



Project Development and Corridor Study Report

Lena Road

December 14, 2021

Revision 1



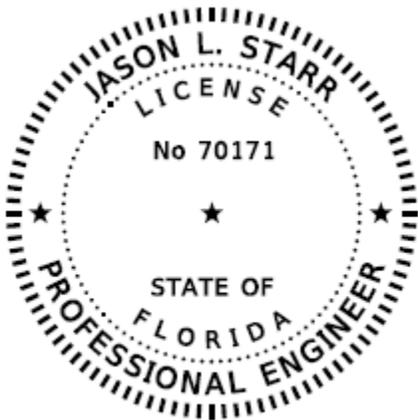
Professional Engineer Certification

PROJECT DEVELOPMENT AND CORRIDOR STUDY REPORT

Project: Lena Road PD&C Study
Limits: From south of 44th Avenue East to north of Landfill Road
CIP #: 6107560

This report contains preliminary information that fulfills the purpose and need for the Lena Road Project Development and Corridor Study from south of 44th Avenue East to north of Landfill Road in Manatee County, Florida. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgement and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with HDR Engineering, Inc. and that I have prepared or approved the evaluation findings, opinions, conclusions, or technical advice for this project.



This item has been digitally signed and sealed by Jason L. Starr, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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Executive Summary

Manatee County conducted a Project Development and Corridor Study to evaluate a 2.1-mile segment of Lena Road from the Lena Road cul-de-sac, north of SR 70, to SR 64 in Manatee County, Florida. The purpose of this project is to enhance safety, improve traffic operations, provide multimodal access, and meet the future transportation demand. The Study evaluated options for widening the existing two-lane roadway to facilitate two typical sections, a divided two-lane roadway and a two-lane section with a continuous two way left turn lane. Both sections will provide a 12-foot shared use path on the west side and a 5-foot sidewalk on the east side of the roadway. The Manatee County Comprehensive Plan shows Lena Road as a future two-lane roadway with 120 feet of right of way.

The existing typical section along Lena Road is a 2-lane roadway with 12-foot travel lanes and unpaved shoulders. The southern portion of Lena Road provides a 5-foot sidewalk on the east side of the roadway and a 10-foot sidewalk outside of the roadway right of way on the west side. The right of way varies throughout the Study limits with typical widths of 90-feet, 50-feet, and finally widening to 96-feet approaching SR 64, starting from the southern end.

Based on the engineering and environmental analysis documented in this report, the recommended alternative for Lena Road is Alternative 2, with 84 feet of right of way containing a two-lane roadway with 11-foot travel lanes, an 18-foot wide median or a 14-foot two way left turn lane, a 12-foot shared use path on the west side of the road and a 5-foot sidewalk on the east side of the road. Alternative 2 best meets the project purpose with:

- Restricted raised median for access management
- Pedestrian accommodations
- Buffer space between the road and sidewalk for pedestrian safety and comfort
- Minimized right of way impacts

The Recommended Alternative requires right of way acquisition from 20 parcels with 1 relocation. Of the two recommended pond sites, one is a recommended partial acquisition and the other is a partial usage of a larger County-owned property. The project will require an Environmental Resource Permit (ERP) for stormwater treatment and wetland and surface water impacts, a Section 404 Permit, for wetland and surface water impacts. There are no properties listed on the National Register of Historic Places (NRHP) within the boundary of the study area. Approximately 0.79 mile of the length of the corridor study area has not been previously surveyed. An archaeological survey of the undisturbed portion of the study area is recommended. In addition, there are historic-age buildings (those constructed in 1976 or before) that have not been previously surveyed within the boundary of the study. Three medium risk potential contamination sites are adjacent to the project corridor and would require further action.

Public involvement was not conducted during this study due to an abbreviated schedule. A public meeting is recommended during the design phase. Cost estimations are based on the best available data at the time of this Study and will be refined during the design phase.

1.0 Project Summary

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with State Road (SR) 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida, as shown in **Figure 1-1**. The Study also included the evaluations of impacts to natural resources and cultural resources within the study area, as well as the potential for impacts to the study area from contamination sites because of the proposed project.

1.1 Project Description

This study consisted of evaluating alternatives to meet the following objectives:

- Connect Lena Road from SR 70 to SR 64, including the proposed 44th Avenue East corridor,
- Accommodate two (2) vehicular travel lanes,
- Accommodate bicycle and pedestrian traffic,
- Identify stormwater management pond site alternatives,
- Identify project impacts,
- Identify right of way needs, and
- Recommend alternative for further development.

1.2 Purpose and Need

The primary purpose of the Lena Road improvements is to provide congestion relief by providing a collector roadway between SR 70 and SR 64. Located between Interstate 75 (I-75) and Lakewood Ranch Boulevard, the new extension of Lena Road to SR 64 will provide connectivity between two commercial/industrial areas currently accessed from SR 70 or SR 64 and provide an alternative local route between these two major east-west corridors. The extension would also connect to the future extension of 44th Avenue East, providing alternative east-west access across I-75.

The Manatee County Capital Improvement Plan (CIP) includes funding for design and construction of a two-lane urban roadway from south of 44th Avenue East to Landfill Road.

To encourage and promote the Complete Streets Concept throughout the County, the Manatee County Comprehensive Plan has identified Lena Road with a twenty-year functional classification as a Collector with a twenty-year Level of Service standard of D, a twenty-year travel lane need of two lanes, and a Right-of-Way needs width of 120 feet.

1.3 Consistency with Other Plans

Related projects with the Lena Road Study area include the 44th Avenue East extension from Creekwood Boulevard to Lakewood Ranch Boulevard (Project #6045662) and the Central County Complex (Project #6106560) as shown in **Figure 1-2**.

1.3.1 44th Avenue East

This capital improvement project will provide a four-lane divided roadway with sidewalks, bike lanes/multi-use path, street lighting, overpass over I-75 and a crossing over a reclaimed water storage lake. The roadway section will include four 11-foot travel lanes, a 22-foot median, curb and gutter, 6-foot bike lanes, a 5-foot sidewalk on the south side, and a 10-foot sidewalk on the north side. A roundabout is planned for the intersection of 44th Avenue East with Lena Road. The southern leg of the roundabout will extend to the north cul-de-sac on Lena Road providing connection to SR 70. Design is scheduled to be completed in 2022 with construction planned for 2023.

1.3.2 Central County Complex

This capital improvement project involves the acquisition of 160.99 acres located south of SR 64 along the east side of Lena Road. The land acquisition is planned to accommodate three Departments serving Manatee County: the Sheriff's Department, Public Works, and Utilities. The County is currently in design of the access road and public utilities on the property. This includes the 30% design status of the access road, known as Musgrave Ranch Road, on the northern side of the property, opposite of Brower Drive. The plans for Musgrave Ranch Road also include turn lane widening of Lena Road.

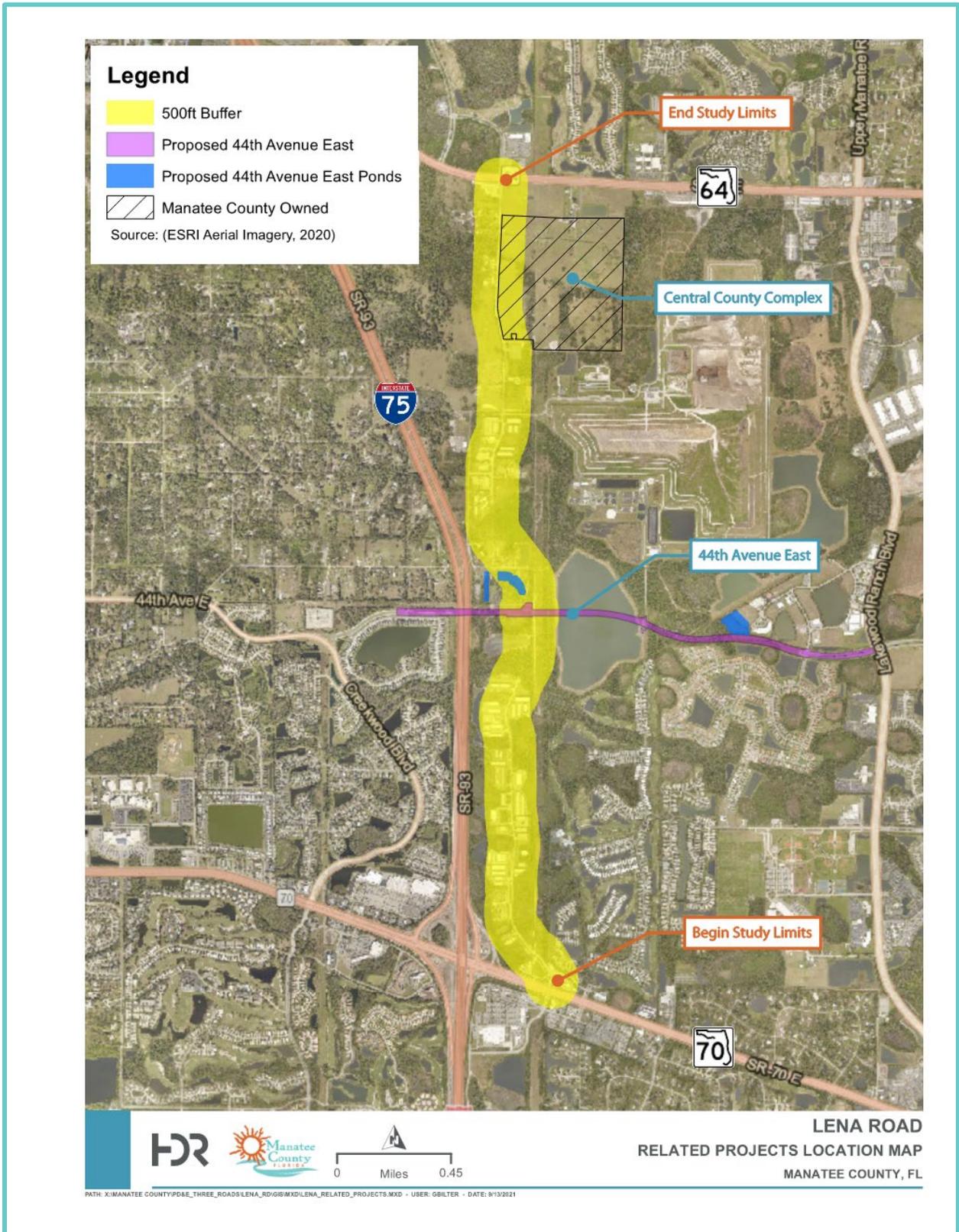


Figure 1-2 | Related Projects Location Map

2.0 Existing Roadway Conditions

The roadway is classified as a collector roadway within Manatee County. Within the Study area, Lena Road exists as two separate roadway segments: north from SR 70 and south from SR 64. From SR 70 to the cul-de-sac north of the Lakewood Ranch Elks Lodge is the first roadway segment and is designated as "Lena Road". The second segment is considered from a separate cul-de-sac at the southern end to SR 64. From the cul-de-sac west towards the I-75 Limited Access right of way, the roadway is designated as "41st Avenue East" where it curves to the north. From 41st Avenue East, the roadway heads north as "Lena Road" and curves to the east towards the County Landfill. A four-way intersection exists with the western leg and northern leg designated as "Lena Road". Landfill Road is the eastern leg and 81st Court East is the southern leg. From this four-way intersection north to SR 64, the roadway is designated as "Lena Road".

2.1 Typical Section

Lena Road from north of SR 70 to the cul-de-sac north of the Lakewood Ranch Elks Lodge is a two-lane curbed roadway within a minimum 90-foot right of way. The existing two 12-foot travel lanes are located along the eastern right of way line, along with a 5-foot concrete sidewalk. A 10-foot concrete path is located along the western right of way line, within easement. See **Figure 2-1**.

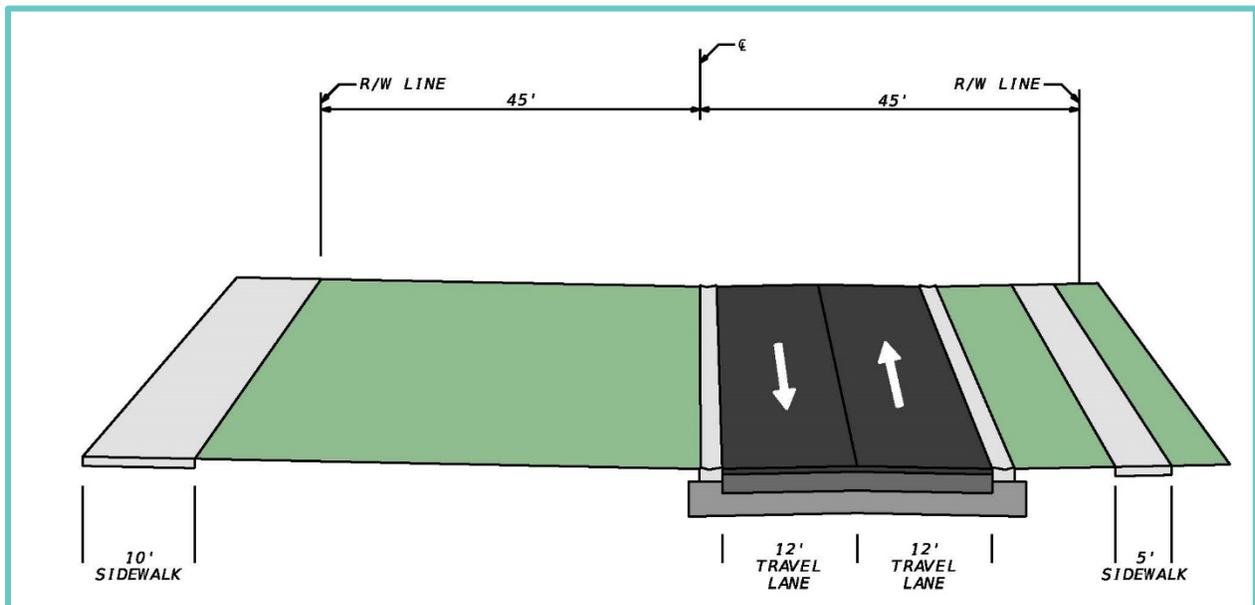


Figure 2-1 | Typical Section – Existing Lena Road north of SR 70 to cul-de-sac

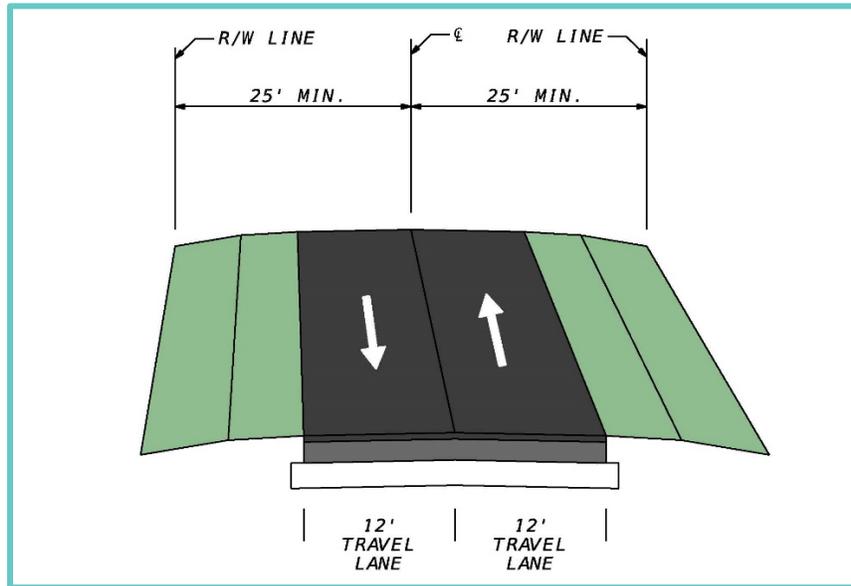


Figure 2-2 | Typical Section – Existing Lena Road from 41st Avenue East to SR 64

Lena Road north of SR 70 to the cul-de-sac is located within a minimum 90-foot right of way. Lena Road from 41st Avenue East to Landfill Road has a minimum 50-foot right of way. The right of way varies moving northward towards SR 64 widening to approximately 96 feet.

2.3 Adjacent Land Use

Lena Road north of SR 70 to the cul-de-sac is commercially developed. Lena Road from 41st Avenue East to SR 64 is bound by commercial/industrial and suburban residential properties.

2.4 Posted Speed Limit

The existing posted speed limit on Lena Road north of SR 70 and south of SR 64 is 30 mph. The existing posted speed limit on Lena Road near Landfill Road is 25 mph.

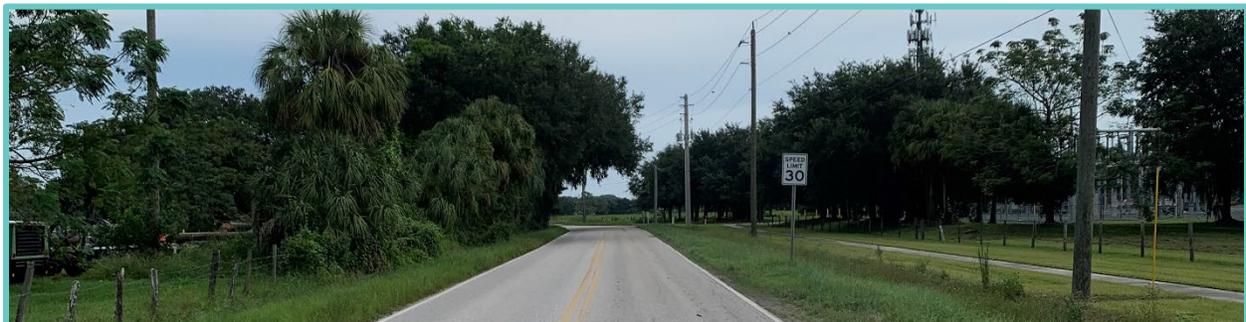


Figure 2-3 | Posted Speed Limit on Lena Road

2.5 Horizontal and Vertical Alignment

Lena Road is a predominantly north-south roadway. From north of SR 70 to the cul-de-sac the roadway consists of a series of reversing curves without tangency. This roadway segment terminates with a cul-de-sac south of County-owned property.

The northern segment of Lena Road begins at the intersection with 41st Avenue East, which is actually a sharp horizontal curve for the pavement area rather than a traditional intersection. Lena Road heads north from this location to another sharp horizontal curve and connects to an intersection with 81st Court East and Landfill Road. This Study considers the roadway alignment from the cul-de-sac on 41st Avenue East to the Landfill Road intersection as the existing condition for initial assessment due to the sharp horizontal curvature.

From Landfill Road to SR 64, Lena Road is a primarily linear roadway with two main horizontal curves. The first curve to the left is near the power substation and is has an approximate radius of 650 feet and is approximately 150 feet long. The second curve to the right has an approximate radius of 800 feet and is approximately 220 feet long. The minimum curve length is 400 feet; therefore, these existing curves lengths are deficient.

The roadway is considered level terrain.

2.6 Multimodal Facilities

Lena Road north of SR 70 accommodates pedestrian and bicycle traffic via the 10-foot-wide path located outside of the west side of the roadway right of way. The 5-foot-wide sidewalk located along the east side is not continuous but is present at developed parcels. From Landfill Road to SR 64, there is no accommodation for pedestrian or bicycle traffic, with the exception of sidewalk on the RaceTrac property located in the southwest corner of Lena Road and SR 64.

There are no MCAT transit routes along Lena Road. There were no school bus routes identified along Lena Road.

2.7 Intersections

2.7.1 SR 70

SR 70 is a six-lane divided facility with a dedicated left and right turn lane at the Lena Road intersection. Lena Road is stop-controlled while SR 70 is uncontrolled. Access to Lena Road from SR 70 eastbound is provided by a directional opening. Lena Road provides access to SR 70 in the westbound direction only (right out). There is a northbound right turn lane on Lena Road for the adjacent 54th Drive East intersection to the north of SR 70. The SR 70 at Lena Road intersection is currently under construction through an FDOT project for SR 70 and I-75 (FPID 201032-2). The project completion is anticipated for December 2021.

Pedestrians are currently accommodated by a sidewalk crossing at the back of SR 70 right of way, crossing Lena Road north of the existing stop bar. The FDOT project will provide curb ramps and a designated crosswalk closer to SR 70. The 10-foot-wide path on the west side of the right of way connects to the SR 70 sidewalk, through a short run of 6-foot-wide sidewalk. The existing keyhole bicycle lane on SR 70 will remain with the FDOT project.

2.7.2 54th Drive East

54th Drive East is a two-lane roadway connecting Lena Road and 87th Street East. The intersection with Lena Road is stop-controlled for 54th Drive East. The western leg of the intersection is a business entrance drive. Lena Road provides a northbound right turn lane that originates at SR 70 to the south and a southbound left turn lane. 54th Drive East provides a westbound undesignated left turn and shared through-right turn lane. The business entrance drive provides a designated entry lane and exit lane.

Pedestrians are currently accommodated by crosswalks on the northern and eastern legs of the intersection. There is a sidewalk network on the east side of Lena Road at this location due to developments on the NE and SE quadrants. The existing 10-foot-wide path on the west side of the right of way is not connected to the crosswalks at the intersection.

2.7.3 41st Avenue East

41st Avenue East is the designated roadway at the southern end of the existing northern segment of the Study area. The intersection of Lena Road exists by designation only and is not a functional intersection. The roadway segments of designated Lena Road and 41st Avenue East are connected by a 105-foot radius curve that is approximately 127 feet long.

There are no pedestrian accommodations at this intersection. There are nine (9) properties with direct access to 41st Avenue East, including FPL access into a transmission corridor.

2.7.4 34th Avenue East

34th Avenue East is a two-lane roadway connecting Lena Road and 81st Court East that is approximately 480 feet long. The intersection of Lena Road is undesignated by pavement markings but is stop controlled for 34th Avenue East.

There is a 5-foot-wide sidewalk on the north side of 34th Avenue East that terminates at this intersection on the NE quadrant. There are two (2) properties with direct access to 34th Avenue East.

2.7.5 Landfill Road / 81st Court East

Landfill Road connects Lena Road to the Manatee County Landfill with a 620-foot-long two-lane roadway from this intersection to the east. 81st Court East is an approximate 1,900-foot-long two-lane roadway from this intersection to the south that terminates with a cul-de-sac. Lena Road is the designation on the western leg and northern leg of this intersection undesignated by pavement markings. The western leg of Lena Road and Landfill Road are stop controlled with the northern leg of Lena Road and 81st Court East being uncontrolled.

There is a 5-foot-wide sidewalk on the west side of 81st Court East that terminates at this intersection on the SW quadrant. There are sixteen (16) properties with direct access to 81st Court East. Landfill Road provides access to the Manatee County Landfill.

2.7.6 Gillis Drive

Gillis Drive is a dead end, unimproved residential access roadway on the west side of Lena Road. The intersection is stop controlled for Gillis Drive with no pedestrian accommodations. There are three (3) properties with direct access to Gillis Drive.

2.7.7 Brower Drive

Brower Drive is a dead end, undesignated two-lane residential access roadway on the west side of Lena Road. The intersection is stop controlled for Brower Drive with no pedestrian accommodations. There are eight (8) properties with direct access to Brower Drive.

2.7.8 SR 64 / Heritage Green Way

Lena Road terminates at SR 64 which is a six-lane divided facility with dedicated left turn lanes and right turn lanes at a signalized intersection. The northern leg of this intersection is essentially a two-lane divided facility designated as Heritage Green Way. The configuration of Heritage Green Way provides a southbound dedicated

left turn lane and a shared through-right turn lane that deflects across the intersection to Lena Road. Lena Road provides a 270-foot-long dedicated left turn lane onto SR 64.

Pedestrians are accommodated on both sides of SR 64 and Heritage Green Way. A 5-foot sidewalk is provided on the on the west side of Lena Road that connects to SR 64. Designated bicycle lanes are provided on SR 64 and Heritage Green Way. Crosswalks are provided on all four legs of this signalized intersection.



2.8 Traffic Data

The Lena Road corridor connection between the cul-de-sac north of SR 70 and Landfill Road does not currently exist. The 44th Avenue East extension project will complete the 44th Avenue East corridor across I-75 from Bradenton to Lakewood Ranch. With these two important missing links in the Study area there is limited existing traffic data for the Study. Count Station 08-51 is located on Lena Road just south of SR 64 and is within the Study area. The 2019 Average Annual Daily Traffic (AADT) from this County Station is 3,987 vehicles.

The historic traffic data for Count Station 08-51 was reviewed to assess the growth rate for the project. The five-year growth rate is 3.85% and the ten-year growth rate is 3.04%. **Appendix B** contains the Design Traffic Memo performed for the Study.

2.9 Crash Data

For the five-year crash period from 2016 to 2021, there were 25 crashes recorded for Lena Road, with a majority (88%) located near the intersection with SR 70 involving read-end collisions. The remaining 3 crashes were noted to be in parking lots near Lena Road. As the Study focal point is on the segment that does not exist, a crash analysis was not performed.

2.10 Drainage

Lena Road spans three watersheds: Williams Creek (WBID 1901), Braden River Below Ward Lake (WBID 1876), and Cypress Strand (WBID 1875). Williams Creek is listed as impaired for nutrients on the FDEP comprehensive study list. Braden River Below Ward Lake and Cypress Strand are impaired for nutrients or dissolved oxygen.

Corridor runoff is divided between the three watersheds. Basin 1 is the existing area within the Study limits from the cul-de-sac north of SR 70 to south of 44th Avenue East and outfalls to Williams Creek which flows westward beneath I-75 into the Braden River. Corridor runoff for Basin 2 is from south of 44th Avenue East to 34th Avenue East and outfalls to a network of wetlands leading to a channel which flows west, beneath I-75 on the north side of 44th Avenue East. Basin 3 is located north of 34th Avenue East to the end of the Study limits at SR 64. Corridor runoff flows northeast to Cypress Strand, which flows north to the Manatee River.

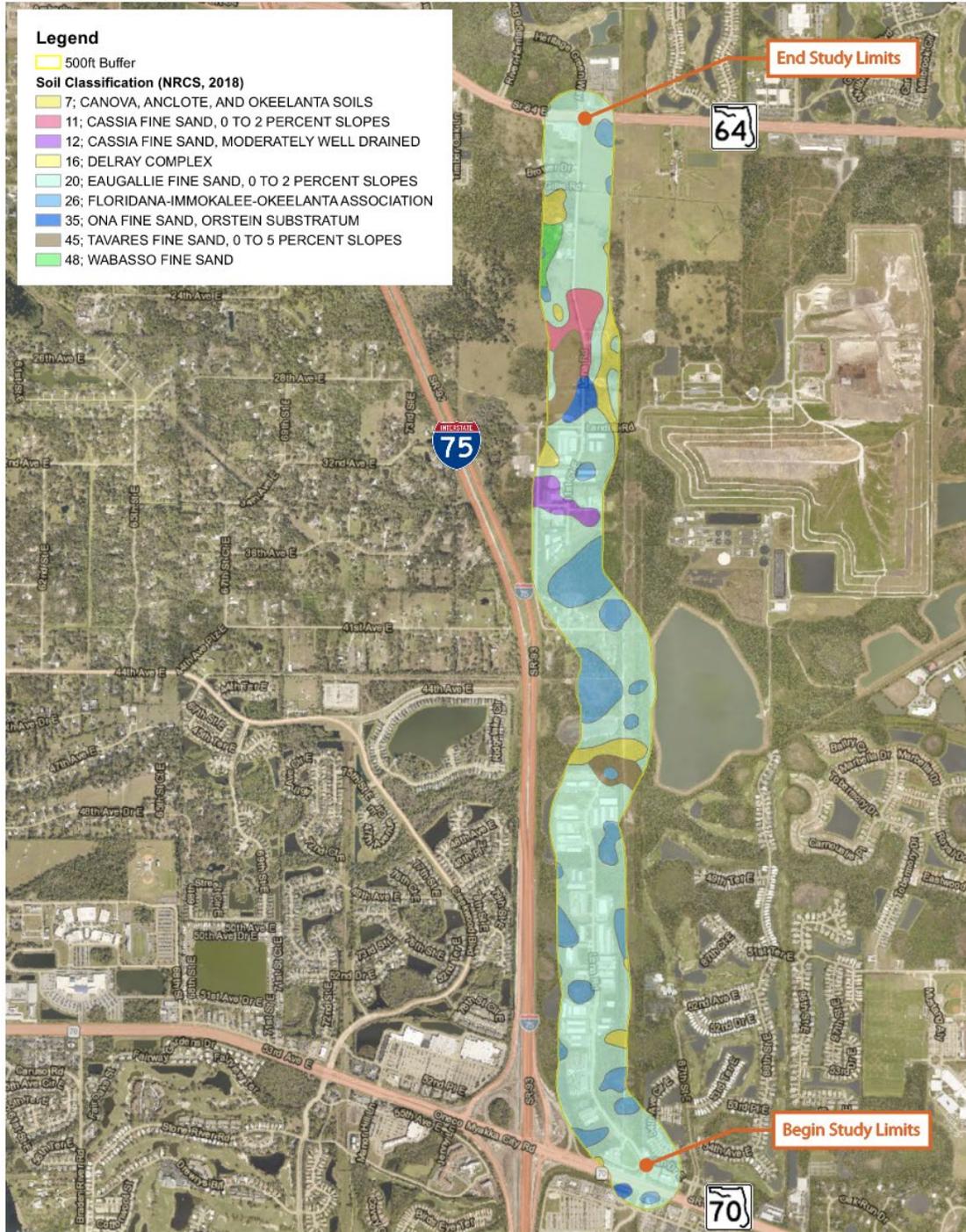
South of the 81st Court East cul-de-sac, the corridor is primarily undeveloped and drains via a series of connected depressions and channels. Developed residential areas drain via shoulder swales. North of the cul-de-sac, the corridor follows 81st Court East and Lena Road which drain via shoulder swales.

2.11 Floodplain

Lena Road is within Manatee County Unincorporated Area shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) 12081C0329E and 12081C0327E, both with an effective date March 17, 2014. The study corridor traverses multiple floodplain areas associated with Cypress Strand. Floodplains from south of 44th Avenue East to Landfill Road are designated Zone A, meaning the areas are within the 1% annual chance flood but do not have established flood elevations north of Landfill Road, floodplains continue along the northbound Lena Road right of way. Then, beginning south of the Cypress Strand cross drain beneath Lena Road and continuing to SR 64, Lena Road right of way is included in the floodplain. Floodplains north of Landfill Road are designated Zone AE, meaning they are within 1% annual chance flood and have established flood elevations. Flood elevation drops from 30 feet at Landfill Road to 20 feet downstream of the Cypress Strand cross drain beneath Lena Road.

2.12 Soils and Geotechnical Data

Soils within the Study area are predominantly fine sands with hydrologic soil group A/D. A United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Custom Soil Resource Report can be found in the Pond Siting Memo in **Appendix F**. A soils map of the Study area appears in **Figure 2-5**.



**LENA ROAD
SOILS MAP
MANATEE COUNTY, FL**

PATH: X:\MANATEE COUNTY\PD4E_THREE_ROADS\LENA_RD\GIS\MXD\LENA_SOILS.MXD - USER: GBILTER - DATE: 6/19/2021

ENVIRONMENTAL ANALYSIS AND REPORTING

2.13 Lighting

There is no street lighting provided along Lena Road within the Study area. SR 64 provides corridor median lighting on the approaches to the Lena Road intersection.

2.14 Utilities

An overview of the County owned utilities overlaid with the proposed 500-foot roadway buffer zone is presented below in **Figure 2-6**. Detailed maps based on County GIS information and UAO provided location and alignment information are provided in **Appendix G**.

2.14.1 Manatee County Potable Water Mains

Existing County potable water mains within the Study area include parallel mains and laterals. The parallel mains are summarized in **Table 2-1** and shown in **Figure 2-6**. A full assessment of existing potable water mains including utility age and asset IDs appears in **Appendix G**.

Table 2-1 | Lena Road Parallel Potable Water Mains

Description	Roadway	Location
10" PVC Water Main	Lena Road	Beginning of Study Area along the west side of Lena Road ending at the cul-de-sac north of SR 70
8" PVC Water Main	41 st Avenue East	Along the north side of 41 st Avenue East including a crossing of I-75
8" PVC Water Main	Lena Road	Along the east side and north side of Lena Road from 41 st Avenue East to the intersection with Landfill Road / 81 st Court East
8" PVC Water Main	Lena Road	Along the west side of Lena Road from the intersection with Landfill Road / 81 st Court East to south of the SR 64 intersection
10" PVC Water Main	Lena Road	Along the west side of Lena Road from the 8" potable water main south of the SR 64 intersection to the north side of SR 64 where it ties into the east-west 42" potable water main
6" Unknown Water Main	Landfill Road	Along the north side of Landfill Road from the intersection with Lena Road / 81 st Court East to the Landfill
8" PVC Water Main	81 st Court East	Along the west side of 81 st Court East from the cul-de-sac to the intersection with Lena Road / Landfill Road
42" DIP Water Main	SR 64	Along the north side of SR 64 within the intersection with Lena Road

2.14.2 Manatee County Wastewater Mains

Existing County wastewater mains within the Study area include parallel mains and laterals. The parallel mains are summarized in **Table 2-2** and shown in **Figure 2-6**. A full assessment of existing wastewater mains including utility age and asset IDs appears in **Appendix G**.

Table 2-2 | Lena Road Parallel Wastewater Mains

Description	Roadway	Location
8" PVC Gravity Main	Lena Road	Beginning of Study Area along the west side of Lena Road ending at the cul-de-sac north of SR 70
20" DIP Force Main	County-Owned Property	This north-south force main follows the FPL Transmission corridor from SR 70 to the 41 st Avenue East and was built in 1988
20" PVC Force Main	County-Owned Property	This north-south force main follows the FPL Transmission corridor from SR 70 to the 41 st Avenue East and was built in 2018
20" DIP Force Main	41 st Avenue East	Along the south side of 41 st Avenue East including a crossing of I-75
8" PVC Gravity Main	Lena Road	Along the west side of Lena Road approximately 600 LF to 34 th Street East
16" PVC Force Main	81 st Court East	Along the east side of 81 st Court East from the cul-de-sac to Landfill Road
8" PVC Gravity Main	81 st Court East	Along the west side of 81 st Court East from the cul-de-sac to Landfill Road
4" PVC Force Main	81 st Court East	Along the east side of 81 st Court East from Lift Station 615 to Landfill Road
16" PVC Force Main	Landfill Road	Along the south side of Landfill Road from the 16" force main on Lena Road (1986) to the Landfill
16" PVC Force Main	Lena Road	Along the east side of Lena Road from Landfill Road to SR 64 and was built in 1986
16" PVC Force Main	Lena Road	Along the east side of Lena Road from Landfill Road to SR 64 and was built in 2006
16" PVC Force Main	Lena Road	Across the SR 64 intersection to Heritage Green Way
12" DIP Force Main	SR 64	Along SR 64, under the southbound right turn lane pavement; connects to the mains on the east side of Lena Road
16" PVC Force Main	SR 64	Along the south side of SR 64 behind the sidewalk; connects to the mains on the east side of Lena Road

2.14.3 Manatee County Reclaim Mains

Existing County reclaim mains within the Study area include parallel mains and laterals. The parallel mains are summarized in **Table 2-3** and shown in **Figure 2-6**. A full assessment of existing reclaim mains including utility age and asset IDs appears in **Appendix G**.

Table 2-3 | Lena Road Parallel Reclaim Mains

Description	Roadway	Location
36" DIP Reclaim Main	Lena Road	Crossing I-75 near 41 st Avenue East and along the west side of Lena Road to the Lena Business Park subdivision where it follows the southern property line
30" DIP Reclaim Main	81 st Court East	Along the east side of 81 st Court East from the cul-de-sac to Landfill Road

10" PVC Reclaim Main	Landfill Road	Along the south side of Landfill Road from the intersection with Lena Road / 81 st Court East to the Landfill
30" DIP Reclaim Main	Lena Road	Along the east side of Lena Road from Landfill Road to SR 64
30" DIP Reclaim Main	SR 64	Along the south side of SR 64 from Lena Road to the east; located between the sidewalk and roadway
16" PVC Reclaim Main	Heritage Green Way	In the median of Heritage Green Way, connecting to the 30" reclaim main on SR 64

2.14.4 Manatee County Information Technology

The County Information Technology fiber optic cable system connects to the Manatee County Landfill from Lena Road. The East County Fiber Ring is located on the south side of SR 64 with a splice vault on the SW quadrant of the intersection with Lena Road. This system heads south to a pull box located outside the limits of the RaceTrac gas station site before crossing over to the east side of Lena Road. South of the FPL substation, the system run splits into two conduit systems that head south to Landfill Road, one on each side of Lena Road. At the Landfill Road / 81st Court East intersection, the two conduit systems reconnect and head along the north side of Landfill Road east to the Landfill.

The County Information Technology system traditionally consists of a 7-way DuraLine FuturePath conduit with pull boxes approximately every 250 feet. The County Information Technology system is shown in **Figure 2-6**.

2.14.5 Manatee County ATMS

There are no County ATMS facilities on Lena Road within the Study area. A County-maintained ATMS line is located on the south side of SR 64, connecting to the signalized intersection with Lena Road / Heritage Green Way. The County-maintained ATMS line is shown in **Figure 2-6**.

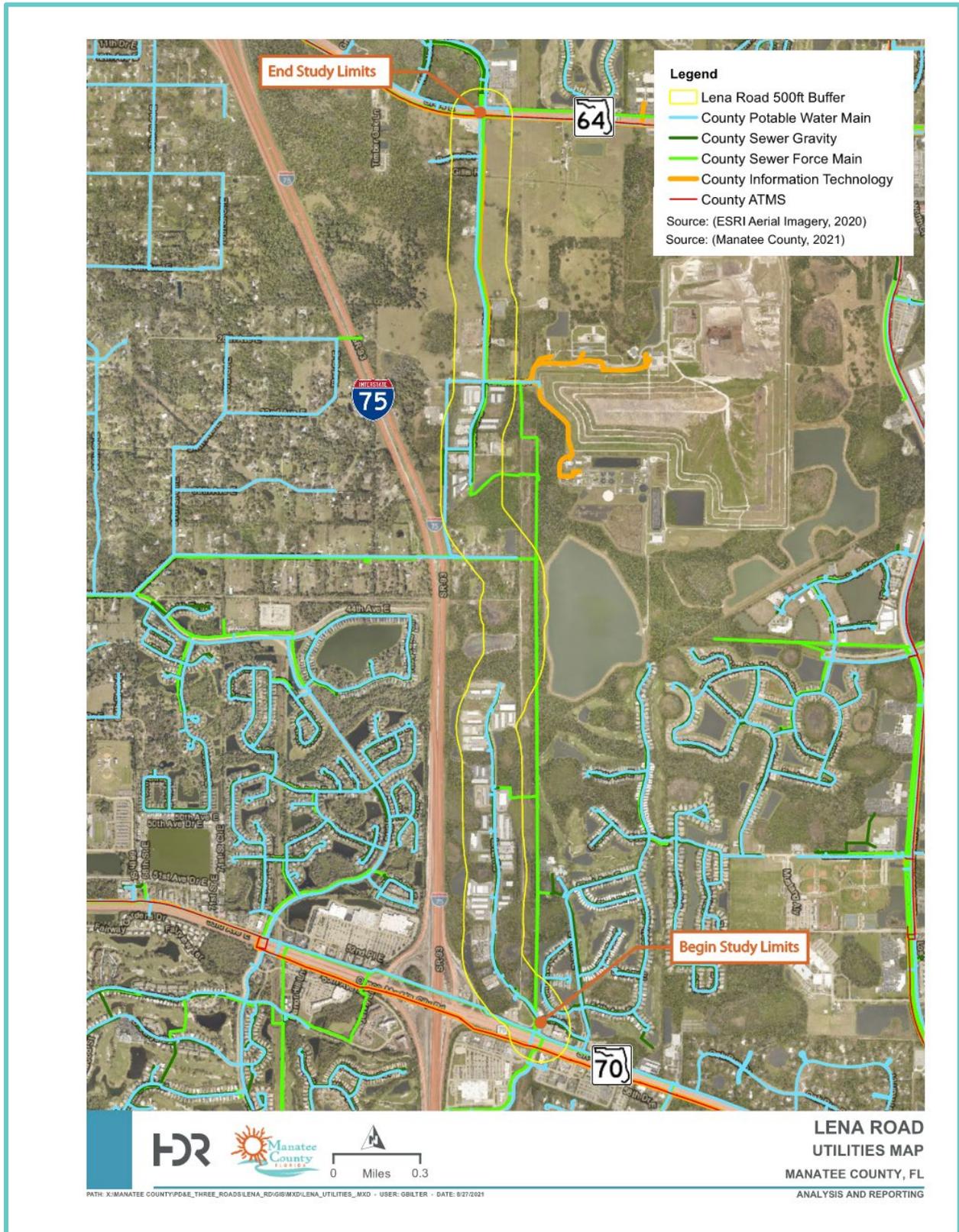


Figure 2-6 | Utilities Map

2.14.6 Manatee County Utility CIP Projects

There are several CIP projects in the Study area due to the presence of the Southeast Water Reclamation Facility (SEWRF) and the proposed Central County Complex.

I-75 Parallel Force Main [CIP 6097980] (Wastewater)

This project includes installing approximately 670 LF of 20-inch diameter force main downstream of 428 Booster Station (RTU 666), under I-75 at 41st Avenue East, where a hydraulic bottleneck exists. The project intent is to correct existing capacity deficiency.

Southeast Water Reclamation Facility (SEWRF) [multiple CIPs] (Wastewater)

The SEWRF CIP projects are located within the boundaries of the treatment plant and include SCADA, electrical, clarifier, and other treatment plant improvements.

Central County Complex [CIPs 61066570 and 6106580] (Water and Wastewater)

The Central County Complex include access roadway design and tie-in to the mains on SR 64 and Landfill Road. Central County Complex utility CIP projects include design of the potable and wastewater mains within the property.

44th Avenue East [CIP 6045662] (Water, Wastewater, and Reclaimed Water)

The 44th Avenue East project includes utility relocation and adjustments for the new roadway corridor as it crosses the SEWRF property. The ability to connect mains north and south on Lena Road is being considered with the utility accommodations of this project.

2.14.7 Private Utility Facilities

Private utility agency owners (UAOs) with utilities located within the Study area were contacted for information on their facilities. **Table 2-4** summarizes the information received for these private UAOs. Additional coordination will be required during the design phase of Lena Road.

Table 2-4 | Lena Road Private Utility Facilities

Utility Agency Owner	Description of Facilities
<p>Florida Power and Light (FPL)</p>	<ul style="list-style-type: none"> FPL maintains a Transmission corridor on the east side of the Lena Road corridor from SR 70 to SR 64 including a 330-ft-wide easement on the County-owned SEWRF property. FPL maintains a Transmission corridor crossing I-75 north of the proposed 44th Avenue East corridor that connects to the north-south Transmission corridor. An FPL substation exists on the east side of Lena Road, north of Landfill Road. FPL maintains a Distribution corridor located on the south side of 41st Avenue East, the east side of Lena Road from 41st Avenue East, and the north side of Lena Road to the Landfill Road / 81st Court East intersection. FPL maintains a Distribution corridor located on the west side of 81st Court East from the cul-de-sac to the Lena Road / 81st Court East intersection. FPL maintains a Distribution corridor located on the west side of Lena Road from the Landfill Road / 81st Court East intersection to the substation property where it crosses to the east side of Lena Road heading north to Brower Drive where it crosses back to the west side of Lena Road. From there it connects to facilities on the south side of SR 64.

Spectrum (Charter) Communications	<ul style="list-style-type: none"> • Spectrum maintains aerial facilities along Lena Road from 41st Avenue East to Landfill Road, along 81st Court East from the cul-de-sac to the Lena Road / Landfill Road intersection, and along Lena Road from the 81st Court East / Landfill Road intersection to SR 64. • Spectrum maintains underground facilities along 41st Avenue East.
CrownCastle Fiber	<ul style="list-style-type: none"> • CrownCastle maintains aerial facilities that follow the FPL Distribution corridor • CrownCastle maintains an underground crossing of SR 64
Uniti Fiber	<ul style="list-style-type: none"> • Uniti Fiber connects the tower north of the FPL substation to SR 64 with a 2-inch 4-way conduit containing 144-ct fiber. • Uniti Fiber maintains a fiber line on SR 64 heading east from the Lena Road intersection.
Zayo	<ul style="list-style-type: none"> • Zayo maintains communication facilities on Lena Road at both ends of the Study area.
Frontier Communications	<ul style="list-style-type: none"> • Frontier maintains a 1-4" PVC conduit with fiber and copper on the east side of Lena Road from SR 70 to the cul-de-sac, crossing over to service the Lakewood Ranch Elks Lodge. • Frontier maintains a 1-1.25" polypipe with fiber along the south side of 41st Avenue East and the east side of Lena Road, with connections to 81st Court East along 34th Avenue East. • Frontier maintains a 1-4" PVC conduit with fiber and copper on the west side of Lena Road from Landfill Road to the north, expanding to 3-4" south of SR 64. • Frontier maintains a 1-4" PVC conduit with fiber and 2-1.25" polypipe with fiber and copper on the east side of Lena Road from Landfill Road to SR 64.
Black and Veatch	This UAO from the Sunshine One Call for the Study area has not responded
Braden River Utilities	This UAO from the Sunshine One Call for the Study area has not responded
Florida Gas Transmission (FGT)	This UAO from the Sunshine One Call for the Study area has not responded
Peace River Electric Cooperative (PRECO)	This UAO from the Sunshine One Call for the Study area has not responded
TECO Peoples Gas	This UAO from the Sunshine One Call for the Study area has not responded

2.15 Signs

There are no overhead sign structures along Lena Road. Standard ground mounted signs are provided for traffic control (speed limit, stop, etc). A multi-post sign is in the southeast corner of Lena Road and Landfill Road for the Manatee County Landfill. The Lena Business Park entrance signs (concrete structure) are located in the SW and SE quadrants of the Lena Road intersection with Landfill Road / 81st Court East.



Figure 2-7 | Lena Road Business Park Entrance

2.16 Structures

There are no bridge structures on Lena Road. There are two existing cross drains within the Study area. One is a 36" pipe on 81st Court East, north of 34th Avenue East, allowing the Cypress Strand Tributary to flow east. The other cross drain is an unknown size on Lena Road, closer to SR 64, and allows Cypress Strand to flow west.

3.0 Existing Environmental Conditions

An analysis of the natural, cultural, and contamination issues/resources was performed as part of the Study. The purpose of this analysis was to determine the existing conditions within the corridor study area and identify potential effects from the proposed modifications to Lena Road. The existing natural and cultural resources within the study area, as well as the potential for impacts to the study area from contamination sites are summarized below.

3.1 Natural Resources

A Natural Resources Assessment Memo (see **Appendix C**) was prepared to support the Study through the evaluation of **Protected Species and Habitat, Wetlands and Other Surface Waters, and Essential Fish Habitat**. The Technical Memorandum documents the results of the corridor assessment in order to support decisions associated with the proposed project as it relates to natural resources potentially present in the corridor study area.

The natural resources assessment was performed using as guidance Part 2, Chapter 16 Protected Species and Habitat and Chapter 9 Wetlands and Other Surface Waters of the Florida Department of Transportation (FDOT) PD&E Manual (July 1, 2020). However, this assessment is not considered a full Natural Resources Evaluation (NRE) as defined in the FDOT PD&E Manual. For this project, the study area includes a 500-foot buffer, east and west of the existing road centerline (i.e., project limits), totaling a 1,000-foot-wide study corridor. All natural resources discussed below fall within this study area. The natural resources assessment did not evaluate proposed stormwater management facilities outside of the corridor study area, such as potential pond locations, if any.

3.1.1 Protected Species and Habitat

The project was evaluated for potential impacts to federal and State of Florida (state) endangered or threatened species of fish, wildlife, and plants (listed species) and habitat of such species that has been designated as critical habitat under Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. Protected species were also reviewed for their potential to occur within the corridor study area.

Federal Protected Wildlife and Critical Habitat

Three federal listed species protected by the U.S. Department of Interior Fish and Wildlife Service (USFWS) potentially occur within the corridor study area. The proposed project would be expected to result in the effect determinations provided in **Table 3-1** for federal listed species. Migratory birds and their habitat, including the non-listed but federally protected bald eagle and osprey were also present in this region and included in **Table 3-1**. However, this list may need to be refined based on the project alternative selected to proceed. USFWS designated critical habitat, as defined by Congress 50 CFR §17.94, was not present within the corridor study area. Therefore, the proposed project would not result in the ***destruction or adverse modification of critical habitat***.

Table 3-1 | Project Effect Determinations for Federal Listed and Protected Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
Federal Listed Wildlife			
<i>Drymarchon corais couperi</i>	Eastern indigo snake	Threatened	May affect, not likely to adversely affect
<i>Mycteria americana</i>	Wood stork	Threatened	May affect, not likely to adversely affect
<i>Aphelocoma coerulescens</i>	Florida scrub jay	Threatened	No affect anticipated
Federal Protected Wildlife			
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA* MBTA**	Minimal or no impact expected
<i>Pandion haliaetus</i>	Osprey	MBTA**	Minimal or no impact expected

* Bald & Golden Eagle Protection Act and Migratory Bird Treaty Act. ** Migratory Bird Treaty Act

State Protected Wildlife

Eight state listed wildlife managed by the Florida Fish and Wildlife Conservation Commission (FWC) could potentially occur within the corridor study area. The proposed project would be expected to result in the effect determinations provided in **Table 3-2** for state listed species. However, this list may need to be refined based on the project alternative selected to proceed.

Table 3-2 | Project Effect Determinations for State Listed Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	Threatened	No effect anticipated
<i>Falco sparverius paulus</i>	Southeastern American kestrel	Threatened	No effect anticipated
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	Threatened	No effect anticipated
Wading Birds			
<i>Egretta caerulea</i>	Little blue heron	Threatened	No effect anticipated
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No effect anticipated
<i>Platalea ajaja</i>	Rosette spoonbill	Threatened	No effect anticipated
Nesting Shorebirds			
<i>Sternula antillarum</i>	Least Tern	Threatened	No effect anticipated

Federal and State Protected Plants

Eleven federal and state listed plants protected by the Florida Department of Agricultural and Consumer Services (FDACS) that have the potential to occur within the corridor study area, including six endangered and five threatened. These listed plant species are shown in **Table 3-3**. None were observed during preliminary field surveys. However, this list may need to be refined based on the project alternative selected to proceed. Due to their low likelihood of occurrence, there is **no effect anticipated** to these federal and state listed plant species.

Table 3-3 | Project Effect Determinations for Federal and State Listed Plants

Scientific Name	Common Name	Status	Project Effect Determination
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	State Threatened	No effect anticipated
<i>Centrosema arenicola</i>	Sand Butterfly Pea	State Endangered	No effect anticipated
<i>Chionanthus pygmaeus</i>	Pygmy Fringe-tree	Federal Endangered	No effect anticipated
<i>Cladonia perforata</i>	Florida Perforate Cladonia	Federal Endangered	No effect anticipated
<i>Lechea cernua</i>	Nodding Pinweed	State Threatened	No effect anticipated
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	State Endangered	No effect anticipated
<i>Nemastylis floridana</i>	Celestial Lily	State Endangered	No effect anticipated
<i>Nolina atopocarpa</i>	Florida Beargrass	State Threatened	No effect anticipated
<i>Pteroglossaspis ecristata</i>	Giant Orchid	State Threatened	No effect anticipated
<i>Rhynchospora megaplumosa</i>	Large-plumed Beaksedge	State Endangered	No effect anticipated
<i>Zephyranthes simpsonii</i>	Redmargin Zephyrlily	State Threatened	No effect anticipated

3.1.2 Wetlands and Other Surface Waters

Wetlands and other surface waters were identified within the corridor study area. The primary wetland types in the study area included: Stream and Lake Swamps, Mixed Wetland Hardwood, Exotic Wetland Hardwoods, Wetland Forested Mixed, Freshwater Marshes, and Wet Prairies. Generally, all wetland systems identified were in moderate to poor condition, having incurred drainage by ditching, watershed conversions to farmland, and/or nearby development. Vegetation communities within the wetlands have also been degraded by agricultural activities, tree harvesting, and nuisance and exotic species growth.

