 Water Management Area (Meeting Minutes)

Good afternoon all,

Attached are the meeting minutes for the Environmental Look Around / potential regional stormwater discussion meeting held on Friday, December 9th, with SJRWMD, the City of Palm Bay, MTWCD, and consultant staff for the study.

Please let me know if there are any questions or edits on the minutes.

Thanks,

Renato

Renato E. Chuw, PE

Associate Principal – Drainage Section Manager

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Dayna Duffy

From: Gerena, Rachel <Rachel.Gerena@brevardfl.gov>
Sent: Monday, January 9, 2023 2:47 PM
To: Renato Chuw
Cc: Frank.Watanabe@palmbayflorida.org; Jack Freeman; Travis Hills; Dayna Duffy
Subject: RE: RE: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arouds

Renato,

Thank you for reaching out. I do not believe that we have any regional studies or plans occurring in that area of the County. We do have the ACE for the SJHP down there but it is not far enough along to consider combined stormwater and is not funded for any future phases at this time.

Thanks,
Rachel

From: Renato Chuw <rchuw@inwoodinc.com>
Sent: Monday, January 9, 2023 1:22 PM
To: Gerena, Rachel <Rachel.Gerena@brevardfl.gov>
Cc: Frank.Watanabe@palmbayflorida.org; Jack Freeman <jfreeman@kittelton.com>; Travis Hills <thills@kittelton.com>; Dayna Duffy <dduffy@inwoodinc.com>
Subject: RE: RE: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arouds

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi Rachel,

I had sent the email below prior to the holidays regarding having a meeting with appropriate county staff regarding if there were any potential regional stormwater opportunities with any County projects and our PD&E study for the Malabar Road project that we are doing for the City.

Thanks,

Renato

From: Renato Chuw
Sent: Friday, December 16, 2022 2:12 PM
To: Gerena, Rachel <Rachel.Gerena@brevardfl.gov>
Cc: Frank.Watanabe@palmbayflorida.org; Jack Freeman <jfreeman@kittelton.com>; Travis Hills <thills@kittelton.com>; Dayna Duffy <dduffy@inwoodinc.com>
Subject: RE: FPID 437210-1 – Malabar Road PD&E Study – Environmental Look Arouds

Good afternoon Rachel,

Kittelton and Associates along with Inwood Consulting Engineers are working on the PD&E Study for improvements on Malabar Road for the City of Palm Bay. The limits of the study is from the St. Johns Heritage Pkwy (SJHP) to Minton Road. We are nearing towards completion of the study and have completed our Pond Siting Report.

During the reviews from FDOT, it was requested to document the Environmental Look Around (ELA) process which is investigating if regional stormwater opportunities / joint use options are available.

We would like to set up a virtual (Teams) meeting with the county to discuss if any opportunities are available. I was not sure who the appropriate county person would be best to have this meeting (stormwater, planning, land management, engineering?)

We are looking to hold this meeting after the holiday in early to mid January. Could you give us some potential dates/times to meet?

Thanks,

Renato

Renato E. Chuw, PE

Associate Principal – Drainage Section Manager

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