Surface waters were present mostly associated with roadside ditches on the northern half of the study area and some remnant field ditches, derived from agricultural land uses. There are two primary water channels associated with Lena Road. These drainages were historically natural and associated with wetlands.

A total of twenty-seven (27) wetlands were identified within the corridor study area. A total of eight (8) surface waters were identified within the corridor study area, all consisting of drainage ditches either running along the roadside or draining away from the roadway. During evaluation of the road alignment alternatives, potential impacts to wetlands and surface waters would be identified and quantified. Direct impacts would include permanent and temporary impacts and would be quantified and tabulated for the state and federal permit applications.

3.1.3 Essential Fish Habitat

Essential fish habitat does not occur within the corridor study area; therefore, an Essential Fish Habitat (EFH) Assessment was not required.

3.2 Cultural Resources

To support the Study, background research was conducted to identify known cultural resources within the corridor study area that have the potential to be impacted by the proposed project improvements. The background research informed recommendations for future cultural resources surveys (archaeological and architectural) in the corridor study area. For the cultural resources assessment, the corridor study area comprises a 500-foot buffer on either side of the existing Lena Road centerline.

A desktop review was completed to identify known cultural resources within the corridor study area, and within 1 mile of the corridor study area boundaries. The results of the desktop review are shown in **Figure 3-1**. The desktop review consisted of a search of Florida Master Site File (FMSF) records to identify previous cultural resources surveys conducted in the corridor study area and vicinity, and previously recorded archaeological sites and architectural resources (buildings and structures) in those areas. Manatee County Appraisal District data, and historic aerials and United States Geological Survey (USGS) maps available online, were used to identify historic-age buildings in the corridor study area.

The desktop review revealed that previous archaeological surveys have been performed within much of the corridor study area over the past 20 years, and that no archaeological sites have been previously recorded in the Area. Approximately 0.79 mile of the length of the corridor study area has not been previously surveyed, and an approximately 0.50-mile segment of that total is undisturbed. Undisturbed areas have a higher probability of containing intact buried cultural resources. Therefore, an archaeological survey for the portions of the corridor study area that are undisturbed is recommended. For the remainder of the corridor study area, it is advised that should any archaeological materials be identified during construction, all construction should cease, and the Florida Division of Historic Resources should be notified.

No historic-age architectural resources have been previously recorded in the corridor study area. A review of Manatee County Appraisal District data online showed 13 historic-age buildings (those constructed in 1976 or before) in the corridor study area that have not been previously surveyed. Given the presence of previously unrecorded historic-age architectural resources in the corridor study area, an architectural resources survey may be necessary to survey those resources and evaluate their eligibility for listing in the National Register of Historic Places (NRHP), depending on the final project design and potential impacts to historic-age architectural resources.

3.3 Contamination

A preliminary contamination screening was conducted for the project corridor to support the Study by identifying properties or facilities that have potential contamination that may affect the Lena Road corridor. The preliminary contamination screening was performed and documented using the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual, Chapter 20 as a guide. However, it is not considered a full Contamination Screening Evaluation Report as defined in the FDOT PD&E Manual. The Contamination Screening Memo is provided in **Appendix E**.

A hazardous materials rating system that expresses the degree of concern for potential contamination problems was used to rank the identified sites. The ratings are No, Low, Medium, and High. Nine (9) sites were identified within the contamination screening buffer distances. These sites were investigated for current or past operations that may present the potential for finding contamination concerns and therefore may impact proposed improvements for the study area. The applied risk ratings are provided in **Table 3-4**.

Table 3-4 | Risk Ratings for Potential Contamination Sites

Risk Rating	No. of Sites in Study Area
High	0
Medium	3
Low	3
No	3

No High-risk sites were identified. The location of the three Medium-risk sites are shown in **Figure 3-2**.

For sites ranked No and Low for potential contamination, no further action is required at this time. These sites/facilities have the potential to impact the study area but based on select variables have been determined to have low risk to the project at this time. Variables that may change the risk rating include a facility's non-compliance to environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change additional assessment of the facilities would be conducted.

For those locations with a risk rating of "Medium", field screening or a soil management plan may be needed depending on the locations of construction and intrusive activities proposed for the study area. These sites have been determined to have potential contaminants, which may impact the proposed construction. A soil and groundwater sampling plan may be needed for each site. The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical tests to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells should also be included in the sampling plan.

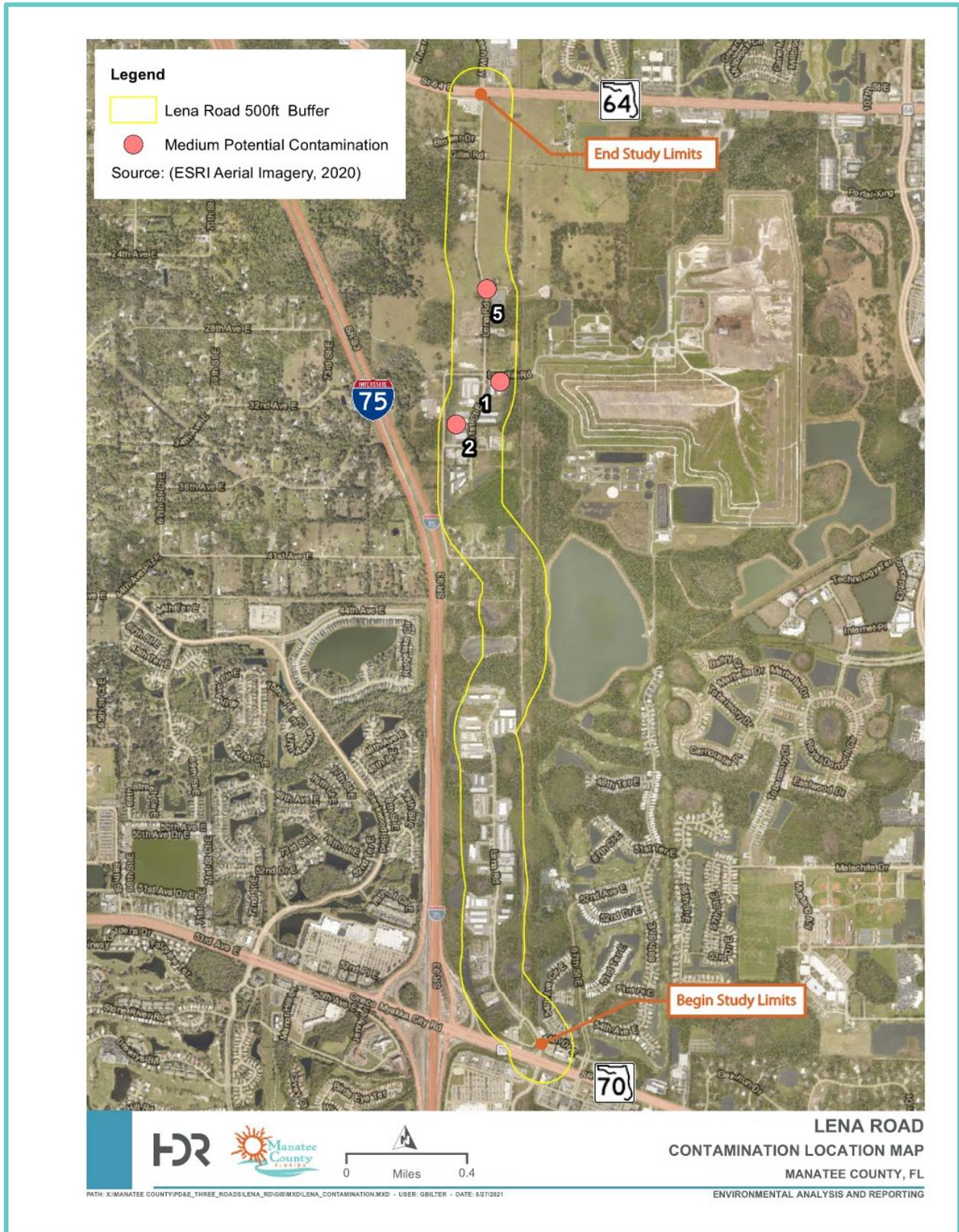


Figure 3-2 | Contamination Location Map

4.0 Alternatives Analysis

4.1 Design Criteria

4.1.1 Reference Manuals

1. Manatee County Public Works Standards (PWS), Part 3. Highway & Traffic Standards Manual, Amended November 2016.
2. Manatee County Comprehensive Plan, Element 5 – Transportation, Table 5-1 (PA-17-02)
3. Florida Greenbook (FGB), Manual of Uniform Standards for Design, 2018 Edition
4. FDOT Design Manual (FDM), 2021

4.1.2 Design Elements

Table 4-1 | General Design Elements

Design Element	Criteria	Source
Design Period	20 years	Manatee County
Context	Industrial/Suburban Neighborhoods	PWS Figure T-15
Functional Classification	Collector	PA-17-02 Table 5-1
Design Speed	35 mph	FDM Table 201.5.1 C3 Suburban Minimum
Posted Speed	30 mph	
Design Vehicle	WB-62 FL	FDM 201.6.1
Roundabout Control Vehicle	WB-62 FL	FDM 201.6.1, FDM 213.7

Table 4-2 | Typical Section Design Elements

Design Element	Criteria	Source
Number of Lanes	2	PA-17-02 Map 5-D
Lane Width	12 ft 11 ft	FGB Table 3-20 (Footnote 2, Industrial) FGB Table 3-20 (Footnote 2, R/W constrained)
Median Width	22 ft 15.5 ft	PWS 401.2, FGB Table 3-23 FGB Table 3-23 (Footnote 2)
Right of Way Width	84 ft	PWS 401.3
Bicycle Lane Width	4 ft 4' min. 7' buffered preferred	PWS 401.3, FGB Figure 9-1 FDM 223.2.1.1
Sidewalk Width	5' (4' from back of curb) 5' (2' from back of curb) 6' (adjacent to curb)	PWS 401.3 FGB Ch. 8, B.1 FGB Ch. 8, B.1
Shared Use Path Width	10' minimum 5' (minimum distance from face of curb)	FGB Ch. 9, C.1 FGB Ch. 9, C.1
Lateral Offset	1.5 ft	FDM Table 215.2.2 (Curbed)

Table 4-3 | Horizontal Alignment Design Elements

Design Element	Criteria	Source
Min. Stopping Sight Distance	250 ft	FGB Table 3-4
Max. Deflection without curve	2°	FGB Ch. 3, C.4.b
Length of Curve	525 ft (15V) 400 ft (min.)	FGB Table 3-8
Max. Curvature (Min. Radius)	14° 15' (402 ft)	FGB Table 3-11
Max. Superelevation	0.05	FGB Ch. 3, C.4.c.2

Table 4-4 | Vertical Alignment Design Elements

Design Element	Criteria	Source
Max. Grade	9 %	FGB Table 3-16 (Level, Urban)
Min. Longitudinal Gutter Grade	0.3%	FGB Ch. 20, D.6.b
Max. Change in Grade without Vertical Curve	0.9	FGB Table 3-17
Min. Crest Curve K	29	FGB Table 3-18
Min. Sag Curve K	49	FGB Table 3-18
Min. Curve Length	105 ft (3V)	FGB Table 3-18
Vertical Clearance	16 ft	FGB Ch. 3, C.7.j.4(b)
Base Clearance above BCWE	3 ft	FDM 210.10.3 (2)

4.2 No-Build Alternative

The No-Build Alternative considers the future conditions if the proposed project is not built. It includes the routine maintenance improvements to the existing roadway and project corridor but does not meet the project needs.

The 44th Avenue East extension project will be constructing a roundabout at the Lena Road intersection and may make the southern connection to the cul-de-sac north of SR 70. The No-Build Alternative for Lena Road within the Study area would still realize some improvements and connectivity to the County roadway network through the improvements to 44th Avenue East.

The Central County Complex Project will potentially increase traffic on SR 64 and Lakewood Ranch Boulevard in the No-Build Alternative for Lena Road. This is primarily based on the accessibility of the potential Sheriff's Department, County Public Works, and County Utilities facilities intended for the site.

4.3 Initial Alternatives

The process to narrow the Study evaluation to two viable alternatives required initial assessment of the project limits to meet County needs and objectives. While the County CIP intends on construction of a 2-lane segment to complete Lena Road from SR 70 to SR 64, the typical sections and alternatives developed for this Study assume that the existing 2-lane roadway north of SR 70 will remain untouched aside from the removal of the cul-de-sac to make the roadway connection.

The growth rate proposed to forecast the Design Year (2045) traffic volumes reviewed the historic five-year and ten-year growth rates as well as the University of Florida Bureau of Economic and Business Research (BEBR) population data. **Appendix B** contains the Traffic Analysis Memo performed for the Study. The proposed growth rate for the Study is 3.04%.

Table 4-5 | Design Year (2045) Build Design Traffic Volume Characteristics

Characteristic	Value
2021 AADT	-
2045 AADT	7,100 vehicles
Peak-to-Daily Ratio	9.00%
DHV	639 vehicles
Directional Distribution	56.30 %
Peak Directional Volume	360 vehicles
Off-Peak Directional Volume	279 vehicles

Under the Build Alternative, the Lena Road corridor is expected to operate at 45% of the peak hour directional LOS D maximum service volume. The peak directional volume is 360 vehicles in the design year (2045) compared to a LOS D maximum service volume of 792 vehicles for the facility.

4.3.1 Corridor Analysis

Two routes were considered for connecting Lena Road from the cul-de-sac north of SR 70 to Landfill Road.

Route A starts at the cul-de-sac north of SR 70 and runs north, west of the FPL easement, and intersects with the future extension of 44th Avenue East at the roundabout. The route then curves left and follows 41st Avenue East and curves right to follow Lena Road. The route would continue north through a series of curves connecting to Lena Road north of Landfill Road. The existing segment of Lena Road that connects to Landfill Road would be maintained through a new intersection with the new Route A alignment of Lena Road. See **Figure 4-1**.

Route B starts at the cul-de-sac north of SR 70 and runs north, west of the FPL easement, and intersects with the future extension of 44th Avenue East at the roundabout. The route then curves left north of 41st Avenue East and curves right to connect to 81st Court East, crossing a conservation area. From the intersection of 81st Court East and Landfill Road, Route B continues along existing Lena Road. See **Figure 4-1**.

While both routes meet the intent of the project to provide connectivity between SR 70 and SR 64, Route A was less desirable for several reasons. The existing Lena Road corridor has existing right of way widths between 50-63 feet and Route A would impact parcels on one or both sides of the corridor to achieve the desired 84-foot right of way. Route B follows 81st Court East, which already maintains an 84-foot right of way corridor. Lena Road has sharp changes in direction at the connection with 41st Avenue East and where it turns east towards the Landfill Road intersection. Additional right of way impacts to the parcels on the inside of these curves would be realized when creating curvature that meets the 35-mph design speed. Additionally, the connection back to existing Lena Road, north of Landfill Road, would require additional parcel impacts to tie into the existing corridor while accommodating 35-mph design speed reverse curvature.

Route A was eliminated from consideration and Route B was selected for the typical section analysis.

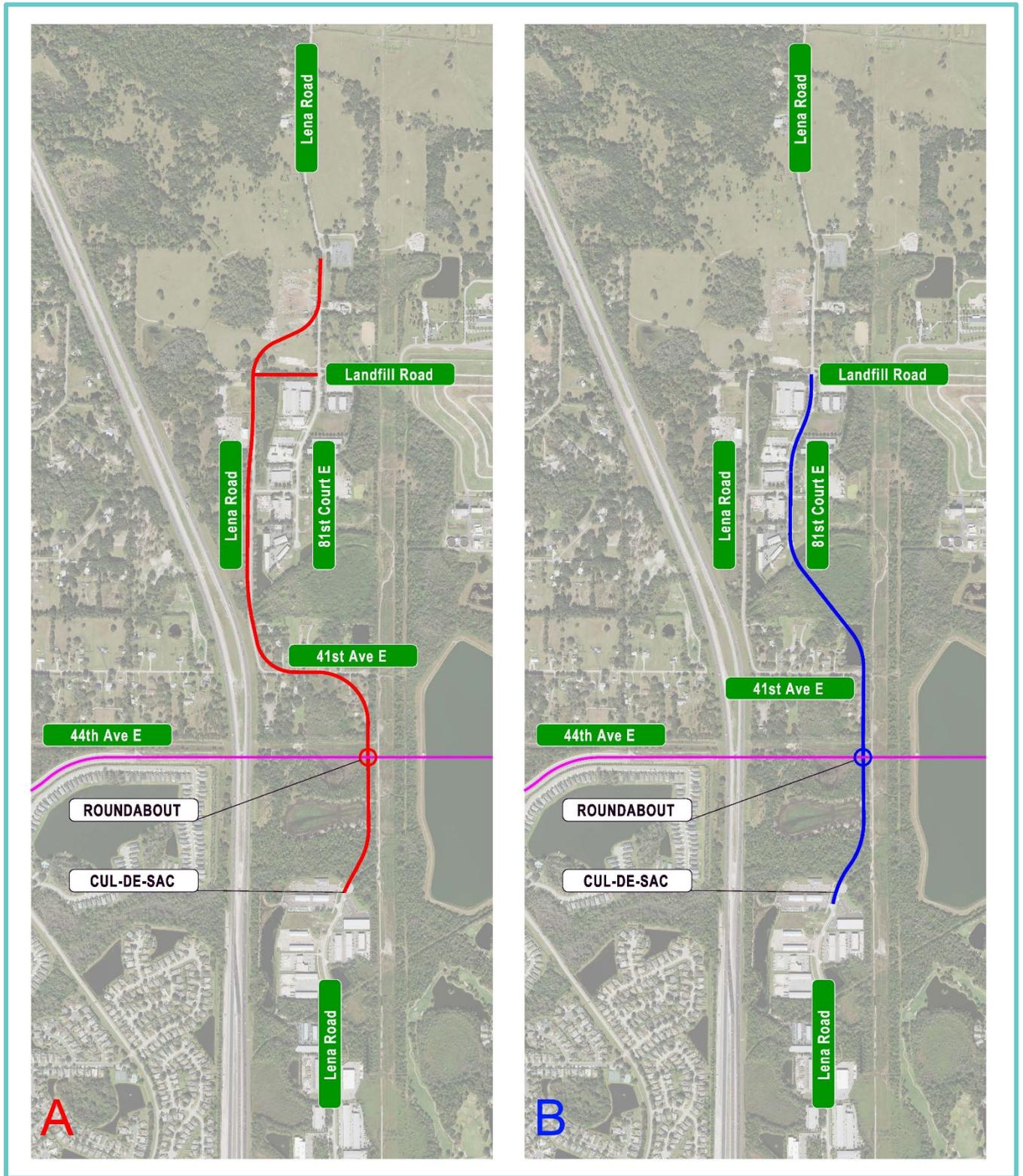


Figure 4-1 | Build Alternative Routes A and B

4.3.2 Typical Section Analysis

Study objectives for the typical section analysis included two-lane accommodation for capacity, restricted median access control for safety, and bicycle and pedestrian accommodations. Three typical sections were reviewed below for the project limits, all utilizing the desired 84-foot right of way.

Build Typical Section 1

Build Typical Section 1 is a two-lane curbed roadway, following the Manatee County Public Works Manual Detail 401.3. This typical section accommodates vehicular traffic with two 12-foot travel lanes, one lane in each direction, separated by a 22-foot raised median. Bicycle traffic is accommodated by a 4-foot bike lane adjacent to the vehicular travel lanes. Pedestrian traffic is accommodated by 5-foot sidewalks located within the border of the roadway, offset 4 feet from the back of curb. Outside of the 84-foot right of way, temporary construction easements are anticipated for driveway connections and harmonization with adjacent property as required.

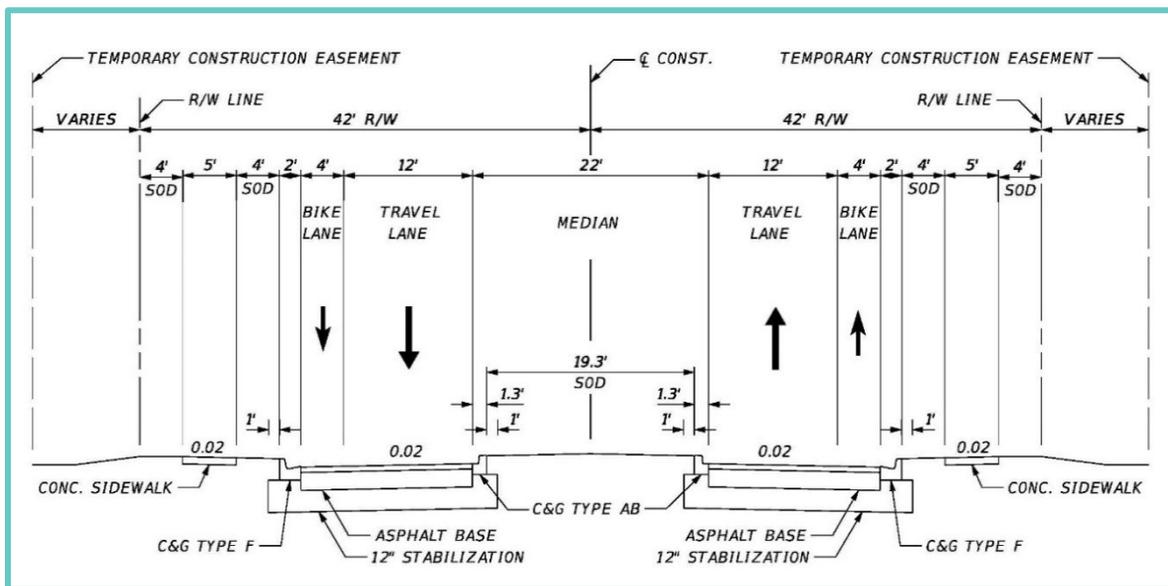


Figure 4-2 | Build Typical Section 1

Build Typical Section 2

Build Typical Section 2 is a two-lane divided curbed roadway with a reduced median and a shared use path. This typical section accommodates vehicular traffic with two 11-foot travel lanes, one lane in each direction, separated by an 18-foot raised median. Bicycle traffic is accommodated by a 12-foot shared use path located within the border of the west side of the roadway, offset 5 feet from the face of curb. Pedestrian traffic is accommodated by the 12-foot shared use path on the west side of the roadway and by a 5-foot sidewalk on the east side of the roadway. The 5-foot sidewalk is located within the border of the roadway, offset 2 feet from the proposed right of way line to allow for offsite drainage accommodations. Outside of the 84-foot right of way, temporary construction easements are anticipated for driveway connections and harmonization with adjacent property as required.

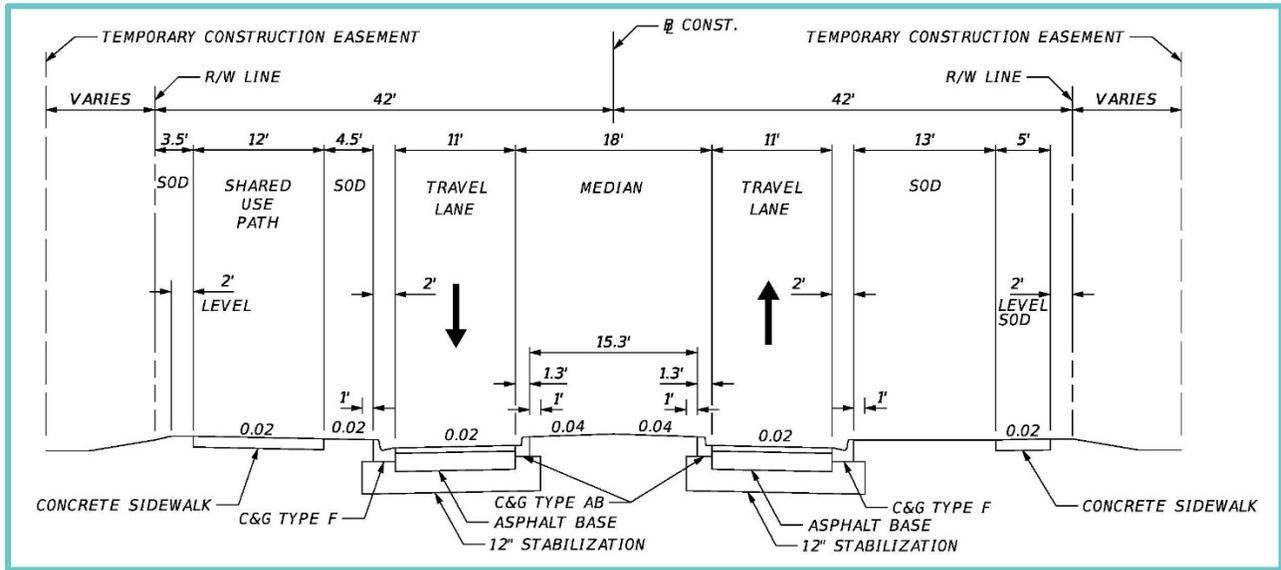


Figure 4-3 | Build Typical Section 2

Build Typical Section 3

Build Typical Section 3 is only considered for the segment of 81st Court East with existing development on both sides of the roadway. Build Typical Section 3 is a two-lane undivided curbed roadway with a two-way left turn lane in the reduced median area to allow access in this constrained segment. This typical section accommodates vehicular traffic with two 11-foot travel lanes, one lane in each direction separated by a 14-foot two-way left turn lane. Bicycle traffic is accommodated by a 12-foot shared use path located within the border of the west side of the roadway, offset 7 feet from the face of curb. Pedestrian traffic is accommodated by the 12-foot shared use path on the west side of the roadway and by a 5-foot sidewalk on the east side of the roadway. The 5-foot sidewalk is located within the border of the roadway, offset 2 feet from the proposed right of way line. Outside of the 84-foot right of way, temporary construction easements are anticipated for driveway connections and harmonization with adjacent property as required.

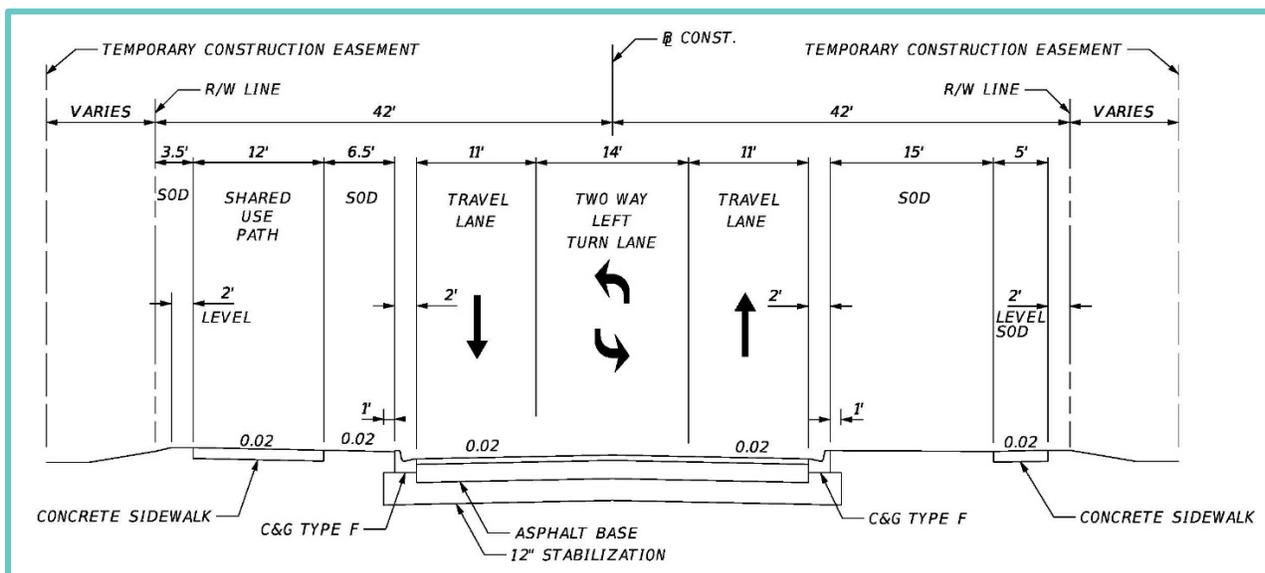


Figure 4-4 | Build Typical Section 3

4.4 Viable Alternatives

Both viable alternatives would consider a connection from the cul-de-sac north of SR 70 to SR 64 along Corridor Alternative Route B. The two-lane undivided roadway at the cul-de-sac would transition to the proposed two-lane divided roadway typical section and connect to the proposed roundabout associated with the 44th Avenue East extension project. Build Typical Section 3 would be considered for 81st Court East with transitions on either side to the divided roadway typical section.

4.4.1 Alternative 1

Alternative 1 considers Build Typical Section 1.

4.4.2 Alternative 2

Alternative 2 considers Build Typical Section 2.

4.5 Pond Siting

Preliminary pond sizing calculations are based on SWFWMD water quality and water requirements, and Manatee County stormwater design requirements. The study corridor is divided into three stormwater basins. Basin 1 includes 44th Avenue East and the adjacent portions of Lena Road and is treated with the 44th Avenue East project. The remaining two basins are considered as part of this Study as they are located north of 41st Avenue East. Two alternative pond sites are evaluated for Basin 2, which require right of way acquisition for a pond. Only one pond site is evaluated for Basin 3 with an assumed location on the Central County Complex property. All ponds are assumed to be wet detention based on evident high groundwater. The full pond siting memo is provided in **Appendix F**.

4.6 Alternatives Evaluation

As both viable alternatives follow the same route, evaluation criteria were selected that would assist in the selection of a Recommended Alternative. The No-Build option was also advanced to this evaluation matrix shown in **Table 4-6**. Quantitative assessments were compared as applicable. Natural, Environmental and Utility impacts are listed as qualitative assessments comparing Build Alternative 1 and 2 (Higher, Lower, Neutral) relative to each other.

Table 4-6 | Alternatives Evaluation

Evaluation Criteria	No-Build	Alternative 1 (Build Typical Section 1)	Alternative 2 (Build Typical Section 2)
Meets Purpose and Need	No	Yes	Yes
Number of Travel Lanes	0-2	2	2
Travel Lane Width (feet)	12	12	11
Multi-Modal Accommodation	Partial	Yes	Yes
Sidewalk Width (Left/Right) (feet)	10* / 5*	5 / 5	12** / 5
Bicycle Lane Width (Left/Right) (feet)	0 / 0	4 / 4	12** / 0
Buffered Bicycle Lane	No	Yes	No

Proposed Right of Way Width (feet)	-	84	84
Utility Impacts	-	Neutral	Neutral
Natural Resource Impacts	-	Higher	Lower
Cultural Resource Impacts	-	Neutral	Neutral
Potential Contamination	-	Neutral	Neutral
Construction Cost	-	Higher	Lower
Right of Way Cost	-	Neutral	Neutral

*Partial sidewalk accommodations on Lena Road at beginning of Study area

** Shared Use Path

4.6.1 Engineering Considerations

The primary difference between Build Alternative 1 and Build Alternative 2 is the method in which bicyclists are accommodated. Due to increased awareness of bicycle level of comfort (BLOC), the County is moving away from on-street bicycle lanes that are only 4-feet wide. The maximum BLOC ratings are achieved with separate facilities for bicyclists. Build Alternative 1 maintains the 4-foot on-street bicycle lanes adjacent to 12-foot-wide travel lanes. Build Alternative 2 does not propose on-street bicycle lanes, instead providing a 12-foot-wide shared use path along the corridor and 11-foot-wide travel lanes. This reduction in pavement area will also help to slow speeds down on this primarily linear corridor.

Harmonizing the offsite conditions will be more flexible with Build Alternative 2 due to the narrower median and flexibility of the east side border area. The 5-foot-wide sidewalk on the east side of the corridor can meander as needed to address offsite drainage patterns and driveway connections. This flexibility will also result in reduced floodplain impacts along the corridor with an increased ability to meet natural ground conditions within the 84-foot-wide right of way.

Regarding the alignment of Corridor Alternative Route B, the existing horizontal curves on 81st Court East are substandard for curve length and are proposed to meet a minimum horizontal curve length of 400 feet. This will require small clips of additional right of way within these two curves.

4.6.2 Environmental Considerations

With both alternatives utilizing Corridor Alternative B, the environmental considerations are primarily neutral. However, the wider pavement area and typical section width with the proposed right of way will result in slightly more impacts with Build Alternative 1. This would be anticipated as wetland impacts rather than any contamination or cultural resource impacts.

4.6.3 Utility Considerations

Lena Road widening and drainage improvements will impact both County-owned and private UAOs along the proposed corridor. Build Alternative 2 may have increased flexibility due to the 12-foot-wide shared use path on the west side and the ability to meander the 5-foot-wide sidewalk on the east side of the corridor around above ground utilities.

If existing utilities are permitted to remain under pavement, this would alleviate conflicts with large diameter utilities. The project cost would be further lessened with either Build Alternative.

4.7 Recommended Alternative

The Recommended Alternative is Build Alternative 2 (Corridor Alternative Route B with Build Typical Section 2 and Build Typical Section 3 for 81st Court East). The selection was based on the improved accommodation of bicycles and pedestrians on Lena Road with a smaller functional pavement footprint compared to Build Alternative 1. With the heavier industrial and commercial use of the corridor, the 12-foot-wide shared use path without on-street bicycle lanes is a safety benefit for multimodal users of this corridor. The benefits related to the 5-foot-wide sidewalk on the east side of the corridor are more flexible with Build Alternative 2 as well.

5.0 Details of the Recommended Alternative

5.1 Typical Section

Build Typical Section 2 is a two-lane divided curbed roadway with a reduced median and a shared use path. This typical section accommodates vehicular traffic with two 11-foot travel lanes, one lane in each direction, separated by an 18-foot raised median. Bicycle traffic is accommodated by a 12-foot shared use path located within the border of the west side of the roadway, offset 5 feet from the face of curb. Pedestrian traffic is accommodated by the 12-foot shared use path on the west side of the roadway and by a 5-foot sidewalk on the east side of the roadway. The 5-foot sidewalk is located within the border of the roadway, offset 2 feet from the proposed right of way line to allow for offsite drainage accommodations. Outside of the 84-foot right of way, temporary construction easements are anticipated for driveway connections and harmonization with adjacent property as required.

Build Typical Section 3 is only considered for the segment of 81st Court East with existing development on both sides of the roadway. Build Typical Section 3 is a two-lane undivided curbed roadway with a two-way left turn lane in the reduced median area to allow access in this constrained segment. This typical section accommodates vehicular traffic with two 11-foot travel lanes, one lane in each direction separated by a 14-foot two-way left turn lane. Bicycle and pedestrian accommodations are consistent with Build Typical Section 2.

Build Typical Section 2 is proposed from the cul-de-sac north of the SR 70 to 81st Court East and from the Landfill Road intersection to SR 64. Build Typical Section 3 is proposed from the south end of Lena Business Park (current 81st Court East) to the Landfill Road intersection. See **Figure 4-3**, **Figure 4-4**, and **Appendix A** for details.

5.2 Horizontal and Vertical Geometry

Lena Road exists within the Study area from SR 70 to the cul-de-sac at the northern end of this segment. The Recommended Alternative analyzes Lena Road north of this cul-de-sac, but the alignment was reviewed for this tie in location. There is a series of reverse curves identified as Lena_REV1, Lena_REV2, and LenaREV3. The Recommended Alternative begins with Lena_REV4 and Lena_REV5 connecting to this series of existing curves. From there the alignment connects to the 44th Avenue East roundabout and heads north to 41st Avenue East. Horizontal curves take the Recommended Alternative north to align with 81st Court East and follow the existing roadway. The existing Lena Road corridor is followed as the alignment heads north and a maximum deflection without curvature of 2 degrees was used at the northern end approaching SR 64. Preliminary horizontal curve data is shown in **Table 5-1**. Superelevation rates are based on 35 mph design speed with 5% maximum superelevation.

Table 5-1 | Preliminary Horizontal Curve Data

Curve Name	Radius	Deflection Direction	Curve Length	Superelevation
<i>Lena_REV1*</i>	1,402 ft	LT	433 ft	NC
<i>Lena_REV2*</i>	720 ft	RT	655 ft	NC
<i>Lena_REV3*</i>	450 ft	LT	186 ft	NC
Lena_REV4	1,000 ft	RT	450 ft	RC
Lena_REV5	819 ft	LT	521 ft	RC
Lena_REV6	603 ft	LT	407 ft	RC

Lena_REV7	637 ft	RT	434 ft	RC
Lena_REV8	996 ft	RT	402 ft	RC
Lena_REV9	996 ft	LT	410 ft	RC
Lena_REV10	1,910 ft	LT	461 ft	NC
Lena_REV11	1,528 ft	RT	401 ft	NC

*Existing Lena Road south of the cul-de-sac

The vertical geometry will be evaluated during final design when survey is secured. Design parameters should be attainable without significant impact to adjacent property.

5.3 Project Traffic Volumes

Appendix B contains the Design Traffic Memo performed for the Study. The proposed traffic volumes are summarized in **Table 5-2**.

Table 5-2 | Design Year (2045) Design Traffic Volume Summary

Characteristic	Value
2045 AADT	7,100 vehicles
Peak-to-Daily Ratio	9.00%
DHV	639 vehicles
Directional Distribution	56.30 %
Peak Directional Volume	360 vehicles
Off-Peak Directional Volume	279 vehicles
LOS D Maximum Service Volume	792 vehicles
Peak Directional Volume % of LOS D Maximum Service Volume	45%

5.4 Intersection Concepts

The Recommended Alternative will revise intersection access for Lena Road as described below. In addition to these intersection concepts, the design phase will also analyze the need for u-turn accommodations along the corridor.

5.4.1 44th Avenue East

The 44th Avenue East extension project will construct a roundabout at the planned intersection with Lena Road. The County anticipates building out the intersection with a possible connection to the cul-de-sac north of SR 70 and an undetermined footprint on the north leg. The two-lane roundabout is sized for four-lane facilities on 44th Avenue East and Lena Road. Lena Road will expand on the approaches to the roundabout allowing more capacity through the intersection. The proposed Lena Road project would connect into both ends of this roundabout.

Pedestrian accommodations will be provided on all four legs of this roundabout with splitter islands providing pedestrian refuge. A minimum 10-foot-wide sidewalk will be provided on all four legs per standard roundabout

design. Bicycle lanes on 44th Avenue East will be directed from the travel lanes within the roundabout per standard striping techniques.

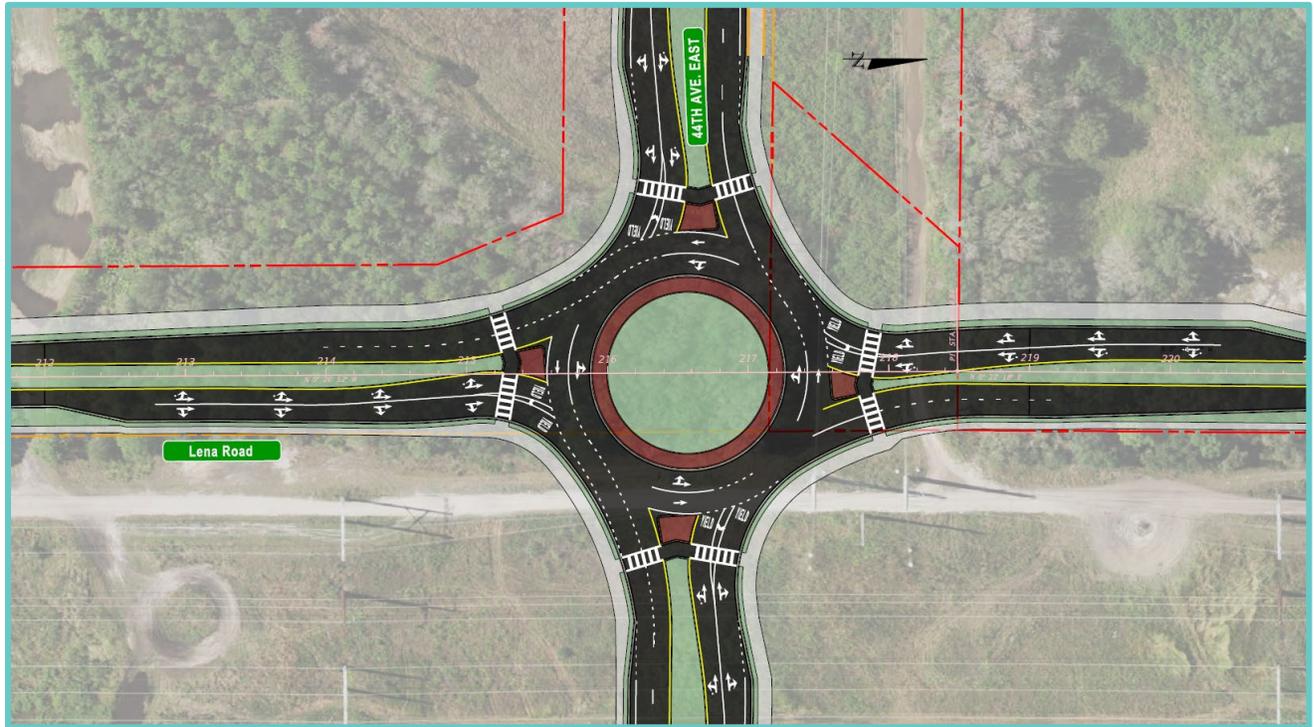


Figure 5-1 | Lena Road and 44th Avenue East Roundabout

5.4.2 41st Avenue East

41st Avenue East will connect to Lena Road at the location of the existing cul-de-sac. Access to the FPL Easement will complete a fourth leg at this intersection. Both 41st Avenue East and the FPL Easement driveway will be stop-controlled in the proposed condition. Pedestrian and bicycle accommodations will be provided parallel to Lena Road on both sides of the corridor by the 12-foot-wide shared use path and 5-foot-wide sidewalk. There will be no designated crosswalks for Lena Road.

5.4.3 34th Avenue East

34th Avenue East will remain a stop-controlled intersection with the new alignment. The two-way left turn lane in this section of Lena Road can provide northbound access onto 34th Avenue East. Pedestrian and bicycle accommodations will be provided parallel to Lena Road on both sides of the corridor by the 12-foot-wide shared use path and 5-foot-wide sidewalk. The shared use path will connect to the sidewalk on the north side of 34th Avenue East. There will be no designated crosswalks for Lena Road.

5.4.4 Landfill Road

The intersection with Landfill Road will remain a two-way stop-controlled intersection where Lena Road / 81st Court East has the right of way. Left turn lanes will be provided on Lena Road to provide access onto Landfill Road and Old Lena Road. A northbound right turn lane will be provided on Lena Road for access onto Landfill Road. Pedestrian and bicycle accommodations will be provided parallel to Lena Road on both sides of the corridor by the 12-foot-wide shared use path and 5-foot-wide sidewalk. There will be no designated crosswalks for Lena Road.

This intersection has the potential for a future traffic signal based on a warrant analysis.

5.4.5 Gillis Drive

Gillis Drive will receive a new paved apron with 35-foot radii connecting to Lena Road. The divided roadway will prevent northbound access for Gillis Drive. Pedestrian and bicycle accommodations will be provided parallel to Lena Road on both sides of the corridor by the 12-foot-wide shared use path and 5-foot-wide sidewalk. There will be no designated crosswalks for Lena Road.

5.4.6 Brower Drive / Musgrave Ranch Road / SR 64

Brower Drive is located opposite of the future Musgrave Ranch Road on the Central County Complex parcel. This intersection is located approximately 800 feet south of the SR 64 intersection. This intersection also marks the end of the two-lane Lena Road section and the beginning of a four-lane Lena Road section that ties to SR 64.

Musgrave Ranch Road is currently at a 30% design phase for a two-lane roadway providing future access to the Central County Complex. With the increased future traffic expectations and the relatively short distance between major intersections, a solution that improves accessibility was evaluated. The result is a roundabout at Brower Drive / Musgrave Ranch Road that will facilitate the traffic flow through this section of Lena Road.

The alignment of Lena Road was shifted to the east to utilize the Central County Complex for the widening of Lena Road. The approach to SR 64 was set to line up the travel lanes of Lena Road with the travel lanes of Heritage Green Way, which intersects SR 64 from the north. The proposed roundabout will allow for transition to the four-lane Lena Road section.

The proposed roundabout has an inscribed circle diameter of 165 feet and carries two 15-foot-wide lanes north and south for Lena Road. In the northbound direction, these lanes open to allow a shared through / left turn lane and a shared through / right turn lane. Similarly, for the southbound direction, Lena Road will have a shared through / left turn lane and a shared through / right turn lane. South of the roundabout these lanes will merge to the single southbound 11-foot-wide travel lane. For Musgrave Ranch Road and Brower Drive, one 15-foot-wide lane east and west will circulate in the roundabout. This circulating lane will facilitate the left turns from Lena Road and the roundabout will have a 2x1 configuration.

The raised median on Lena Road will control access on the approaches. On the south side of the proposed roundabout, this means Gillis Drive will only be able to access southbound Lena Road. On the north side of the proposed roundabout, the Racetrac gas station driveways and a proposed medical office complex will have access to southbound Lena Road. The proposed roundabout will allow circulation for a u-turn maneuver that provides access to the SR 64 signal.

Pedestrian and bicycle accommodations will be provided with a minimum 10-foot-wide sidewalk circulating the proposed roundabout. On the west side of Lena Road, the 12-foot-wide shared use path will connect to the existing sidewalk on SR 64. On the east side of Lena Road, the 10-foot-wide sidewalk will circulate around Musgrave Ranch Road and terminate on the northeast quadrant. Crosswalks will be provided on all legs and median refuge will be located in the raised medians or splitter islands.

There are two properties on the west side that currently access Lena Road. Reconfiguration of their driveways will need to be addressed during the design phase, but an option is shown with this concept. See **Figure 5-2** for the layout of this proposed roundabout and connection to SR 64.

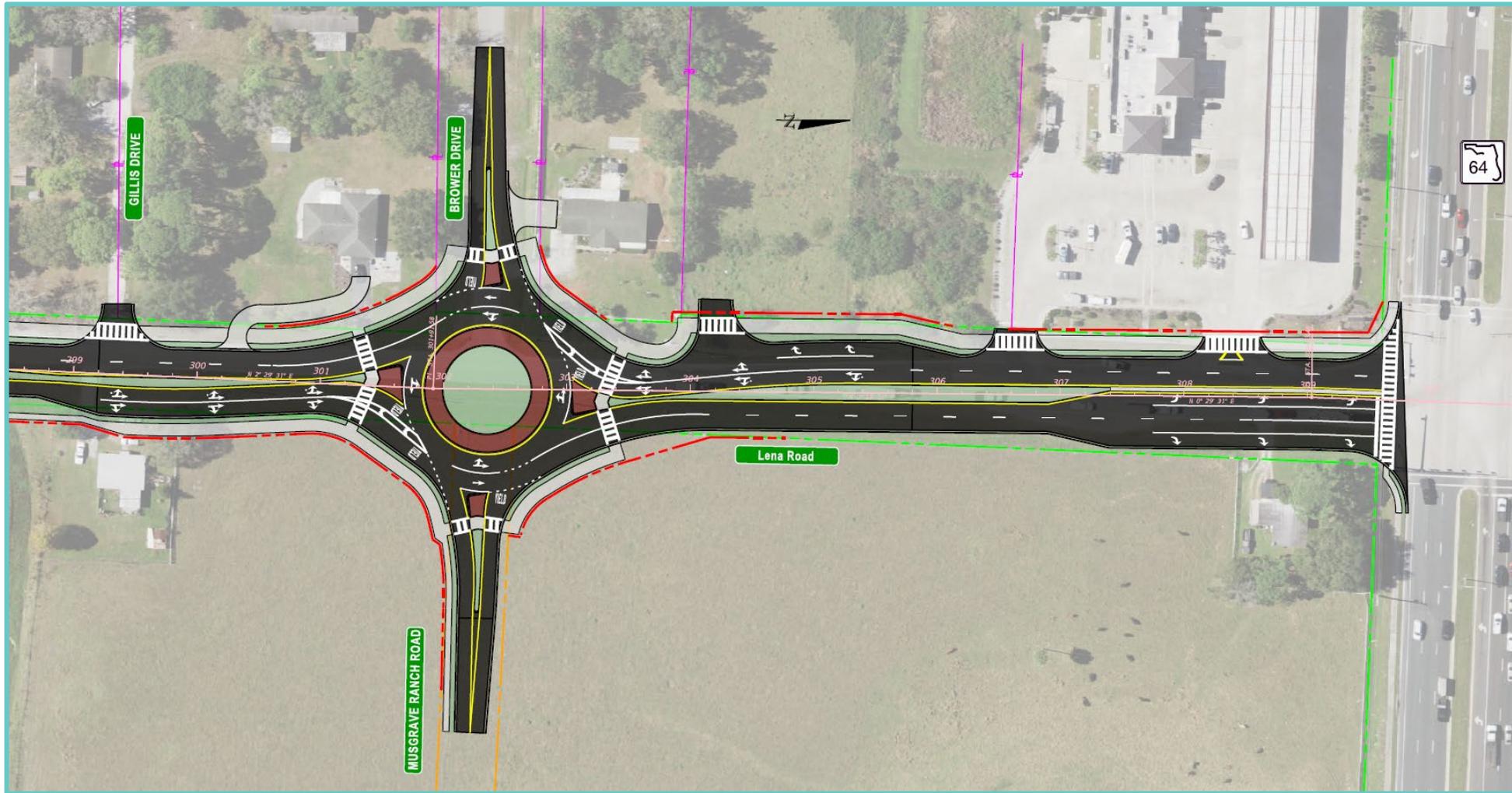


Figure 5-2 | Lena Road Roundabout at Brower Drive / Musgrave Ranch Road

5.5 Access Management Plan

Median openings are recommended in addition to the full median openings noted above for the intersecting roadway. **Table 5-3** lists the approximate location, spacing, and type (full/directional) of the proposed median openings. Access management would be unrestricted for the limits of Build Typical Section 3 which uses a two-way left turn lane in the center of the roadway to provide access to Lena Road. The design phase will also analyze the need for u-turn accommodations along the corridor.

Table 5-3 / Recommended Median Openings

Location	Type	Control	Spacing	Intersection / Business
216+50	Full	Roundabout	-	44 th Avenue East
225+85	Full	Unsignalized	935 ft	41 st Avenue East
241+10	Full	Unsignalized	1,525 ft	Two-Way Left Turn Lane
260+80	Full	Unsignalized	1,970 ft	Landfill Road
274+30	Full	Unsignalized	1,350 ft	FPL Substation
288+00	Full	Unsignalized	1,370 ft	Hyatt Survey Services
302+40	Full	Roundabout	1,440 ft	Brower Drive / Musgrave Ranch Road
310+50	Full	Signalized	810 ft	SR 64

5.6 Bicycle and Pedestrian Accommodations

Bicycle and pedestrians will be accommodated by a 12-foot-wide shared use path along the west side of Lena Road. This path will connect to the 10-foot concrete sidewalk along the west side of Lena Road from SR 70 to the cul-de-sac and to the roundabout accommodations at 44th Avenue East, including the 10-foot concrete sidewalk along the north side of that alignment. The 12-foot-wide path will connect to the bicycle lanes and sidewalks along SR 64 via curb ramps at the intersection. The path will be set at least five feet from the face of curb.

Pedestrians will also be accommodated by a 5-foot-wide sidewalk along the east side of Lena Road. This sidewalk will connect to the 5-foot concrete sidewalk along the east side of Lena Road from SR 70 to the cul-de-sac. At the roundabouts at 44th Avenue East and Brower Drive / Musgrave Ranch Road, the 5-foot-wide sidewalk will expand to the 10-foot-wide accommodations. The east side sidewalk terminates on the northeast quadrant of Lena Road and Brower Drive / Musgrave Ranch Road. The sidewalk will primarily be located two feet from the right of way.

The design phase shall also consider supplemental green pavement markings for the shared use path crosswalks along the corridor.

5.7 Right of Way Requirements

The existing right of way will require widening and new right of way acquired for the proposed roadway alignment and stormwater management facilities. The two recommended pond sites are located on parcels

already impacted by the roadway footprint. Pond 2A is a partial acquisition and Pond 3 is located on the Central County Complex parcel.

Outside of the encumbrances from the 44th Avenue East extension project, the Recommended Alternative for Lena Road is an 84-foot-wide right of way corridor with corner clips at Landfill Road and the proposed roundabout at Brower Drive / Musgrave Ranch Road. There are twenty (20) parcels anticipated to be impacted, requiring 5.5 acres of property. The pond sites account for another 3.2 acres of property. There is one total take due to the property impacts where the additional land can be utilized for floodplain mitigation. That parcel is 5.2 acres alone. The total amount property impacts for the Recommended Alternative is 13.9 acres. Temporary construction easements are anticipated for driveway connections and harmonization as required beyond the proposed right of way.

5.8 Lighting

If corridor lighting is warranted for Lena Road, it can be accommodated on either side of the roadway corridor, barring FPL impacts and OSHA offsets. In locations where the divided median is being provided, there is a potential for median lighting. The proposed medians are 15.3 feet between vertical face of curbs and Manatee County has previously permitted the use of median lighting with similar maintained widths.

The 44th Avenue East extension project will provide corridor lighting on the outside of the four-lane typical section and will illuminate the roundabout using standard techniques. Similar lighting should be utilized at the proposed Brower Drive / Musgrave Ranch Road roundabout.

The County does not currently have formalized standard lighting. Recent construction projects have tried to set a standard that includes GE Evolve LED fixtures, 40-foot-tall mounting heights, and arm lengths that vary between 8-feet, 12-feet, and 15-feet depending on their usage and location. Intersection lighting standards shall follow the latest FDM guidance at the time of design.

5.9 Utilities

The Lena Road Recommended Alternative is anticipated to have impacts to County-owned and private utilities. Full impacts will be determined during the design phase based on survey and final roadway and drainage design.

5.9.1 Manatee County Potable Water Mains

The Lena Road Recommended Alternative may impact existing County mains currently along the west side of 81st Court East and along the west side of Lena Road from Landfill Road to SR 64. The 8-inch PVC water mains are potentially located under the proposed 12-foot-wide shared use path but are also located in proposed pavement widening areas. The Recommended Alternative does not impact the 10-inch PVC water main located at the beginning of the Study area at the cul-de-sac north of SR 70.

5.9.2 Manatee County Wastewater Mains

The Lena Road Recommended Alternative may impact existing County mains currently along both sides of 81st Court East and along the east side of Lena Road from Landfill Road to SR 64. The wastewater mains are in proposed pavement widening areas for the Recommended Alternative. The Recommended Alternative does not impact Lift Station 615 or the 8-inch PVC gravity main located at the beginning of the Study area at the cul-de-sac north of SR 70.

5.9.3 Manatee County Reclaim Mains

There are sections of the existing 30-inch ductile iron reclaim main that are located under the proposed curb line of the Lena Road Recommended Alternative. Other sections are primarily located under proposed pavement widening areas for the Recommended Alternative. Due to the use of ductile iron for this reclaim main, the design phase should investigate the opportunity to preserve the mains in the proposed travel way.

5.9.4 Manatee County Information Technology

The Lena Road Recommended Alternative will impact the existing County Information Technology fiber optic system that connects to the Manatee County Landfill. There is an opportunity to consolidate conduit runs on the Lena Road corridor with the proposed improvements.

5.9.5 Manatee County ATMS

The Lena Road Recommended Alternative will impact the existing ATMS facilities along SR 64. The extents of these impacts are directly related to signalization improvements required for the SR 64 / Lena Road / Heritage Green Way intersection.

5.9.6 Manatee County Utility CIP Projects

The Lena Road Recommended Alternative is not anticipated to impact the CIP projects identified in Section 2.14.6. Design coordination will be required between the CIP projects and the Lena Road project.

5.9.7 Private Utility Facilities

Coordination with the private UAOs will be required during the design phase of Lena Road. There are above ground impacts to the FPL Distribution poles in along the Lena Road Recommended Alternative. These pole impacts will also affect aerial and underground communication lines.

5.10 Preliminary Drainage Analysis

Three wet detention ponds are recommended, one of which is already proposed in the 44th Avenue East extension project. Recommended pond sites include a total of 3.2-acres of right of way acquisition. Based on preliminary review all recommended alternatives have a low risk to wetlands, contamination, utilities, wildlife, and cultural resources.

Basin 1 runoff flows to Pond 1, a stormwater management facility associated with the 44th Avenue East extension project (SMF 12) which outfalls into the Braden River Below Ward Lake watershed. Basin 2 includes wetlands, open land, and 81st Court East – within Lena Road Business Park (ERP 3143.004). Existing basin runoff outfalls to five existing wet detention ponds. Basin 2 analysis determines the pond size and location required to supplement the capacity in the existing ponds. Alternative Pond 2A is a 1.87-acre partial acquisition of Parcel 1468121259 and outfalls east into Cypress Strand and wetland impacts are not anticipated. There are 0.92 acres of floodplain impacts for Alternative Pond 2A. It is centrally located within Basin 2 and is adjacent to the outfall ditch leading to Cypress Strand. Pond 3 is located on the Central County Complex property in Basin 3. The location is to be determined with the future development of the Central County Complex but requires 1.06 acres.

Existing Lena Road from SR 70 to the existing cul-de-sac is south of Basin 1 limits and outside of the Recommended Alternative. Pond siting analysis was not performed for this segment of Lena Road, but it traverses Creekwood East Corporate Park (ERP 5641.021) and drains to Williams Creek.

The full pond siting memo is provided in **Appendix F**.

5.11 Floodplain Analysis

Floodplain impacts are anticipated to Zones A and AE associated with Cypress Strand. No-rise certification will be required for impacts to the FEMA floodplain. Floodplain impacts and compensation within Basin 1 south of 41st Avenue East are documented in the 44th Avenue East extension project design and are not included in this Study. The existing Lena Road Business Park includes floodplain compensation (ERP 3143.004) and it is assumed that redeveloping areas in the floodplain will not result in additional floodplain impacts. Floodplain impacts in the Braden River Below Ward Lake watershed are estimated at 2.72-acres. Floodplain impacts in the Cypress Strand watershed are estimated at 6.08 acres.

Floodplain compensation benefits from 1.14-acres of surplus floodplain compensation with the 44th Avenue East extension project. The 44th Avenue East extension project surplus and Floodplain Compensation Area 1 provide 2.75-acres of compensation in the Braden River Below Ward Lake watershed. Floodplain Compensation Area 2 provides 6.22 acres of compensation in the Cypress Strand watershed. The final location of Floodplain Compensation Area 2 within the Central County Complex property will be determined with the final design.

5.12 Structures

There are no proposed bridge structures within the Study area. The existing 36" cross drain and unknown size Cypress Strand cross drain are extended in the proposed design. Two additional cross drains are required. One is a 6-foot by 6-foot box culvert proposed to convey Williams Branch beneath Lena Road. A 42" cross drain is proposed to convey a wetland channel flowing west to the Braden River.

5.13 Cost Estimate

5.13.1 Construction Cost Estimate Assumptions

The construction cost estimate for the Recommended Alternative is based on the following assumptions:

- Clearing and Grubbing based on full width of right of way and cost includes removal of concrete on the corridor and clearing floodplain compensation areas.
- Earthwork estimated based a depth of ten feet over the cleared area from the beginning of the Recommended Alternative to 81st Court East, a depth of two feet over 81st Court East, a depth of five feet north of Landfill Road, and includes excavation and embankment. Pond earthwork is included in the earthwork estimate.
- Aside from 25 feet of milling and resurfacing where proposed construction ties to existing and the 44th Avenue East roundabout area, the pavement design was assumed to be comprised of 12-inch Type B Stabilization, Optional Base Group 9 (10 inches), 3-inch Superpave Asphalt Concrete, Traffic C, PG 76-22 with 1.5-inch Asphalt Concrete Friction Course, Traffic C, PG 76-22. Milling assumed at 1.5-inch with replacement of friction course.
- 1,000 feet of gravity wall (5-feet tall) with aluminum pipe guiderail assumed for unknown conditions which may require its use, due to right of way constraints.
- Curb inlet spacing assumed at 300 feet, excluding 44th Avenue East roundabout area.
- Back of sidewalk inlets assumed every 600 feet to address offsite drainage, excluding 44th Avenue East roundabout area.
- Storm drain main trunk line estimated at 36-inch diameter for length of project.
- Storm drain lateral pipes estimated at 18-inch diameter based on 300 feet spacing.
- Traffic Signal removal and reconstruction based on a lump sum price of \$500,000 per intersection.

- Light poles estimated based on 200 feet spacing, staggered on the left and right sides of the roadway.
- Mobilization estimated based on 10% of project subtotal.
- Maintenance of Traffic estimated based on 15% of project subtotal.
- To account for items not estimated and other project unknowns, a contingency of 25% was applied to the sum of the project subtotal plus mobilization and maintenance of traffic.
- Utility relocation construction costs are not included.
- Wetland mitigation costs are not included.

5.13.2 Construction Cost Estimate

The Recommended Alternative construction cost estimate is \$17,840,000. The estimate is summarized in **Table 5-4**. Detailed information is provided in **Appendix I**.

Table 5-4 | Recommended Alternative Construction Cost Estimate

Component	Cost Estimate
Roadway and Drainage	\$ 9,769,000
Signing and Pavement Marking	\$ 57,000
Signalization	\$ 500,000
Lighting	\$ 1,091,000
Mobilization	\$ 1,142,000
Maintenance of Traffic	\$ 1,713,000
Project Unknowns	\$ 3,568,000
CONSTRUCTION COST TOTAL	\$ 17,840,000

5.13.3 Right of Way Cost Estimate

There are twenty (20) parcels impacted by the Recommended Alternative and preliminary cost estimation was determined at a cursory level for the Study. The Recommended Alternative right of way cost estimate is \$1,700,000. The estimate is summarized in **Table 5-5**. Detailed parcel identification is provided in **Appendix I**.

Table 5-5 | Recommended Alternative Right of Way Cost Estimate

Component	Cost Estimate
Roadway Partial Takes	\$ 400,000
Pond Partial Takes	\$ 700,000
Roadway and Pond Full Takes	\$ 600,000
RIGHT OF WAY COST TOTAL	\$ 1,700,000

6.0 Summary of Permits and Mitigation

6.1 Stormwater

A pre-application meeting was completed with Southwest Florida Water Management District (SWFWMD) on October 7, 2021 (see **Appendix H**). Prior on-site / off-site permit activity within the Study area includes:

- Environmental Resource Permit (ERP) 5641.020 (Creekwood East Corporate Park)
- ERP 3413.004 (Lena Road Business Park)
- ERP 24001.000 (Manatee County Reclaimed Water Main N-SE)

Anticipated permit requirements include the following:

- An ERP from SWFWMD per Florida Administrative Code (FAC) 62-330
- Florida Department of Environmental Protection (FDEP) State 404 Program per FAC 62-331
- A National Pollutant Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA) per the Clean Water Act.

6.2 Natural Resources

6.2.1 Anticipated Permits

The Lena Road project would require permitting with two state of Florida agencies, including SWFWMD and the FDEP Southwest District.

A pre-application meeting was completed with SWFWMD on October 7, 2021, including an Environmental Discussion. See Pre-Application Meeting Notes in **Appendix H**. SWFWMD required that the limits of jurisdictional wetlands and surface waters be provided and that appropriate mitigation for impacts be provided using the Uniform Mitigation Assessment Method (UMAM), including the use of available mitigation banks within the Manatee River Environmental Resource Permit (ERP) Basin. The Applicant must demonstrate elimination and reduction of wetland impacts and use appropriate wetland setbacks. Hydroperiods in wetlands must be maintained and seasonal highwater levels determined at pond locations. A title determination is required from FDEP to confirm if state-owned sovereign submerged lands are present, often associated with named waterways and waterbodies. Bald eagle nest MN032 is in proximity (~250 feet) to the project and coordination with USFWS will be required. (A second nest, MN036, is located near SR 70 about 400 feet from the project and would also require coordination with USFWS). Conservation area(s) crossed by the project are likely wetland mitigation sites. Impact assessments will be based on permitted success criteria, not on existing conditions, per SWFWMD requirements.

In January 2021, the state of Florida assumed the federal Clean Water Act Section 404 Permit program for non-tidally influenced wetlands and waters. The Lena Road project would require a Section 404 permit from FDEP. A pre-application meeting was not held with FDEP. In addition, due to impacts to wetlands and other surface waters, the project will require a new Individual Statewide Environmental Resource Permit (ERP) pursuant to 62-330 F.A.C. The following agency permitting actions are anticipated:

- FDEP Section 404 Permit – Individual Permit or General Permit, depending on the extent of wetland and water impacts, 0.5 acres of impact being the threshold.
- FDEP National Pollutant Discharge Elimination System, Stormwater Discharge from Large and Small Construction Activities (62-621.300 F.A.C.). This permit is to be obtained by the contractor.

- SWFWMD Statewide ERP – Individual ERP with the application review fee determined by project work area and extent of wetland impacts.

A second tier of agency involvement includes FWC and USFWS as commenting agencies on the respective permit applications for listed and protected species. Coordination and possible consultation with these agencies would be required to construct the Lena Road project.

6.2.2 Wildlife

To protect listed wildlife, wildlife habitat, and plants, Manatee County will conduct wildlife surveys of the road corridor and pond sites during permitting and then prior to construction for the presence of protected wildlife species including plants. Manatee County will abide by standard resource protection measures in addition to the following specific commitments:

- The County will adhere to the most current version of USFWS *Standard Protection Measures for the Eastern Indigo Snake* (2013) during construction.
- The County will survey for bald eagle nests during permitting and design. If a bald eagle nest is identified within 660 feet of the project prior to or during construction, the County will coordinate with the USFWS and the FWC in accordance with the BGEPA and MBTA and will adhere to the USFWS Bald Eagle Management Guidelines.
- The County will conduct osprey nest surveys during the permitting phase of the proposed project. If an osprey nest is identified, the County will coordinate with the USFWS and/or the FWC, depending on the activity status of the nest.
- The County will perform pre-construction surveys for nesting Florida sandhill cranes per the FWC species guidelines (2016) to ensure active nests and flightless young are protected.
- If required, the County will perform southeastern American kestrel surveys for breeding and active nest cavities during permitting and pre-construction.
- The County will perform preliminary gopher tortoise surveys during permitting and formal gopher tortoise surveys during pre-construction in areas deemed suitable habitat in accordance with the FWC Gopher Tortoise Permitting Guidelines, and will secure an FWC *Gopher Tortoise Relocation Permit*, if gopher tortoise burrows are found.
- The County will survey wading bird nesting habitat within 330 feet of the project area during permitting. If a wading bird nest is detected, additional surveys may be recommended to determine if an active breeding site is present.
- The County will perform pre-construction surveys for least tern nests and young and for multi-year construction projects. Surveys can be conducted prior to land clearing and earthmoving to ensure nesting birds are not present.
- If protected plants are discovered during pre-construction surveys, the County will initiate coordination with the FDACS.

6.2.3 Wetlands and Other Surface Waters

To protect wetland and water resources before, during, and after construction, Manatee County will abide by state and federal permit requirements and water quality protection measures particularly including the following commitments:

- The County will implement provisions to avoid and minimize wetland impacts during design, permitting, and construction.
- The County will use the UMAM to evaluate each wetland impact area to quantify the functional loss based on location and landscape, water environment, and vegetation conditions.

- The County will mitigate for wetland impacts pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344.
- The County will use erosion control measures and Best Management Practices during construction to avoid and minimize direct, indirect, and temporary impacts to habitat and water quality.

6.3 Cultural Resources

Approximately 0.79 mile of the length of the corridor study area has not been previously surveyed, and an approximately 0.50-mile segment of that total is undisturbed. Undisturbed areas have a higher probability of containing intact buried cultural resources. Therefore, an archaeological survey for the portions of the corridor study area that are undisturbed is recommended. Given the presence of previously unrecorded historic-age architectural resources in the corridor study area, an architectural resources survey may also be necessary to survey those resources and evaluate their eligibility for listing in the NRHP, depending on the final project design and potential impacts to historic-age architectural resources.

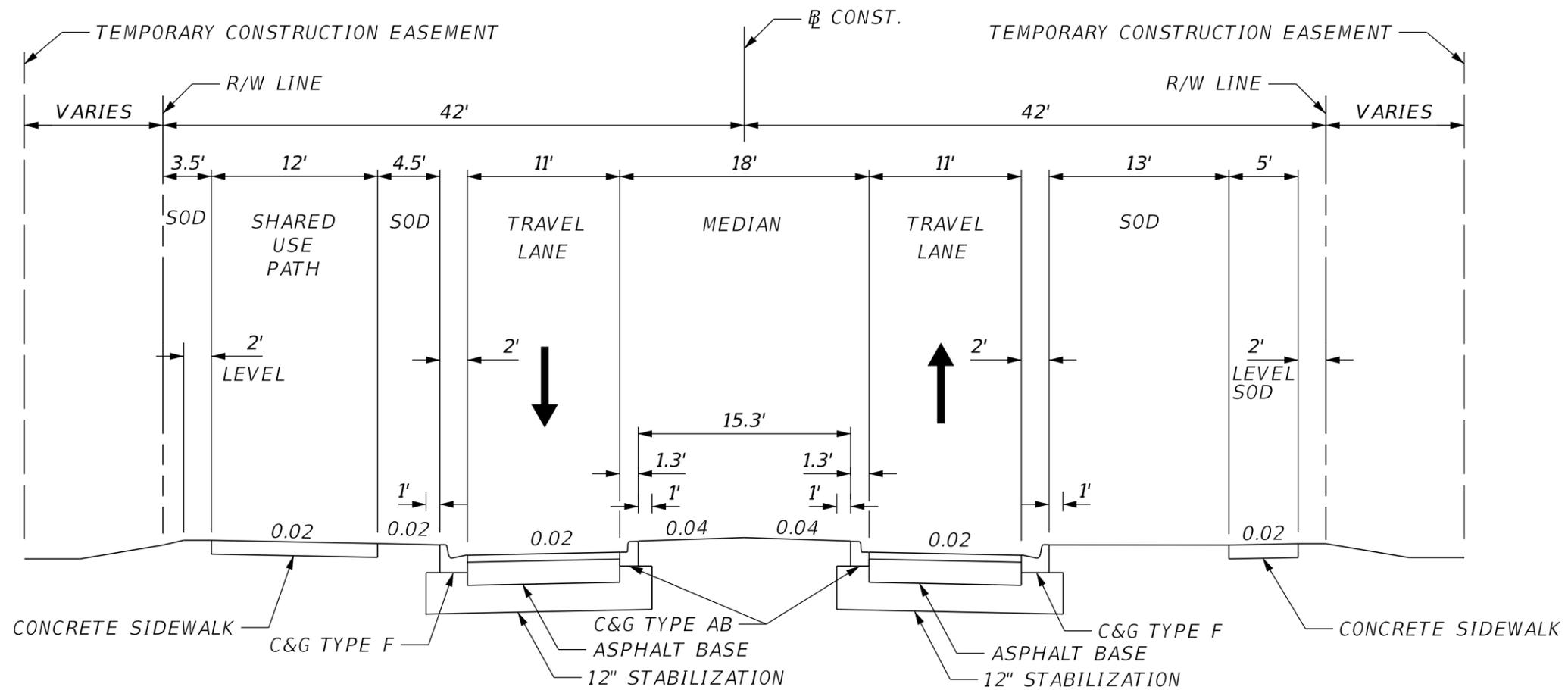
If prehistoric or historic artifacts, are encountered at any time within the project area, construction activities involving subsurface disturbance in the vicinity of the discovery will cease. The Florida Department of State, Division of Historical Resources, Compliance Review Section will be contacted. The subsurface construction activities will not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during construction activities, all work will stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

6.4 Potential Contamination

For those locations with a risk rating of "Medium", field screening or a soil management plan may be needed depending on the locations of construction and intrusive activities proposed for the study area. These sites have been determined to have potential contaminants, which may impact the proposed construction. A soil and groundwater sampling plan may be needed for each site. The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical tests to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells should also be included in the sampling plan.

Appendices

Appendix A – Concept Plans



NOT TO SCALE

BUILD TYPICAL SECTION 2

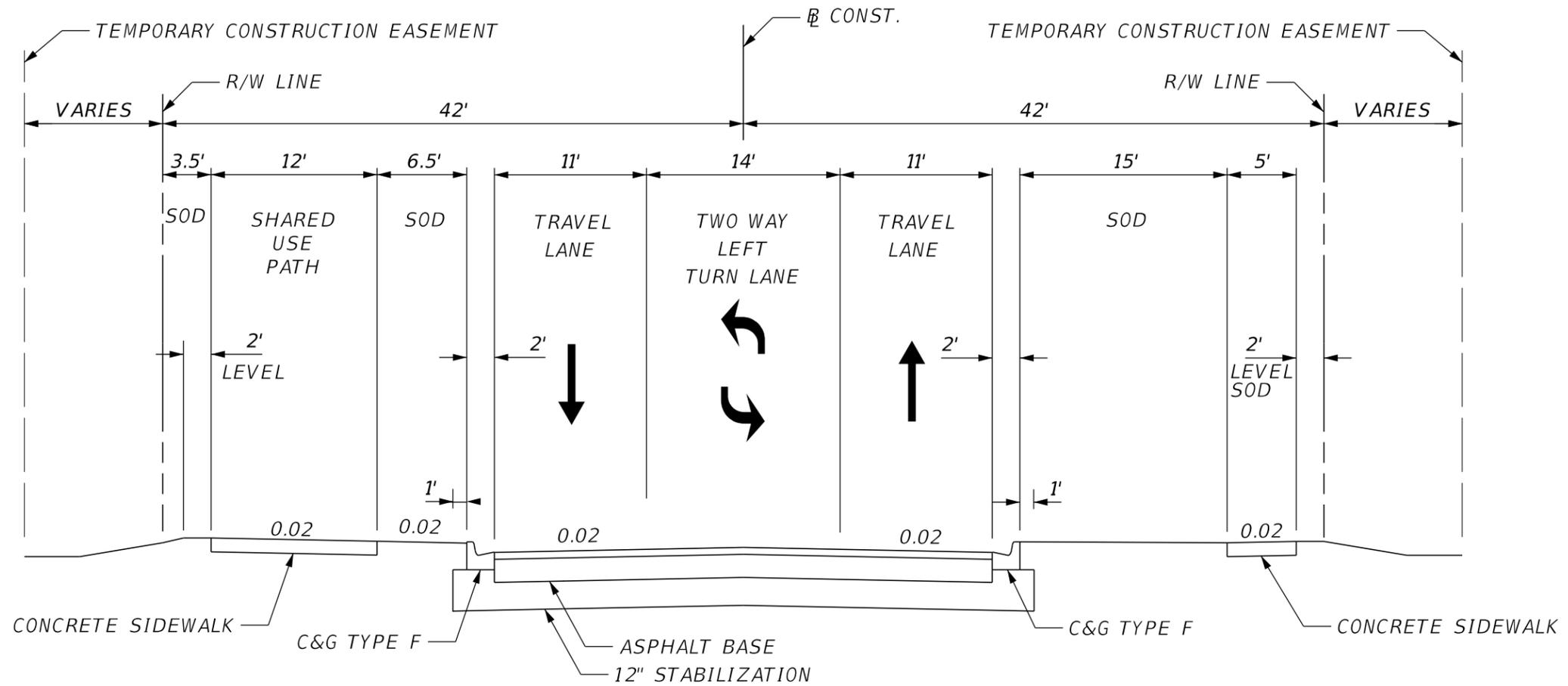
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DRAWN BY RCS		SARASOTA, FLORIDA 34232		MANATEE COUNTY PUBLIC WORKS		RECOMMENDED TYPICAL SECTION		
CHECKED BY KMP								
No.	REVISIONS	DATE	BY					

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11/11/2021

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NOT TO SCALE

BUILD TYPICAL SECTION 3

SCALE AS NOTED		HDR ENGINEERING, INC.		DATE 11/2021		DESIGN ENGINEER JASON L. STARR		SHEET NO.
DESIGNED BY JLS		2601 CATTLEMEN ROAD, SUITE 400		PROJECT NO. 6107560		FL. LICENSE NO. 70171		
DRAWN BY RCS		SARASOTA, FLORIDA 34232		MANATEE COUNTY PUBLIC WORKS		RECOMMENDED TYPICAL SECTION		
CHECKED BY KMP								
No.	REVISIONS	DATE	BY					

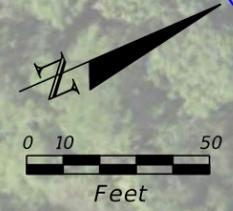
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**WESTCOAST
LANDSCAPING
& LAWN**

PARCEL ID 1730850909

**LAKWOOD RANCH
ELKS LODGE**

PARCEL ID 1730850859



Lena Road

CONST. LENA

MATCHLINE STA. 206+00.00

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PARCEL ID 1730851759

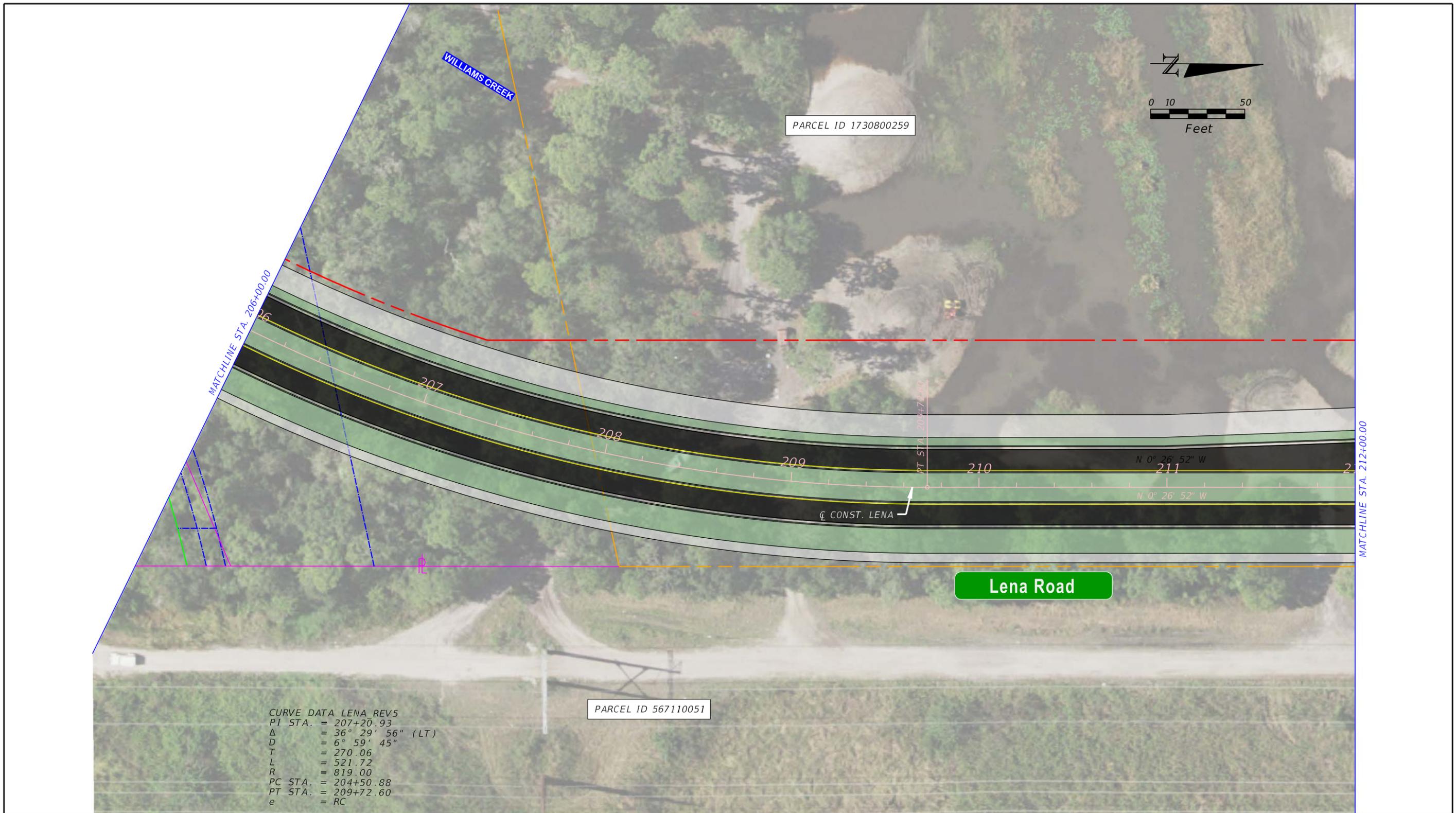
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING RIGHT-OF-WAY

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO.
	DESIGNED BY JLS		PROJECT NO. 6107560		FL. LICENSE NO. 70171		3
No.	REVISIONS	DATE	BY	KMP			

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MATCHLINE STA. 212+00.00

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PARCEL ID 567110051

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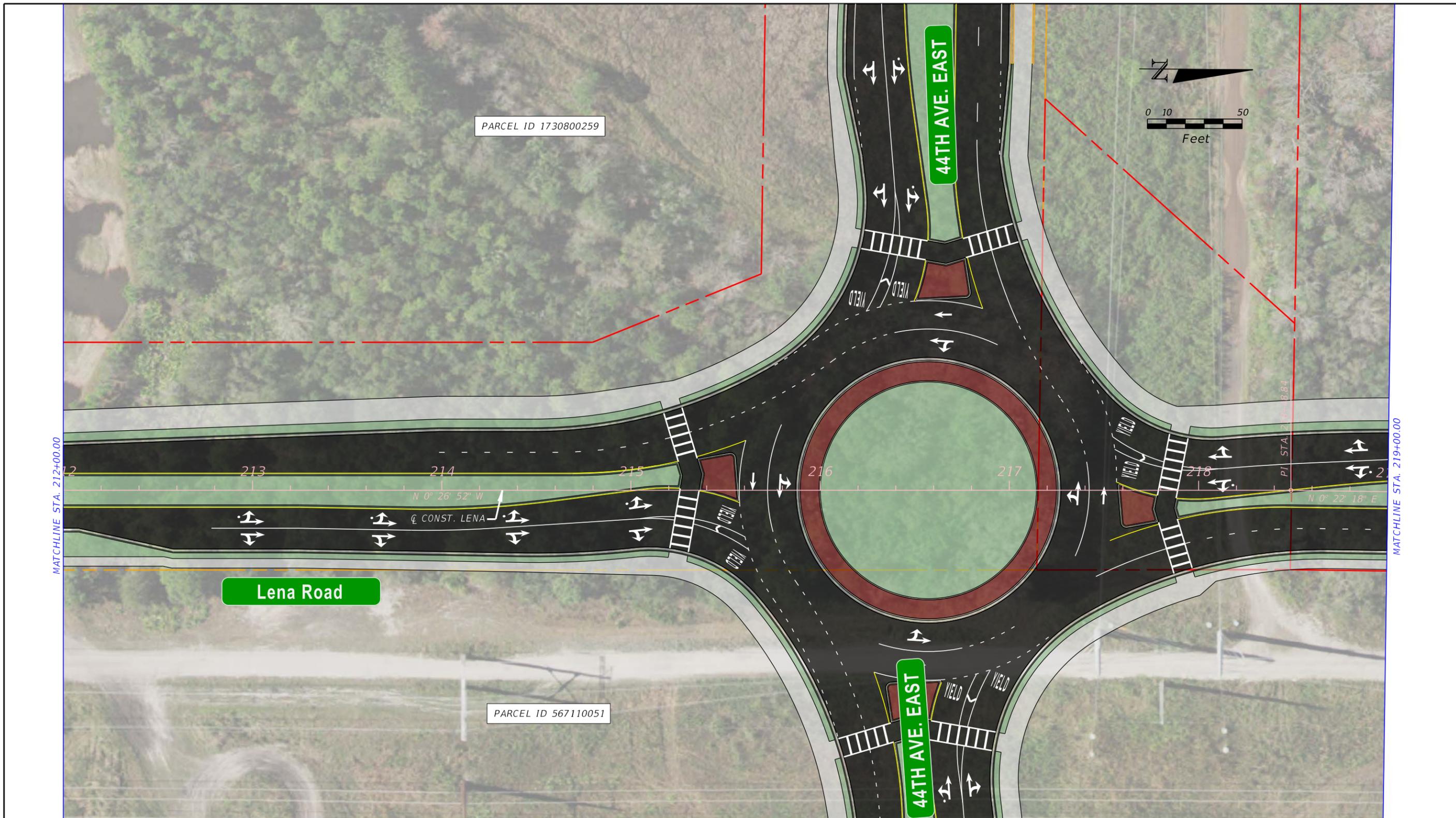
Lena Road

LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY

	SCALE	AS NOTED	HDR ENGINEERING, INC.		DATE	11/2021	DESIGN ENGINEER	JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO.
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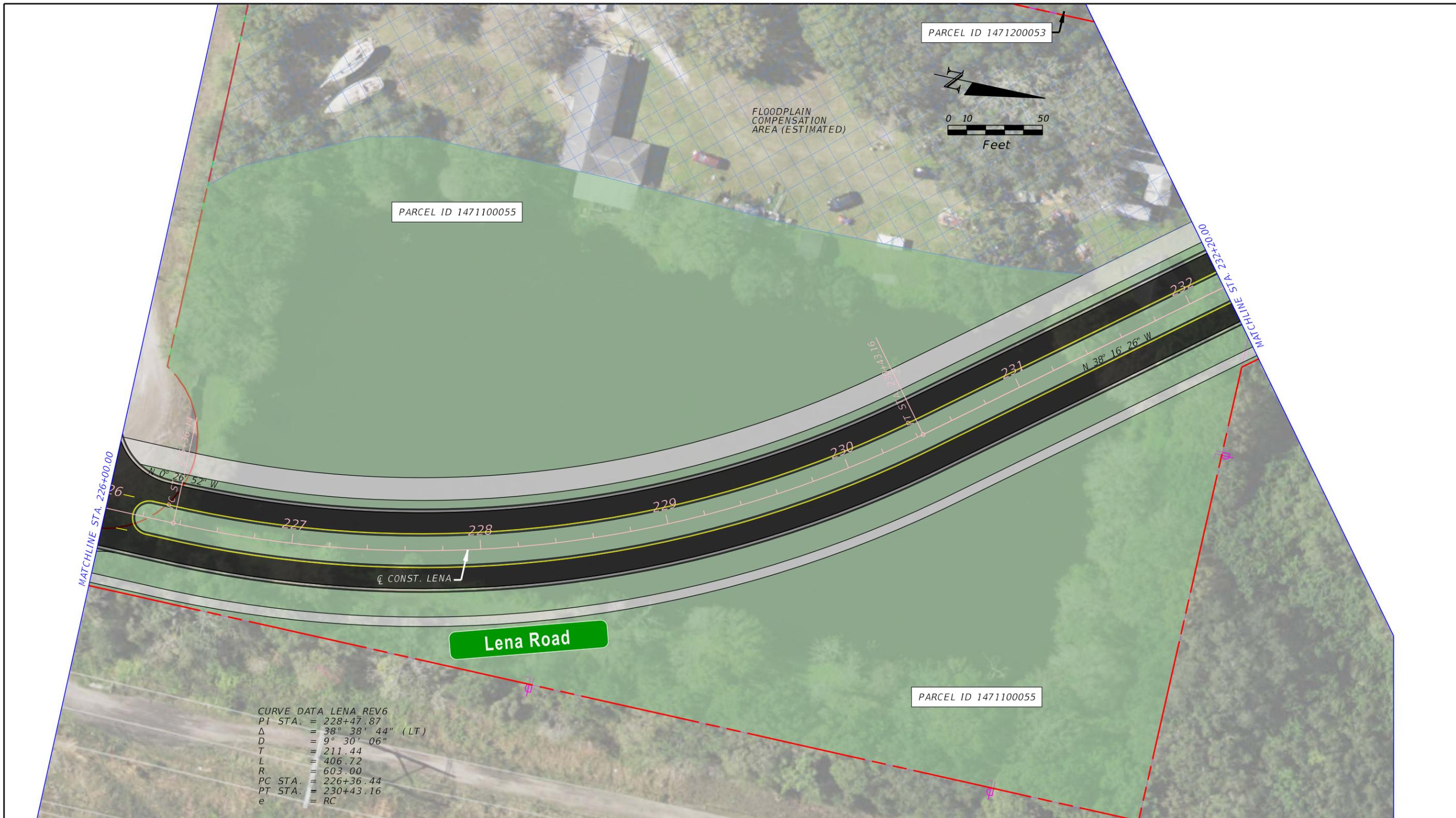


LEGEND

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- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 5
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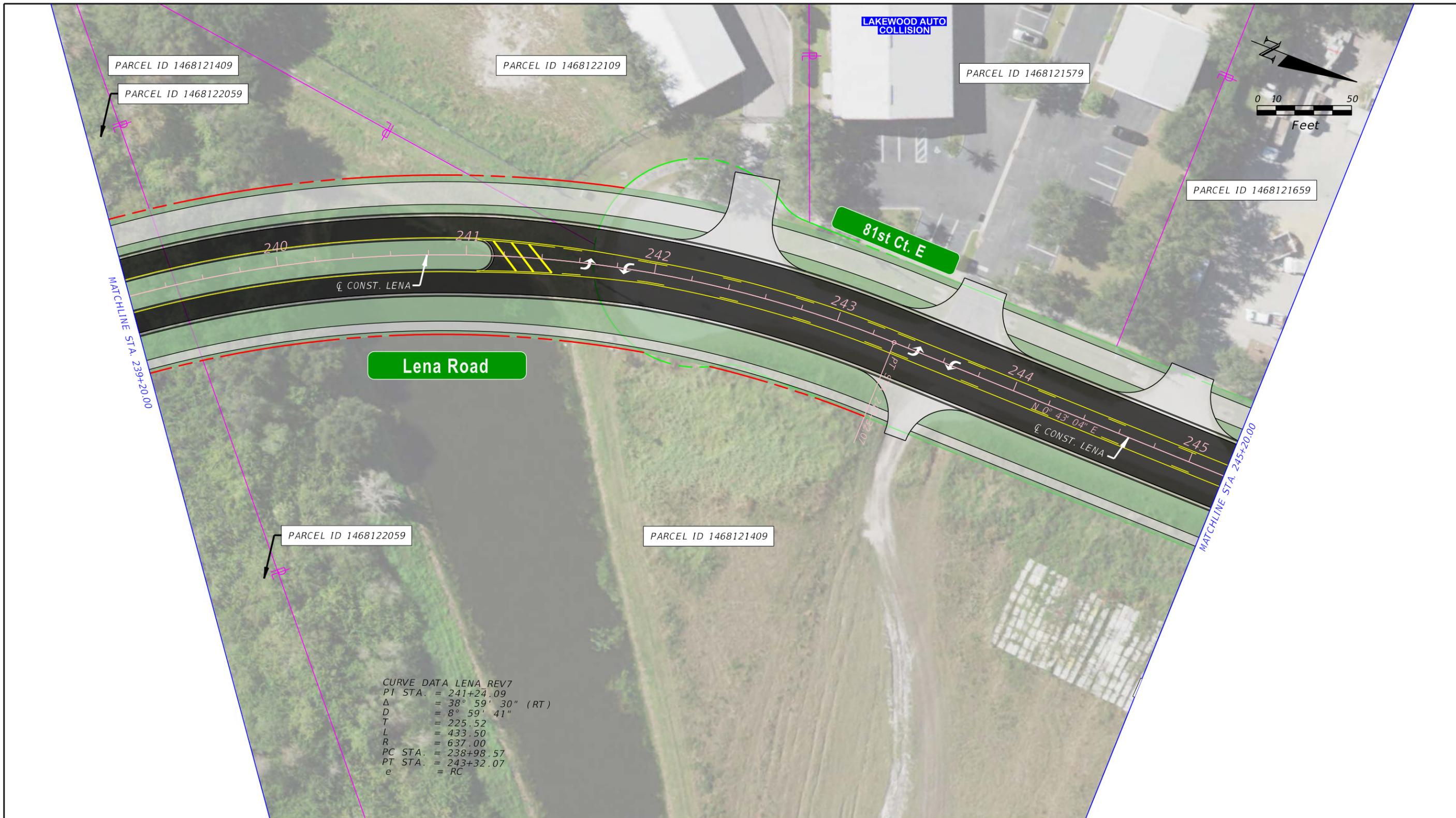
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING RIGHT-OF-WAY

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 7
	DESIGNED BY JLS		PROJECT NO. 6107560		FL. LICENSE NO. 70171		
No.	REVISIONS	DATE	BY	KMP			

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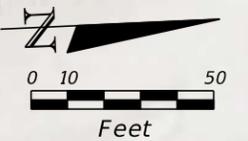
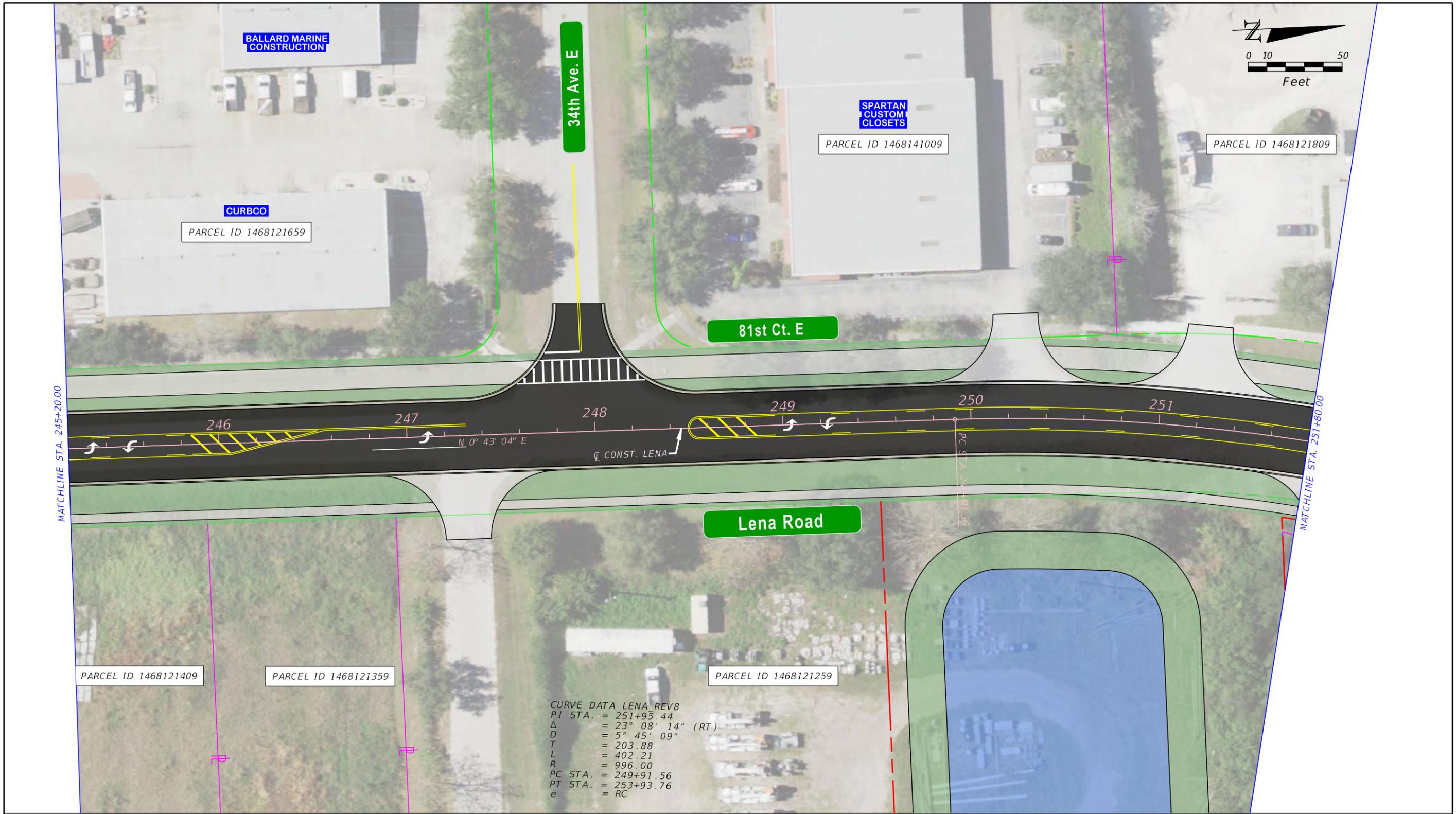
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 9
	DESIGNED BY JLS		PROJECT NO. 6107560		FL. LICENSE NO. 70171		
No.	REVISIONS	DATE	BY	KMP			

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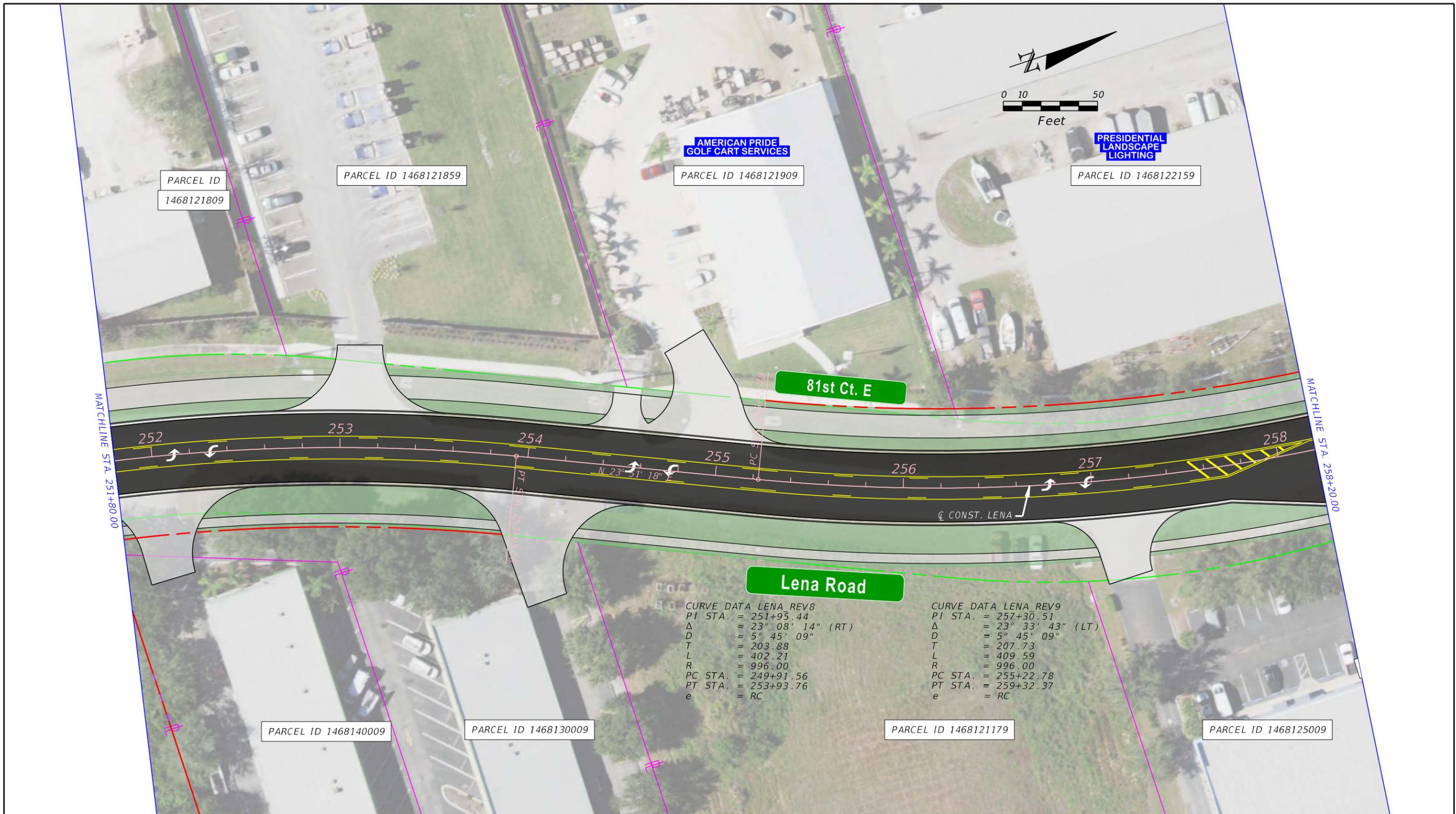
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING RIGHT-OF-WAY

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 10
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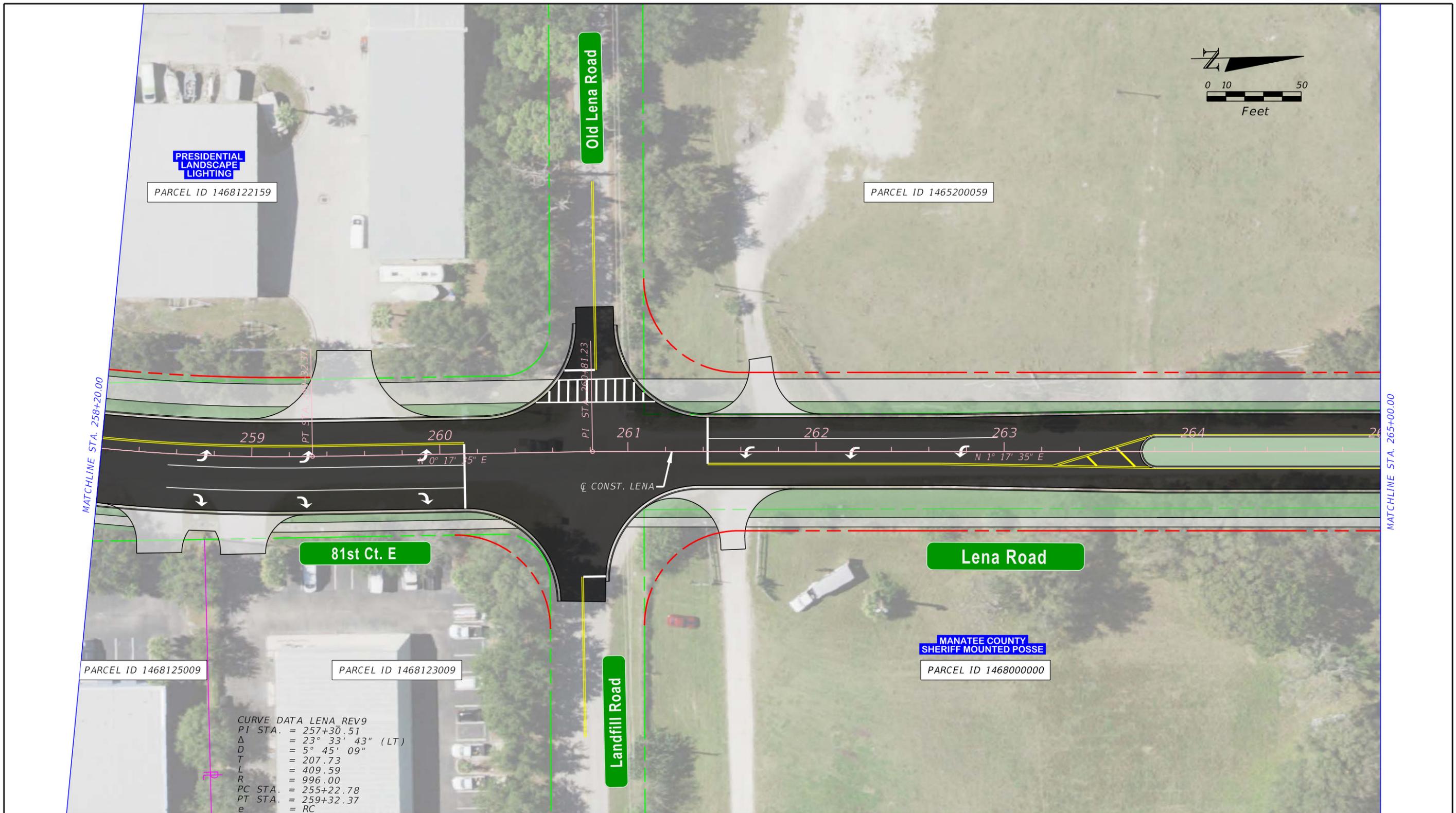


LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021		DESIGN ENGINEER JASON L. STARR	<p style="font-size: 1.2em; font-weight: bold;">RECOMMENDED ALTERNATIVE</p>	SHEET NO. II
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No.	REVISIONS	DATE	BY	KMP			

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PRESIDENTIAL
LANDSCAPE
LIGHTING
PARCEL ID 1468122159

PARCEL ID 1465200059

MATCHLINE STA. 258+20.00

MATCHLINE STA. 265+00.00

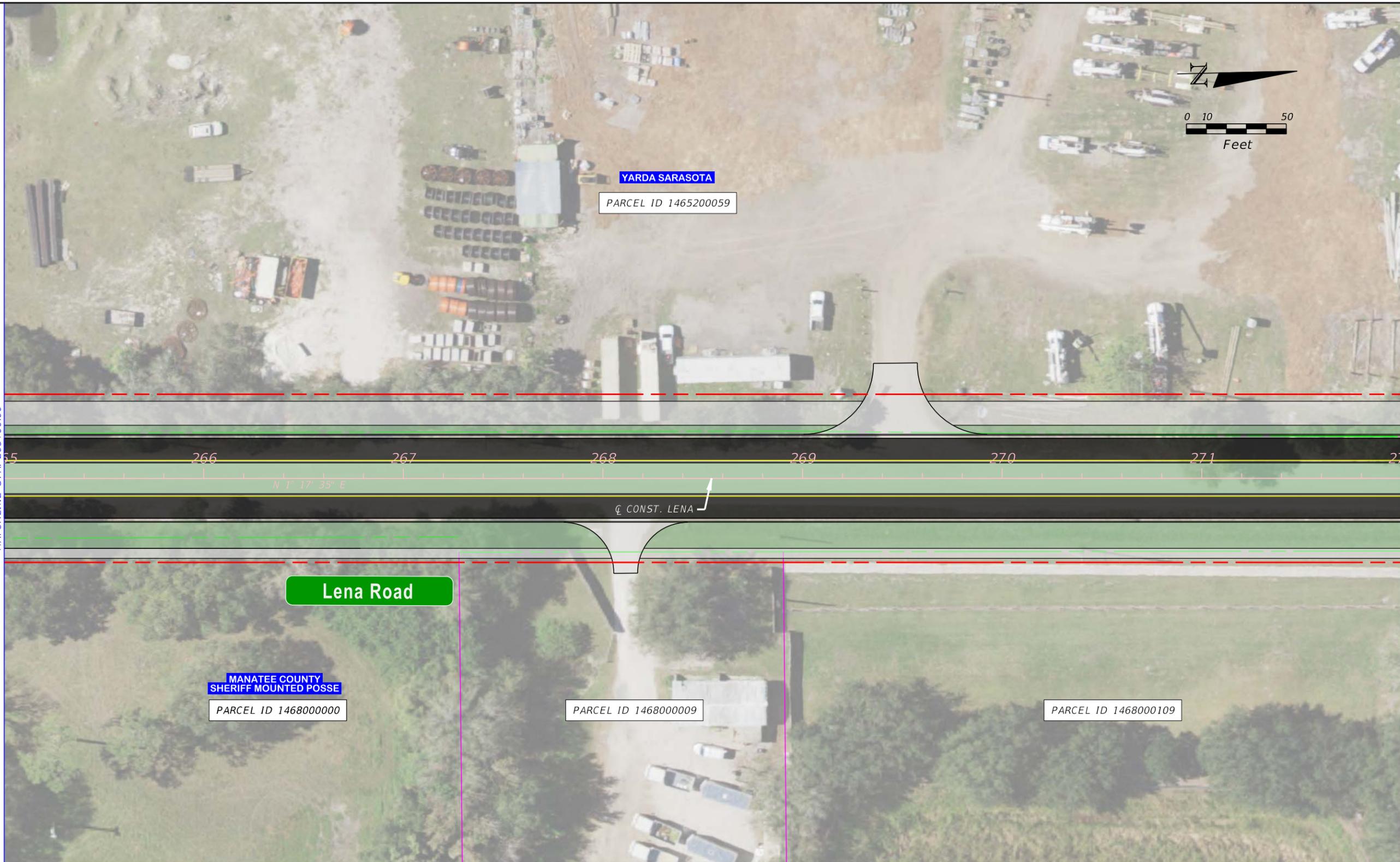
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 12
	DESIGNED BY JLS		PROJECT NO. 6107560		FL. LICENSE NO. 70171		
No.	REVISIONS	DATE	BY	KMP			

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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

				SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO.
						PROJECT NO. 6107560		FL. LICENSE NO. 70171		13
No.	REVISIONS	DATE	BY	KMP						

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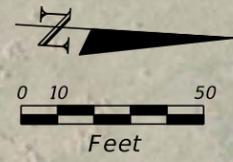
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LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021		DESIGN ENGINEER JASON L. STARR	<p style="font-size: 1.2em; font-weight: bold; margin: 0;">RECOMMENDED ALTERNATIVE</p>	SHEET NO.
	DESIGNED BY JLS		PROJECT NO. 6107560	<p style="font-weight: bold; margin: 0;">MANATEE COUNTY PUBLIC WORKS</p>	FL. LICENSE NO. 70171		14
No.	REVISIONS	DATE	BY	KMP			

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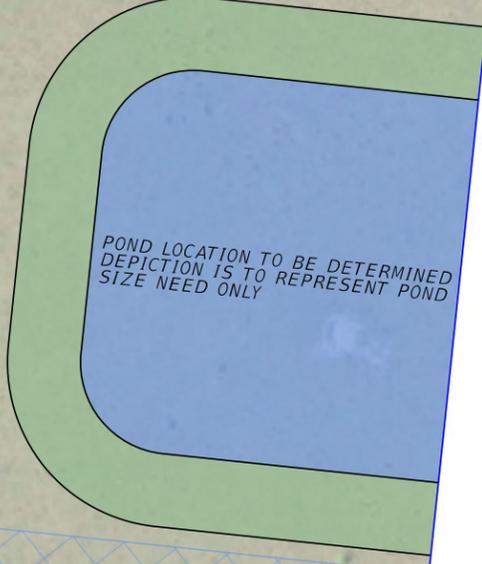
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MATCHLINE STA. 285+20.00



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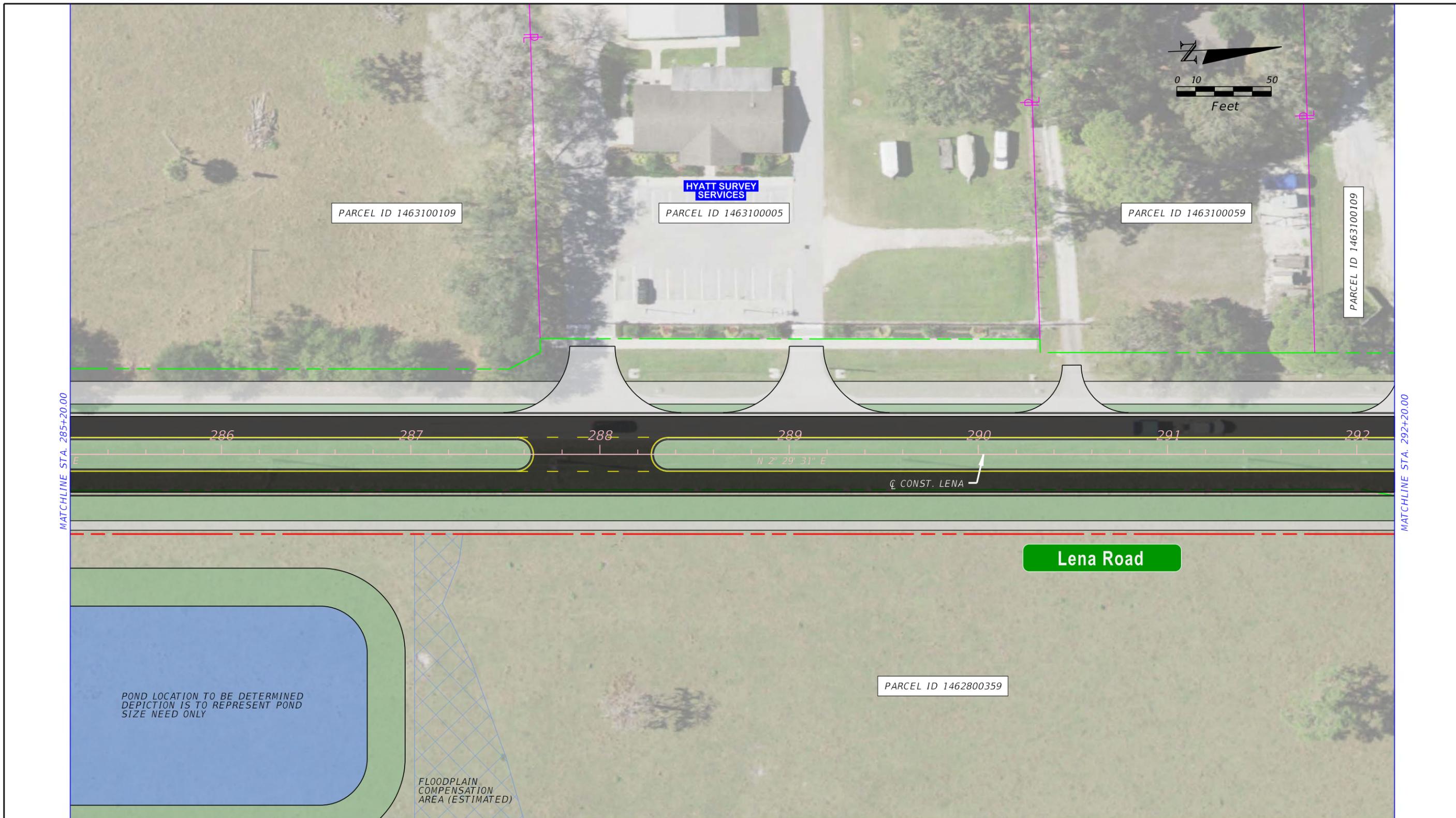


LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING RIGHT-OF-WAY

	SCALE	AS NOTED	HDR ENGINEERING, INC.	DATE	11/2021	DESIGN ENGINEER	JASON L. STARR	SHEET NO.
	DESIGNED BY	JLS	2601 CATTLEMEN ROAD, SUITE 400	PROJECT NO.	6107560	FL. LICENSE NO.	70171	15
	DRAWN BY	RCS	SARASOTA, FLORIDA 34232	MANATEE COUNTY PUBLIC WORKS		RECOMMENDED ALTERNATIVE		
	CHECKED BY	KMP						
No.	REVISIONS	DATE	BY					

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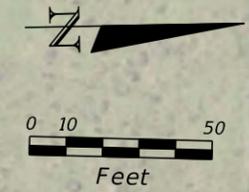
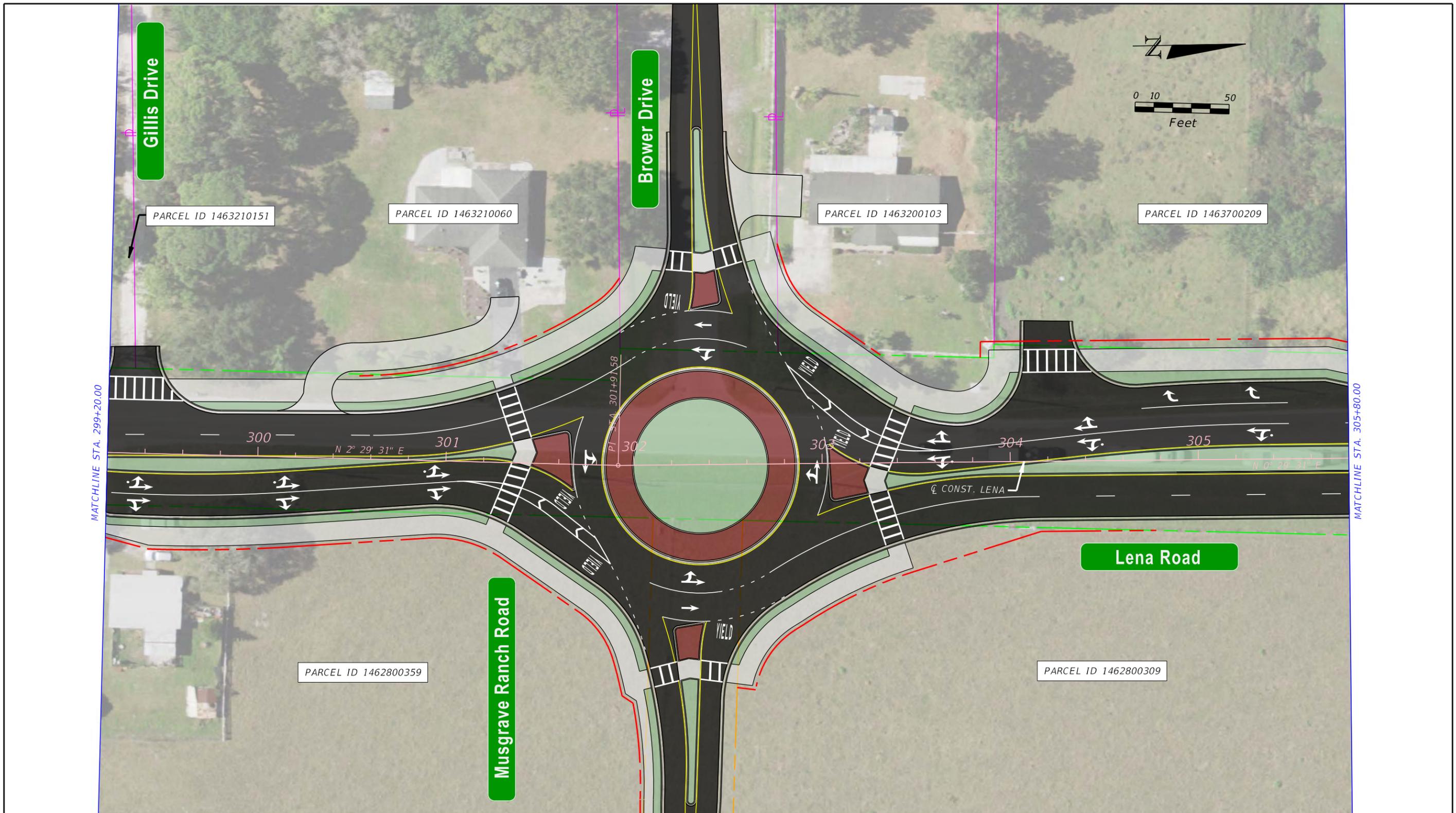


LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	DESIGNED BY JLS	DATE 11/2021		DESIGN ENGINEER JASON L. STARR	<p style="font-size: 1.2em; font-weight: bold;">RECOMMENDED ALTERNATIVE</p>	SHEET NO.
		DRAWN BY RCS	PROJECT NO. 6107560	<p style="font-weight: bold;">MANATEE COUNTY PUBLIC WORKS</p>	FL. LICENSE NO. 70171		16
No.	REVISIONS	DATE	BY	KMP			

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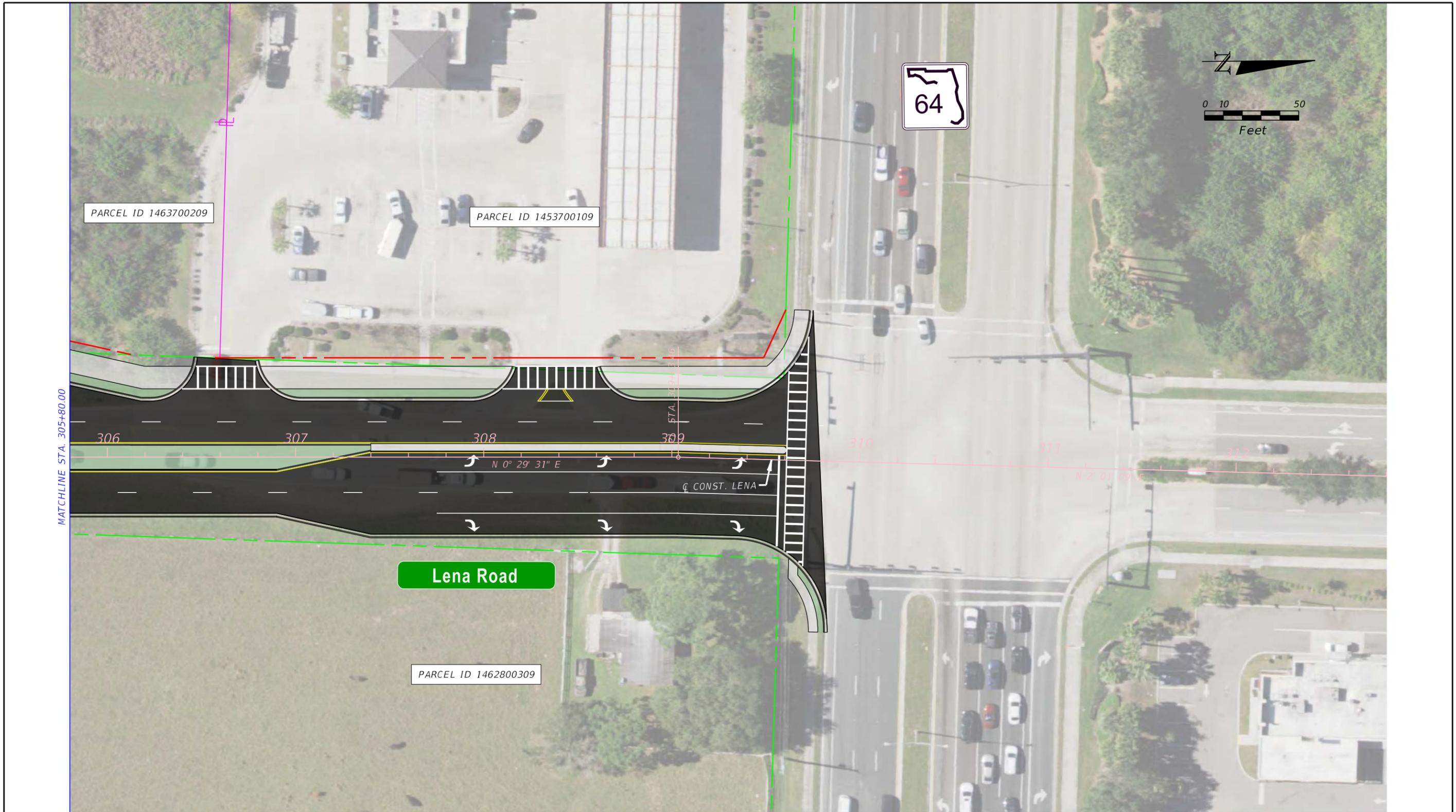


LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- EXISTING RIGHT-OF-WAY
- PROPOSED FLOODPLAIN COMPENSATION AREA

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 18
			PROJECT NO. 6107560		FL. LICENSE NO. 70171		
No.	REVISIONS	DATE	BY	KMP			

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MATCHLINE STA. 305+80.00

LEGEND

- PROPOSED ASPHALT (ROADWAY)
- PROPOSED GRASS
- EXISTING PARCEL LINES
- PROPOSED RIGHT-OF-WAY
- PROPOSED CONCRETE (SIDEWALK, CURB AND GUTTER)
- PROPOSED POND SITE
- PROPOSED FLOODPLAIN COMPENSATION AREA
- EXISTING RIGHT-OF-WAY

	SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 11/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER JASON L. STARR	RECOMMENDED ALTERNATIVE	SHEET NO. 19
			PROJECT NO. 6107560		FL. LICENSE NO. 70171		
No.	REVISIONS	DATE	BY	KMP			

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Appendix B – Design Traffic Memo

Memorandum

Date: 10/04/2021

Project: Manatee County Corridor Studies

To: Eric Shroyer, Manatee County Public Works Project Manager
Darin Rice, Manatee County Public Works Project Engineer

From: Jason Starr, PE, HDR Project Manager
Tarek Lotfy Kamal, EI, HDR Transportation EIT

Subject: Lena Road Corridor Study – Traffic Analysis Memorandum

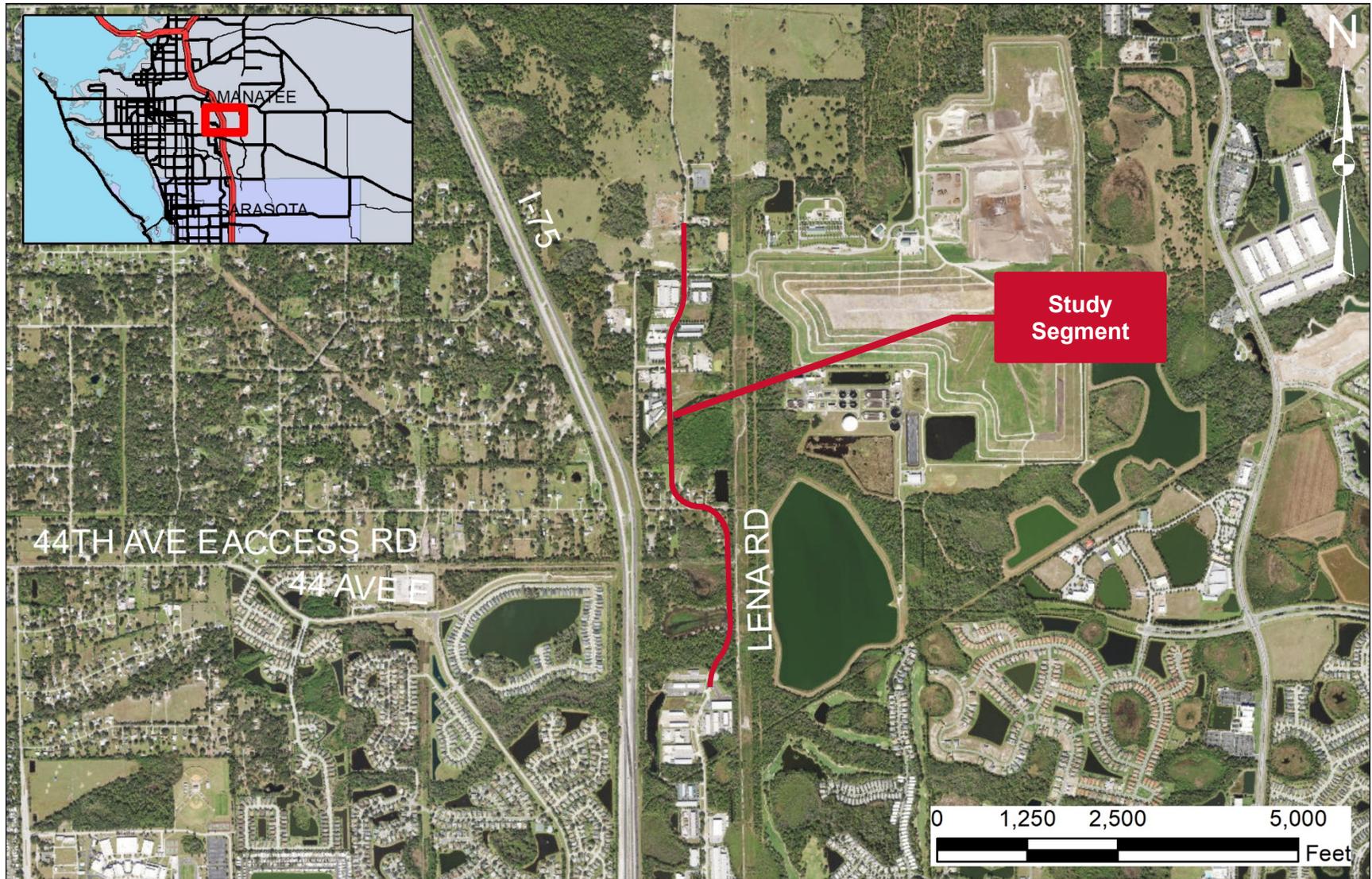
1.0 Introduction/Purpose of Memorandum

The purpose of this memorandum is to document the corridor analysis results for the Lena Road corridor in Manatee County. Existing year (2021) traffic volumes were not developed for the Lena Road segment between south of 44th Avenue East to north of Landfill Road as the majority of this segment doesn't currently exist. Volume characteristics were developed using the Florida Department of Transportation (FDOT) Florida Traffic Online (FTO) traffic counts data, shown in **Appendix A**. Future volumes were projected using a 3.04% growth rate, based on the 10-year historic growth rates. The Build concept (2-Lane Roadway) was analyzed for capacity using the 2020 FDOT Quality/Level of Service (QLOS) Handbook.

2.0 Existing Conditions

The Lena Road corridor connection between south of 44th Avenue East and north of Landfill Road does not currently exist. The project is located in Manatee County, Florida, as illustrated in **Figure 1**.

Figure 1 | Vicinity Map



2.1 Roadway Characteristics

The Lena Road corridor connection between south of 44th Avenue East and north of Landfill Road doesn't currently exist. However, the existing segments of Lena Road corridor are local roadways with a posted speed of 30 miles per hour (mph) north of SR 70 and south of SR 64 beyond the project limits. The existing segments of Lena Road are 2-way undivided roadways between SR 70 and south of 44th Avenue East and between SR 64 and north of Landfill Road. There are no dedicated bike lanes along the northbound or southbound approaches of the existing corridor segments.

2.2 Crash Analysis

A crash analysis was not performed for this segment of Lena Road between south of 44th Avenue East and north of Landfill Road as the segment doesn't currently exist.

2.3 Traffic Data Collection

Turning movement counts were not collected for the intersections along the corridor for this study. Historical traffic data obtained from the FDOT 2020 FTO database and historical traffic data provided by Manatee County were used as the basis for the capacity analysis. Historical AADT data from the year 2020 was not used due to COVID-19 causing abnormal traffic patterns.

2.4 Traffic Parameters

Traffic parameters, including the design-hour factor (K), design-hour directional distribution factor (D), and design-hour truck percentage (DHT), were determined based on the 2019 historical traffic data obtained from the FDOT 2020 FTO database. FDOT FTO Count stations were not available along the existing segments of the Lena Road corridor. Station #130072 along SR 64 east of Lena Road was the closest station to the study limits and was used for the traffic parameters determination. Historical traffic data can be found in **Appendix A**.

The design hour traffic factors utilized for the study area are as follows:

K – Factor = 9.00%

D – Factor = 56.30%

T – Factor = 4.90%

3.0 Growth Rate

The growth rate was determined by comparing the Manatee County population projections, the historic traffic trends, the travel demand from the District 1 Regional Planning Model (D1RPM), and the socioeconomic (SE) data from the D1RPM.

3.1 BEBR Growth Trends

Historical population data obtained from the University of Florida Bureau of Economic and Business Research (BEBR) was used to analyze growth rates that may be applicable in developing future traffic projections. As shown in **Table 1**, Manatee County had a population of about 398,500 in 2020. **Table 1** shows the low, medium, and high population estimates for 2025, 2035, and 2045, along with the corresponding growth rates from 2020 to each future year. The low, medium, and high population growth rates for 2045 range from 0.51% to 2.56%.

Table 1 | BEBR Population Growth Rates – Manatee County

Projection Range	2020 Population	2025		2035		2045	
		Population	Growth	Population	Growth	Population	Growth
Low	398,505	401,400	0.15%	431,900	0.56%	449,200	0.51%
Medium	398,505	437,600	1.96%	498,000	1.66%	544,400	1.46%
High	398,505	470,200	3.60%	566,100	2.80%	653,700	2.56%

3.2 Historic Count Trends

A historical count trends analysis was performed using count data provided by Manatee County. Historical AADT volumes were input into the FDOT Trend worksheet to calculate trend growth rates through the Design Year (2045).

Historical AADT data from the year 2020 was not used due to COVID-19 causing abnormal traffic patterns. The trends analysis method relies on historical traffic counts and does not consider future traffic pattern changes due to new traffic generators or network improvements. Manatee County historical counts and trend worksheets can be found in **Appendix A**.

3.3 D1RPMv2.0

The D1RPMv2.0 was utilized to review the anticipated future roadway network and planned developments through Design Year (2045). Socioeconomic (SE) data provided by Manatee County was used to update the future year (2045) ZDATA to reflect planned development within the county, and both No Build and Build scenarios were modeled for the study corridor.

The D1RPMv2.0 SE data was reviewed for both the model's validated base year (2015) and the future year (2045) to assess socioeconomic growth in the project area. D1RPMv2.0 plots and growth rate calculations can be found in **Appendix B**.

3.4 Determined Growth Rates

The Lena Road corridor connection between south of 44th Avenue East to north of Landfill Road does not currently exist. The historical traffic growth rates were based on Station 08-51 along Lena Road, north of the project limits.

Growth rates for existing and no build scenarios were not applicable as the segment doesn't currently exist.

A Build growth rate of 3.04% was used to forecast the Design Year (2045) traffic volumes for the Build 2-lane roadway connection scenario, based on the 10-year historical traffic trend growth rate from station 08-51.

Table 2 shows the growth rate comparison and the proposed growth rates for the Lena Road corridor.

Table 2 | Determined Growth Rate

Source	Calculated Growth Rate
Historical Traffic (5 Years) - Manatee County Station 08-51	3.85%
Historical Traffic (10 Years) - Manatee County Station 08-51	3.04%
BEBR - Low	0.51%
BEBR - Medium	1.46%
BEBR - High	2.56%
D1RPMv2.0 - No Build	N/A
D1RPMv2.0 - Build	N/A
D1RPMv2.0 - Project Area SE Data	3.10%
Proposed Growth Rate	Existing N/A No Build N/A Build 3.04%

4.0 Existing Year (2021) Volume Development

Existing year (2021) AADT volumes were not developed for this segment of Lena Road as the segment doesn't currently exist.

5.0 Existing Year (2021) Level of Service Analysis

A capacity analysis for the existing year (2021) was not performed for this segment of Lena Road as the segment doesn't currently exist.

6.0 Design Alternatives and Assumptions

One design alternative was assessed for the Design Year (2045). The alternative is a Build alternative which assumes that the existing segments of Lena Road are connected between south of 44th Avenue East and north of Landfill Road with a 2-lane roadway. The Build alternative is anticipated to connect SR 64 and SR 70 which is expected to support traffic within the project area.

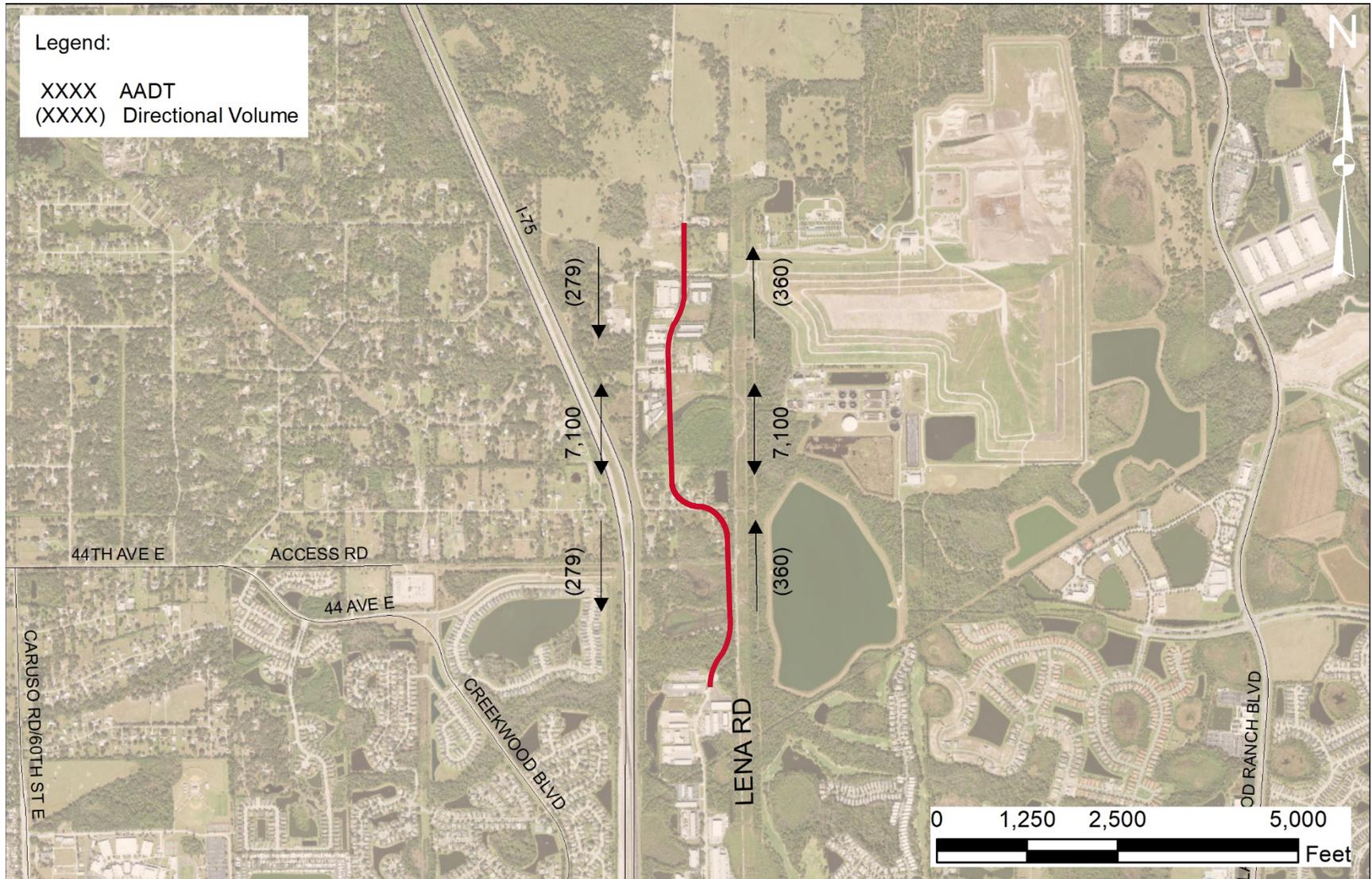
7.0 Design Year (2045) Volume Development

The Manatee County 2019 historical AADT was used to forecast the Design Year (2045) AADT volumes for the Build alternative using a 3.04% growth rate. The Build alternative Design Year (2045) roadway AADT volumes and design hour directional volumes are shown in **Figure 2**. **Table 3** shows the Design Year (2045) design traffic volume characteristics along the Lena Road corridor between south of 44th Avenue East and north of Landfill Road for the Build alternative. The K-Factor (Peak -To- Daily Ratio) was used to calculate the Design-Hour Volume (DHV) and the D-factor (Directional Distribution) was used to calculate the directional volumes.

Table 3 | Design Year (2045) Build Design Traffic Volume Characteristics

Corridor	Lena Road
Limits	From south of 44th Avenue East to north of Landfill Road
2021 AADT	-
2045 AADT	7,100
Peak -To- Daily Ratio	9.00%
DHV	639
Directional Distribution	56.30%
Peak Directional Volume	360
Off Peak Directional Volume	279

Figure 2 | Build Design AADT and Design Hour Directional Volumes



8.0 Design Year (2045) Level of Service Analysis

Generalized Service Volume Tables (GSVT), found in the FDOT Quality/LOS Handbook 2020, were used to perform a corridor capacity analysis. The developed Design year (2045) traffic volumes were compared to the LOS D maximum service volumes found in the GSVTs to determine the volume/LOS D maximum service volume percentage. GSVT Table 7 was used to compare the peak hour directional volumes to the LOS D maximum peak hour directional volumes. **Table 4** provides the capacity analysis for the Design Year (2045) peak hour directional volumes along the Lena Road corridor for the Build alternative. For Design Year (2045) under the Build alternative the corridor is expected to operate under the peak hour directional LOS D maximum service volume.

Under the Build alternative, the corridor is expected to operate at 45% of the peak hour directional LOS D maximum service volume.

Table 4 | Design Year (2045) No Build LOS D Capacity Analysis

Lena Road			
From south of 44th Avenue East to north of Landfill Road			
Attribute	Volume	Peak Hour Directional LOS D Maximum Service Volume	
		2 Lane	
Peak Directional Volume	360	792	45%

*Adjusted for non-state roads, reduced by 10%

9.0 Summary and Conclusion

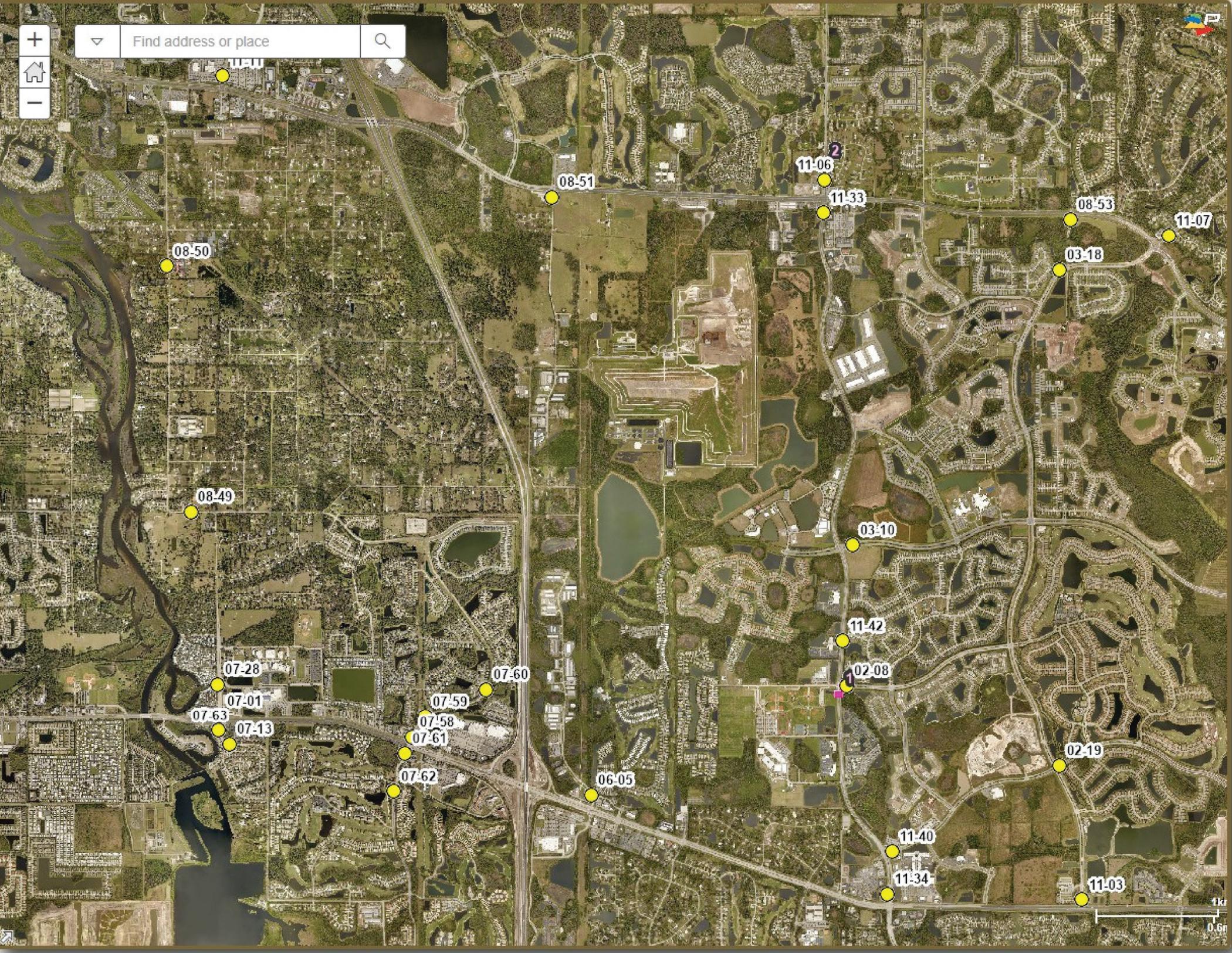
The results of the capacity analysis show that for the design year (2045) under the Build alternative the Lena Road corridor operates under the peak hour directional LOS D maximum service volume. The corridor is expected to operate at 45% of the peak hour directional LOS D maximum service volume

Appendix A
Historical Data and Trends Analysis

Count Stations	Count Stations
OBJECTID	6949
SHAPE	Point
STATION_ID	08-51
ROUTE_NAME	Lena Rd.
DIR	S
DIST	200
CROSS_ROUTE_NAME	SR 64& Manatee Ave.
C86	No Data
C87	No Data
C88	No Data
C89	No Data
C90	No Data
C91	No Data
C92	No Data
C93	No Data
C94	No Data
C95	No Data
C96	No Data
C97	No Data
C98	No Data
C99	No Data
C2000	No Data
C2001	No Data
C2002	No Data
C2003	No Data
C2004	No Data
C2005	No Data
C2006	4171
C2007	3270
C2008	3210
C2009	2616
C2010	3100
C2011	2750
C2012	3207
C2013	2567
C2014	3218
C2015	3237
C2016	3734
C2017	3578
C2018	3601
C2019	3987
C2020	3480
C2021	Null
C2022	Null
C2023	Null
C2024	Null
C2025	Null
EDITORNAME	MOLMSTEAD
LASTUPDATE	3/31/2021 8:05:00 AM
CREATOR	Null
CREATION_DATE	Null



Find address or place



11-11

08-50

08-49

07-28

07-01

07-63

07-13

07-62

07-59

07-58

07-61

07-60

06-05

08-51

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03-10

11-42

02-08

11-40

11-34

08-53

03-18

02-19

11-03

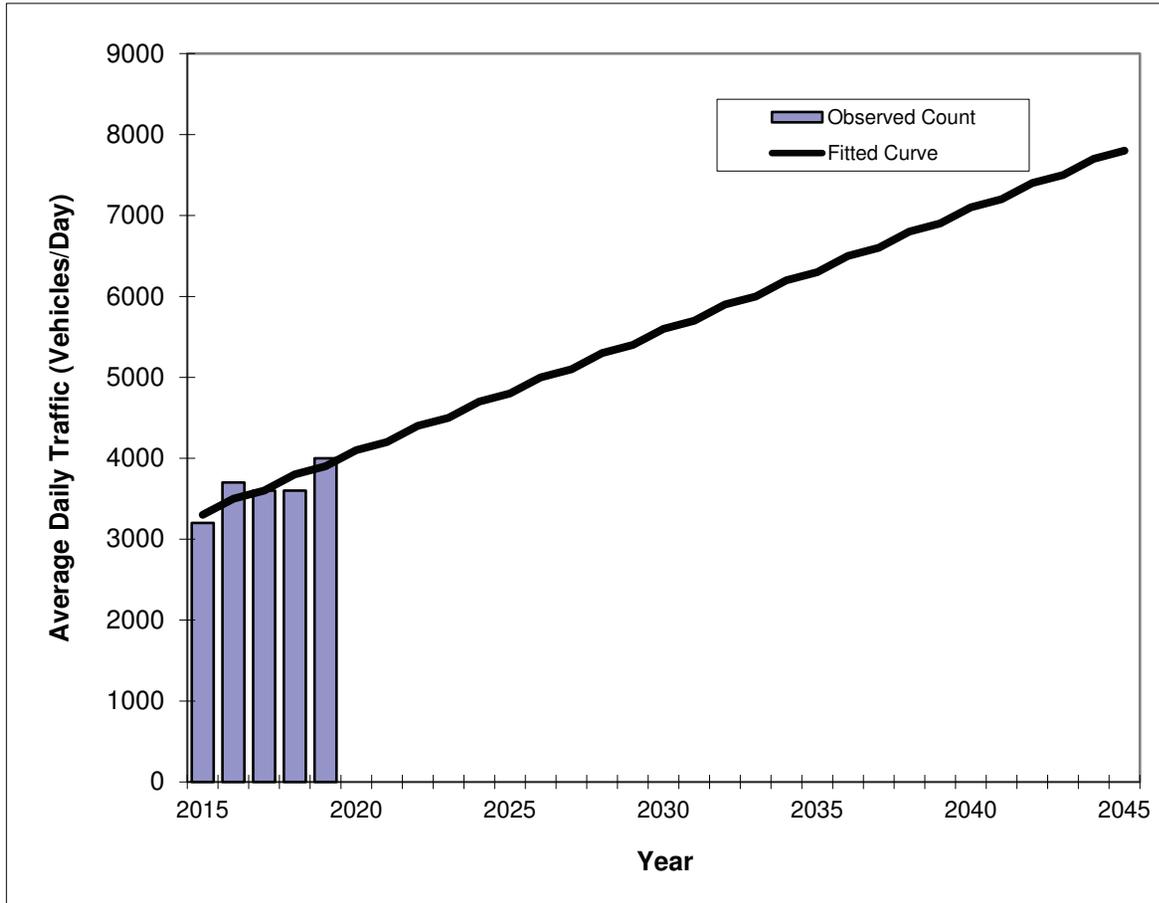
11-07

1k
0.6m

Traffic Trends - V03.a Lena Road --

FIN#	1234
Location	1

County:	Manatee (13)
Station #:	08-51
Highway:	Lena Road



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	3200	3300
2016	3700	3500
2017	3600	3600
2018	3600	3800
2019	4000	3900
2025 Opening Year Trend		
2025	N/A	4800
2035 Mid-Year Trend		
2035	N/A	6300
2045 Design Year Trend		
2045	N/A	7800
TRANPLAN Forecasts/Trends		

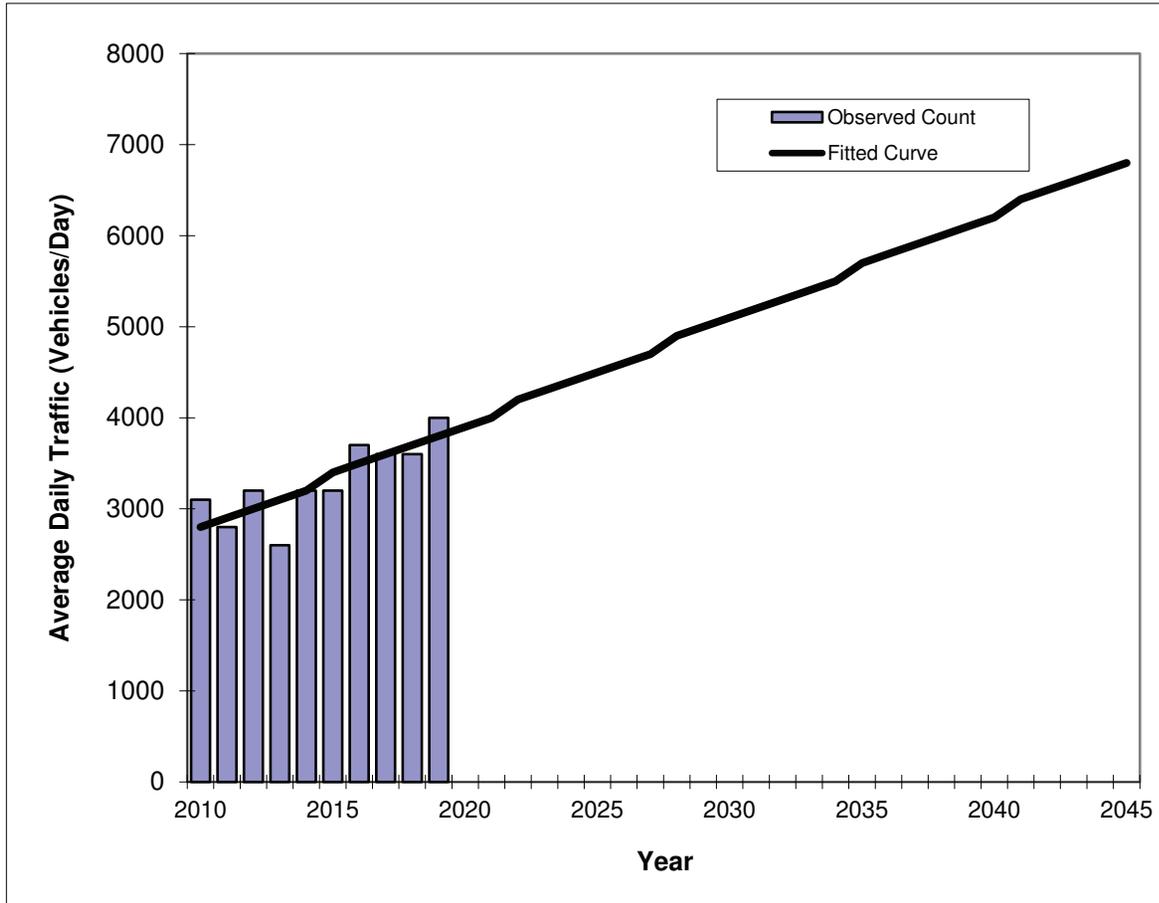
** Annual Trend Increase:	150
Trend R-squared:	68.60%
Trend Annual Historic Growth Rate:	4.55%
Trend Growth Rate (2019 to Design Year):	3.85%
Printed:	8-Sep-21
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a Lena Road --

FIN#	1234
Location	1

County:	Manatee (13)
Station #:	08-51
Highway:	Lena Road



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	3100	2800
2011	2800	2900
2012	3200	3000
2013	2600	3100
2014	3200	3200
2015	3200	3400
2016	3700	3500
2017	3600	3600
2018	3600	3700
2019	4000	3800
2025 Opening Year Trend		
2025	N/A	4500
2035 Mid-Year Trend		
2035	N/A	5700
2045 Design Year Trend		
2045	N/A	6800
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	115
Trend R-squared:	66.70%
Trend Annual Historic Growth Rate:	3.97%
Trend Growth Rate (2019 to Design Year):	3.04%
Printed:	8-Sep-21
Straight Line Growth Option	

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

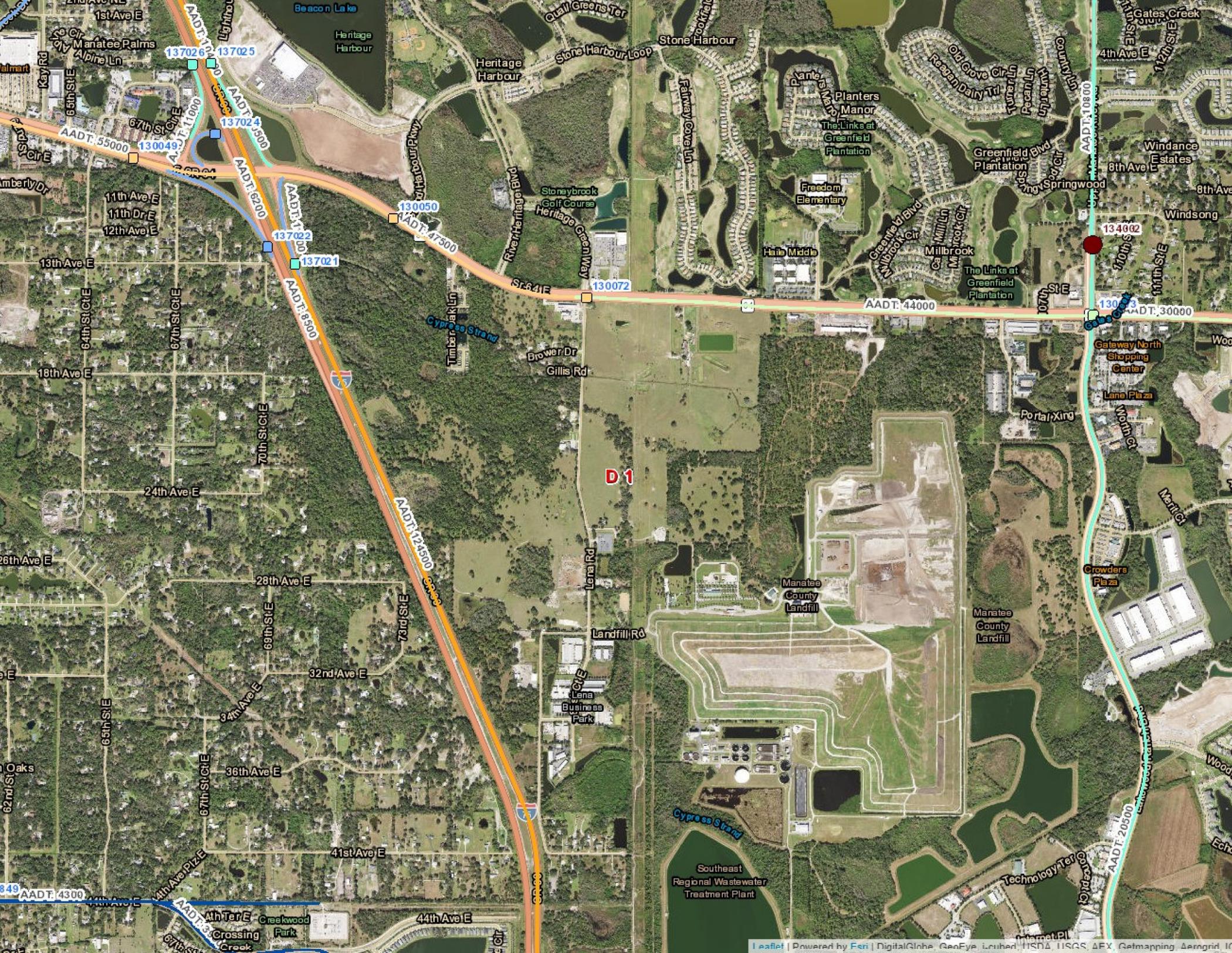
COUNTY: 13 - MANATEE

SITE: 0072 - SR 64, EAST OF LENA ROAD

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	44000	C	E 22000		W 22000	9.00	56.30	4.90
2019	47000	C	E 23500		W 23500	9.00	56.80	4.50
2018	43000	C	E 21500		W 21500	9.00	55.80	4.30
2017	39500	C	E 20000		W 19500	9.00	56.50	6.60
2016	37500	C	E 18500		W 19000	9.00	55.90	6.60
2015	35000	C	E 17500		W 17500	9.00	56.10	6.60
2014	32000	C	E 16000		W 16000	9.00	55.60	7.20
2013	28500	F	E 14000		W 14500	9.00	56.40	5.40
2012	27500	C	E 13500		W 14000	9.00	55.80	5.40
2011	28000	F	E 14000		W 14000	9.00	56.90	6.50
2010	27000	C	E 13500		W 13500	13.38	57.76	6.50
2009	23000	C	E 11500		W 11500	13.22	60.14	7.40
2008	28000	F	E 14000		W 14000	10.99	59.34	7.80
2007	29000	C	E 14500		W 14500	10.21	55.66	7.80
2006	28000	C	E 14000		W 14000	10.19	54.91	11.00
2005	24500	S	E 12000		W 12500	10.10	53.40	10.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES



137026 137025

130049 137024

137022

137021

130050

130072

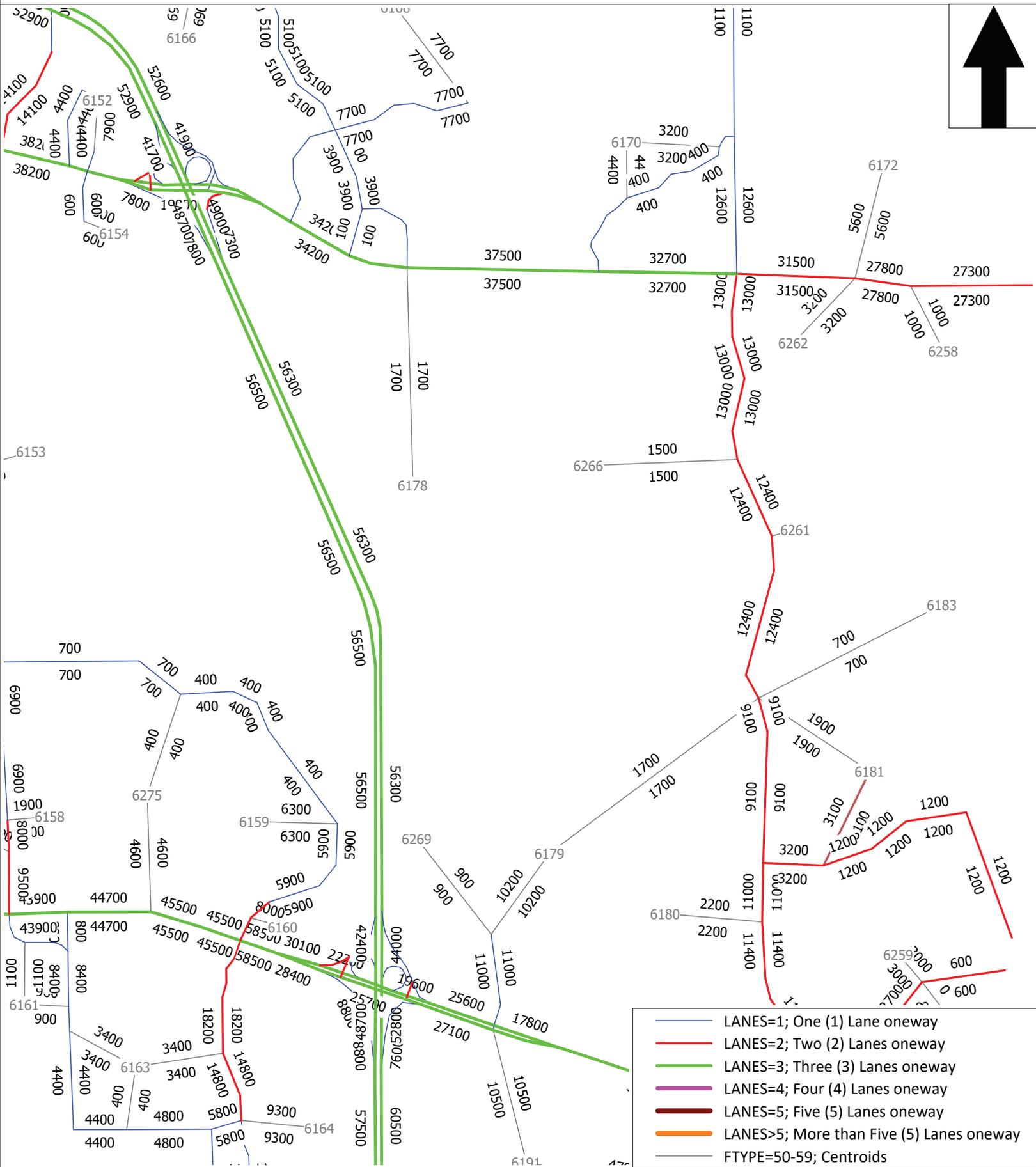
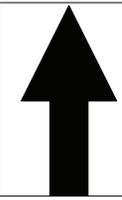
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Appendix B
D1RPMv2.0

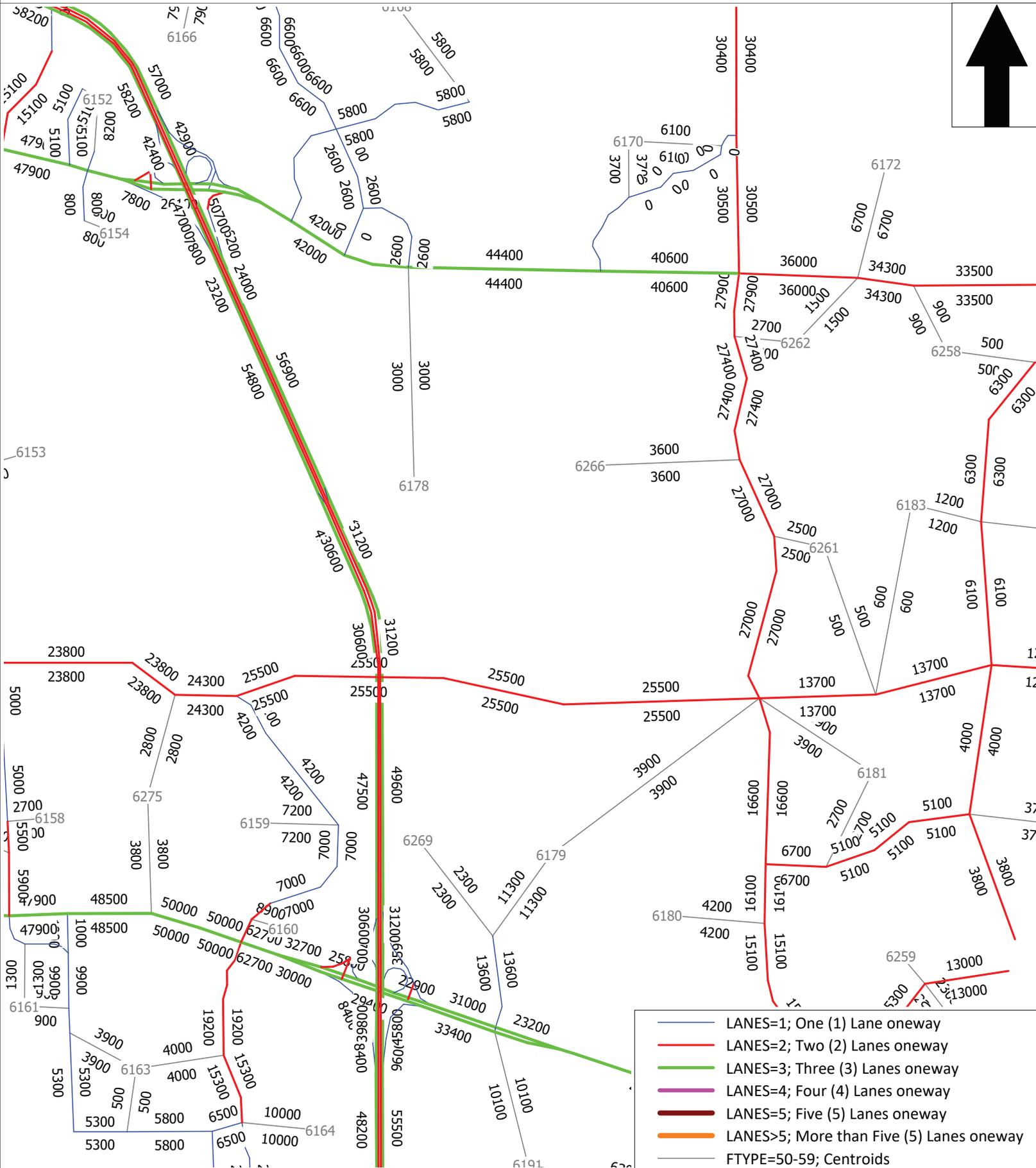
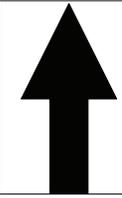
D1RPMv2.0



Base Year 2015 AADT (Duplicate Posts)

2015 Base Year Validation

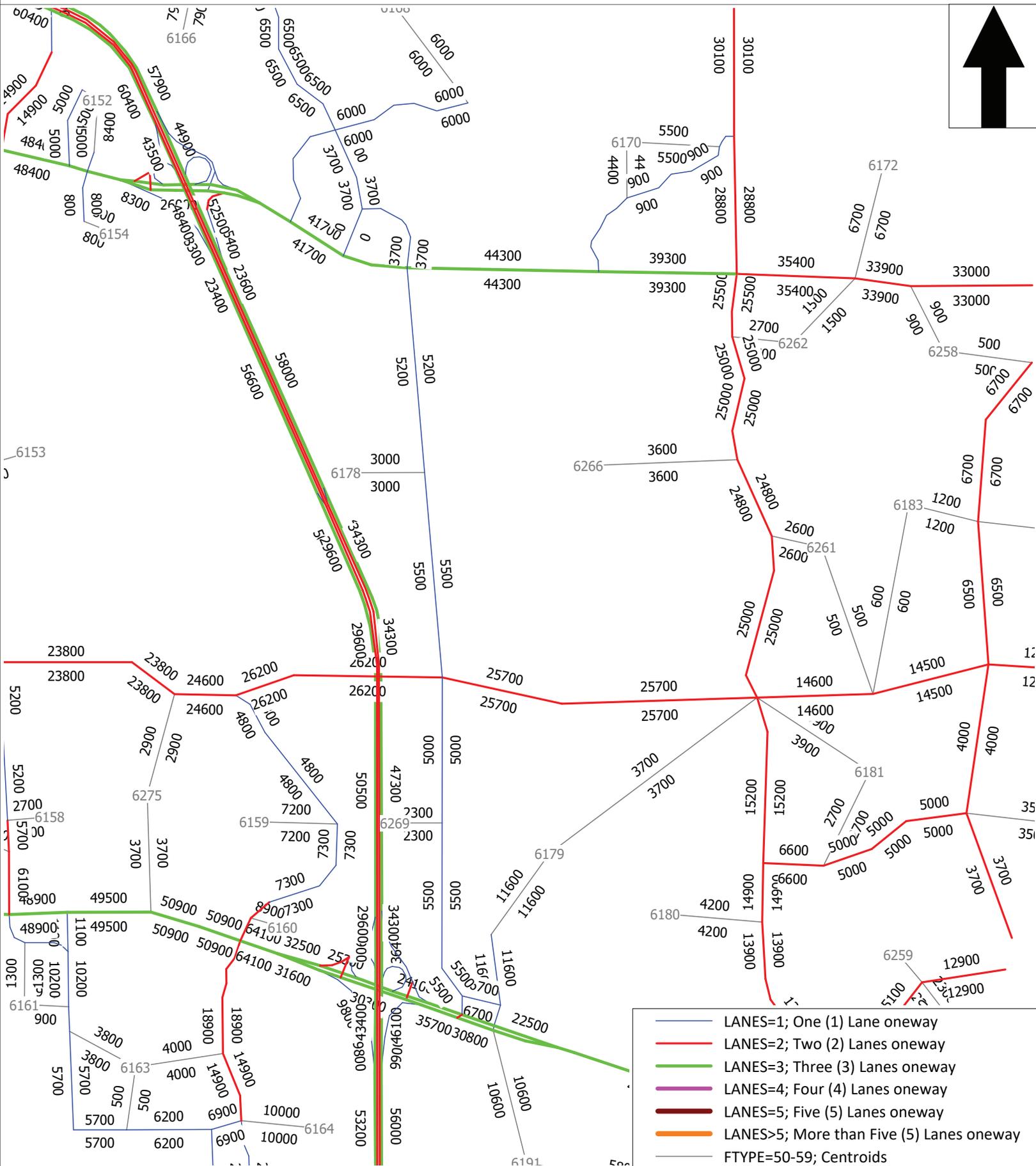
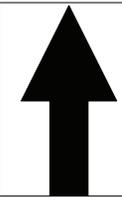
D1RPMv2.0



Horizon Year 2045 AADT (Duplicate Posts)

2045 Updated Cost Feasible

D1RPMv2.0



Horizon Year 2045 AADT (Duplicated Posts)

2045 Lena Road Build 2-Lanes

Lena Road Immediate Project Area

D1RPMv2.0 2015 Base Model

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	35	2	96	49	147	55	194	396	0	0	0
6269	0	1	1	0	25	25	125	175	78	0	0

D1RPMv2.0 2045 Cost Feasible Model

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	54	57	227	148	158	104	305	567	0	0	0
6269	39	29	124	34	71	69	182	322	220	0	0

D1RPMv2.0 2015 Base Model to 2045 Cost Feasible Model Linear Growth

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	1.81%	91.67%	4.55%	6.73%	0.25%	2.97%	1.91%	1.44%	0.00%	0.00%	0.00%
6269	0.00%	93.33%	410.00%	0.00%	6.13%	5.87%	1.52%	2.80%	6.07%	0.00%	0.00%
Total Type Growth	5.52%	92.22%	8.73%	9.05%	1.10%	3.88%	1.76%	1.86%	6.07%	0.00%	0.00%
Overall Area Growth	3.10%										

Lena Road Expanded Project Area

D1RPMv2.0 2015 Base Model

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	35	2	96	49	147	55	194	396	0	0	0
6269	0	1	1	0	25	25	125	175	78	0	0
6179	1163	0	2166	1116	68	289	641	998	0	0	0
6191	737	376	2740	1414	66	653	510	1229	0	0	0

D1RPMv2.0 2045 Cost Feasible Model

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	54	57	227	148	158	104	305	567	0	0	0
6269	39	29	124	34	71	69	182	322	220	0	0
6179	1248	152	2601	1344	171	310	688	1169	78	964	2125
6191	791	403	2939	1516	115	701	547	1363	0	0	0

D1RPMv2.0 2015 Base Model to 2045 Cost Feasible Model Linear Growth

ZONE	SFDU	MFDU	RESDPOP	WORKERS	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP	HMDU	SCHOOL	UNIVERSITY
6178	1.81%	91.67%	4.55%	6.73%	0.25%	2.97%	1.91%	1.44%	0.00%	0.00%	0.00%
6269	0.00%	93.33%	410.00%	0.00%	6.13%	5.87%	1.52%	2.80%	6.07%	0.00%	0.00%
6179	0.24%	0.00%	0.67%	0.68%	5.05%	0.24%	0.24%	0.57%	0.00%	0.00%	0.00%
6191	0.24%	0.24%	0.24%	0.24%	2.47%	0.25%	0.24%	0.36%	0.00%	0.00%	0.00%
Total Type Growth	0.34%	2.30%	0.59%	0.60%	2.28%	0.53%	0.57%	0.74%	9.40%	0.00%	0.00%
Overall Area Growth	1.36%										

Appendix C – Natural Resources Assessment Memo

Natural Resources Assessment Technical Memorandum

Lena Road

Project Development and Corridor Study Report

October 2021



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- Appendix A – Soil Data Report
- Appendix B – IPaC Resource List
- Appendix C – Affects Determination Keys
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Executive Summary

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. . The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with State Road (SR) 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida. This Natural Resources Assessment Technical Memorandum was prepared to support the Study through the evaluation of Protected Species and Habitat, Wetlands and Other Surface Waters, and Essential Fish Habitat. This Technical Memorandum documents the results of the corridor assessment in order to support decisions associated with the proposed project as it relates to natural resources potentially present in the corridor study area.

Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas, including wetlands, critical wildlife habitats, and listed species.

The natural resources assessment was performed using as guidance Part 2, Chapter 16 Protected Species and Habitat and Chapter 9 Wetlands and Other Surface Waters of the Florida Department of Transportation (FDOT) PD&E Manual (July 1, 2020). However, this assessment is not considered a full Natural Resources Evaluation (NRE) as defined in the FDOT PD&E Manual. In addition, the natural resources assessment did not evaluate proposed stormwater management facilities outside of the corridor study area, such as potential pond locations, if any.

Protected Species and Habitat

The project was evaluated for potential impacts to federal and State of Florida (state) endangered or threatened species of fish, wildlife, and plants (listed species) and habitat of such species that has been designated as critical habitat under Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. Protected species were also reviewed for their potential to occur within the corridor study area.

Federal Protected Wildlife and Critical Habitat

Three federal listed species protected by the U.S. Department of Interior Fish and Wildlife Service (USFWS) potentially occur within the corridor study area. The proposed project would be expected to result in the effect determinations provided in **Table E-1** for federal listed species. Migratory birds and their habitat, including the non-listed but federally protected bald eagle and osprey were also present in this region and included in **Table E-1**. However, this list may need to be refined based on the project alternative selected to proceed. USFWS designated critical habitat, as defined by Congress 50 CFR §17.94, was not present within the corridor study area. Therefore, the proposed project would not result in the *destruction or adverse modification of critical habitat*.

Table E-1: Project Effect Determinations for Federal Listed and Protected Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
Federal Listed Wildlife			
<i>Drymarchon corais couperi</i>	Eastern indigo snake	Threatened	May affect, not likely to adversely affect
<i>Mycteria americana</i>	Wood stork	Threatened	May affect, not likely to adversely affect
<i>Aphelocoma coerulescens</i>	Florida scrub jay	Threatened	No affect anticipated
Federal Protected Wildlife			
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA* MBTA**	Minimal or no impact expected
<i>Pandion haliaetus</i>	Osprey	MBTA**	Minimal or no impact expected

* Bald & Golden Eagle Protection Act and Migratory Bird Treaty Act. ** Migratory Bird Treaty Act

State Protected Wildlife

Eight state listed wildlife managed by the Florida Fish and Wildlife Conservation Commission (FWC) could potentially occur within the corridor study area. The proposed project would be expected to result in the effect determinations provided in **Table E-2** for state listed species. However, this list may need to be refined based on the project alternative selected to proceed.

Table E-2: Project Effect Determinations for State Listed Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	Threatened	No effect anticipated
<i>Falco sparverius paulus</i>	Southeastern American kestrel	Threatened	No effect anticipated
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	Threatened	No effect anticipated
Wading Birds			
<i>Egretta caerulea</i>	Little blue heron	Threatened	No effect anticipated
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No effect anticipated
<i>Platalea ajaja</i>	Rosette spoonbill	Threatened	No effect anticipated
Nesting Shorebirds			
<i>Sternula antillarum</i>	Least Tern	Threatened	No effect anticipated

Federal and State Protected Plants

Eleven federal and state listed plants protected by the Florida Department of Agricultural and Consumer Services (FDACS) that have the potential to occur within the corridor study area, including six endangered and five threatened. These listed plant species are shown in **Table E-3**. None were observed during preliminary field surveys. However, this list may need to be refined based on the project alternative selected to proceed. Due to their low likelihood of occurrence, there is **no effect anticipated** to these federal and state listed plant species.

Table E-3: Project Effect Determinations for Federal and State Listed Plants

Scientific Name	Common Name	Status	Project Effect Determination
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	State Threatened	No effect anticipated
<i>Centrosema arenicola</i>	Sand Butterfly Pea	State Endangered	No effect anticipated
<i>Chionanthus pygmaeus</i>	Pygmy Fringe-tree	Federal Endangered	No effect anticipated
<i>Cladonia perforata</i>	Florida Perforate Cladonia	Federal Endangered	No effect anticipated
<i>Lechea cernua</i>	Nodding Pinweed	State Threatened	No effect anticipated
<i>Linum carteri var. smallii</i>	Small's Flax	State Endangered	No effect anticipated
<i>Nemastylis floridana</i>	Celestial Lily	State Endangered	No effect anticipated
<i>Nolina atopocarpa</i>	Florida Beargrass	State Threatened	No effect anticipated
<i>Pteroglossaspis ecristata</i>	Giant Orchid	State Threatened	No effect anticipated
<i>Rhynchospora megaplumosa</i>	Large-plumed Beaksedge	State Endangered	No effect anticipated
<i>Zephyranthes simpsonii</i>	Redmargin Zephyrlily	State Threatened	No effect anticipated

Wetlands and Other Surface Waters

Wetlands and other surface waters were identified within the corridor study area. The primary wetland types in the study area included: Stream and Lake Swamps, Mixed Wetland Hardwood, Exotic Wetland Hardwoods, Wetland Forested Mixed, Freshwater Marshes, and Wet Prairies. Generally, all wetland systems identified were in moderate to poor condition, having incurred drainage by ditching, watershed conversions to farmland, and/or nearby development. Vegetation communities within the wetlands have also been degraded by agricultural activities, tree harvesting, and nuisance and exotic species growth.

Surface waters were present mostly associated with roadside ditches on the northern half of the study area and some remnant field ditches, derived from agricultural land uses. There are two primary water channels associated with Lena Road. These drainages were historically natural and associated with wetlands.

A total of 16 wetlands were identified within the corridor study area. A total of five surface waters were identified within the corridor study area, all consisting of drainage ditches either running along the roadside or draining

away from the roadway. During evaluation of the road alignment alternatives, potential impacts to wetlands and surface waters would be identified and quantified. Direct impacts would include permanent and temporary impacts and would be quantified and tabulated for the state and federal permit applications.

Essential Fish Habitat

Essential fish habitat does not occur within the corridor study area; therefore, an Essential Fish Habitat (EFH) Assessment was not required.

1.0 Introduction

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. This Natural Resources Assessment Technical Memorandum was prepared to support the Study through the evaluation of **Protected Species and Habitat, Wetlands and Other Surface Waters, and Essential Fish Habitat**. This Technical Memorandum documents the results of the corridor assessment to support decisions associated with the proposed modifications to Lena Road as it relates to natural resources potentially present in the corridor study area.

Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas, including wetlands, critical wildlife habitats, and listed species.

The purpose of this natural resources assessment is to demonstrate due diligence in accordance with federal and state regulations and to begin conformance with the requirements of Title 23 of the Code of Federal Regulations (CFR) Part 771 and applicable federal and state laws, including the National Environmental Policy Act (NEPA). The natural resources assessment was performed using as guidance Part 2, Chapter 16 Protected Species and Habitat and Chapter 9 Wetlands and Other Surface Waters of the Florida Department of Transportation (FDOT) PD&E Manual (July 1, 2020). However, this assessment is not considered a full Natural Resources Evaluation (NRE) as defined in the FDOT PD&E Manual. In addition, the natural resources assessment did not evaluate proposed stormwater management facilities outside of the corridor study area, such as potential pond locations, if any.

1.1 Project Description

Manatee County proposes the extension of Lena Road to State Road (SR) 64. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with SR 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida, as shown in **Figure 1-1**. The County is performing a full range of engineering and environmental studies within the study corridor to support the evaluation of project alternatives and develop a preliminary design.

The project is located in southwestern Manatee County within the Williams Creek watershed and the Cypress Strand watershed. Williams Creek is a tributary to the Braden River. Cypress Creek is a tributary to the Manatee River (Below Dam) watershed. **Figure 1-2** shows the study area on the United States Geologic Survey (USGS), 7.5 Minute "Lorraine, Florida" (2021) Quadrangle topographic maps with an aerial photograph base. For this project, the study area includes a 500-foot buffer, east and west of the existing road centerline (i.e., project limits), totaling a 1,000-foot-wide study corridor. All resources discussed herein fall within this study area.

1.2 Purpose and Need

The primary purpose of the Lena Road improvements is to provide congestion relief by providing a collector roadway between SR 70 and SR 64. Located between Interstate 75 (I-75) and Lakewood Ranch Boulevard, the new extension of Lena Road to SR 64 would provide connectivity between two commercial/industrial areas currently accessed from SR 70 or SR 64 and provide an alternative local route between these two major east-west corridors. The extension would also connect to the future extension of 44th Avenue East, providing alternative east-west access across I-75.

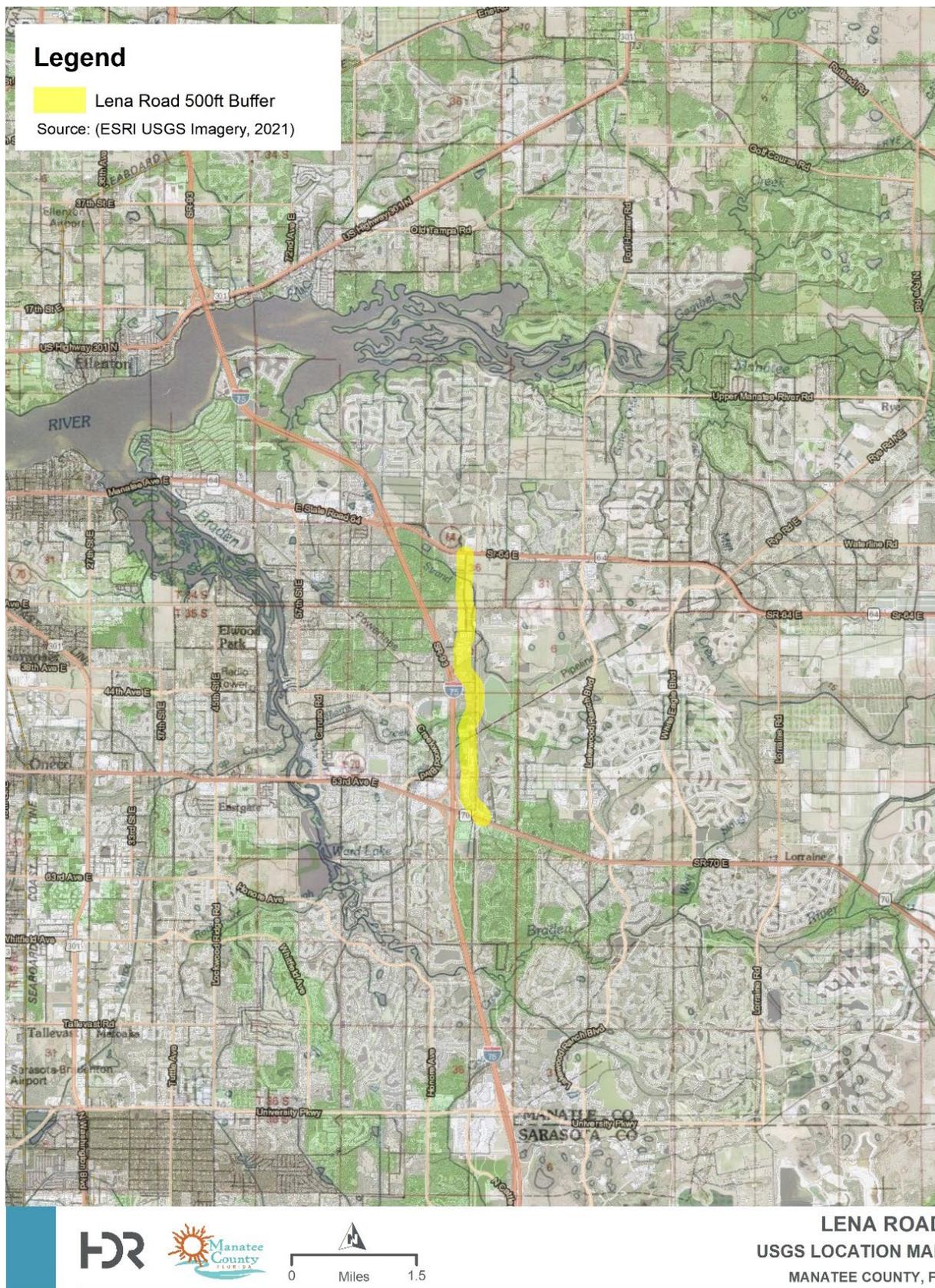


Figure 1-2: Study Area

2.0 Existing Conditions

2.1 Land Use

The land use in this part of Manatee County has been characterized by agriculture for decades, including vegetable farms, citrus groves, and cattle pastures. The 1954 U.S. Census of Agriculture reported the aggregated land in farms as 309,000 acres, or 69 percent of all county land (USDA 1958). This area of Manatee County is coastal lowlands, comprised mostly of nearly level plains that have undergone little or no dissection since successive sea level withdrawals in the Pleistocene epoch (Ice Age) (USDA 1983). Aerial imagery from the University of Florida Digital Library Collection was reviewed, including photography from 1940, 1957, and 1970, for recent land use conditions and environmental features. The historic aerial photography confirmed that current-day Lena Road was present in 1957 only as a 4,800 foot road south from SR 64, to current-day Landfill Road. At that time, it was sole access to a farm that was present in 1940, including citrus groves and agricultural fields. Except for this segment, no other portion of the current Lena Road alignment south to SR 70 was present in 1970 although a smaller footprint of the county landfill appears to be under construction.

The Southwest Florida Water Management District (SWFWMD) Land Use Land Cover data (2017) and 2020 aerial imagery were reviewed for existing land uses within the study area. Land use was categorized using the FDOT *Florida Land Use, Cover and Forms Classification System* (FLUCFCS) (1999). Site reviews were performed to confirm current conditions and recent changes in land use and land cover types, particularly for this rapidly changing corridor. Natural areas were evaluated for habitat type, quality, and any degradations evident. The dominant existing land uses within the Lena Road study area consist of Commercial and Services (FLUCFCS 140), covering 19.7 percent, and Industrial (FLUCFCS 150) at 11.7 percent, each associated with the Lena Business Park. These areas are on the southern portion of the project and in the middle near Landfill Road. Agricultural (FLUCFCS 210 and 250) is 5.6 percent of the project area, primarily at the northern project area. Low-Density Residential (FLUCFCS 110) is 6.3 percent of land area, primarily at the central and northern project areas and Open Lands (FLUCFCS 190) are 7.8 percent of the study area at the northern extent of the project. **Table 2-1** summarizes the land use within the study area, and **Figure 2-1** is a map of the land use within the study area.

Table 2-1: SWFWMD Land Use Land Cover Summary for the Study Area

FLUCFCS Code	FLUCFCS Description	Acres within Study Area	Percent within Study Area
Urban Land Uses			
110	Low Density, <2 dwelling units/acre	29.2	6.3%
130	130: High Density, 6 or more dwelling units/acre	4.6	1.1%
140	Commercial and Services	91.2	19.7%
1423	Junk Yard	16.5	3.6%
150	Industrial	54.4	11.7%
190	Open Land (Urban)	36.1	7.8%
810	Transportation	31.8	6.9%
Agriculture			
210	Cropland and Pastureland	14.7	3.2%
250	Specialty Farms	11.1	2.4%
Surface Waters and Natural Habitats			
510	Streams and Waterways	4.0	0.9%
530	Reservoirs	20.3	4.4%
615	Stream and Lake Swamps (bottomland)	9.0	1.9%
617	Mixed Wetland Hardwood	39.8	8.5%
641	Freshwater Marshes	29.9	6.5%
643	Wet Prairies	3.0	0.6%
644	Emergent Aquatic Vegetation	0.4	0.1%
Total Area of Interest		463.0	100%

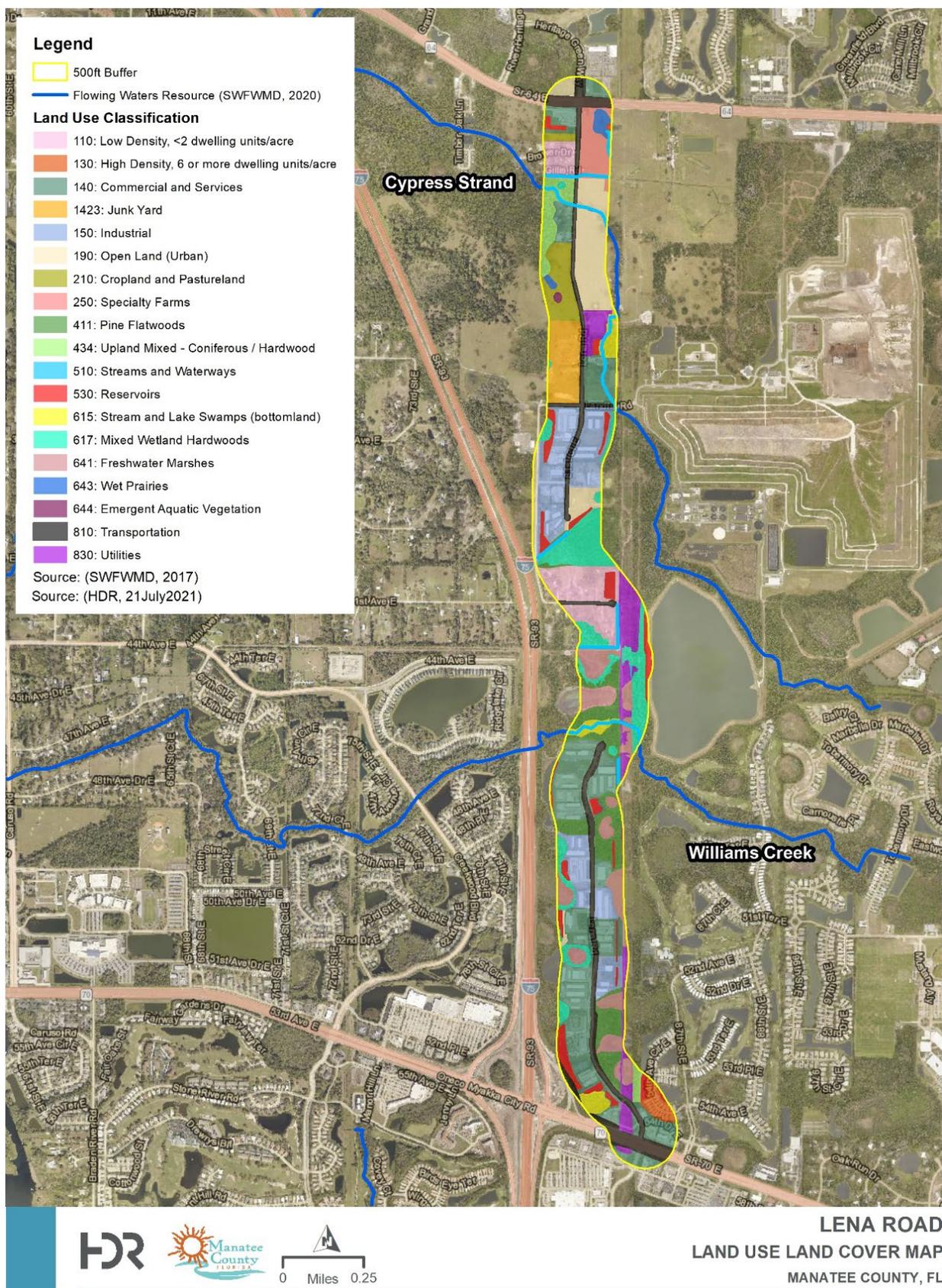


Figure 2-1: Land Use and Land Cover for the Lena Road Study Area

2.2 Soils

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Soil Survey of Manatee County, Florida dated May 1983 and the Web Soil Survey (2021) (**Appendix A**) were reviewed for near surface soil data. Based on the NRCS soil geodatabase, the study area includes nine soil mapping units. The general soil types are listed in **Table 2-2** with their corresponding NRCS map unit number, hydric classification, drainage class, and their coverage in acres and percent cover within the study area. **Figure 2-2** shows soil types within the study area on an aerial image, including their hydric or non-hydric status.

Soils were predominantly non-hydric, including EauGallie-EauGallie Wet, Fine Sand, 0 to 2 Percent Slopes with a depth to water table of about 6 inches to 18 inches, which covers 70 percent of the study area. There were three hydric soils, including the Floridana-Immokalee-Okeelanta Association with a depth to water table of 0 inches, which covers 14 percent of the study area; Canova, Anclote, and Okeelanta soils with a depth to water table of 0 inches, which covers 5 percent of the study area; and Delray Complex with a depth to water table of 0 inches to 6 inches, which covers less than 1 percent of the study area. **Table 2-2** lists the soil types, drainage classes, and percent area mapped within the study area.

Table 2-2: NRCS Soil Survey of Manatee County, Florida Summary for the Study Area

Map Unit	NRCS Map Unit Name	Hydric	Drainage Class	Acres Within Study Area	Percent of Study Area
7	Canova, Anclote, and Okeelanta Soils	Yes	Very Poorly Drained	23.2	5%
11	Cassia Fine Sand, 0 to 2 Percent Slopes	No	Somewhat Poorly Drained	11.8	2.5%
12	Cassia Fine Sand, Moderately Well Drained	No	Moderately Well Drained	9.1	2%
16	Delray Complex	Yes	Very Poorly Drained	2.0	0.4%
20	EauGallie-EauGallie Wet, Fine Sand, 0 to 2 Percent Slopes	No	Poorly Drained	323.6	70%
26	Floridana-Immokalee-Okeelanta Association	Yes	Very Poorly Drained	64.0	13.8%
35	Ona Fine sand, Orstein Substratum	No	Poorly Drained	6.6	1.4%
45	Tavares Fine Sand, 0 to 5 Percent Slopes	No	Moderately Well Drained	18.2	3.9%
48	Wabasso-Wabasso, Wet, Fine Sand, 0 to 2 Percent Slopes	No	Poorly Drained	4.4	1%
Total Study Area				463.0	100%

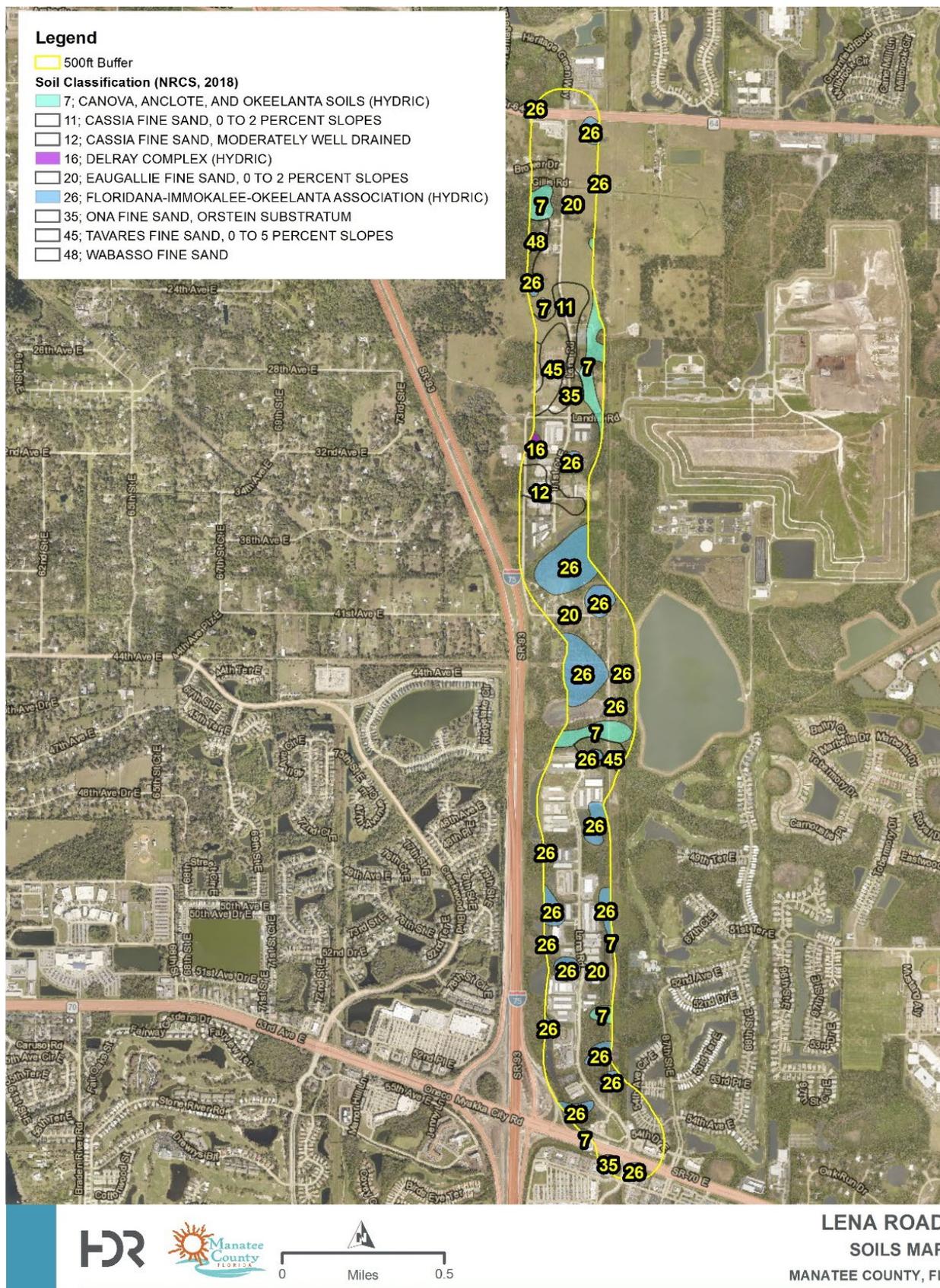


Figure 2-2: NRCS Soils Map for the Lena Road Study Area

3.0 Protected Species and Habitat

This Technical Memorandum complies with Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. Section 7(a) (2) of the ESA requires every federal agency, in consultation with and with the assistance of the Secretary, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Section 7(a) (3) of the ESA authorizes a prospective permit or license applicant to request the issuing federal agency to enter into early consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) to determine whether the proposed action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

In accordance with 16 United States Code (U.S.C.) 1536[(a)-(d)] of the ESA, as amended, federal agencies impose specific requirements regarding endangered or threatened species of fish, wildlife, or plants (listed species) and habitat of such species that has been designated as critical habitat under Section 7(a) of the ESA. These requirements include the protection of all federal listed species (and their habitats).

The state affords protections to listed animals through the Florida Fish and Wildlife Conservation Commission (FWC) pursuant to Chapter 68A-27, Florida Administrative Code (F.A.C.). The state affords protections to listed plants through the Florida Department of Agriculture and Consumer Services (FDACS) Division of Plant Industry pursuant to Chapter 5B-40, F.A.C.

3.1 Methodology

The project was evaluated for potential impacts to federal and state, threatened or endangered species (listed species) and federal protected species. Federally listed species are protected under the ESA. Other species, such as the bald eagle, are not listed but are afforded protection under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d) or Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711). State listed species are protected under Chapter 379, Florida Statutes and Chapters 68A-27 and 5B-40 F.A.C. The purpose of this assessment was to evaluate if listed or protected species would likely utilize the study area and to determine if protected species, or their habitat, could be adversely impacted by the project.

The Florida Natural Areas Inventory (FNAI) Biodiversity Matrix (Unofficial) was queried and a USFWS IPaC Official Species List was generated for the study area listing protected species that have the potential to occur within the study area. The IPaC Official Species List is included in **Appendix B**.

The methodology to identify state or federal listed species potentially occurring within the study area also included review of federal and state agency databases and USFWS Consultation Areas. A GIS desktop analysis was performed referencing this information prior to conducting field surveys to establish baseline information and guide onsite evaluations. **Figure 3-1** is a map of wildlife records showing the results of the GIS desktop analysis. Preliminary wildlife surveys were conducted within the project right-of-way in July and August 2021.

Information sources and databases utilized for the wildlife analysis included the following:

- ESRI ArcGIS World Image Service (2020)
- The Cornell Lab of Ornithology - e-Bird database (2019-2021)
- FNAI Biodiversity Matrix (Unofficial) (August 2021)
- Audubon Center for Birds of Prey Bald Eagle Nest database (2021)
- USDA NRCS, Soils of Manatee County, Florida (1983)
- USFWS Wood Stork Nesting Colonies / Core Foraging Areas (2021)
- USFWS Critical Habitat (2021)

- USFWS IPaC Resource List (2021)

Protected species that were identified as having the potential to occur within the study area are discussed in the following sections. The study area was assessed for their habitat requirements and each species was assigned an effect determination. In addition, each potential species was designated as having a no, low, moderate, or high likelihood of occurrence based on range, habitat type, location, patch size, and connectivity, as defined below.

No	Suitable habitat is not believed to be present within the study area.
Low	Species documented within Manatee County, but with a low likelihood to occur within the study area due to the limited presence of suitable habitat.
Moderate	Species documented within Manatee County and for which suitable habitat was present within the study area; however, no documented occurrences exist.
High	Species highly likely to occur within the study area based on known habitat ranges and existence of suitable habitat. Species known to occur within or adjacent to the study area or have been documented within the vicinity.

3.2 Federal Protected Wildlife and Critical Habitat

Based on the combined results of the desktop analysis and preliminary field surveys, federal listed and protected species potentially occurring within the corridor study area are provided in **Table 3-1** along with their likelihood of occurrence. Their likelihood of occurrence was based on the above-mentioned data sources and methodology. Three listed federal species have the potential to occur within the study area and are discussed in detail following **Table 3-1**.

Migratory birds and their habitat, including the non-listed but federally protected bald eagle and osprey, and the state listed least tern, were also present in this region and included in **Table 3-1**. Migratory birds are afforded protection under the MBTA (16 U.S.C. 703-711). The least tern is discussed under the state listed wildlife section. The bald eagle is additionally protected under the BGEPA (16 U.S.C. 668-668d), as amended. The bald eagle and osprey are discussed under the federal protected wildlife section. In addition to federal listed endangered and threatened species, the gopher tortoise has been recognized as a candidate species for federal listing. This state threatened reptile is discussed in **Section 3.3**.

The study area was evaluated for Critical Habitat for federal listed species as defined by Congress 50 CFR § 17.94. Review of available information determined that USFWS-designated critical habitat was not present.

Table 3-1: Federally Protected Wildlife Potentially Occurring within the Study Area

Scientific Name	Common Name	Status	Likelihood of Occurrence
Federal Listed Wildlife			
<i>Drymarchon corais couperi</i>	Eastern indigo snake	Threatened	Moderate
<i>Mycteria americana</i>	Wood stork	Threatened	High
<i>Aphelocoma coerulescens</i>	Florida scrub jay	Threatened	Low
Federal Protected Wildlife			
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA* MBTA**	Moderate
<i>Pandion haliaetus</i>	Osprey	MBTA**	Low

* Bald & Golden Eagle Protection Act and Migratory Bird Treaty Act. ** Migratory Bird Treaty Act

3.2.1 Eastern Indigo Snake (*Drymarchon corais couperi*)

The federal status for the eastern indigo snake is threatened. The eastern indigo snake is a shiny black snake, which can reach lengths up to eight feet. The indigo snake will use a range of habitats from disturbed open land, pasture, scrub, sandhills, and flatwoods to wet prairies and mangrove swamps. Indigo snakes are known to lay eggs in uplands with a preference for gopher tortoise burrows. These snakes are also known to utilize gopher tortoise burrows for thermal refuge.

The eastern indigo snake is distributed across Florida although no critical habitat has been designated in the study area. Neither gopher tortoise burrows nor eastern indigo snakes were observed during preliminary field surveys. However, the indigo snake has been documented within Manatee County and potential indigo snake habitat was present within and outside the corridor study area. Therefore, the *Eastern Indigo Snake Programmatic Effect Determination Key* approved for the North Florida Ecological Services Field Offices (USFWS 2013) was reviewed for consistency (**Appendix C**), as keyed out below:

- A** Project is not located in open water or salt marsh...**go to B.**

- B** Permit will be conditioned for use of the Service's *Standard Protection Measures for the Eastern Indigo Snake* during site preparation and project construction...**go to C.**

- C** There are gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities ...**go to D.**

- D** The project will impact less than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) or less than 25 active and inactive gopher tortoise burrows...**go to E.**

In line with the consultation key, if found, gopher tortoise burrows, active or inactive, would be excavated prior to site manipulation. If an eastern indigo snake was encountered, the snake would be allowed to vacate the area. Notably, gopher tortoise burrows were not observed during preliminary surveys, but they could be present within the study area.

- E** Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows be inspected each morning before site manipulation in a particular area, and if

occupied by an eastern indigo snake, no work will commence until the snake has vacated the vicinity of proposed work ...**NLAA**.

Projects containing habitat with the potential to support the indigo snake are required to follow the USFWS *Standard Protection Measures for the Eastern Indigo Snake* (2013) (**Appendix D**) during construction, which dictates that contractors be made aware the species could be present and that land clearing and using heavy equipment be conducted with avoidance and protection of this species in mind. These protection measures will be required for this project during clearing and grubbing and during construction within the project limits, including within pond sites. Due to these commitments and per the *Eastern Indigo Snake Programmatic Effect Determination Key*, it is anticipated that the project **may affect, but is not likely to adversely affect** the eastern indigo snake.

3.2.2 Wood Stork (*Mycteria americana*)

The federal status for the wood stork is threatened. The wood stork is a large wading bird with black edged wings and a short black tail. This often-transient wading bird forages in shallow water containing high prey densities and it utilizes freshwater and estuarine habitats for nesting, foraging, and roosting. Wood storks typically nest in rookeries and construct nests in forested wetlands, including hardwood hammocks, cypress swamps, and forested sloughs.

The study area falls within the jurisdiction of the USFWS North Florida Ecological Services Office, which recognizes a 15-mile Core Foraging Area (CFA) radius around wood stork rookeries for central Florida. The CFA is the maximum distance storks typically fly from the colony to capture prey for their young. The USFWS guidelines state that impacts to appropriate wetland systems within the CFA of an active colony may directly affect colony productivity.

Based on USFWS data (2017), the study area falls within the CFA of one wood stork colony at the time of this Technical Memorandum. This nesting colony was approximately 4.3 miles west-northwest of the study area. While nesting colonies were not documented within the study area, riverine and forested wetlands, marshes, and roadside ditches were present where intermittent foraging or loafing could occur. The USFWS recognizes the need to protect wood stork suitable foraging habitat (SFH) within a CFA. SFH is defined as calm, relatively open waters, uncluttered by dense vegetation with water levels between 2 to 15 inches (USFWS 2012). Wood storks were not observed during preliminary field surveys; however, potential impacts to SFH could occur due to direct impacts from the future road widening and pond sites. The Wood Stork Effect Determination Key (**Appendix C**) for the North Florida Ecological Services Field Offices (2008) was reviewed for consistency, as keyed out below:

- A** Project more than 2,500 feet from a colony site...**go to B.**

- B** Project impacts SFH²...**go to C.**

- C** Project impacts to SFH are less than or equal to 0.5-acre³...**NLAA.**

- D** Project impacts to SFH are within the Core Foraging Area of a colony site, or wood storks have been documented foraging on site ...**go to E.**

- E** Project provides SFH compensation within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank preferably within the CFA or consists of SFH compensation within the CFA consisting of enhancement, restoration or creation in a project phased approach that provides an amount of habitat and foraging function equivalent to that of impacted SFH...**NLAA.**

Construction from the widening of Lena Road could impact riverine and forested wetlands, marshes, and some roadside ditches with SFH; therefore, provisions to reduce or minimize impacts would be implemented. These measures would include wetland mitigation pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. Due to these assurances and per the Wood Stork Effect Determination Key (USFWS 2008), it is anticipated that the project **may affect, but is not likely to adversely affect** the wood stork.

3.2.3 Florida Scrub Jay (*Aphelocoma coerulescens*)

The federal status for the Florida scrub-jay is threatened. The Florida scrub-jay is blue- and gray-colored and about the size of a blue jay. They have blue wings, head, and tail, gray back and underparts, and a whitish forehead and neck. The Florida scrub jay does not have black markings or a crest as other jays do. Florida scrub-jays live in family groups, consisting of a breeding pair with young helpers that are usually the offspring of the pair.

The study area is within the USFWS Florida Scrub-jay Consultation Area. Florida scrub-jays are habitat-specific and utilize sand pine and oak scrub, as well as scrubby flatwoods. Scrubby flatwoods have an open canopy of widely spaced pine trees and a low, shrubby understory dominated by scrub oak and saw palmetto, often interspersed with patches of barren white sand. These habitat types were not present within the study area and there are no recent records of scrub-jays occurring in the area. For this reason, it is expected that the project would have no effect on the Florida scrub-jay.

3.2.4 Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle was delisted from the USFWS List of Endangered and Threatened Wildlife effective August 8, 2007. The bald eagle continues to receive protections through the BGEPA and the MBTA. To minimize disturbance to nesting eagles, construction activities are restricted within 330 feet of an active nest tree. The USFWS Eagle Management Guidelines (USFWS 2007) are used as guidance if construction is to occur within 660 feet of an active eagle nest during the nesting season (October 1 - May 15).

As shown in **Figure 3-1**, two bald eagle nests were within the Lena Road corridor study area, including MN036a (active 2016) at the south end of the project near SR 70, and MN032 (active 2011) at the north extent of the project adjacent to an FPL substation northwest of the county landfill (Audubon, 2021).

- MN036a was mapped about 420 feet southwest of Lena Road but the nest was not observed during field reviews.
- MN032 was mapped about 250 feet east of the Lena Road, possibly associated with a telecommunications tower, but the nest was not observed during field reviews.

USFWS protection zones on both nests overlay existing Lena Road and will require coordination with the USFWS to develop construction management guidelines for nest MN036, and to possibly obtain an Eagle Take Permit for nest MN032 if impacts to this nest cannot be avoided.

A third bald eagle nest (MN051) lies 2,500 feet (about 0.5 miles) east of Lena Road near the middle of the project corridor. The nest is located on the east side of the 85-acre Manatee County Reclaimed Southeast Water Reclamation Facility (SEWRF) Lake. This nest is active, most recently fledging young in 2021. USFWS coordination regarding MN051 has been ongoing since January 2016 and an Incidental Take Permit #MB33468C-0 was obtained by Manatee County. The County purchased land adjacent to Duette Preserve to satisfy the eagle mitigation required by the permit. MN051 lies beyond the 660 feet buffer zone from Lena Road.

There are numerous other known nests in Manatee County west along I-75 and the Braden River, south in Sarasota County, and north along the Manatee River, but all other nest locations are one mile or greater outside the corridor study area. Resurvey of the corridor would occur during permitting and design. If the two closest

bald eagle nests can be confirmed within 660 feet of the project, the County would coordinate with the USFWS in accordance with the BGEPA and MBTA. Because this project would be consistent with the BGEPA and MBTA, long-term impacts to the bald eagle would not be expected.

3.2.5 Osprey (*Pandion haliaetus*)

Ospreys are afforded protection under the MBTA and are state protected by Chapter 68A of the F.A.C. Ospreys require nest sites in open surroundings for easy approach that are safe from ground predators, such as raccoons. They readily build nests on manmade structures, such as telephone poles and nest platforms designed especially for these birds. Nesting season typically occurs between December and February.

Although both active and inactive osprey nests are federally protected, only active nests require federal permits for taking. Under state rules, only inactive osprey nests may be taken, as determined by the absence of eggs or flightless young at the nest. Typically, a replacement nesting structure located in the immediate vicinity is required to be erected.

Ospreys and their nests were not observed during preliminary field surveys for the study area. Surveys to identify active osprey nests will be conducted during the design and permitting phase of the project, and permits will be acquired if impacts during construction are unavoidable. Nest avoidance will be prioritized, and nest structure replacement will occur if removal is required. Because the project would be consistent with federal and state requirements, it is anticipated that the project would not impact the osprey.

3.3 State Protected Wildlife

Based on desktop analysis and preliminary field surveys, state listed wildlife managed by the FWC and potentially occurring within the corridor study area are provided in **Table 3-2** along with their protection status and likelihood of occurrence. Likelihood of occurrence was based on the above-mentioned data sources and methodologies, and on the presence of suitable habitat as defined in Florida’s Imperiled Species Management Plan, as amended (2018). Listing status was in accordance with Florida’s Official Endangered and Threatened Species List (June 2021).

State protected wildlife known to occur or have the potential to use habitat within the study area include eight species. None of the state listed species were observed during preliminary field surveys; however, potential habitat was present for some species.

Table 3-2: State Listed Species Potentially Occurring within the Study Area

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	Threatened	Moderate
<i>Falco sparverius paulus</i>	Southeastern American kestrel	Threatened	Low
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	Moderate
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	Threatened	Low
Wading Birds			
<i>Egretta caerulea</i>	Little blue heron	Threatened	High
<i>Egretta tricolor</i>	Tricolored heron	Threatened	High

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Platalea ajaja</i>	Rosette spoonbill	Threatened	Moderate
Nesting Shorebirds			
<i>Sternula antillarum</i>	Least Tern	Threatened	Low

3.3.1 Florida Sandhill Crane (*Antigone canadensis pratensis*)

The state protection status of the Florida sandhill crane is threatened. Sandhill cranes are tall gray birds with a patch of red on their head. Sandhill cranes use a variety of habitats, preferring wet prairies, marshy lake margins, wet pastures, and marshes. Sandhill cranes nest in shallow freshwater ponds and marshes. Sandhill cranes sometimes forage along roadsides and often in pastures.

No sandhill cranes were observed during surveys of the study area although some larger pasture areas to the north could be used by cranes for foraging. There were also large marshes within the business park to the south and marsh-like littoral zones on several small ponds that could provide nesting habitat.

Per the FWC species guidelines (2016), pre-planning and pre-construction surveys are recommended in areas with potential to support nesting sandhill cranes to ensure active nests and flightless young are protected. Sandhill cranes breed from December through August and nest between February and April. For pre-planning surveys, FWC recommends three survey events during the permitting process to facilitate avoidance, minimization, and mitigation measures. The ideal time for these surveys is in March, early April, and early May. For pre-construction surveys, surveys should occur prior to site clearing. Also, Florida sandhill cranes do not nest in the same location every year, so because construction occurs over several years it would be necessary to reconfirm nesting (or the absence thereof) each year.

Given that the County would be committed to avoiding nesting sandhill cranes during construction if present, and because freshwater marsh systems would be maintained, there is **no effect anticipated** to the Florida sandhill crane.

3.3.2 Southeastern American Kestrel (*Falco sparverius Paulus*)

The state status of the southeastern American kestrel is threatened. Females have brown wings while males have bluish-gray wings, however both have white bellies and black markings around their eyes. There are two kestrel subspecies in Florida. The American kestrel is migratory; the Southeastern American kestrel is not. Identification of southeastern American kestrels can only be confirmed in the field when the migrant is not in Florida (approximately April through August). Kestrels utilize open grassland, pasture, and agricultural land, as well as ephemeral wetlands. They prefer habitats with perches, a diverse prey population, and tree snags with cavities for nesting. The FWC distribution map shows the kestrel as a potential species within this region but not in Manatee County. The FNAI distribution map and Biodiversity Matrix (Unofficial) list the kestrel as a potential species within this region.

The kestrel was not observed during preliminary field surveys although open pasture and fields were present, and snags were available. Within the study area, some land management activities have created disturbed clearings with low-growing vegetation, which could provide substrate for kestrels. The proposed road widening could overlay adjacent cleared areas and habitats.

FWC formal surveys for the southeastern American kestrel are conducted from April through August and are valid until March 1 of the following breeding season. FWC recommends three survey events. Surveys are

conducted along transects to document the presence of kestrels (perching or foraging), suitable cavities, and/or active nest cavities. Verification of suitable nest cavities is conducted between March 1 and July 31.

The FWC may recommend kestrel surveys during permitting. If kestrel breeding and/or nesting is confirmed, the FWC will recommend avoidance measures to eliminate a take by maintaining a 490-foot buffer around active nest cavities during the breeding season, retaining cavities in natural structures, and maintaining at least 124 acres of SFH within a 0.31-mile radius of occupied habitat. Given the habitat conditions within portions of the study area, the southeastern American kestrel may use the project area but is not expected. Therefore, there is **no effect anticipated** to the southeastern American kestrel.

3.3.3 Gopher Tortoise (*Gopherus polyphemus*)

The state protection status for the gopher tortoise is threatened. The tortoise is a candidate for federal listing in its eastern range, which includes Florida, Georgia, and parts of Alabama and South Carolina. A final decision on whether to expand the listed range of this species or remove the species from the ESA candidate listing is expected in 2022 or 2023. The gopher tortoise has a brownish-gray, rounded carapace, and the plastron is beige without a hinge. The gopher tortoise has claws adapted for digging deep burrows. Tortoises occupy upland habitats, preferring those with well-drained sandy soils, a seasonal high groundwater table below 18 inches, and open areas with abundant forage. Habitats supportive of healthy gopher tortoise populations include, but are not limited to, dry pastures and fields, flatwoods, sandhills, scrub, xeric oak hammocks, dry prairies, and disturbed open lands such as transportation and utility rights-of-way. Tortoise burrows are used by many commensals such as the eastern indigo snake and the Florida pine snake.

Potential gopher tortoise habitat was present in the corridor study area; however, no gopher tortoises or potentially occupied tortoise burrows were observed during preliminary surveys. Formal tortoise surveys were not performed during the field survey.

Preliminary gopher tortoise surveys would be recommended within the project area during permitting. These surveys typically cover approximately 15 percent of potential gopher tortoise habitat. Prior to construction, formal gopher tortoise surveys will be required in areas deemed suitable for the gopher tortoise in accordance with the FWC *Gopher Tortoise Permitting Guidelines*. If potentially occupied tortoise burrows are found within the project area, a gopher tortoise capture, relocation, and release permit will be acquired from the FWC in accordance with F.A.C. 68A-27.007 and 68A-27.003.

Because gopher tortoise habitat would be surveyed, potentially occupied gopher tortoise burrows verified, and any gopher tortoise relocated, there is **no adverse effect anticipated** on the species.

3.3.4 Florida Pine Snake (*Pituophis melanoleucus mugitus*)

The state protection status for the Florida pine snake is threatened. The Florida pine snake can reach a length of up to 84 inches. It has a brown back with dark blotches, white belly, ridged scales, small head, and pointed snout. This snake utilizes dry, sandy open areas and has been found using gopher tortoise burrows. The FNAI Biodiversity Matrix (Unofficial) documents potential pine snake habitat and lists sightings of the pine snake in this region. Neither the pine snake nor gopher tortoise burrows were observed during preliminary field surveys within the study area. Due to the disturbed project area lacking suitable habitat and the requirement to excavate all potentially occupied gopher tortoise burrows, which would include a requirement to protect commensal species, there is **no effect anticipated** to the Florida pine snake.

3.3.5 Wading Birds

Wading birds, including the little blue heron, roseate spoonbill, and tricolored heron would be expected to utilize the study area, and in particular, the wetlands found within the study area. The state protection status of all three wading birds is threatened.

- Little blue herons have a grayish blue body. Their head is dark maroon during breeding season and purplish during non-breeding season.
- The roseate spoonbill has pink and red wings with a white neck and back and reddish legs and feet.
- The tricolored heron has a dark blue colored head and upper body, a purple chest, and a white belly.

The breeding season varies somewhat for each species and by location. All three birds are year-round residents in Florida, but none were observed in the study area. These wading birds could use the study area for foraging and loafing particularly the larger creek systems, extensive marshes at the south portion of Lena Road, and some of the adjacent smaller surface waters and roadside ditches.

Wading birds rely on wetlands for breeding, foraging, and sheltering and will build nests of sticks, twigs, and fibers in trees or shrubs on hummocks or in branches overhanging water. Wading birds typically nest in multi-species colonies, although tricolored herons also will nest in single-species groups or build solitary nests. These three wading birds are known to forage in shallow herbaceous and forested wetlands, as well as along the edges of riverine habitat.

The FWC recommends surveys to determine if wading bird nesting habitat is present within 330 feet of a project area. These surveys are usually conducted during the permitting process and generally focus on identifying nesting habitat rather than foraging habitat. If a wading bird nest is detected, additional surveys are recommended to determine if an active breeding site is present. Conducting surveys during the dates specified as follows is recommended:

Little Blue Heron	April 15 – June 30
Rosette Spoonbill	February 15 – April 30
Tricolored Heron	April 15 – June 30

Impacts to wading bird foraging habitat is addressed through wetland mitigation that meets the requirements of Rule 68A-27.007, F.A.C. However, if nesting is detected, additional measures are necessary to develop appropriate avoidance, minimization, and mitigation measures. FWC will also recommended pre-construction surveys prior to site clearing or excavation to ensure active nests or flightless young are not present. With adherence to the FWC guidelines and wetland impacts minimized and mitigated, there is **no effect anticipated** to these species.

3.3.6 Nesting Shorebirds

Least Tern

The state protection status for the least tern is threatened. The least tern is a small shorebird approximately eight to nine inches in length, with a forked tail and long pointed wings. Least terns are gray backed with a white belly, yellow beak, and a black cap. Terns typically nest on beaches with coarse sand and shell but have been reported to use interior shoreline habitats for nesting, including substrates such as dredged spoil and manmade structures. The least tern breeding season is April 1 through September 30. Least tern protection measures should focus on construction management techniques that avoid taking shorebird nests and young.

The least tern has not been documented in the study area and they were not observed during field surveys. They could opportunistically utilize the project area during construction if bare ground is exposed. However, protection of potential least tern nests and young can be ensured through construction planning and management. For multi-year construction projects, where construction activities cannot be avoided during least tern nesting season, pre-construction surveys can be conducted prior to land clearing and earthmoving to ensure nesting birds are not present. If nesting or flightless young are encountered, construction should be

suspended in that area and the sighting reported to the FWC. Assuming these basic construction practices, there is no effect anticipated to the least tern.

3.4 Federal and State Protected Plants

The FNAI Biodiversity Matrix (Unofficial) identified 11 federal and state listed plants protected by the FDACS that have the potential to occur within the corridor study area. These listed plant species are shown in **Table 3-3**. None of these species were observed within the study area during preliminary field surveys. Due to their low likelihood of occurrence, there is no effect anticipated to these federal and state listed plant species. If protected plants are discovered during field surveys for permitting or at the time of construction, coordination with the FDACS will be initiated.

Table 3-3: Federal and State Listed Plants Potentially Occurring within the Study Area

Scientific Name	Common Name	Status	Likelihood of Occurrence
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	State Threatened	Low
<i>Centrosema arenicola</i>	Sand Butterfly Pea	State Endangered	None
<i>Chionanthus pygmaeus</i>	Pygmy Fringe-tree	Federal Endangered	Low
<i>Cladonia perforata</i>	Florida Perforate Cladonia	Federal Endangered	None
<i>Lechea cernua</i>	Nodding Pinweed	State Threatened	None
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	State Endangered	None
<i>Nemastylis floridana</i>	Celestial Lily	State Endangered	Low
<i>Nolina atopocarpa</i>	Florida Beargrass	State Threatened	None
<i>Pteroglossaspis ecristata</i>	Giant Orchid	State Threatened	Low
<i>Rhynchospora megaplumosa</i>	Large-plumed Beaksedge	State Endangered	Low
<i>Zephyranthes simpsonii</i>	Redmargin Zephyrlily	State Threatened	Low

4.0 Wetlands and Other Surface Waters

4.1 Methodology

A GIS desktop analysis was performed prior to the field survey to establish baseline information and guide the onsite evaluations for conducting wetland, riverine, and other surface water delineation estimates. Data sources utilized for this analysis included the following:

- ESRI ArcGIS World Image Service (2013-2015)
- SWFWMD Land Use Land Cover (2018)
- USDA NRCS, Soils of Manatee County, Florida (1983)
- USFWS National Wetland Inventory (NWI)
- USGS Topographic Maps
- Florida Department of Environmental Protection (FDEP) Outstanding Florida Water (2019)

Estimated delineations of wetlands and other surface waters were performed within the study area in July and August 2021. Features outside the existing right-of-way were estimated based on ground-truthing aerial photography to the extent possible considering private property and access limitations. Delineations were completed in accordance with the U.S. Army Corps of Engineers *Wetland Delineation Manual* (1987); *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (2010); Rule 62-340, F.A.C., *Delineation of the Landward Extent of Wetlands and Surface Waters*; and the *Florida Wetlands Delineation Manual* (1995).

4.2 Study Area Wetland and Other Surface Water Features

Wetlands are present within the corridor study area and were mapped and classified according to FLUCFCS and the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et.al. 1979). **Table 4-1** lists the wetland, surface water, and other surface water features within the study area along with their estimated acreages and FLUCFCS and USFWS classifications. **Figures 4-1, 4-2, and 4-3** show the south, middle, and north areas of the study area with all wetlands and other surface waters observed within the 500-foot buffer limits. The primary wetland types in the study area included:

- Stream and Lake Swamps (FLUCFCS 615),
- Mixed Wetland Hardwood (FLUCFCS 617),
- Freshwater Marshes (FLUCFCS 641),
- and smaller areas of Wet Prairies (FLUCFCS 643).

The natural forested systems were typically larger areas in the southern and central portions of the study area intermixed with the Commercial and Services and Industrial land uses. Wetlands near the County's water reclamation facility were also larger forested systems. There were few or no forested wetland systems associated with the two named waterways, Williams Creek (OSW-2) and Cypress Strand (OSW-6), that flow through the study area.

Existing conditions within the Lena Road study area included evidence of elevated water levels in wetlands, adjoining uplands, and stormwater management facilities across the southern and middle project sections associated with southern Lena Road and the Lena Business Park at Landfill Road. Field reviews indicated elevated water levels by as much 0.5 feet and perhaps 1.0 feet above normal wet season. This may be an indication of blocked pipes or restricted flow ways on significant portions of the study area. Several large facilities, including Lena Road, I-75, the Florida Power and Light Company (FPL) electrical transmission line, and the County water treatment facility may also have affected surface water flows and levels, and/or local groundwater elevations. These observations may merit further engineering investigations, including ultimately a determination of base clearance elevation for the proposed road widening.

Historic aerial photography shows a trend toward land clearing, ditching, and agricultural uses, beginning in 1940, which was much more prevalent by 1957. Nearly all marshes are drained by ditches (Streams and Waterways, FLUCFCS 510), which have had reduced water levels and hydroperiods for decades. By 1970, agricultural land uses are far more extensive and low-density residential areas are more common.

To the north of Landfill Road, there are fewer and smaller forested and herbaceous wetlands within the study area.

Generally, all wetland systems are in moderate to poor condition, having incurred drainage by ditching, and watershed conversions to commercial development and farmland. Vegetation communities within the wetlands have also been degraded by past agricultural activities, tree harvesting, nuisance and exotic species growth, and in places, above normal water levels.

Surface waters were mostly associated with the two primary water channels crossing Lena Road. These drainages were historically natural and associated with limited wetlands in the study area, including:

- **Williams Creek** drains the southern portion of the study area and flows west to the Braden River as a Stream Swamp through residential areas. The southern third of the road project lies within the Williams Creek watershed.
- **Cypress Strand** includes a creek channel flowing north through the northern portion of the project. There is very little forested wetland associated with the creek, instead bounded by a strand of live oaks with variable canopy.

There are Wetland Conservation areas marked within the central area of the Lena Road study area. These areas are either wetland mitigation sites and/or conservation areas with upland buffers surrounding them. Permit conditions and protective easements will require review to anticipate impact avoidance and minimization needs and potential mitigation needs.

Table 4-1: Wetland and Other Surface Waters, Classification, and Acres in the Study Area

Wetland and OSW	FLUCFCS Description	USFWS Classification	Area within Study Area
WL-1	615- Stream and Lake Swamps	PFO3 – Palustrine Forested Broad-leaved Evergreen	3.24
WL-2	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	2.27
WL-3	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	2.21
WL-4	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	1.27
WL-5	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	2.0
WL-6	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	2.01
	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	1.55
WL-7	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	0.21
WL-8	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	4.11
WL-9	617- Mixed Wetland Hardwoods	PFO3 - Palustrine, Forested, Broad-leaved, Evergreen	3.32
	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	2.13
WL-10	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	1.59
WL-11	641 – Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	0.70
WL-12	617- Mixed Wetland Hardwoods	PFO3 - Palustrine, Forested, Broad-leaved, Evergreen	0.42
WL-13	615- Stream and Lake Swamps	PFO3 – Palustrine Forested Broad-leaved Evergreen	3.06
WL-14	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	3.58
WL-15	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	4.37
WL-16	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	10.11

Wetland and OSW	FLUCFCS Description	USFWS Classification	Area within Study Area
WL-17	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	5.76
	641- Freshwater Marsh	PEM1 – Palustrine, Emergent, Persistent	5.03
WL-18	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	13.42
WL-19	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	0.46
WL-20	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	1.21
WL-21	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	1.27
WL-22	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	0.16
WL-23	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	3.56
WL-24	644- Emergent Aquatic Vegetation	PEM1 – Palustrine, Emergent, Persistent	0.45
WL-25	643 - Wet Prairies	PEM1 – Palustrine, Emergent, Persistent	0.65
WL-26	617- Mixed Wetland Hardwoods	PFO3 – Palustrine Forested Broad-leaved Evergreen	0.31
WL-27	643 - Wet Prairies	PEM1 – Palustrine, Emergent, Persistent	2.39
OSW-1	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.19
OSW-2	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.66
OSW-3	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.14
OSW-4	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.62
OSW-5	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.3
OSW-6	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	1.4
OSW-7	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.5
OSW-8	510 – Streams and Waterways	R ₂ UB ₂ – Riverine, Lower Perennial, Unconsolidated Bottom, Sand	0.21



Figure 4-2: Wetlands and Surface Water Map – Middle



LENNA ROAD WETLANDS AND SURFACE WATERS MAP
MANATEE COUNTY, FL

HDR Manatee County Florida

0 Feet 600

PATH: X:\MANATEE COUNTY\PD&E_THREE_ROADS\LENA_RD\GIS\MXD\LENA_SEG3.MXD - USER: GBILTER - DATE: 9/15/2021

Figure 4-3: Wetlands and Surface Water Map – North

4.3 Outstanding Florida Waters

FDEP-designated Outstanding Florida Waters (OFW) receive special protection to maintain ambient water quality in accordance with Chapter 62-302.700 F.A.C. and under the authority granted by Section 403.061(27) F.S. (FDEP, 2021). These waters are provided the highest level of water quality protection in the state of Florida, including requirements for additional water quality treatment above and beyond usual standards.

The corridor study area does not cross any OFWs so these criteria do not apply to this project.

4.4 Sovereign Submerged Lands

Sovereign Submerged Lands (SSL) are lands, including but not limited to, tidal lands, islands, sand bars, shallow banks, and lands waterward of the ordinary or mean high water line, beneath navigable fresh water, or beneath tidally influenced waters, which the State of Florida acquired title to on March 3, 1845, by virtue of statehood, and which have not been heretofore conveyed or alienated per Chapter 18-21.003, F.A.C. The corridor study area does not contain SSL listed, per Title XVIII Public Lands and Property Chapter 253 F.S. or per the Florida TITF Land Records Spatial Index of the FDEP. Special SSL provisions and proprietary easements are not required for the widening of Lena Road.

4.5 Wetland and Other Surface Waters

4.5.1 Direct Wetland and Other Surface Water Impacts

Direct impacts to wetlands and other surface waters must be quantified and assessed for the proposed Lena Road project alignment and footprint. During evaluation of the road alignment alternatives, potential impacts to wetlands and other surface waters would be identified and quantified. Direct impacts would include permanent and temporary impacts and would be quantified and tabulated for the state and federal permit applications.

The Uniform Mitigation Assessment Method (UMAM) will be utilized to evaluate each wetland impact area to quantify the anticipated functional loss for each area based on location and landscape, water environment, and vegetation conditions. UMAM assessment forms would be prepared at a later design stage to document existing conditions of the wetlands to determine the functional loss for each impact.

4.5.2 Avoidance and Minimization

The proposed widening of Lena Road would use the existing disturbed and cleared right-of-way for the road and other project improvements as much as possible. Every effort would be made to avoid and minimize wetland impacts for the road widening. Additional impacts outside the existing right-of-way could result in impacts to wetland and other surface water habitats of better quality further from the disturbed right-of-way limits. Unavoidable direct wetland impacts would be expected within the existing right-of-way. Other impacts would be expected outside the existing right-of-way for the additional widening required, causing further disturbance to wetland and wildlife habitats.

Degradation of water quality, resulting from construction or excess stormwater runoff from the project, has the potential to adversely impact flowing waters and associated habitats. Best Management Practices (BMPs) would be implemented during construction to protect water quality. Direct, indirect, and temporary impacts to habitat and water quality would be avoided and then minimized using erosion control measures and BMPs during construction. Measures to minimize project impacts could include construction phasing, sediment barriers, floating turbidity barriers, and other construction techniques identified during design and permitting in cooperation with the regulatory agencies.

In addition, maintenance of an Erosion Control Plan that addresses protecting wetland areas and implements FDOT design standards, including those measures designed to protect aquatic environments, would be used as outlined in the following manuals:

- Standard Specifications for Road and Bridge Construction (Section 7, 104, and 110) (July 2020),
- State of Florida Erosion and Sediment Control Manual (E&SC Manual) (July 2013), and
- FDOT Design Manual (2020).

Based on the avoidance and minimization measures discussed above and in accordance with Section 404 of the Clean Water Act, the proposed project alternatives within the corridor study area would represent the most practicable alignment for the Lena Road widening. Given that the project involves improvements to an existing roadway, opportunities to completely avoid wetland impacts would not be available. Although unavoidable impacts to wetlands and other surface waters would occur within the existing and proposed right-of-way, these would be the least impactful as compared to an alternate new roadway alignment outside of the existing right-of-way.

This evaluation would consider all practicable measures to avoid and minimize impact and impairment to wetlands and other surface water habitats, resulting from the proposed road widening. Mitigation of direct and indirect wetland and riverine surface water impacts would be provided to reduce the short-term and long-term adverse impacts to wetland resources in this region of Manatee County. Habitat quality, water quality and quantity, and hydroperiods would be protected and maintained in all wetlands and riverine surface waters that remain undisturbed.

4.5.3 Indirect and Cumulative Impacts

Short-term and long-term impacts to water quality and the resultant effects on wetland resources caused by construction, maintenance, and operation of the widened Lena Road would be managed using erosion control measures and BMPs during construction and use of stormwater management protocols. Measures to protect water quality within the waterways and wetlands will be required to meet state water quality standards.

Indirect wetland impacts are to habitat functions of wetlands associated with adjacent upland activities. The offset buffer of the indirect impact varies by agency. During the permitting process, indirect impacts would be evaluated at each wetland impact. For the state regulatory agencies, per the Environmental Resource Permit (ERP) Applicant's Handbook Volume I, Part III, Section 10.2.7, an average 25-foot buffer is the guidance used to estimate secondary impacts to the habitat functions of wetlands associated with adjacent upland activities. The exact buffer width would be site-specific and would be finalized during design and permitting.

The guidance for establishing the secondary impact buffer distance would be specific to landscape conditions (e.g., natural versus urban setting), wetland type (e.g., forested versus herbaceous) and wetland quality (e.g., low, medium, or high). The actual buffer distances for each wetland would be finalized in cooperation with the agencies, following formal wetland delineations and wetland quality characterizations at the time of permitting.

Cumulative effects of potential future projects on the natural resources adjacent to the widened road would be considered. Wetlands are present however these systems are limited in area, protected by federal and state regulations, and would not be expected to be impacted by future development. While development would be expected near these wetland areas, wetland buffers required by regulations would provide adequate protection. Therefore, cumulative impacts from the proposed project would be expected to be insignificant.

4.5.4 Mitigation

Wetland and riverine surface water impacts, resulting from the widening of Lena road would be mitigated pursuant to Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. Final mitigation requirements would be determined

during permitting based on the project design, extent and type of impacts, and use of the UMAM habitat scoring.

Some wetland impacts are expected to be unavoidable for the Lena Road widening and would occur within the Williams Creek and Cypress Strand Watersheds. To compensate these impacts, Manatee County would be first directed to use available mitigation banks with service areas that cover the project limits. Braden River Mitigation Bank and the Manatee Mitigation Bank would be two candidates for these requirements. These banks have available state credits however, federal credits are limited but could be available soon.

- **Braden River Mitigation Bank** - The service area for this mitigation bank includes the project area; however, it does not offer federal mitigation credits. It only offers state approved, freshwater herbaceous and forested wetland mitigation credits.
- **Manatee Mitigation Bank** - The service area for this mitigation bank includes the project area; however, the federal permit remains pending. Issuance is expected in October 2021.

If adequate mitigation bank credits are not available, permittee-responsible, onsite or offsite wetland mitigation could be proposed within the project watershed limits, potentially on Manatee County-owned land. A project-specific wetland mitigation plan has not been developed. A feasibility study and review of potential sites would be required to determine selection of a viable and suitable site for mitigation.

5.0 Essential Fish Habitat

Essential Fish Habitat (EFH) Assessments are conducted in accordance with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act of 1996. However, essential fish habitat does not occur within the corridor study area. Therefore, an EFH Assessment is not required.

6.0 Anticipated Permits

Coordination with regulatory agencies is recommended for the Lena Road widening project primarily involving two state of Florida agencies, including SWFWMD and the FDEP Southwest District. In January 2021, the state of Florida assumed the federal Clean Water Act Section 404 permit program for non-tidally influenced wetlands and waters. The Lena Road widening project would require a Section 404 permit from FDEP. In addition, due to impacts to wetlands and other surface waters, the project will require a Statewide ERP pursuant to 62-330 F.A.C. The following agency permitting actions are anticipated:

- FDEP Section 404 Permit – Individual Permit or General Permit, depending on the extent of wetland and surface water impacts, 0.5 acres of impact being the threshold.
- FDEP National Pollutant Discharge Elimination System, Stormwater Discharge from Large and Small Construction Activities (62-621.300 F.A.C.). This permit is to be obtained by the contractor.
- SWFWMD Statewide ERP – Individual ERP with the application review fee determined by project work area and extent of wetland impacts.

A second tier of agency involvement includes FWC and USFWS as commenting agencies on the respective permit applications for listed and protected species. Coordination and possible consultation with these agencies would be required to construct the Lena Road widening project.

7.0 Conclusions

7.1 Protected Species and Habitat

7.1.1 Federal Protected Wildlife and Critical Habitat

The federal listed and protected wildlife species provided in **Table 7-1** were determined to have the potential to occur within the corridor study area. Each species is listed with its federal status and the project effect determination based on the study results. The study area is not located within designated Critical Habitat for any federal protected species. Therefore, the proposed project would not result in the ***destruction or adverse modification of critical habitat***.

Table 7-1: Project Effect Determinations for Federal Listed and Protected Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
Federal Listed Wildlife			
<i>Drymarchon corais couperi</i>	Eastern indigo snake	Threatened	May affect, not likely to adversely affect
<i>Mycteria americana</i>	Wood stork	Threatened	May affect, not likely to adversely affect
<i>Aphelocoma coerulescens</i>	Florida scrub jay	Threatened	No affect anticipated
Federal Protected Wildlife			
<i>Haliaeetus leucocephalus</i>	Bald eagle	BGEPA* MBTA**	Minimal or no impact expected
<i>Pandion haliaetus</i>	Osprey	MBTA**	Minimal or no impact expected

* Bald & Golden Eagle Protection Act and Migratory Bird Treaty Act. ** Migratory Bird Treaty Act

7.1.2 State Protected Wildlife

The state listed wildlife species provided in **Table 7-2** were determined to have the potential to occur within the corridor study area. Each species is listed with its state status and the project effect determination based on the study results.

Table 7-2: Project Effect Determinations for State Listed Wildlife

Scientific Name	Common Name	Status	Project Effect Determination
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	Threatened	No effect anticipated
<i>Falco sparverius paulus</i>	Southeastern American kestrel	Threatened	No effect anticipated
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	Threatened	No effect anticipated
Wading Birds			
<i>Egretta caerulea</i>	Little blue heron	Threatened	No effect anticipated

Scientific Name	Common Name	Status	Project Effect Determination
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No effect anticipated
<i>Platalea ajaja</i>	Rosette spoonbill	Threatened	No effect anticipated
Nesting Shorebirds			
<i>Sternula antillarum</i>	Least Tern	Threatened	No effect anticipated

7.1.3 Federal and State Protected Plants

Eleven federal and state listed plants protected by the FDACS provided in **Table 7-3** were determined to have the potential to occur within the corridor study area. Each species is listed with its status and the project effect determination based on the study results. None of these species were observed during preliminary surveys and therefore there is no effect anticipated to these species

Table 7-3: Project Effect Determinations for Federal and State Listed Plants

Scientific Name	Common Name	Status	Project Effect Determination
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	State Threatened	No effect anticipated
<i>Centrosema arenicola</i>	Sand Butterfly Pea	State Endangered	No effect anticipated
<i>Chionanthus pygmaeus</i>	Pygmy Fringe-tree	Federal Endangered	No effect anticipated
<i>Cladonia perforata</i>	Florida Perforate Cladonia	Federal Endangered	No effect anticipated
<i>Lechea cernua</i>	Nodding Pinweed	State Threatened	No effect anticipated
<i>Linum carteri var. smallii</i>	Small's Flax	State Endangered	No effect anticipated
<i>Nemastylis floridana</i>	Celestial Lily	State Endangered	No effect anticipated
<i>Nolina atopocarpa</i>	Florida Beargrass	State Threatened	No effect anticipated
<i>Pteroglossaspis ecristata</i>	Giant Orchid	State Threatened	No effect anticipated
<i>Rhynchospora megaplumosa</i>	Large-plumed Beaksedge	State Endangered	No effect anticipated
<i>Zephyranthes simpsonii</i>	Redmargin Zephyrlily	State Threatened	No effect anticipated

7.2 Wetlands and Other Surface Waters

Wetlands were present in the corridor study area and were mapped and classified according to FLUCFCS and the USFWS Classification of Wetlands and Deepwater Habitats of the United States.

A total of 27 wetland systems were identified within the corridor study area. These wetland systems consist of 14 herbaceous wetland areas totaling approximately 33 acres and 17 forested wetland areas totaling approximately 55 acres.

A total of eight surface waters were identified within the corridor study area consisting of Williams Creek, Cypress Stand, and drainage ditches.

Potential impacts to wetlands and other surface waters would be estimated and assessed during an alternative's analysis. Each alternative would have a unique total UMAM functional loss on which to determine the eventual mitigation cost for each alternative. Additional wetland functional losses associated with the preferred pond site impacts would also be evaluated and compared. Mitigation will be required for all project impacts.

Final mitigation requirements would be determined during permitting based on the project design and using the UMAM scoring of impact areas at that time of review with the environmental agencies. Impacts to wetlands that result from the project would be mitigated pursuant to Section 373.4137, F.S., to satisfy all requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344.

There are no FDEP-designated OFWs within the corridor study area protected in accordance with 62-302.700 F.A.C. and under the authority granted by Section 403.061(27) F.S.

There are no sovereign submerged lands designated with the corridor study area per Title XVIII Public Lands and Property Chapter 253 F.S.

7.3 Essential Fish Habitat

There is no essential fish habitat present within the corridor study area.

7.4 Anticipated Permits

The Lena Road project would require permitting with two state of Florida agencies, including SWFWMD and the FDEP Southwest District.

- FDEP Section 404 Permit – Individual Permit or General Permit, depending on the extent of wetland and water impacts, 0.5 acres of impact being the threshold.
- FDEP National Pollutant Discharge Elimination System, Stormwater Discharge from Large and Small Construction Activities (62-621.300 F.A.C.) – To be obtained by the contractor.
- SWFWMD Statewide ERP – Individual ERP with the application review fee determined by project work area and extent of wetland impacts.

8.0 Commitments

8.1 Wildlife

To protect listed wildlife, wildlife habitat, and plants, Manatee County will conduct wildlife surveys of the road corridor and pond sites during permitting and then prior to construction for the presence of protected wildlife species including plants. Manatee County will abide by standard resource protection measures in addition to the following specific commitments:

1. The County will adhere to the most current version of USFWS Standard Protection Measures for the *Eastern Indigo Snake* (2013) during construction.
2. The County will survey for **bald eagle** nests during permitting and design. If a bald eagle nest is identified within 660 feet of the project prior to or during construction, the County will coordinate with the USFWS and the FWC in accordance with the BGEPA and MBTA and will adhere to the USFWS Bald Eagle Management Guidelines.

3. The County will conduct osprey nest surveys during the permitting phase of the proposed project. If an osprey nest is identified, the County will coordinate with the USFWS and/or the FWC, depending on the activity status of the nest.
4. The County will perform pre-construction surveys for nesting **Florida sandhill cranes** per the FWC species guidelines (2016) to ensure active nests and flightless young are protected.
5. If required, the County will perform **southeastern American kestrel** surveys for breeding and active nest cavities during permitting and preconstruction.
6. The County will perform preliminary **gopher tortoise** surveys during permitting and formal gopher tortoise surveys during pre-construction in areas deemed suitable habitat in accordance with the FWC Gopher Tortoise Permitting Guidelines, and will secure an FWC Gopher Tortoise Relocation Permit, if gopher tortoise burrows are found.
7. The County will survey **wading bird** nesting habitat within 330 feet of the project area during permitting. If a wading bird nest is detected, additional surveys may be recommended to determine if an active breeding site is present.
8. The County will perform pre-construction surveys for **least tern** nests and young and for multi-year construction projects. Surveys can be conducted prior to land clearing and earthmoving to ensure nesting birds are not present.
9. If **protected plants** are discovered during pre-construction surveys, the County will initiate coordination with the FDACS.

8.2 Wetlands and Other Surface Waters

To protect wetland and water resources before, during, and after construction, Manatee County will abide by state and federal permit requirements and water quality protection measures particularly including the following commitments:

1. The County will implement provisions to avoid and minimize wetland impacts during design, permitting, and construction.
2. The County will use UMAM to evaluate each wetland impact area to quantify the functional loss based on location and landscape, water environment, and vegetation conditions.
3. The County will mitigate for wetland impacts pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344.
4. The County will use erosion control measures and Best Management Practices during construction to avoid and minimize direct, indirect, and temporary impacts to habitat and water quality.

9.0 References

- Audubon Center for Birds of Prey. 2021. EagleWatch Program Bald Eagle Nest Location Map. Maitland, Florida. Accessed on the Internet at: <https://cbop.audubon.org/conservation/about-eaglewatch-program>
- Carlisle, V.W. *et al.* 2007. Hydric Soils of Florida Handbook. Florida Association of Environmental Soil Scientists, Gainesville, Florida. 4th Edition.
- Cornell Lab of Ornithology. 2021. E-Bird database. Ithaca, New York. August 2021. Accessed at <https://ebird.org/hotspot/L6597784>.
- Cowardin, L.M., *et al.* 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Publication, Washington D.C.
- Florida Department of Environmental Protection. Chapter 62-340 F.A.C., Delineation of the Landward Extent of Wetland and Surface Waters.
- Florida Department of Environmental Protection. 2017. Factsheet about Outstanding Florida Waters (OFW). Section 403.061(27) Water Quality Standards Program. Tallahassee, Florida.
- Florida Department of Environmental Protection, *et al.* 2018. ERP Applicant's Handbook Volume I – Secondary Impacts 10.2.7. Tallahassee, Florida.
- Florida Department of Environmental Protection. 2007. Uniform Mitigation Assessment Method. 62-345. F.A.C. <http://www.dep.state.fl.us/legal/Rules/surfacewater/62-345/62-345.pdf>
- Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Bureau of Survey and Mapping, Thematic Mapping Section. Tallahassee, FL.
- Florida Fish and Wildlife Conservation Commission. Florida's Endangered Species, Threatened Species, and Species of Special Concern. Dec. 2018. Accessed January 2020. <http://www.myfwc.com>.
- Florida Fish and Wildlife Conservation Commission. 2016. Florida's Imperiled Species Management Plan, as amended Dec. 2018.
- Florida Natural Areas Inventory, Florida Biodiversity Matrix Query. August 2021. Accessed at <https://www.fnai.org/BiodiversityMatrix/index.html>
- Gilbert, K.M., *et al.* 1995. *The Florida Wetlands Delineation Manual*. Florida Department of Environmental Protection. Accessed at: <https://floridadep.gov/sites/default/files/delineationmanual.pdf>.
- The Cornell Lab of Ornithology. 2021. E-Bird database. Ithaca, New York. August 2021. Accessed at <https://ebird.org/hotspot/L6597784>.
- U.S. Department of Agriculture (USDA), Soil Conservation Service. 1983. Available at: http://soils.usda.gov/survey/printed_surveys/state.asp?abbr=FL&state=Florida. Accessed August 2021.
- The Cornell Lab of Ornithology. 2021. E-Bird database. Ithaca, New York. August 2021. Accessed at <https://ebird.org/hotspot/L6597784>.
- U.S. Army Corps of Engineers. 2010. Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region.
- U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Access at <https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>

U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service. 2008. Effect Determination Key for the Wood Stork in Central and North Peninsular Florida.

U.S. Department of Interior. Fish and Wildlife Service. 2021. IPaC Resource List. Official Report. Accessed for the Lena Road Corridor Study Area August 5, 2021. Consultation Code: 04EF1000-2021-SLI-1390

U.S. Fish and Wildlife Service. 2010, as amended 2013. Eastern Indigo Snake Programmatic Effect Determination Key.

U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines.

U.S. Fish and Wildlife Service. 2013. Standard Protection Measures for the Eastern Indigo Snake.

U.S. Fish and Wildlife Service Threatened and Endangered Species System (TESS) Available at <http://ecos.fws.gov> Accessed September 2016.

Yahr, R. 1995. FWS Multi-Species Recovery Team Meeting. December 6-8, 1995. Found at <https://www.fws.gov/verobeach/MSRPPDFs/FLPerforate.PDF>. Accessed January 27, 2020.

Appendices

Appendix A – Soil Data Report



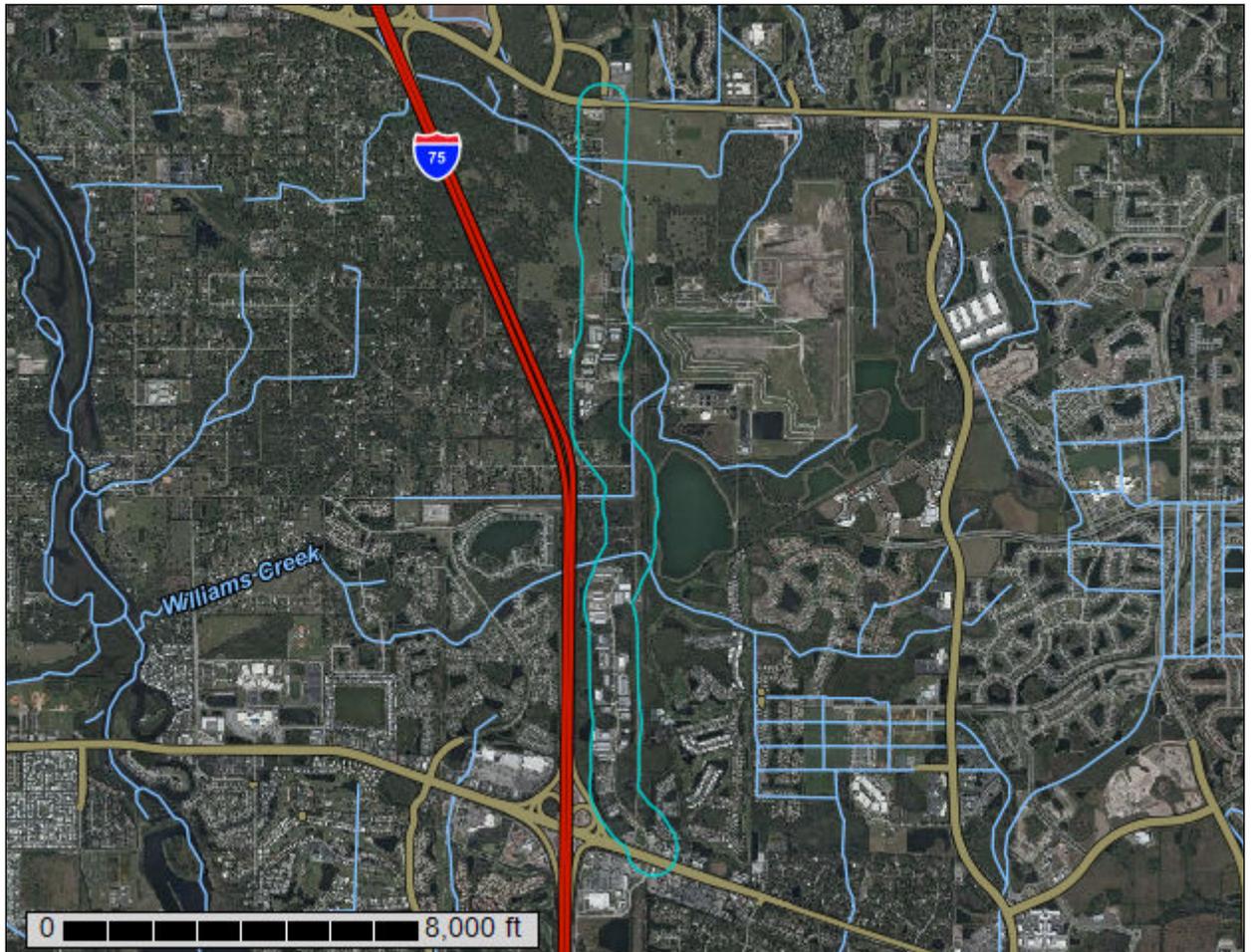
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Manatee County, Florida



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Manatee County, Florida
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 5, 2020—Mar 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Canova, Anclote, and Okeelanta soils	23.2	5.0%
11	Cassia fine sand, 0 to 2 percent slopes	11.8	2.5%
12	Cassia fine sand, moderately well drained	9.1	2.0%
16	Delray complex	2.0	0.4%
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	323.7	69.9%
26	Floridana-Immokalee-Okeelanta association	64.0	13.8%
35	Ona fine sand, orstein substratum	6.6	1.4%
45	Tavares fine sand, 0 to 5 percent slopes	18.2	3.9%
48	Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes	4.4	1.0%
Totals for Area of Interest		463.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

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scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Manatee County, Florida

7—Canova, Anclote, and Okeelanta soils

Map Unit Setting

National map unit symbol: 1hg9b
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Canova and similar soils: 40 percent
Anclote and similar soils: 25 percent
Okeelanta and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canova

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy marine deposits

Typical profile

Oa - 0 to 8 inches: muck
A - 8 to 24 inches: fine sand
B/C - 24 to 68 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains
(G155XB645FL)

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Other vegetative classification: Organic soils in depressions and on flood plains
(G155XB645FL)
Hydric soil rating: Yes

Description of Anclote

Setting

Landform: Drainageways on marine terraces, depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 16 inches: fine sand
Cg2 - 16 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Description of Okeelanta

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Herbaceous organic material over sandy marine deposits

Typical profile

Oa - 0 to 20 inches: muck
C - 20 to 54 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained

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Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains (G155XB645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL)
Hydric soil rating: Yes

Minor Components

Manatee

Percent of map unit: 5 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Chobee

Percent of map unit: 5 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)
Hydric soil rating: Yes

Floridana

Percent of map unit: 5 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

11—Cassia fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tzx6
Elevation: 0 to 110 feet
Mean annual precipitation: 42 to 63 inches
Mean annual air temperature: 68 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Cassia and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cassia

Setting

Landform: Rises on flatwoods on marine terraces, knolls on flatwoods on marine terraces
Landform position (three-dimensional): Tread, rise, talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 26 inches: fine sand
Bh - 26 to 42 inches: fine sand
C - 42 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 18 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

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Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL)

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL), Sand Pine Scrub (R155XY001FL)

Hydric soil rating: No

Minor Components

Myakka

Percent of map unit: 7 percent

Landform: Drainageways on flatwoods on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Pomello

Percent of map unit: 6 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, interfluve, riser

Down-slope shape: Linear, convex

Across-slope shape: Linear

Ecological site: R155XY001FL - Sand Pine Scrub

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL), Sand Pine Scrub (R155XY001FL)

Hydric soil rating: No

Satellite

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces, rises on marine terraces

Landform position (three-dimensional): Tread, talf, rise

Down-slope shape: Linear, convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL), Sand Pine Scrub (R155XY001FL)

Hydric soil rating: No

Jonathan

Percent of map unit: 3 percent

Landform: Knolls on marine terraces, ridges on marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, tread, rise

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic
uplands (G155XB121FL)

Hydric soil rating: No

12—Cassia fine sand, moderately well drained

Map Unit Setting

National map unit symbol: 1hg7q
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Cassia, moderately well drained, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cassia, Moderately Well Drained

Setting

Landform: Rises on marine terraces
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 29 inches: fine sand
Bh - 29 to 41 inches: fine sand
C - 41 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

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Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Minor Components

Pomello

Percent of map unit: 10 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

16—Delray complex

Map Unit Setting

National map unit symbol: 1hg7v
Elevation: 10 to 60 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Delray and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delray

Setting

Landform: Flats on marine terraces, drainageways on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear, concave
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 15 inches: fine sand
E - 15 to 55 inches: fine sand
Btg - 55 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Minor Components

Floridana, depressional

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on stream terraces, flood
plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds
(R155XY010FL)

Hydric soil rating: Yes

Gator

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Organic soils in depressions and on flood plains
(G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Felda, hydric

Percent of map unit: 5 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic
lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Anclote

Percent of map unit: 5 percent

Landform: Drainageways on marine terraces, depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear, concave

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Across-slope shape: Concave

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

Hydric soil rating: Yes

Ona, non-hydric

Percent of map unit: 5 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

20—EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2y9gx

Elevation: 10 to 150 feet

Mean annual precipitation: 45 to 61 inches

Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 335 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Eaugallie and similar soils: 70 percent

Eaugallie, wet, and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of EauGallie

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

E - 6 to 23 inches: fine sand

Bh - 23 to 47 inches: fine sand

Bw - 47 to 55 inches: fine sand

Btg - 55 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

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Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: R155XY003FL - South Florida Flatwoods
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Description of Eaugallie, Wet

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 17 inches: fine sand
Bh - 17 to 26 inches: fine sand
Bw - 26 to 48 inches: fine sand
E'g - 48 to 72 inches: fine sand
Btg - 72 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 3 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: R155XY003FL - South Florida Flatwoods

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Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Wabasso

Percent of map unit: 6 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Delray

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, convex, linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Pinellas

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Cabbage Palm Flatwoods (R155XY005FL)

Hydric soil rating: No

Myakka

Percent of map unit: 2 percent

Landform: Drainageways on flatwoods on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Riviera

Percent of map unit: 1 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

26—Floridana-Immokalee-Okeelanta association

Map Unit Setting

National map unit symbol: 1hg86
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Floridana, depressional, and similar soils: 35 percent
Immokalee and similar soils: 30 percent
Okeelanta and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Floridana, Depressional

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 19 inches: fine sand
E - 19 to 36 inches: fine sand
Btg - 36 to 63 inches: sandy clay loam
Cg - 63 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w

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Hydrologic Soil Group: C/D

Forage suitability group: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL)

Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Description of Immokalee

Setting

Landform: Depressions on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 10 inches: fine sand

E - 10 to 34 inches: fine sand

Bh - 34 to 43 inches: fine sand

C - 43 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Description of Okeelanta

Setting

Landform: Depressions on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Parent material: Herbaceous organic material over sandy marine deposits

Custom Soil Resource Report

Typical profile

Oa - 0 to 20 inches: muck
C - 20 to 54 inches: sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains (G155XB645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Minor Components

Delray

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Anclote

Percent of map unit: 3 percent
Landform: Drainageways on marine terraces, depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Chobee

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave

Custom Soil Resource Report

Across-slope shape: Concave

Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

Hydric soil rating: Yes

Pomona, non-hydric

Percent of map unit: 2 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Manatee

Percent of map unit: 2 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Myakka, non-hydric

Percent of map unit: 2 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

35—Ona fine sand, orstein substratum

Map Unit Setting

National map unit symbol: 1hg8j

Elevation: 20 to 150 feet

Mean annual precipitation: 48 to 56 inches

Mean annual air temperature: 68 to 75 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Ona, non-hydric, and similar soils: 70 percent

Custom Soil Resource Report

Ona, hydric, and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ona, Non-hydric

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand

Bh - 5 to 16 inches: fine sand

E - 16 to 52 inches: fine sand

B'h1 - 52 to 68 inches: fine sand

B'h2 - 68 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Description of Ona, Hydric

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand

Bh - 5 to 16 inches: fine sand

E - 16 to 52 inches: fine sand

Custom Soil Resource Report

B'h1 - 52 to 68 inches: fine sand

B'h2 - 68 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Myakka, non-hydric

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

St. Johns, non-hydric

Percent of map unit: 4 percent

Landform: Seeps on marine terraces

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Wauchula, non-hydric

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), South Florida Flatwoods (R155XY003FL)

Custom Soil Resource Report

Hydric soil rating: No

Waveland, non-hydric

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

45—Tavares fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2sw00

Elevation: 0 to 130 feet

Mean annual precipitation: 42 to 63 inches

Mean annual air temperature: 66 to 77 degrees F

Frost-free period: 340 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Tavares and similar soils: 83 percent

Minor components: 17 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares

Setting

Landform: Flats on marine terraces, hills on marine terraces, ridges on marine terraces, knolls on marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, side slope, tread, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear, convex

Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

C - 6 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: About 18 to 42 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Minor Components

Cassia

Percent of map unit: 5 percent
Landform: Rises on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Pomello

Percent of map unit: 4 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: R155XY001FL - Sand Pine Scrub
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Apopka

Percent of map unit: 3 percent
Landform: Hills on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Astatula

Percent of map unit: 3 percent
Landform: Hills on marine terraces, ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope

Custom Soil Resource Report

Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands
(G155XB111FL)
Hydric soil rating: No

Adamsville

Percent of map unit: 2 percent
Landform: Rises on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL), Upland Hardwood Hammock (R155XY008FL)
Hydric soil rating: No

48—Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2y9dx
Elevation: 0 to 150 feet
Mean annual precipitation: 43 to 60 inches
Mean annual air temperature: 68 to 77 degrees F
Frost-free period: 335 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Wabasso and similar soils: 70 percent
Wabasso, wet, and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wabasso

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 24 inches: fine sand
Bh - 24 to 35 inches: fine sand
Bw - 35 to 39 inches: fine sand
Btg - 39 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Custom Soil Resource Report

Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Description of Wabasso, Wet

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 24 inches: fine sand
Bh - 24 to 35 inches: fine sand
Bw - 35 to 39 inches: fine sand
Btg - 39 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 3 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w

Custom Soil Resource Report

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Eaugallie

Percent of map unit: 5 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Malabar

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Riviera

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic
lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Aripeka

Percent of map unit: 2 percent

Landform: Rises on karstic marine terraces

Landform position (three-dimensional): Tread, rise

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Shallow or moderately deep, sandy or loamy soils
on rises and ridges of mesic uplands (G155XB521FL), Wetland Hardwood
Hammock (R155XY012FL)

Hydric soil rating: No

Basinger

Percent of map unit: 1 percent

Landform: Depressions on flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Custom Soil Resource Report

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Paisley

Percent of map unit: 1 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Wetland Hardwood Hammock (R155XY012FL),
Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL)

Hydric soil rating: Yes

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Wildlife Management

Wildlife Management interpretations are tools for evaluating the suitability of the soil for various components of wildlife habitat, and as habitat of different types or species of wildlife. Example interpretations include crawfish aquaculture, burrowing animals and reptiles, grasses and legumes for food and cover, and freshwater wetland plants.

WLF - Gopher Tortoise Burrowing Suitability

This soil interpretation is intended to provide ratings based on the dominant soil characteristics that influence the suitability of the soil for excavation, maintenance, and preservation of burrows by gopher tortoises (*Gopherus polyphemus*). The information allows the user to identify areas of potentially suitable habitat area prior to the application of conservation practices. The ratings are for the soils in their natural condition and do not consider present land use, existing vegetation, water sources, and the presence or absence of wildlife in the area. The presence or absence of a species is determined at the local level and by many factors including soil characteristics.

The gopher tortoise (*Gopherus polyphemus*) is a burrowing reptile that inhabits open pine forests throughout the southeastern United States. Historically, typical gopher tortoise habitat consisted of open, frequently burned longleaf pine or longleaf pine/scrub oak uplands and flatwoods on moderately well drained to xeric soils. The burrows of a gopher tortoise are the habitat and center of normal feeding, breeding, and sheltering activity. Gopher tortoises excavate and use more than one burrow for shelter beneath the ground surface. Burrows, which may extend for more than 30 feet, provide shelter from canid predators, winter cold and summer heat.

Custom Soil Resource Report

The soil criteria that are taken into account in this soil interpretation are those that have been determined to have the most effect on burrow excavation, maintenance, and preservation. These include the soil texture, percent coarse fragments, depth to a restrictive layer or layer with greater than or equal to 35% clay, ponding or flooding frequency, slope, and depth to seasonal high water table.

Each soil criteria is assigned a numerical rating between 0 and 1. In this rating, 1 represents more suitable soil characteristics, and 0 represents less suitable soil characteristics. Each criterion is calculated separately and the lowest rating is reported as the overall soil suitability rating, representing the most limiting factor in the soil's suitability for gopher tortoise burrows.

Rating classes have been defined as follows:

Highly suited (numerical rating 0.95-1): These soils have no restrictions for use and are favorable for burrowing by gopher tortoise. Colonization and population densities may be above average if other habitat factors are not limiting.

Moderately suited (numerical rating 0.5-0.95): These soils are suitable and somewhat favorable for burrowing by gopher tortoise. Some restrictive features may limit the use of the site to a minor extent. Colonization and population densities may be average to above for the area if the other habitat requirements are met.

Less suited (numerical rating 0.05-0.5): These soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Colonization and population densities may be below average or restricted in the area due to the limiting factors even though all of the other species habitat requirements are met.

Unsuitable (numerical rating 0-0.05): These soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Areas of included soils with better drainage may provide suitable soil properties in some locations.

Not Rated: Miscellaneous areas are given a not rated status.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen, which is displayed on the report. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the Selected Soil Interpretations report with this interpretation included from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

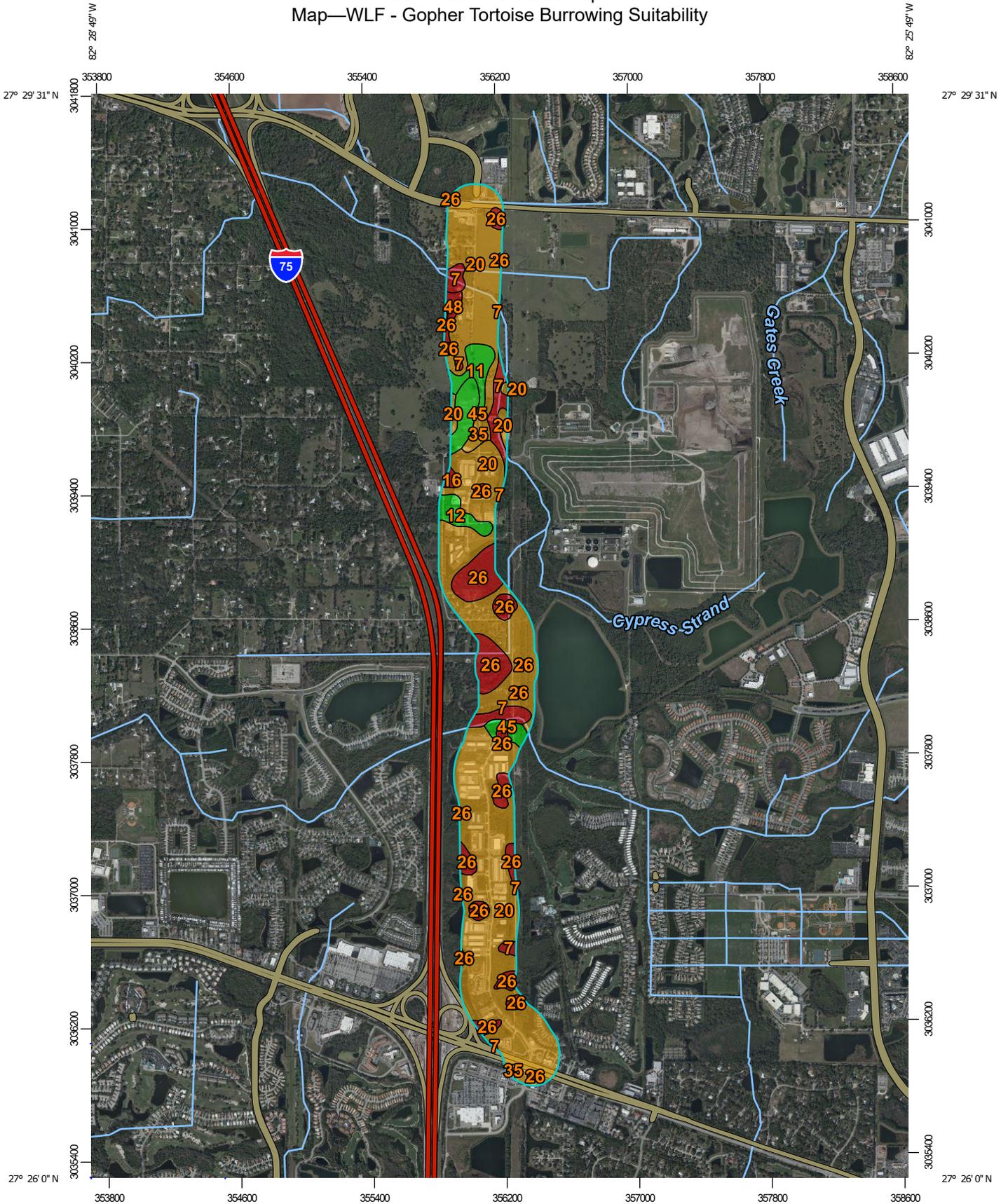
Citations:

Custom Soil Resource Report

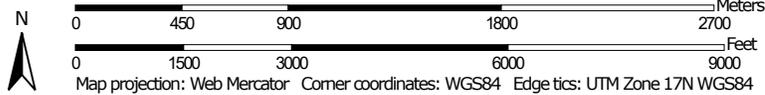
U.S. Fish and Wildlife Service and Natural Resources Conservation Service. 2012.
Gopher Tortoise (*Gopherus polyphemus*) Soil Classifications for the Federally Listed
Range using the National Soil Information System Database, Version 1.

Custom Soil Resource Report

Map—WLF - Gopher Tortoise Burrowing Suitability



Map Scale: 1:31,800 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Unsuitable
-  Less suited
-  Moderately suited
-  Highly suited
-  Not rated or not available

Soil Rating Lines

-  Unsuitable
-  Less suited
-  Moderately suited
-  Highly suited
-  Not rated or not available

Soil Rating Points

-  Unsuitable
-  Less suited
-  Moderately suited
-  Highly suited
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways

-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Manatee County, Florida
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 5, 2020—Mar 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Tables—WLF - Gopher Tortoise Burrowing Suitability

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
7	Canova, Anclote, and Okeelanta soils	Unsuitable	Canova (40%)	Ponding (0.00)	23.2	5.0%
				Water table (0.00)		
				Texture (0.31)		
			Anclote (25%)	Ponding (0.00)		
				Water table (0.00)		
			Okeelanta (20%)	Ponding (0.00)		
				Water table (0.00)		
				Texture (0.50)		
			Manatee (5%)	Ponding (0.00)		
				Water table (0.00)		
			Chobee (5%)	Ponding (0.00)		
				Water table (0.00)		
Texture (0.59)						
Floridana (5%)	Water table (0.00)					
11	Cassia fine sand, 0 to 2 percent slopes	Highly suited	Cassia (80%)		11.8	2.5%
			Pomello (6%)			
			Satellite (4%)			
12	Cassia fine sand, moderately well drained	Highly suited	Cassia, moderately well drained (90%)		9.1	2.0%
			Pomello (10%)			
16	Delray complex	Unsuitable	Delray (75%)	Water table (0.00)	2.0	0.4%
				Floridana, depressional (5%)		
			Water table (0.00)			
			Texture (0.96)			
			Gator (5%)	Ponding (0.00)		
				Water table (0.00)		
				Texture (0.50)		
Felda, hydric (5%)	Water table (0.00)					

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI		
			Anclote (5%)	Ponding (0.00) Water table (0.00)				
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	Less suited	EauGallie (70%)	Water table (0.20)	323.7	69.9%		
			Wabasso (6%)	Water table (0.20)				
			Pinellas (3%)	Water table (0.20)				
			Myakka (2%)	Water table (0.20)				
26	Floridana-Immokalee-Okeelanta association	Unsuitable	Floridana, depressional (35%)	Ponding (0.00) Water table (0.00) Texture (0.96)	64.0	13.8%		
			Immokalee (30%)	Ponding (0.00) Water table (0.00)				
			Okeelanta (20%)	Ponding (0.00) Water table (0.00) Texture (0.50)				
			Delray (3%)	Ponding (0.00) Water table (0.00)				
			Anclote (3%)	Ponding (0.00) Water table (0.00)				
			Chobee (3%)	Ponding (0.00) Water table (0.00) Texture (0.59)				
			Manatee (2%)	Ponding (0.00) Water table (0.00)				
35	Ona fine sand, orstein substratum	Less suited	Ona, non-hydric (70%)	Water table (0.22)			6.6	1.4%
			Myakka, non-hydric (4%)	Water table (0.22)				
			St. Johns, non-hydric (4%)	Water table (0.22)				
			Waveland, non-hydric (3%)	Soil depth (0.09) Water table (0.22)				

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
45	Tavares fine sand, 0 to 5 percent slopes	Highly suited	Tavares (83%)		18.2	3.9%
			Cassia (5%)			
			Pomello (4%)			
			Astatula (3%)			
			Apopka (3%)			
			Adamsville (2%)			
48	Wabasso- Wabasso, wet, fine sand, 0 to 2 percent slopes	Unsuitable	Wabasso (70%)	Water table (0.00)	4.4	1.0%
				Texture (1.00)		
			Wabasso, wet (15%)	Water table (0.00)		
				Texture (1.00)		
			Malabar (3%)	Water table (0.00)		
			Riviera (3%)	Water table (0.00)		
				Texture (0.91)		
			Aripeka (2%)	Soil depth (0.00)		
				Content of rock fragments (0.50)		
				Texture (0.65)		
				Water table (0.92)		
			Paisley (1%)	Soil depth (0.00)		
				Water table (0.00)		
				Texture (0.56)		
Basinger (1%)	Ponding (0.00)					
	Water table (0.00)					
Totals for Area of Interest					463.0	100.0%

Rating	Acres in AOI	Percent of AOI
Less suited	330.3	71.3%
Unsuitable	93.6	20.2%
Highly suited	39.1	8.4%
Totals for Area of Interest	463.0	100.0%

Rating Options—WLF - Gopher Tortoise Burrowing Suitability

Aggregation Method: Dominant Condition

Custom Soil Resource Report

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix B – IPaC Resource List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
North Florida Ecological Services Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
Phone: (904) 731-3336 Fax: (904) 731-3045

In Reply Refer To:
Consultation Code: 04EF1000-2021-SLI-1390
Event Code: 04EF1000-2021-E-02160
Project Name: Lena Road

August 05, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - Migratory Birds
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

North Florida Ecological Services Field Office

7915 Baymeadows Way, Suite 200

Jacksonville, FL 32256-7517

(904) 731-3336

Project Summary

Consultation Code: 04EF1000-2021-SLI-1390

Event Code: 04EF1000-2021-E-02160

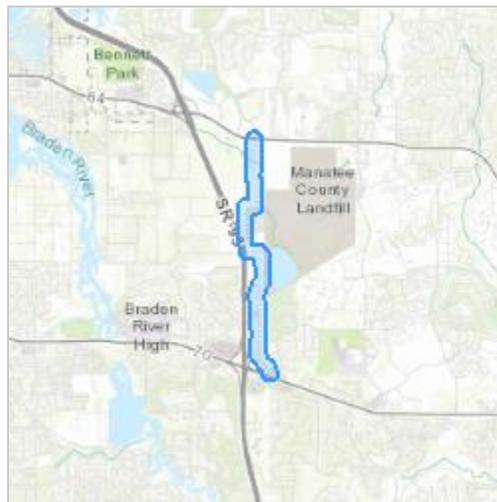
Project Name: Lena Road

Project Type: TRANSPORTATION

Project Description: Connecting Lena road to 64 and 70

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@27.4627625,-82.4565495173091,14z>



Counties: Manatee County, Florida

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Audubon's Crested Caracara <i>Polyborus plancus audubonii</i> Population: FL pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8250	Threatened
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6994	Candidate
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1110	Threatened

Flowering Plants

NAME	STATUS
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1084	Endangered

Lichens

NAME	STATUS
Florida Perforate Cladonia <i>Cladonia perforata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7516	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Clapper Rail <i>Rallus crepitans</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Oct 31
Common Ground-dove <i>Columbina passerina exigua</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 1 to Dec 31
Least Tern <i>Sterna antillarum</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Limpkin <i>Aramus guarauna</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 15 to Aug 31
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Reddish Egret <i>Egretta rufescens</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7617	Breeds Mar 1 to Sep 15
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Yellow Warbler <i>Dendroica petechia gundlachi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 20 to Aug 10

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

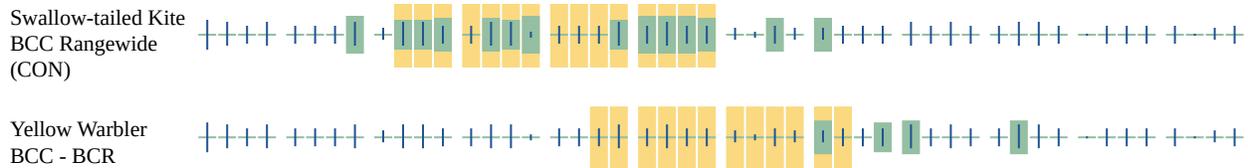
Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Appendix C – Affects Determination Keys



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960

January 25, 2010

David S. Hobbie
Chief, Regulatory Division
Jacksonville District Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Service Federal Activity Code: 41420-2007-FA-1494
Service Consultation Code: 41420-2007-I-0964
Subject: South Florida Programmatic
Concurrence
Species: Wood Stork

Dear Mr. Hobbie:

The Fish and Wildlife Service's (Service) South Florida Ecological Services Office (SFESO) and the U.S. Army Corps of Engineers Jacksonville District (Corps) have been working together to improve the consultation process for federally listed species associated with the Corps' wetland permitting program. The Service provided letters to the Corps dated March 23, 2007, and October 18, 2007, in response to a request for a multi-county programmatic concurrence with a criteria-based determination of "may affect, not likely to adversely affect" (NLAA) for the threatened eastern indigo snake (*Drymarchon corais couperi*) and the endangered wood stork (*Mycteria americana*) for projects involving freshwater wetland impacts within specified Florida counties. In our letters, we provided effect determination keys for these two federally listed species, with specific criteria for the Service to concur with a determination of NLAA.

The Service has revisited these keys recently and believes new information provides cause to revise these keys. Specifically, the new information relates to foraging efficiencies and prey base assessments for the wood stork and permitting requirements for the eastern indigo snake. This letter addresses the wood stork key and is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). The eastern indigo snake key will be provided in a separate letter.

Wood stork

Habitat

The wood stork is primarily associated with freshwater and estuarine habitats that are used for nesting, roosting, and foraging. Wood storks typically construct their nests in medium to tall trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water (Ogden 1991, 1996; Rodgers et al. 1996). Successful colonies are those



that have limited human disturbance and low exposure to land-based predators. Nesting colonies protected from land-based predators are characterized as those surrounded by large expanses of open water or where the nest trees are inundated at the onset of nesting and remain inundated throughout most of the breeding cycle. These colonies have water depths between 0.9 and 1.5 meters (3 and 5 feet) during the breeding season.

Successful nesting generally involves combinations of average or above-average rainfall during the summer rainy season and an absence of unusually rainy or cold weather during the winter-spring breeding season (Kahl 1964; Rodgers et al. 1987). This pattern produces widespread and prolonged flooding of summer marshes, which maximize production of freshwater fishes, followed by steady drying that concentrate fish during the season when storks nest (Kahl 1964). Successful nesting colonies are those that have a large number of foraging sites. To maintain a wide range of foraging sites, a variety of wetland types should be present, with both short and long hydroperiods. The Service (1999) describes a short hydroperiod as a 1 to 5-month wet/dry cycle, and a long hydroperiod as greater than 5 months. During the wet season, wood storks generally feed in the shallow water of the short-hydroperiod wetlands and in coastal habitats during low tide. During the dry season, foraging shifts to longer hydroperiod interior wetlands as they progressively dry-down (though usually retaining some surface water throughout the dry season).

Wood storks occur in a wide variety of wetland habitats. Typical foraging sites for the wood stork include freshwater marshes and stock ponds, shallow, seasonally flooded roadside and agricultural ditches, narrow tidal creeks and shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs. Because of their specialized feeding behavior, wood storks forage most effectively in shallow-water areas with highly concentrated prey. Through tactolocation, or grope feeding, wood storks in south Florida feed almost exclusively on fish between 2 and 25 centimeters [cm] (1 and 10 inches) in length (Ogden et al. 1976). Good foraging conditions are characterized by water that is relatively calm, uncluttered by dense thickets of aquatic vegetation, and having a water depth between 5 and 38 cm (5 and 15 inches) deep, although wood storks may forage in other wetlands. Ideally, preferred foraging wetlands would include a mosaic of emergent and shallow open-water areas. The emergent component provides nursery habitat for small fish, frogs, and other aquatic prey and the shallow, open-water areas provide sites for concentration of the prey during seasonal dry-down of the wetland.

Conservation Measures

The Service routinely concurs with the Corps' "may affect, not likely to adversely affect" determination for individual project effects to the wood stork when project effects are insignificant due to scope or location, or if assurances are given that wetland impacts have been avoided, minimized, and adequately compensated such that there is no net loss in foraging potential. We utilize our *Habitat Management Guidelines for the Wood Stork in the Southeast Region* (Service 1990) (Appendix 1) (HMG) in project evaluation. The HMG is currently under review and once final will replace the enclosed HGM. There is no designated critical habitat for the wood stork.

The SFESO recognizes a 29.9 kilometer [km] (18.6-mile) core foraging area (CFA) around all known wood stork colonies in south Florida. Appendix 2 (to be updated as necessary) provides locations of colonies and their CFAs in south Florida that have been documented as active within the last 10 years. The Service believes loss of suitable wetlands within these CFAs may reduce foraging opportunities for the wood stork. To minimize adverse effects to the wood stork, we recommend compensation be provided for impacts to foraging habitat. The compensation should consider wetland type, location, function, and value (hydrology, vegetation, prey utilization) to ensure that wetland functions lost due to the project are adequately offset. Wetlands offered as compensation should be of the same hydroperiod and located within the CFAs of the affected wood stork colonies. The Service may accept, under special circumstances, wetland compensation located outside the CFAs of the affected wood stork nesting colonies. On occasion, wetland credits purchased from a "Service Approved" mitigation bank located outside the CFAs could be acceptable to the Service, depending on location of impacted wetlands relative to the permitted service area of the bank, and whether or not the bank has wetlands having the same hydroperiod as the impacted wetland.

In an effort to reduce correspondence in effect determinations and responses, the Service is providing the Wood Stork Effect Determination Key below. If the use of this key results in a Corps determination of "no effect" for a particular project, the Service supports this determination. If the use of this Key results in a determination of NLAA, the Service concurs with this determination¹. This Key is subject to revisitation as the Corps and Service deem necessary.

The Key is as follows:

A. Project within 0.76 km (0.47 mile)² of an active colony site³ "may affect"⁴

Project impacts Suitable Foraging Habitat (SFH) at a location greater than 0.76 km (0.47 mile) from a colony site..... "go to B"

Project does not affect SFH⁵..... "no effect".

¹ With an outcome of "no effect" or "NLAA" as outlined in this key, and the project has less than 20.2 hectares (50 acres) of wetland impacts, the requirements of section 7 of the Act are fulfilled for the wood stork and no further action is required. For projects with greater than 20.2 hectares (50 acres) of wetland impacts, written concurrence of NLAA from the Service is necessary.

² Within the secondary zone (the average distance from the border of a colony to the limits of the secondary zone is 0.76 km (2,500 feet, or 0.47 mi).

³ An active colony is defined as a colony that is currently being used for nesting by wood storks or has historically over the last 10 years been used for nesting by wood storks.

⁴ Consultation may be concluded informally or formally depending on project impacts.

⁵ Suitable foraging habitat (SFH) are wetlands that typically have shallow-open water areas that are relatively calm and having a permanent or seasonal water depth between 5 to 38 cm (2 to 15 inches) deep. Other shallow non-wetland water bodies are also SFH. SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to freshwater marshes, small

- B. Project impact to SFH is less than 0.20 hectare (one-half acre)⁶.....*NLAA*¹”
 Project impact to SFH is greater in scope than 0.20 hectare (one-half acre).....*go to C*
- C. Project impacts to SFH not within the CFA (29.9 km, 18.6 miles) of a colony site*go to D*
 Project impacts to SFH within the CFA of a colony site*go to E*
- D. Project impacts to SFH have been avoided and minimized to the extent practicable, and compensation (Service approved mitigation bank or as provided in accordance with Mitigation Rule 33 CFR Part 332) for unavoidable impacts is proposed in accordance with the CWA section 404(b)(1) guidelines and habitat compensation replaces the foraging value matching the hydroperiod⁷ of the wetlands affected and provides foraging value similar to, or higher than, that of impacted wetlands. See Appendix 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance⁸ *NLAA*¹”
 Project not as above..... “*may affect*⁴”
- E. Project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA or within the service area of a Service-approved mitigation bank; and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration

ponds, shallow, seasonally flooded roadside or agricultural ditches, seasonally flooded pastures, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

⁶ On an individual basis, SFH impacts to wetlands less than 0.20 hectare (one-half acre) generally will not have a measurable effect on wood storks, although we request that the Corps require mitigation for these losses when appropriate. Wood storks are a wide ranging species, and individually, habitat change from impacts to SFH less than one-half acre are not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

⁷ Several researchers (Flemming et al. 1994; Ceilley and Bortone 2000) believe that the short hydroperiod wetlands provide a more important pre-nesting foraging food source and a greater early nestling survivor value for wood storks than the foraging base (grams of fish per square meter) that short hydroperiod wetlands provide. Although the short hydroperiod wetlands may provide less fish, these prey bases historically were more extensive and met the foraging needs of the pre-nesting storks and the early-age nestlings. Nest productivity may suffer as a result of the loss of short hydroperiod wetlands. We believe that most wetland fill and excavation impacts permitted in south Florida are in short hydroperiod wetlands. Therefore, we believe that it is especially important that impacts to these short hydroperiod wetlands within CFAs are avoided, minimized, and compensated for by enhancement/restoration of short hydroperiod wetlands.

⁸ For this Key, the Service requires an analysis of foraging prey base losses and enhancements from the proposed action as shown in the examples in Appendix 3 for projects with greater than 2.02 hectares (5 acres) of wetland impacts. For projects with less than 2.02 hectares (5 acres) of wetland impacts, an individual foraging prey base analysis is not necessary although type for type wetland compensation is still a requirement of the Key.

matching the hydroperiod⁶ of the wetlands affected, and provides foraging value similar to, or higher than, that of impacted wetlands. See Appendix 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance⁸..... "NLAA¹"

Project does not satisfy these elements "may affect⁴"

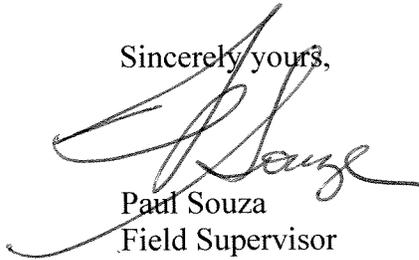
This Key does not apply to Comprehensive Everglades Restoration Plan projects, as they will require project-specific consultations with the Service.

Monitoring and Reporting Effects

For the Service to monitor cumulative effects, it is important for the Corps to monitor the number of permits and provide information to the Service regarding the number of permits issued where the effect determination was: "may affect, not likely to adversely affect." We request that the Corps send us an annual summary consisting of: project dates, Corps identification numbers, project acreages, project wetland acreages, and project locations in latitude and longitude in decimal degrees.

Thank you for your cooperation and effort in protecting federally listed species. If you have any questions, please contact Allen Webb at extension 246.

Sincerely yours,



Paul Souza
Field Supervisor
South Florida Ecological Services Office

Appendices

- cc: w/Appendices
- Corps, Jacksonville, Florida (Stu Santos)
- EPA, West Palm Beach, Florida (Richard Harvey)
- FWC, Vero Beach, Florida (Joe Walsh)
- Service, Jacksonville, Florida (Billy Brooks)

LITERATURE CITED

- Ceilley, D.W. and S.A. Bortone. 2000. A survey of freshwater fishes in the hydric flatwoods of flint pen strand, Lee County, Florida. Proceedings of the 27th Annual Conference on Ecosystems Restoration and Creation, 70-91. Hillsborough Community College; Hillsborough County, Florida.
- Flemming, D.M., W.F. Wolff, and D.L. DeAngelis. 1994. Importance of landscape heterogeneity to wood storks. Florida Everglades Management 18: 743-757.
- Kahl, M.P., Jr. 1964. Food ecology of the wood stork (*Mycteria americana*) in Florida. Ecological Monographs 34:97-117.
- Ogden, J.C. 1991. Nesting by wood storks in natural, altered, and artificial wetlands in central and northern Florida. Colonial Waterbirds 14:39-45.
- Ogden, J.C., J.A. Kushlan, and J.T. Tilmant. 1976. Prey selectivity by the wood stork. Condor 78(3):324-330.
- Ogden, J.C. 1996. Wood Stork in J.A. Rodgers, H. Kale II, and H.T. Smith, eds. Rare and endangered biota of Florida. University Press of Florida; Gainesville, Florida.
- Rodgers, J.A. Jr., A.S. Wenner, and S.T. Schwikert. 1987. Population dynamics of wood storks in northern and central Florida, USA. Colonial Waterbirds 10:151-156.
- Rodgers, J.A., Jr., S.T. Schwikert, and A. Shapiro-Wenner. 1996. Nesting habitat of wood storks in north and central Florida, USA. Colonial Waterbirds 19:1-21.
- U.S. Fish and Wildlife Service. 1990. Habitat management guidelines for the wood stork in the southeast region. Prepared by John C. Ogden for the Southeast Region U.S. Fish and Wildlife Service; Atlanta, Georgia.
- U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Fish and Wildlife Service; Atlanta, Georgia. Available from: <http://verobeach.fws.gov/Programs/Recovery/vbms5.html>.



United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:

August 13, 2013

Colonel Alan M. Dodd, District Engineer
Department of the Army
Jacksonville District Corps of Engineers
P.O Box 4970
Jacksonville, Florida 32232-0019
(Attn: Mr. David S. Hobbie)

RE: Update Addendum to USFWS Concurrence Letter to U.S. Army Corps of Engineers
Regarding Use of the Attached Eastern Indigo Snake Programmatic Effect Determination Key

Dear Colonel Dodd:

This letter is to amend the January 25, 2010, letter to the U.S. Army Corps of Engineers regarding the use of the attached eastern indigo snake programmatic effect determination key (key). It supersedes the update addendum issued January 5, 2012.

We have evaluated the original programmatic concurrence and find it suitable and appropriate to extend its use to the remainder of Florida covered by the Panama City Ecological Services Office.

On Page 2

The following replaces the last paragraph above the signatures:

“Thank you for your continued cooperation in the effort to conserve fish and wildlife resources. Any questions or comments should be directed to Annie Dziergowski (North Florida ESO) at 904-731-3089, Harold Mitchell (Panama City ESO) at 850-769-0552, or Victoria Foster (South Florida ESO) at 772-469-4269.”

On Page 3

The following replaces both paragraphs under “Scope of the key”:

“This key should be used only in the review of permit applications for effects determinations for the eastern indigo snake within the State of Florida, and not for other listed species or for aquatic resources such as Essential Fish Habitat (EFH).”

On Page 4

The following replaces the first paragraph under Conservation Measures:

“The Service routinely concurs with the Corps’ “not likely to adversely affect” (NLAA) determination for individual project effects to the eastern indigo snake when assurances are given that

our *Standard Protection Measures for the Eastern Indigo Snake* (Service 2013) located at: <http://www.fws.gov/northflorida/IndigoSnakes/indigo-snakes.htm> will be used during project site preparation and project construction. There is no designated critical habitat for the eastern indigo snake.”

On Page 4 and Page 5 (Couplet D)

The following replaces D. under Conservation Measures:

D. The project will impact less than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) or less than 25 active and inactive gopher tortoise burrows.....go to E

The project will impact more than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) or more than 25 active and inactive gopher tortoise burrows and consultation with the Service is requested²..... ”may affect”

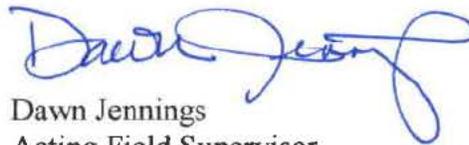
On Page 5

The following replaces footnote #3:

“³If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a FWC Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the most current Gopher Tortoise Permitting Guidelines found at <http://myfwc.com/gophertortoise> .”

Thank you for making these amendments concerning the Eastern Indigo Snake Key. If you have any questions, please contact Jodie Smithem of my staff at the address on the letterhead, by email at jodie_smithem@fws.gov, or by calling (904)731-3134.

Sincerely,



Dawn Jennings
Acting Field Supervisor

cc:

- Panama City Ecological Services Field Office, Panama City, FL
- South Florida Ecological Services Field Office, Vero Beach, FL



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960



January 25, 2010

David S. Hobbie
Chief, Regulatory Division
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Service Federal Activity Code: 41420-2009-FA-0642

Service Consultation Code: 41420-2009-I-0467

41910-2010-I-0045

Subject: North and South Florida
Ecological Services Field Offices
Programmatic Concurrence for Use
of Original Eastern Indigo Snake
Key(s) Until Further Notice

Dear Mr. Hobbie:

The U.S. Fish and Wildlife Service's (Service) South and North Florida Ecological Services Field Offices (FO), through consultation with the U.S. Army Corps of Engineers Jacksonville District (Corps), propose revision to both Programmatic concurrence letters/keys for the federally threatened Eastern Indigo Snake (*Drymarchon corais couperi*), (indigo snake), and now provide one key for both FO's. The original programmatic key was issued by the South Florida FO on November 9, 2007. The North Florida FO issued a revised version of the original key on September 18, 2008. Both keys were similar in content, but reflected differences in geographic work areas between the two Field Offices. The enclosed key satisfies each office's responsibilities under the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C.1531 *et seq.*).

Footnote number 3 in the original keys indicated "A member of the excavation team should be authorized for Incidental Take during excavation through either a section 10(a)(1)(A) permit issued by the Service or an incidental take permit issued by the Florida Fish and Wildlife Conservation Commission (FWC)." We have removed this reference to a Service issued Section 10(a)(1)(A) permit, as one is not necessary for this activity. We also referenced the FWC's revised April 2009 Gopher Tortoise Permitting Guidelines with a link to their website for updated excavation guidance, and have provided a website link to our Standard Protection Measures. All other conditions and criteria apply.

We believe the implementation of the attached key achieves our mutual goal for all users to make consistent effect determinations regarding this species. The use of this key for review of projects

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located in all referenced counties in our respective geographic work areas leads the Service to concur with the Corps' determination of "may affect, not likely to adversely affect" (MANLAA) for the Eastern indigo snake. The biological rationale for the determinations is contained within the referenced documents and is submitted in accordance with section 7 of the Act.

Should circumstances change or new information become available regarding the eastern indigo snake or implementation of the key, the determinations may be reconsidered as deemed necessary.

Thank you for your continued cooperation in the effort to conserve fish and wildlife resources. Any questions or comments should be directed to either Allen Webb (Vero Beach) at 772-562-3909, extension 246, or Jay Herrington (Jacksonville) at 904-731-3326.

Sincerely,



Paul Souza
Field Supervisor
South Florida Ecological Services Office



David L. Hankla
Field Supervisor
North Florida Ecological Services Office

Enclosure

cc: electronic only
FWC, Tallahassee, Florida (Dr. Elsa Haubold)
Service, Jacksonville, Florida (Jay Herrington)
Service, Vero Beach, Florida (Sandra Sneckenberger)

Eastern Indigo Snake Programmatic Effect Determination Key

Scope of the key

This key should be used only in the review of permit applications for effects determinations within the North and South Florida Ecological Services Field Offices Geographic Areas of Responsibility (GAR), and not for other listed species or for aquatic resources such as Essential Fish Habitat (EFH). Counties within the **North** Florida GAR include Alachua, Baker, Bradford, Brevard, Citrus, Clay, Columbia, Dixie, Duval, Flagler, Gilchrist, Hamilton, Hernando, Hillsborough, Lafayette, Lake, Levy, Madison, Manatee, Marion, Nassau, Orange, Pasco, Pinellas, Putnam, St. Johns, Seminole, Sumter, Suwannee, Taylor, Union, and Volusia.

Counties in the **South** Florida GAR include Broward, Charlotte, Collier, De Soto, Glades, Hardee, Hendry, Highlands, Lee, Indian River, Martin, Miami-Dade, Monroe, Okeechobee, Osceola, Palm Beach, Polk, Sarasota, St. Lucie.

Habitat

Over most of its range, the eastern indigo snake frequents several habitat types, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats (Service 1999). Eastern indigo snakes appear to need a mosaic of habitats to complete their life cycle. Wherever the eastern indigo snake occurs in xeric habitats, it is closely associated with the gopher tortoise (*Gopherus polyphemus*), the burrows of which provide shelter from winter cold and summer desiccation (Speake et al. 1978; Layne and Steiner 1996). Interspersion of tortoise-inhabited uplands and wetlands improves habitat quality for this species (Landers and Speake 1980; Auffenberg and Franz 1982).

In south Florida, agricultural sites, such as sugar cane fields, created in former wetland areas are occupied by eastern indigo snakes (Enge pers. comm. 2007). Formerly, indigo snakes would have only occupied higher elevation sites within the wetlands. The introduction of agriculture and its associated canal systems has resulted in an increase in rodents and other species of snakes that are prey for eastern indigo snakes. The result is that indigos occur at higher densities in these areas than they did historically.

Even though thermal stress may not be a limiting factor throughout the year in south Florida, indigo snakes still seek and use underground refugia. On the sandy central ridge of central Florida, eastern indigos use gopher tortoise burrows more (62 percent) than other underground refugia (Layne and Steiner 1996). Other underground refugia used include armadillo (*Dasypus novemcinctus*) burrows near citrus groves, cotton rat (*Sigmodon hispidus*) burrows, and land crab (*Cardisoma guanhumii*) burrows in coastal areas (Service 2006). Natural ground holes, hollows at the base of trees or shrubs, ground litter, trash piles, and crevices of rock-lined ditch walls are also used (Layne and Steiner 1996). These refugia are used most frequently where tortoise burrows are not available, principally in low-lying areas off the central and coastal ridges. In extreme south Florida (the Everglades and Florida Keys), indigo snakes are found in tropical

hardwood hammocks, pine rocklands, freshwater marshes, abandoned agricultural land, coastal prairie, mangrove swamps, and human-altered habitats (Steiner et al. 1983). It is suspected that they prefer hammocks and pine forests, because most observations occur in these habitats disproportionately to their presence in the landscape (Steiner et al. 1983). Hammocks may be important breeding areas as juveniles are typically found there. The eastern indigo snake is a snake-eater so the presence of other snake species may be a good indicator of habitat quality.

Conservation Measures

The Service routinely concurs with the Corps' "not likely to adversely affect" (NLAA) determination for individual project effects to the eastern indigo snake when assurances are given that our *Standard Protection Measures for the Eastern Indigo Snake* (Service 2004) located at: <http://www.fws.gov/northflorida/IndigoSnakes/indigo-snakes> will be used during project site preparation and project construction. There is no designated critical habitat for the eastern indigo snake.

In an effort to reduce correspondence in effect determinations and responses, the Service is providing an Eastern Indigo Snake Effect Determination Key, similar in utility to the West Indian Manatee Effect Determination Key and the Wood Stork Effect Determination Keys presently being utilized by the Corps. If the use of this key results in a Corps' determination of "no effect" for a particular project, the Service supports this determination. If the use of this Key results in a determination of NLAA, the Service concurs with this determination and no additional correspondence will be necessary¹. This key is subject to revisitation as the Corps and Service deem necessary.

- A. Project is not located in open water or salt marsh.....go to B
 Project is located solely in open water or salt marsh..... "no effect"
- B. Permit will be conditioned for use of the Service's *Standard Protection Measures For The Eastern Indigo Snake* during site preparation and project construction.....go to C
 Permit will not be conditioned as above for the eastern indigo snake, or it is not known whether an applicant intends to use these measures and consultation with the Service is requested² "may affect"
- C. There are gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activitiesgo to D
 There are no gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities "NLAA"
- D. The project will impact less than 25 acres of xeric habitat supporting less than 25 active and inactive gopher tortoise burrows.....go to E

The project will impact more than 25 acres of xeric habitat or more than 25 active and inactive gopher tortoise burrows and consultation with the Service is requested²..... "may affect"

- E. Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow³. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of proposed work..... "NLAA"

Permit will not be conditioned as outlined above and consultation with the Service is requested² "may affect"

¹With an outcome of "no effect" or "NLAA" as outlined in this key, the requirements of section 7 of the Act are fulfilled for the eastern indigo snake and no further action is required.

²Consultation may be concluded informally or formally depending on project impacts.

³ If burrow excavation is utilized, it should be performed by experienced personnel. The method used should minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the Florida Fish and Wildlife Conservation Commission's revised April 2009 Gopher Tortoise Permitting Guidelines located at http://myfwc.com/License/Permits_ProtectedWildlife.htm#gophertortoise. A member of the excavation team should be authorized for Incidental Take during excavation through an incidental take permit issued by the Florida Fish and Wildlife Conservation Commission.

Appendix D – Special Protection Measures

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or “approval” from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or “approval” from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11” x 17” or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. “Taking” of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. “Take” is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant’s designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant’s designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.
2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.
3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.
3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

Appendix D – Cultural Resources Memo

Cultural Resources Technical Memorandum

Lena Road

Project Development and Corridor Study Report

October 2021



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Executive Summary

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with State Road (SR) 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida. Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas.

To support the Study, background research was conducted to identify known cultural resources within the corridor study area (Study Area) that have the potential to be impacted by the proposed project improvements. The background research informed recommendations for future cultural resources surveys (archaeological and architectural) in the Study Area. For this project, the Study Area comprises a 500-foot buffer on either side of the existing Lena Road centerline.

The desktop review revealed that previous archaeological surveys have been performed within much of the Study Area over the past 20 years, and that no archaeological sites have been previously recorded in the Study Area. Approximately 0.79 mile of the length of the Study Area has not been previously surveyed, and an approximately 0.50-mile segment of that total is undisturbed. Undisturbed areas have a higher probability of containing intact buried cultural resources. Therefore, an archaeological survey for the portions of the Study Area that are undisturbed is recommended. For the remainder of the Study Area, it is advised that should any archaeological materials be identified during construction, all construction should cease, and the Florida Division of Historic Resources should be notified.

No historic-age architectural resources have been previously recorded in the Study Area. A review of Manatee County Appraisal District data online showed 13 historic-age buildings (those constructed in 1976 or before) in the Study Area that have not been previously surveyed. Given the presence of previously unrecorded historic-age architectural resources in the study area, an architectural resources survey may be necessary to survey those resources and evaluate their eligibility for listing in the NRHP, depending on the final project design and potential impacts to historic-age architectural resources.

1.0 Introduction

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. Manatee County proposes the extension of Lena Road to State Road (SR) 64. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with SR 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida, as shown in **Figure 1**. Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas.

To support the Study, background research was conducted to identify known cultural resources within the corridor study area (Study Area) that have the potential to be impacted by the proposed project improvements. The background research informed recommendations for future cultural resources surveys (archaeological and architectural) in the Study Area. For this project, the Study Area comprises a 500-foot buffer on either side of the existing Lena Road centerline.

1.1 Purpose

The primary purpose of the Lena Road improvements is to provide congestion relief by providing a collector roadway between SR 70 and SR 64. Located between Interchange 75 (I-75) and Lakewood Ranch Boulevard, the new extension of Lena Road to SR 64 would provide connectivity between two commercial/industrial areas currently accessed from SR 70 or SR 64 and provide an alternative local route between these two major east-west corridors. The extension would also connect to the future extension of SR 44 Avenue East, providing alternative east-west access across I-75.

2.0 Environmental Setting

The Study Area is underlain by the Hawthorn Group of the Peace River Formation of Miocene and Pliocene age (USGS 2021). According to the University of California and U.S. Department of Agriculture Natural Resources Conservation Service Soil Web (2019), eight mapped soil units occur within the Study Area, as listed in **Table 1**.

Table 1 | Mapped Soil Units in the Study Area.

Map Symbol	Soil Unit	Landform
45	Tavares fine sand, 0 to 5 percent slopes	Marine terraces
11	Cassia fine sand, 0 to 2 percent slopes	Marine terraces
35	Ona fine sand, orstein substratum	Flatwoods
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	Flatwoods
16	Delray complex	Flats
12	Cassia fine sand, moderately well drained	Rises
26	Floridana-Immokalee-Okeelanta association	Depressions/Marine Terraces
7	Canova, Anclote, and Okeelanta soils	Depressions



Figure 1 | Project Location

3.0 Methodology

A desktop review was completed to identify known cultural resources within the Lena Road Study Area, and within 1 mile of the Study Area boundaries. The desktop review consisted of a search of Florida Master Site File (FMSF) records to identify previous cultural resources surveys conducted in the Study Area and vicinity, and previously recorded archaeological sites and architectural resources (buildings and structures) in those areas. Manatee County Appraisal District data, and historic aerials and United States Geological Survey (USGS) maps available online, were used to identify historic-age buildings in the Study Area.

4.0 Findings

4.1 Cultural Resource Surveys

At the time of the desktop review, FMSF data revealed the boundaries of 23 previous cultural resources surveys overlap the 1-mile search area. Survey areas of 10 of the 22 previous surveys partially overlap the Study Area. Previous surveys overlap 2.75 miles of the 3.47-mile long current Lena Road alignment. The locations of these 10 previous surveys are shown in **Figure 2**. Details for all previous cultural resources within 1 mile of the Study Area are listed in **Table 2**.

4.2 Archaeological Sites

FMSF data shows one archaeological site located within 1 mile of the Study Area. Site 8MA01497 (Lena 1) is a prehistoric site located approximately 0.16 mile east of the Study Area. Artifacts discovered at the site include pottery, and the site was recommended not eligible for inclusion in the NRHP. Due to its distance from the corridor, Site 8MA01497 is unlikely to be impacted by the proposed project.

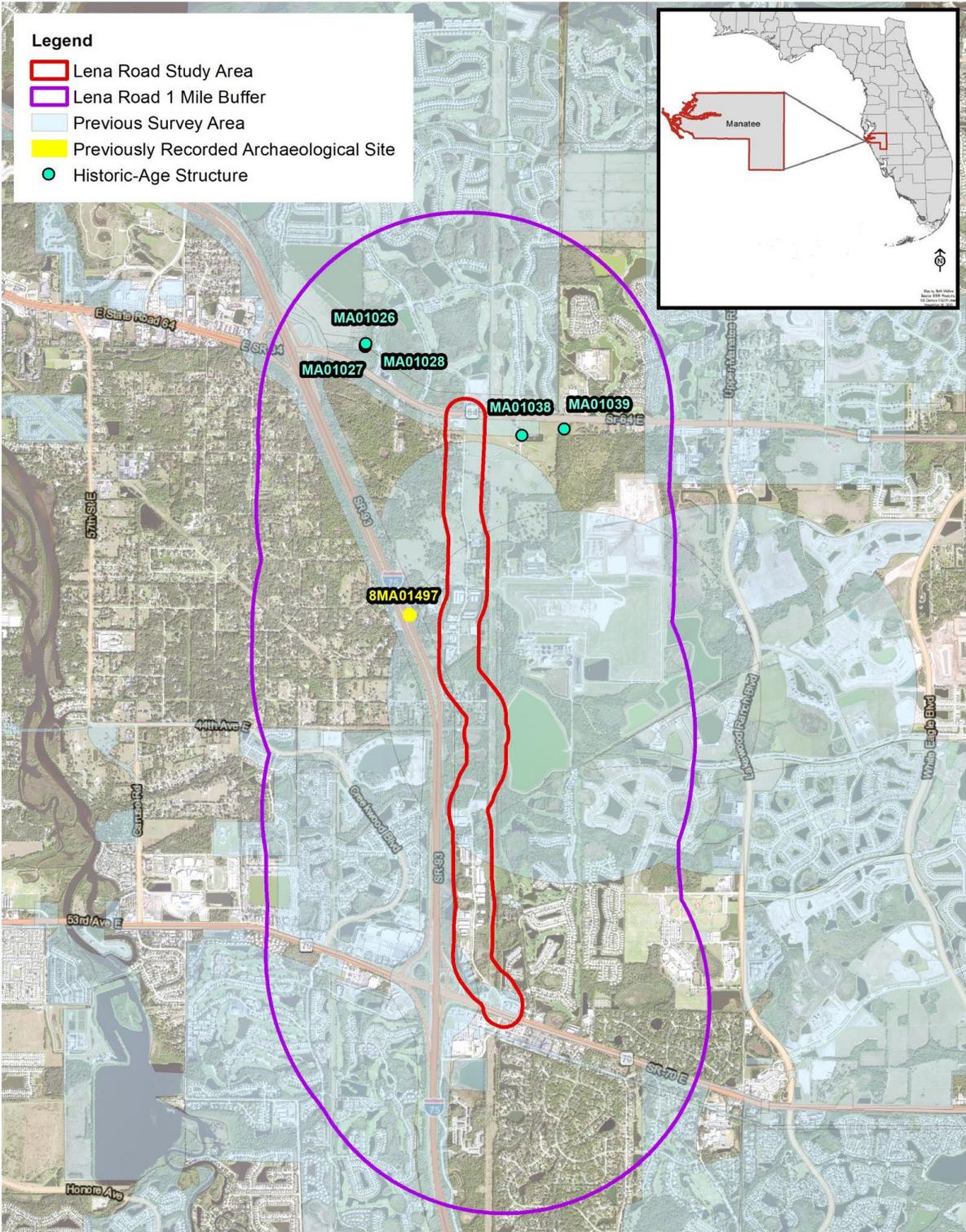
4.3 Historic-age Architectural Resources

4.3.1 Previously Recorded Historic-age Architectural Resources

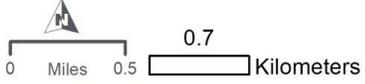
FMSF data shows five historic-age architectural resources located within 1 mile of the Study Area. The closest, MA01038, is located approximately 0.20 mile east of the Study Area, and it has been evaluated as ineligible for inclusion in the NRHP. Due to their distance from the Study Area, both previously recorded structures are unlikely to be impacted by the proposed project. Details for all previously recorded historic-age structures are listed in **Table 3**.

4.3.2 Unrecorded Historic-age Architectural Resources

For projects requiring compliance with Section 106 of the National Historic Preservation Act (NHPA), an Area of Potential Effects (APE) is defined to assess potential effects of the project on historic properties. An APE is defined as the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of historic properties, including changes to historic setting via visual impacts. All buildings and structures (including bridges) 50 years of age or older in the APE must be identified, surveyed, and evaluated for potential eligibility for listing in the NRHP. For most projects, a five-year buffer is applied to allow for project completion, meaning all resources 45 years of age or older (built in 1976 or earlier) in the APE should be recorded and evaluated as part of a cultural resources survey.



- Legend**
- Lena Road Study Area
 - Lena Road 1 Mile Buffer
 - Previous Survey Area
 - Previously Recorded Archaeological Site
 - Historic-Age Structure



LENA ROAD
CULTURAL BACKGROUND MAP
 MANATEE COUNTY, FL

PATH: X:\MANATEE COUNTY\PD&E_THREE_ROADS\LENA_RD\GIS\MXD\LENA_FDHR_MXD - USER: GBILTER - DATE: 9/30/2021

Figure 2 | Cultural Resources and Previous Surveys within 1 Mile of the Study Area

Table 2 | Previous Cultural Resources Surveys Conducted within 1 Mile of the Study Area

ID	Agency	Report Title	Contractor	Year	Comments
22585	-	Cultural Resource Assessment Survey, Technical Memorandum, I-75 (SR 93) at SR 64 Interchange, Manatee County, Florida; FPID No. 201032-6-32-1	Archeological Consultants Inc.	2015	-
24011	FCC	FCC – Form 621, Panamerican Consultants, Inc. An Archaeological and Historical Survey of the Jiggs landing FA10151958 Collection of Antennas on Existing Stealth Flagpole Tower, 4916 Lena Road, Brandelton, Manatee County, Florida	Panamerican Consultants, Inc.	2012	-
15979	-	I-75 Manatee County PD&E Study from North of University Parkway to North of Moccasin Wallow Road	Janus Research, Inc.	2008	Overlaps approx. 1.14 mi (1.8 km) of the Study Area
15282	FCC	An Archaeological and Historical Survey of the SR 70 & I-75 Tower in Manatee County, Florida FCC Form 620	Panamerican Consultants, Inc.	2007	Overlaps approx. 88 ft (27 m) of the Study Area
11422	-	Creekwood Parcels A, B, C and D, Technical Memorandum, Cultural Resource Assessment Survey, Manatee County, Florida	Archeological Consultants, Inc.	2005	-
12142	-	Cultural Resource Assessment Survey for the Lakewood Ranch Business Park, Manatee County, Florida	Janus Research, Inc.	2005	-
10443	-	Cultural Resources Assessment Survey, Crossing Creek Village, Phase I, Sarasota County Florida	Archeological Consultants, Inc.	2004	-
9144	-	Cultural Resource Reconnaissance Survey/Section 106 Review Proposed Lena Road Communication Tower Site 3331 Lena Road,	Archeological Consultants, Inc.	2003	Overlaps approx 1.71 mi (2.75 km) of the Study Area

		Bradenton, Manatee County, Florida			
7628	-	An Archaeological and Historical Survey of the Proposed Williams Creek Tower Location in Manatee County, Florida	Panamerican Consultants, Inc.	2001	Overlaps t approx. 0.99 mi (1.6 km) of the Study Area
7917	-	Historic Properties Survey and Assessment Within the One Mile Area of Potential Effects of the Proposed Schroeder Ranch #1 Telecommunications Tower, Manatee County, Florida	Florida Archaeological Consulting, Inc.	2001	-
6743	-	A Cultural Resource Assessment Survey Upper Manatee River Road from SR 64 to US 301 Manatee County, Florida	Archeological Consultants, Inc.	2001	-
6066	-	Cultural Resource Assessment Survey for the State Road (SR) 70 PD&E Study from West of Interstate 75 to Lorraine Road in Manatee County, Florida	Janus Research, Inc	2000	-
6079	-	A Cultural Resource Assessment Survey S.R. 64 from East of I-75 to Lorraine Road, Manatee County, Florida	Archaeological Consulting, Inc.	2000	Overlaps approx.. 200 ft (61 m) of the Study Area
6330	-	A Cultural Resource Assessment Survey of Two Potential Sarasota Lateral Contractor Yards, Florida Gas Transmission Company, Manatee County, Phase IV Expansion, Florida	Southeastern Archaeological Research	2000	Overlaps approx. 540 ft (165 m) of the Study Area
5710	-	Cultural Resource Assessment Survey for the State Road (SR) 64 Improvements S.E.I.R. from Interstate 75 to East of the Haile Middle School Entrance in Manatee County, Florida	Janus Research	1999	Overlaps approx. 0.91 mi (1.5 km) of the Study Area
5540	-	Cultural Resources Assessment for the Heritage Sound DRI/ADA Project Site, Manatee County, Florida	Janus Research	1998	Overlaps approx.. 360 ft (110 m) of the Study Area

2069	-	Cultural Resource Assessment Survey of the Creekwood Development, Manatee County, Florida	Piper Archaeological Research, Inc.	1988	Overlaps approx.. 0.13 mi (0.21 km) of the Study Area
4399	-	Cultural Resource Assessment Survey: Environmental Clearance for Stormwater Ponds and Mitigation Area for SR 70 from US 301 to Interstate 75 in Manatee County, Florida	Archeological Consultants, Inc.	1995	-
2214	FDoT	The proposed multilaning of SR70 (Onepo Road), from SR683 (US301) to Lorraine Road, in Manatee County, Florida	-	1986	Overlaps approx.. 105 ft (32 m) of the Study Area
1613	-	An archaeological and historical survey of the River Club property, Manatee County, Florida	-	1988	-
1293	-	Phase I cultural resources assessment survey of Manatee County Southeast Wastewater Treatment Plant effluent pipeline corridor, Manatee County, Florida	-	1986	-
133	-	An Archaeological and Historical Survey of the Proposed Tara Development Property in Manatee County, Florida	Piper Archaeological Research, Inc.	1979	-
8890	FDoT	Pond Siting Cultural Resource Assessment Survey SR 70 West of Interstate 75 to Lakewood Ranch Boulevard, Manatee County, Florida	-	2002	-

Table 3 | Previously Recorded Historic-Age Structures Located within 1 Mile of the Study Area

Site ID	Name	Address	NRHP Eligibility	Comments
MA01038	8500-8507 SR 64	8500-8507 SR 64, Parrish	Ineligible	Approx. 0.20 mi (0.32 km) from the Study Area
MA01039	9408 SR 64	9408 SR 64, Parrish	Ineligible	Approx. 0.43 mi (0.69 km) from the Study Area
MA01026	Harlee Farms Building #1	-	Ineligible	Approx. 0.55 mi (0.89 km) from the Study Area
MA01027	Harlee Farms Building #2	-	Ineligible	Approx. 0.55 mi (0.89 km) from the Study Area
MA01028	Harlee Farms Building #3	-	Ineligible	Approx. 0.56 mi (0.90 km) from the Study Area

A review of Manatee County Appraisal District data online showed 13 buildings constructed in 1976 or before located within the Study Area (Table 4). All are residential in use. The oldest of the buildings was built in 1893, and the most recently constructed was built in 1976. The final project design, including potential right-of-way (ROW) acquisitions and introductions of new vertical elements, would determine which, if any, of these buildings would be included in the APE for a historic-age resources architectural survey, in accordance with Section 106.

Table 4 | Previously Unrecorded Historic-Age Architectural Resources Located within Study Area.

Address	Year Built	Classification
1507 Lena Rd., Bradenton	1958	Residential
8304 Bower Dr., Bradenton	1968	Residential
8104 Bower Dr., Bradenton	1976	Residential
1712 Lena Rd., Bradenton	1972	Residential
1707 Lena Rd., Bradenton	1957	Residential
2008 Lena Rd., Bradenton	1964	Residential
2950 Lena Rd., Bradenton	1893	Residential
3204 Lena Rd., Bradenton	1960	Residential
7909 41st Ave. E, Bradenton	1974	Residential
7905 41st Ave. E, Bradenton	1974	Residential
7903 41st Ave. E, Bradenton	1969	Residential
8010 41st Ave. E, Bradenton	1975	Residential
8040 41st Ave. E, Bradenton	1975	Residential

5.0 Summary and Recommendations

The desktop review revealed that previous archaeological surveys have been performed for the majority of the Study Area within the past 20 years, but no archaeological sites have been previously recorded in the Study Area. Approximately 0.79 mile of the length of the Study Area has not been previously surveyed, and an approximately 0.50-mile segment of that total is undisturbed. Undisturbed areas have a higher probability of containing intact buried cultural resources. Therefore, an archaeological survey for the portions of the Survey Area that are undisturbed is recommended. For the remainder of the Study Area, it is advised that should any archaeological materials be identified during construction, all construction should cease, and the Florida Division of Historic Resources should be notified.

No historic-age architectural resources have been previously recorded in the Study Area. A review of Manatee County Appraisal District data online showed 13 historic-age buildings in the Study Area that have not been previously surveyed. Given the presence of previously unrecorded historic-age architectural resources in the Study Area, an architectural resources survey may also be necessary to survey those resources and evaluate their eligibility for listing in the National Register of Historic Places, depending on the final project design and potential impacts to historic-age architectural resources.

6.0 References

United States Geological Survey (USGS).

2021 Florida Geologic Map Data. Available online at <https://mrddata.usgs.gov/geology/state/state.php?state=FL>. Accessed July 2021.

University of California and U.S. Department of Agriculture Natural Resources Conservation Service (University of California, Davis, California Soil Resource Lab; University of California, Division of Agriculture and Natural Resources;)

2019 SoilWeb. University of California; USDA-NRCS. Available online at <https://data.nal.usda.gov/dataset/soilweb>, accessed July 2021.



Appendix E – Contamination Screening Memo

Contamination Screening Technical Memorandum

Lena Road

Project Development and Corridor Study Report

September 2021



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Executive Summary

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with State Road (SR) 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida.

A preliminary contamination screening was conducted for the project corridor to support the Study by identifying properties or facilities that have potential contamination that may affect the Lena Road corridor. The preliminary contamination screening was performed using the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual, Chapter 20 as a guide. This preliminary screening uses the reporting format and standard environmental assessment practices of reviewing records of regulatory agencies, site reconnaissance, literature review and when necessary, personal interviews of individuals and business owners within the limits of the study area, outlined in the FDOT PD&E Manual, Chapter 20. However, this preliminary contamination screening is not considered a full Contamination Screening Evaluation Report as defined in the FDOT PD&E Manual.

Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas, including potential contamination concerns.

Nine (9) sites were investigated along the project corridor for current or past operations that may present the potential for finding contamination concerns and therefore may impact proposed improvements for the study area. The following risk ratings have been applied:

Risk Rating	No. of Sites
High	0
Medium	3
Low	3
No	3

However, this list may need to be refined based on the project alternative selected to proceed.

For sites ranked No and Low for potential contamination, no further action is required at this time. These sites/facilities have the potential to impact the study area, but based on select variables have been determined to have low risk to the project at this time. Variables that may change the risk rating include a facility's non-compliance to environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change, additional assessment of the facilities would be conducted.

For those locations with a risk rating of "Medium", field screening or a soil management plan may be needed depending on the locations of construction and intrusive activities proposed for the study area. These sites have been determined to have potential contaminants, which may impact the proposed construction. A soil and groundwater sampling plan may be needed for each site. The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical tests to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells should also be included in the sampling plan.

Additional information may become available or site-specific conditions may change from the time this memorandum was prepared and should be considered prior to proceeding with roadway construction.

1.0 Introduction

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. Manatee County proposes the extension of Lena Road to State Road (SR) 64. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with SR 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida, as shown in **Figure 1**.

This Contamination Technical Memorandum has been prepared to support the Study by identifying properties or facilities that have potential contamination/hazardous materials that may affect the corridor study area. Manatee County will use the results of the Study to evaluate alternatives to avoid or minimize impacts to environmental sensitive areas, including potential contamination concerns.

1.1 Purpose

The primary purpose of the Lena Road improvements is to provide congestion relief by providing a collector roadway between SR 70 and SR 64. Located between Interstate 75 (I-75) and Lakewood Ranch Boulevard, the new extension of Lena Road to SR 64 would provide connectivity between two commercial/industrial areas currently accessed from SR 70 or SR 64 and provide an alternative local route between these two major east-west corridors. The extension would also connect to the future extension of 44th Avenue East, providing alternative east-west access across I-75.

2.0 Methodology

A preliminary contamination screening of the corridor study area was conducted to determine the potential for contamination within the corridor right-of-way. A desktop review was performed of electronically available information on the Florida Department of Environmental Protection (FDEP) Oculus website. This review identified locations including but not limited to underground storage tanks (USTs), petroleum discharges, registered drycleaners, superfund sites, solid waste sites, and brownfield sites. The Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual Part 2 Chapter 20, Contamination provides a standard contamination screening buffer, an area within and adjacent to the project that should be evaluated for possible additional contamination assessment. The following buffer distances are recommended by FDOT and were used for the desktop review:

- 500 feet from the right-of-way line for petroleum, drycleaners, and non-petroleum sites. Corridor projects in heavily industrialized or urbanized areas with dewatering planned near the contaminated sites need to be addressed with FDEP, Water Management District, or the local delegated program lead.
- 1,000 feet from the right-of-way line for non-landfill solid waste sites (such as recycling facilities, transfer stations, and debris placement areas).
- 1/2 -mile (2,640 feet) from the right-of-way line for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) registered sites, National Priorities List (NPL) Superfund sites, or Landfill sites.

Additionally, an environmental database search was performed by Environmental Data Resources, Inc. The resulting Environmental Data Report (EDR), dated July 1, 2021 (provided in Appendix A), includes potential hazardous material and petroleum contamination sites that were listed in the United States Environmental Protection Agency (USEPA) and the FDEP databases. The databases listed in **Table 1** and **Table 2** were reviewed with the Oculus or EDR databases.

Table 1 | Federal Databases

Database Name	Database Description
National Priorities List (NPL)	This list contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities.
Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS)	This Superfund database tracks facilities and/or locations that the USEPA is investigating to determine if an existing or threatened release of hazardous substances is present.
Records of Decisions (ROD) System	This system documents information relative to site history, community participation, enforcement activities, site characteristics, scope and role of response action, and remedies applied to Superfund sites.
Archived CERCLIS Sites (No Further Remedial Action Planned List (NFRAP))	This list contains archived data on CERCLIS sites where the USEPA has completed assessment activities and determined no further steps to list the site on the NPL will be taken.
Emergency Response Notification System (ERNS) List	This database stores information on the notification of oil discharges and hazardous substance releases. It is a cooperative data sharing effort among the USEPA, US Department of Transportation, and the National Response Center.
Resource Conservation and Recovery Information System (RCRIS) Handlers with Corrective Action Activity (CORRACTS)	This database lists hazardous waste handlers that have undergone Resource Conservation and Recovery Act (RCRA) corrective action activity.
Hazardous Waste Data Management System (HWDMS)	This historical database was replaced by the USEPA RCRA Information System (RCRIS). The HWDMS list formerly tracked sites involved in the generation, transportation, treatment, storage, and/or disposal of hazardous waste.
RCRA-Large Quantity Generator (LQG), Small Quantity Generator (SQG), Conditionally Exempt SQG and Transporters (NONTSD)	This list is a subset of the USEPA RCRIS list and identifies facilities that generate and transport hazardous wastes.
RCRA Treatment, Storage and/or Disposal Sites (TSD)	This list is a subset of the RCRIS and identifies facilities that treat, store, and/or dispose of hazardous waste.
RCRA Administrative Action Tracking System (RAATS)	This list is a historical RCRA enforcement database that tracked facilities found to be major violators under RCRA. Data entry in this database discontinued in 1995.
Tribal Lust List (TRIBLLUST)	This database lists active and closed storage tank facilities on Native American lands. The database is created by extracting records from the storage tank databases that have indicated current or past releases.
Tribal Tanks List (TRIBLTANKS)	This database lists active and closed storage tanks on Native American lands.

Facility Registry System (FRS)	The FRS is a centrally-managed database of sites regulated by Program Offices of the USEPA, such as air, water, and waste. The FRS has replaced the Facility Index System List (FINDS).
Toxic Release Inventory System (TRIS) List	This list identifies facilities that are required to submit annual reports relative to the estimated routine and accidental release of toxic chemicals to the environment, as stipulated under current federal laws.
Biennial Reporting System	This system collects data on the generation and management of hazardous waste from large quantity generators and treatment, storage, and disposal facilities. The data are reported on even years by the facilities to state environmental agencies that provide the information to regional and national USEPA offices.
PCB Activity Data System (PADS)	This list contains sites that have notified the USEPA of their activities relative to the generation, transportation, permitted storage, and permitted disposal of polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act.
Permit Compliance System (PCS)	This is a data system for the National Pollutant Discharge Elimination System (NPDES) permit holding facilities.
Brownfields Management System (USBRWNFLDS)	This database stores information reported by USEPA brownfields grant recipients on brownfields properties assessed or cleanup up with grant funding.

Table 2 | State Databases

Database Name	Database Description
Underground/Aboveground Storage Tanks (TANKS)	This database contains sites with registered aboveground (AST) or underground storage tanks (UST) containing regulated petroleum products.
Leaking Underground Storage Tanks List (LUST)	This list identifies facilities and/or locations that have notified the FDEP of a possible release of contaminants from petroleum storage systems.
Solid Waste Facilities List (SLDWST)	This list identifies locations that have been permitted to conduct solid waste handling activities. Activities may include landfills, transfer stations, and sites handling bio-hazardous wastes.
State Sites List (STCERC)	This historical list contains sites that the Florida Department of Environmental Regulation (now FDEP) compiled to track suspect contamination sites. The FDER updated this list, previously known as the Florida SITES list, in 1989.
State Funded Action Sites (STNPL)	This list contains facilities and/or locations that have been identified by the FDEP as having known environmental contamination and are currently being addressed through state funded cleanup action.
State Hazardous Waste Notifiers (STRCRA)	This list identifies facilities that generate, transport, treat, store, and dispose of hazardous waste.
State Institutional and/or Engineering Controls (INSTENG)	This list contains sites that have had institutional and/or engineering controls implemented to regulate exposure to environmental hazards.

Database Name	Database Description
State Designated Brownfields (BRWNFLDS)	This database contains a listing of state-designated brownfield areas. Brownfield areas are typically abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.
State Voluntary Cleanup (VOLCLNUP)	Derived from the FDEP Brownfields Site Rehabilitation Agreement database, the VOLCLNUP database identifies sites that have signed an agreement to voluntarily cleanup a brownfield site in accordance with the FDEP's requirements.
Florida Dry Cleaners List (DRY)	This list is comprised of data from the FDEP Storage Tank and Contamination Monitoring database and the Dry Cleaning Solvent Cleanup Program Priority Ranking List. This list contains dry cleaning sites (and suspected historical dry cleaning sites) that have registered with the FDEP for the Dry Cleaning Solvent Cleanup Program.

In addition to the database search of potential contamination sites, field reviews were conducted on August 6, 2021 to verify the locations of the sites included in the EDR and identified through the FDEP Oculus search. Site reconnaissance was completed from the public areas for each facility having the potential for contamination involvement of the corridor. The sites were evaluated for possible contamination risks to the project right-of-way and construction activities.

3.0 Risk Ratings

A hazardous materials rating system that expresses the degree of concern for potential contamination problems was used to rank the identified sites. The ratings are No, Low, Medium, and High and are generally explained as follows:

- No – A review of available information on the property and a review of the conceptual or design plans indicates there is minimal potential contamination impact to the project. It is possible that contaminants have been handled on the property. However, findings from this preliminary contamination screening indicate that contamination impacts are not expected.
- Low – A review of available information indicates that past or current activities on the property have an ongoing compliance or regulatory issue, the site has a hazardous waste generator identification (ID) number, or the site stores, handles, or manufacturers hazardous materials. However, based on the review of conceptual or design plans and/or findings from this preliminary contamination screening, it is not likely that there would be any contamination impacts to the project.
- Medium – After a review of conceptual or design plans and findings from a preliminary contamination screening, a potential contamination impact to the project has been identified. If there was insufficient information (such as regulatory records or site historical documents) to make a determination as to the potential for contamination impact, and there was reasonable suspicion that contamination may exist that would impact the proposed design and construction, the property was rated at least as a “Medium.” Properties used historically as gasoline stations and which have not been evaluated or assessed by regulatory agencies, sites with abandoned in place underground petroleum storage tanks or currently operating gasoline stations received this rating.

- High – After a review of all available information and conceptual or design plans, there is appropriate analytical data or regulatory information that shows contamination would impact construction activities, have implications to right-of-way acquisition or have other potential transfer of contamination related liability to the FDOT.

4.0 Findings

Following the desktop review, nine (9) sites were identified within the contamination screening buffer distances. Of the nine (9) sites, six (6) were identified as having the potential for contamination concern to the corridor study area. Of the six (6) sites investigated, the following risk ratings have been applied:

- Medium Risk Sites: Three (3) sites were identified as having a Medium risk to the project corridor.
- Low Risk Sites: Three (3) sites were identified as having a Low risk to the project corridor.

Table 3 lists the potential contamination sites along the project corridor. Individual site descriptions follow **Table 3**. No High-risk sites were identified. The location of these three Medium risk sites are shown in **Figure 2**. The remaining three sites would have No impact to the project corridor.

Table 3 | Summary of Potential Contamination Sites

Site No.	Site Name	Address	Oculus or EDR Database ¹	Distance from ROW	Details	Risk Rating
1	Rios Drycleaning	3101 81 st Court East, Bradenton, FL 34211	Hist Cleaner	120 feet	Historic Drycleaners	Medium
2	Southern Gunite, Inc./Prestige Gunite of Bradenton Inc.	3302 81 st Court East, Bradenton, FL 34211	SWF, AST, FINDS, ECHO, AIRS	115 feet	AST Concern	Medium
3	American Pride Golf Cart Services	3208 81 st Court East, Bradenton, FL 34211	SWF	125 feet	Waste Tire Collector	No
4	Southeast Regional Wastewater Treatment Facility	3331 Lena Road, Bradenton, FL 34211 / 3335 Lena Road, Bradenton, FL 34211	SWF, Spills, NPDES, Tier 2, AST, UST	0.3 mile (1,584 feet)	Chemicals, Biosolids	Low
5	Lena Road Class 1 Landfill, Fleet Service, Utility Operations Dept.	3333 Lena Road, Bradenton, FL 34211	SWF, RCRA-SQG, RCRA-VSQQ, UST, AST, HW Gen., NPDES, AIRS	0.3 mile (1,584 feet)	Landfill, Leachate, Household Hazardous Waste	Medium
6	Landfill Gas to Energy Plant	3415 Lena Road, Bradenton, FL 34211	FINDS	0.3 mile (1,584 feet)	Generators	Low

Site No.	Site Name	Address	Oculus or EDR Database ¹	Distance from ROW	Details	Risk Rating
7	Davis Concrete	3331 81 st Court East, Bradenton, FL 34211	AST	420 feet	AST	Low
8	Freedom Recycling C&D Debris Waste Processing Facility	3407 81 st Court East, Bradenton, FL 34211	SWF	N/A	Facility Never Constructed/Un developed Land	No
9	Lena Towers Business Park	3730 Lena Road, Bradenton, FL 34211	ECHO	100 feet	Industrial Businesses/Construction Permit	No

Sources: Environmental Data Resources, Inc. Environmental Data Report (EDR), dated July 1, 2021, FDEP Map Direct

Notes:

ROW: right-of-way.

¹ Tables 1 and 2 list the Oculus or EDR databases reviewed and the description for each.

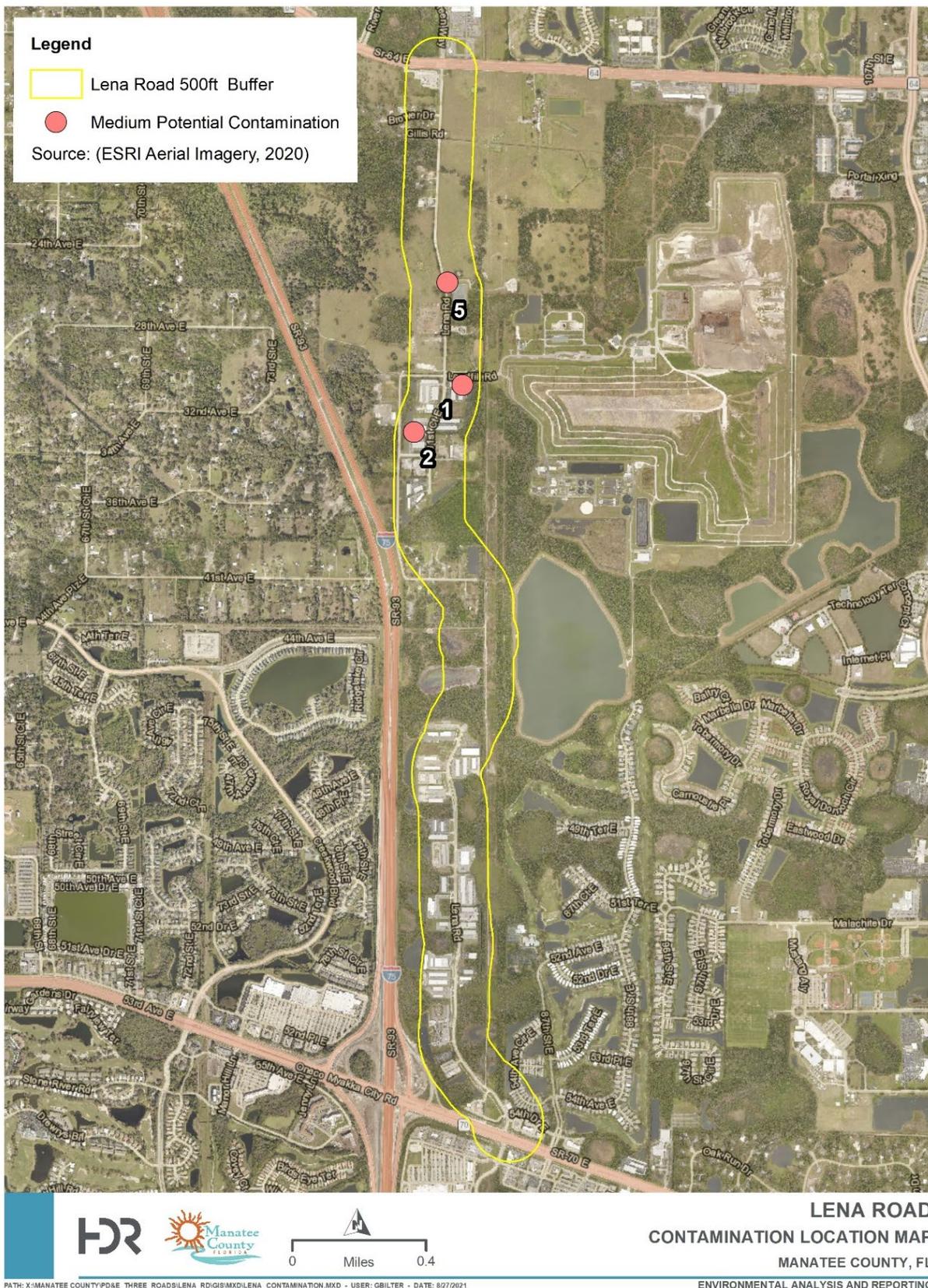


Figure 2 | Potential Contamination Site Locations

Site No. 1 – Rios Drycleaning

3101 81st Court East, Bradenton, FL 34211

- Concern: Historic Drycleaner
- Risk Rating: Medium

During site reconnaissance, the site consisted of a strip of businesses including ShutterShop, Titan Pool and Spa, and Smiley Pool Services. The building is located 120 feet from the existing right-of-way. According to the EDR, this site was a drycleaning facility in 2007 and 2008. According to the historical aerial photographs, the parcel was undeveloped land in 2005, with the building shown in 2006. The site was not found to be registered in the FDEP Drycleaning Solvent Program Cleanup Sites. More investigation is needed to know if the current businesses store Chlorine or other water treatment chemicals on the property. Based on the site visit and regulatory review, the site is given a risk rating of “Medium” for potential contamination to impact the corridor.

Site No. 2 – Southern Gunite, Inc./Prestige Gunite of Bradenton Inc.

3302 81st Court East, Bradenton, FL 34211

- Concern: Solid Waste Facility, Diesel Aboveground Storage Tank, Compliance Inspection Notification
- Risk Rating: Medium

Photos of the facility are provided in **Figure 3**. The site is located 115 feet from the existing right-of-way. According to the historic aerial photographs, the facility was built in the early 2000s. According to the EDR, Prestige Gunite of Bradenton Inc. had a Minor Air Permit that was created in 2009 and considered permanently closed in 2012. The site has a 1,000-gallon AST containing vehicular diesel since 2006. According to the public records online, Southern Gunite, Inc. was founded at the facility in 2014. During site reconnaissance, the site was Southern Gunite, Inc. Southern Gunite, Inc. is a general contractor specializing in construction services. An annual inspection conducted in March 2019 indicated the facility was operating in compliance, however the inspection stated a note of concern: “shop fabricated storage tank system has a not repaired component which has or could cause a release or discharge”. A corrective action was given by the inspector to immediately replace the missing interstitial gauge glass. No follow-up records are provided on the EDR and FDEP records. Based on the site visit and regulatory review, the site is given a risk rating of “Medium” for potential contamination to impact the corridor.



Figure 3 | Southern Gunite (2021 HDR Site Reconnaissance, FDEP Records 2014 Inspection)

Site No. 3 – American Pride Golf Cart Services 3208 81st Court East, Bradenton, FL 34211

- Concern: Waste Tire Collector and Generator
- Risk Rating: No

Photos of the facility are provided in **Figure 4**. During site reconnaissance, this site was American Pride Golf Cart Services. This facility is an authorized EZ-GO dealer carrying new, re-manufactured and used custom gas and electric golf carts. The site is located 125 feet from the existing right-of-way. According to the EDR, American Pride Golf Cart Services is registered on the site as a waste tire collector since 2017. The facility reported 3 tons of used tires were collected and disposed of at the Lena Road County Landfill. The facility renewed registration in 2019. Based on the site visit and regulatory review, the site is given a risk rating of “No” for potential contamination to impact the corridor.



Figure 4 | American Golf Services (2021 HDR Site Reconnaissance)

Site No. 4 – Southeast Regional Wastewater Treatment Facility 3331 Lena Road, Bradenton, FL 34211 / 3335 Lena Road, Bradenton, FL 34211

- Concern: Historic Spill, Solid Waste Facility, Used Oil Aboveground Storage Tank, Hazardous Substance
- Risk Rating: Low

Photos of the facility are provided in **Figure 5**. During site reconnaissance, this site was located on the Manatee County Sanitary Landfill property. The site is located 0.3 miles from the existing right-of-way. The Wastewater Treatment Facility is located in the southwest corner of the landfill property. According to the EDR, the site is registered as a solid waste facility and is registered under the hazardous waste program, handling hazardous substances, chemicals and biosolids. The site had a 1,000-gallon AST containing used oil that was installed in 1998 and removed in 2000. The site reported a spill in 2000. The site had a 3,000-gallon AST containing an unidentified hazardous substance that was installed in 1996 and removed in 2001. The site also had a 6,510-gallon AST containing an unidentified hazardous substance that was installed in 2008 and removed in 2012. The site had a Stormwater No Exposure Certificate issued November 2015 and expired November 2020. The site has a construction generic dewatering permit issued October 2020 and set to expire October 2025. An annual inspection conducted April 2021 noted the facility operating in compliance. Based on the site visit and regulatory review, the site is given a risk rating of “Low” for potential contamination to impact the corridor.



Figure 5 | Southeast Regional Wastewater Treatment Plant (FDEP Records 2015 Inspection)

*Site No. 5 – Lena Road Class 1 Landfill, Fleet Service, Utility Operations Dept.
3333 Lena Road, Bradenton, FL 34211*

- Concern: Solid Waste Facility, Hazardous Waste Generator
- Risk Rating: Medium

Photos of the facility are provided in **Figure 6**. During site reconnaissance, this site was the Manatee County Sanitary Landfill property. The site is located 0.3 miles from the existing right-of-way. The site began collecting waste in the 1970s. The landfill is permitted by FDOT as a Class 1 Landfill facility that includes a clay slurry wall leachate containment and collection system, and landfill gas collection and conveyance system, transmission pipes, a blower, and a flare station. The facility has an active waste tire processing facility, an inactive, pre-authorized disaster debris management site, and drop off areas for white goods, batteries, and scrap metals. The landfill had a 1,000-gallon UST for construction purposes containing unleaded gas that was installed in 1989 and removed in 1999. The landfill had a 1,000-gallon AST containing unleaded gas that was installed in 1984 and removed in 1989. The landfill had a 10,000-gallon AST containing vehicular diesel that was installed in 1979 and removed in 1989. The landfill has a 20,000-gallon AST containing vehicular diesel on site that was installed in 1999. According to the EDR, this site was a conditionally exempt small quantity generator of ignitable, corrosive, and reactive hazardous waste since 1995. According to the EDR, in 2007 the landfill was not considered a generator of hazardous waste. The facility conducts monthly monitoring of water balance, groundwater gradient, rainfall, leachate meter readings, and leachate tracking summaries, and conducts quarterly waste tire processing reports. An annual inspection was conducted in May 2020 that indicated the facility operating in compliance. Based on the site visit and regulatory review, the site is given a risk rating of “Medium” for potential contamination to impact the corridor.



Figure 6 | Lena Road Landfill Biosolids Facility and Entrance (FDEP Records 2019 Inspection)

*Site No. 6 – Landfill Gas to Energy Plant
3415 Lena Road, Bradenton, FL 34211*

- Concern: Solid Waste Facility
- Risk Rating: Low

Photos of the facility are provided in **Figure 7**. During site reconnaissance, this site was located on the Manatee County Sanitary Landfill property. The site is located 0.3 miles from the existing right-of-way. According to the EDR, this site is a landfill gas to energy plant for the Lena Road/Manatee County Landfill. Onsite generators are operated by Florida Power and Light Company. Based on the site visit and regulatory review, the site is given a risk rating of “Low” for potential contamination to impact the corridor.



Figure 7 | Landfill Gas to Energy Plant (FDEP Records 2019 Inspection)

Site No. 7 – Davis Concrete

3331 81st Court East, Bradenton, FL 34211

- Concern: Aboveground Storage Tank
- Risk Rating: Low

Photos of the facility are provided in **Figure 8**. During site reconnaissance, this site was Davis Concrete. Davis Concrete is a concrete contractor and supplier. The site is located 420 feet from the existing right-of-way. According to the EDR, this site is an in-service fuel user/non-retail. One AST is located in the northeast corner of the property. FDEP’s annual inspections at the site determine the facility is in compliance. No violations were found. Based on the site visit and regulatory review, the site is given a risk rating of “Low” for potential contamination to impact the corridor.



Figure 8 | Davis Concrete AST (FDEP Records 2019 Inspection)

Site No. 8 – Freedom Recycling C&D Debris Waste Processing Facility

3407 81st Court East, Bradenton, FL 34211

- Concern: Registered Solid Waste Facility
- Risk Rating: No

Photos of the facility are provided in **Figure 9**. During site reconnaissance, this site was undeveloped land. The parcel is located south of Davis Concrete. According to the EDR, this site is registered as a construction and demolition debris waste processing facility. However, the facility was never constructed. According to the Manatee County Property Appraiser, the parcel was purchased by Freedom Recycling in 2003, with design plans for the proposed waste processing facility dated as early as 2004. The site’s permit that was issued in 2011 was not renewed by Freedom Recycling and expired January 5, 2016. Based on the site visit and regulatory review, the site is given a risk rating of “No” for potential contamination to impact the corridor.



Figure 9 | Freedom Recycling Vacant Land (2021 HDR Site Reconnaissance)

*Site No. 9 – Lena Towers Business Park
3730 Lena Road Bradenton, FL 34211*

- Concern: Industrial Businesses
- Risk Rating: No

During site reconnaissance, this site was Lena Towers Business Park. The site is located 100 feet from the existing right-of-way. Multiple businesses are located within the business park along 34th Avenue. Businesses include Ballard Marine Construction, Curbco, and Spartan Custom Closets. According to the historic aerial photographs, the parcels north and south of 34th Avenue were being developed in 2003. According to the EDR, the site had a construction stormwater permit in 2010. Based on the site visit and regulatory review, the site is given a risk rating of “No” for potential contamination to impact the corridor.

5.0 Recommendations

For the sites ranked “No” for potential contamination, no further action is required. These sites have been evaluated and determined not to have any potential environmental risk to the study area at this time.

For sites ranked “Low” for potential contamination, no further action is required at this time. These sites/facilities have the potential to impact the study area but based on select variables have been determined to have low risk to the corridor at this time. Variables that may change the risk rating include a facility’s non-compliance to environmental regulations, new discharges to the soil or groundwater, and modifications to current permits. Should any of these variables change, additional assessment of the facilities would be conducted.

For those locations with a risk rating of “Medium”, field screening or a soil management plan may be needed depending on the locations of construction and intrusive activities proposed for the study area. These sites have been determined to have potential contaminants, which may impact the proposed construction. A soil and groundwater sampling plan may be needed for each site. The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical tests to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells should also be included in the sampling plan.

Additional information may become available or site-specific conditions may change from the time this memorandum was prepared and should be considered prior to proceeding with any roadway construction

Appendices

Appendix A – EDR



Lena Road

Lena Road

Bradenton, FL 34211

Inquiry Number: 6558351.5s

June 30, 2021

EDR Area / Corridor Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

LENA ROAD
BRADENTON, FL 34211

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRA - Small Quantity Generators

A review of the RCRA-SQG list, as provided by EDR, and dated 03/22/2021 has revealed that there are 2 RCRA-SQG sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE COUNTY LENA EPA ID:: FLD984244392	3333 LENA RD # B	B17 / 3	86
MANATEE COUNTY FLEET EPA ID:: FLD982122004	3333 LENA RD	B18 / 3	90

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-VSQG site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<i>MANATEE COUNTY FLEET</i> EPA ID:: FLT970059135	<i>3333 LENA RD</i>	<i>B13 / 3</i>	<i>51</i>

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

A review of the SWF/LF list, as provided by EDR, has revealed that there are 2 SWF/LF sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
AMERICAN PRIDE GOLF Database: SWF/LF, Date of Government Version: 04/12/2021 Facility-Site Id: 105066 Class Status: INACTIVE (I)	3208 81ST CT E	3 / 3	20
MANATEE CNTY-LANDFIL Database: SWF/LF, Date of Government Version: 04/12/2021 Facility-Site Id: 44795 Class Status: ACTIVE (A) Class Status: UNDER SOLID WASTE PERMIT (W) Class Status: INACTIVE (I)	3333 LENA RD	B20 / 3	95

State and tribal registered storage tank lists

UST: Storage Tank Facility Information

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE CNTY-LANDFIL Database: UST, Date of Government Version: 01/26/2021 Tank Status: B Facility-Site Id: 8630173 Facility Status: OPEN	3333 LENA RD	B20 / 3	95
MANATEE CNTY-SE WWTP Database: UST, Date of Government Version: 01/26/2021 Tank Status: B Facility-Site Id: 8944388 Facility Status: OPEN	3335 LENA RD	B21 / 3	191

AST: Storage Tank Facility Information

A review of the AST list, as provided by EDR, has revealed that there are 5 AST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE CNTY EAST PL Database: AST, Date of Government Version: 01/26/2021 Facility-Site Id: 9800685 Facility Status: CLOSED Facility Status: CLOSED	3331 LENA RD	B9 / 3	42
MANATEE COUNTY PUBLI Database: AST, Date of Government Version: 01/26/2021	3331 LENA ROAD	B10 / 3	43

EXECUTIVE SUMMARY

Facility-Site Id: 9800602
 Facility Status: CLOSED
 Facility Status: CLOSED

MANATEE CNTY-LANDFIL 3333 LENA RD B20 / 3 95

Database: AST, Date of Government Version: 01/26/2021
 Facility-Site Id: 8630173
 Facility Status: OPEN
 Facility Status: OPEN

MANATEE CNTY-SE WWTP 3335 LENA RD B21 / 3 191

Database: AST, Date of Government Version: 01/26/2021
 Facility-Site Id: 8944388
 Facility Status: OPEN
 Facility Status: OPEN

SOUTHERN GUNITE, INC 3302 81ST CT E C23 / 3 198

Database: AST, Date of Government Version: 01/26/2021
 Facility-Site Id: 9808317
 Facility Status: OPEN
 Facility Status: OPEN

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

SPILLS: Oil and Hazardous Materials Incidents

A review of the SPILLS list, as provided by EDR, and dated 04/05/2021 has revealed that there is 1 SPILLS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
SOUTHEAST WATER RECL OHMIT Incident Number: 9820 Incident Status: Closed	3331 LENA ROAD	B7 / 3	25

Other Ascertainable Records

RMP: Risk Management Plans

A review of the RMP list, as provided by EDR, and dated 01/22/2021 has revealed that there is 1 RMP site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
SOUTHEAST REGIONAL W	3331 LENA ROAD	B6 / 3	22

EXECUTIVE SUMMARY

ICIS: Integrated Compliance Information System

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE COUNTY UTILI FRS ID:: 110012324047	3333 LENA ROAD	B14 / 3	53

US AIRS: Aerometric Information Retrieval System Facility Subsystem

A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE COUNTY UTILI Database: US AIRS (AFS), Date of Government Version: 10/12/2016 EPA plant ID:: 110012324047	3333 LENA ROAD	B14 / 3	53

FINDS: Facility Index System/Facility Registry System

A review of the FINDS list, as provided by EDR, and dated 02/03/2021 has revealed that there are 9 FINDS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
SOUTHEAST REGIONAL W Registry ID:: 110020728113	3331 LENA ROAD	B5 / 3	21
MANATEE COUNTY SOUTH Registry ID:: 110027955988 Registry ID:: 110064416118	3331 LENA RD	B11 / 3	49
MANATEE COUNTY FLEET Registry ID:: 110005584518	3333 LENA RD	B13 / 3	51
LENA ROAD CLASS I LA Registry ID:: 110043790662	3333 LENA ROAD	B15 / 3	84
LENA RD LANDFILL - P Registry ID:: 110012324047	3333 LENA ROAD	B16 / 3	85
PACIFIC TOMATO GROWE Registry ID:: 110035700471	3333 LENA RD	B19 / 3	95
MANATEE COUNTY LFGTE Registry ID:: 110070398130	3415 LENA RD	B22 / 3	198
PRESTIGE GUNITE OF B Registry ID:: 110039607333	3302 EAST 81ST COURT	C24 / 3	200
LENA TOWERS BUSINESS Registry ID:: 110024387215	3730 LENA RD	26 / 3	207

EXECUTIVE SUMMARY

ECHO: Enforcement & Compliance History Information

A review of the ECHO list, as provided by EDR, and dated 04/04/2021 has revealed that there are 9 ECHO sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE COUNTY SOUTH Registry ID: 110033633968	3331 LENA RD	B4 / 3	21
MANATEE COUNTY SOUTH Registry ID: 110064416118 Registry ID: 110027955988	3331 LENA RD	B11 / 3	49
MANATEE COUNTY SOUTH Registry ID: 110028292498	3331 LENA RD	B12 / 3	50
MANATEE COUNTY FLEET Registry ID: 110005584518	3333 LENA RD	B13 / 3	51
LENA ROAD CLASS I LA Registry ID: 110043790662	3333 LENA ROAD	B15 / 3	84
LENA RD LANDFILL - P Registry ID: 110012324047	3333 LENA ROAD	B16 / 3	85
PACIFIC TOMATO GROWE Registry ID: 110035700471	3333 LENA RD	B19 / 3	95
PRESTIGE GUNITE OF B Registry ID: 110039607333	3302 EAST 81ST COURT	C24 / 3	200
LENA TOWERS BUSINESS Registry ID: 110024387215	3730 LENA RD	26 / 3	207

AIRS: Permitted Facilities Listing

A review of the AIRS list, as provided by EDR, and dated 01/26/2021 has revealed that there are 2 AIRS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE CNTY-LANDFIL Facility Status: A Facility Id: 810055	3333 LENA RD	B20 / 3	95
SOUTHERN GUNITE-BRAD Facility Status: A Facility Id: 810239	3302 81ST CT E	C25 / 3	200

Financial Assurance: Financial Assurance Information Listing

A review of the Financial Assurance list, as provided by EDR, has revealed that there are 3 Financial Assurance sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE CNTY-LANDFIL Database: Financial Assurance 1, Date of Government Version: 01/25/2021 Database: Financial Assurance 3, Date of Government Version: 01/26/2021 Facility Id: 00044795	3333 LENA RD	B20 / 3	95

EXECUTIVE SUMMARY

Facility Status: OPEN
Facility ID: 8630173

MANATEE CNTY-SE WWTP **3335 LENA RD** **B21 / 3** **191**

Database: Financial Assurance 3, Date of Government Version: 01/26/2021

Facility Status: OPEN
Facility ID: 8944388

SOUTHERN GUNITE-BRAD **3302 81ST CT E** **C25 / 3** **200**

Database: Financial Assurance 3, Date of Government Version: 01/26/2021

Facility Status: OPEN
Facility ID: 9808317

HW GEN: Hazardous Waste Generators

A review of the HW GEN list, as provided by EDR, and dated 03/23/2021 has revealed that there is 1 HW GEN site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MANATEE CNTY-LANDFIL	3333 LENA RD	B20 / 3	95

TIER 2: Tier 2 Facility Listing

A review of the TIER 2 list, as provided by EDR, and dated 12/31/2019 has revealed that there are 5 TIER 2 sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
PRESTIGE GUNITE - BR	3132 EAST 81 COURT	A2 / 4	18
SOUTHEAST WATER RECL	3331 LENA ROAD	B7 / 3	25
Facility Id: 5840457			
Facility Id: 4218254			
Facility Id: 5115468			
Facility Id: 3990509			
Facility Id: 6633883			
<i>*Additional key fields are available in the Map Findings section</i>			
BIOSOLIDS DRYER/SOUT	3331 LENA ROAD	B8 / 3	38
Facility Id: 5840458			
Facility Id: 6633884			
Facility Id: 6084699			
Facility Id: 6365466			
MANATEE COUNTY PUBLI	3331 LENA ROAD	B10 / 3	43
Facility Id: 5115472			
MANATEE CNTY-LANDFIL	3333 LENA RD	B20 / 3	95
Facility Id: 4218258			
Facility Id: 6189473			
Facility Id: 6673256			
Facility Id: 3993868			
Facility Id: 6367774			
<i>*Additional key fields are available in the Map Findings section</i>			

EXECUTIVE SUMMARY

NPDES: Wastewater Facility Regulation Database

A review of the NPDES list, as provided by EDR, and dated 01/29/2021 has revealed that there are 2 NPDES sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
SOUTHEAST WATER RECL Status: A Facility ID: FLR20DY53 Facility ID: FLRNEE423 Facility ID: FLA012618 Facility ID: FLG072647	3331 LENA ROAD	B7 / 3	25
MANATEE CNTY-LANDFIL Status: A Facility ID: FLR05F797	3333 LENA RD	B20 / 3	95

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
RIOS DRYCLEANING TO	3101 81ST CT E	A1 / 4	18

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

A review of the SWF/LF list, as provided by EDR, has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the requested target property.

EXECUTIVE SUMMARY

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
FREEDOM RECYCLING C& Database: SWF/LF, Date of Government Version: 04/12/2021 Facility-Site Id: 93193 Class Status: NEVER OPERATED, PERMIT NEVER USED (O)	3407 81ST COURT, EAS	E 0 - 1/8 (0.018 mi.)	28 / 3	209
TIRE AND WHEEL OUTLE Database: SWF/LF, Date of Government Version: 04/12/2021 Facility-Site Id: 106138 Class Status: INACTIVE (I)	7218 36TH AVE E	W 1/4 - 1/2 (0.431 mi.)	29 / 3	210

State and tribal registered storage tank lists

AST: Storage Tank Facility Information

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the requested target property.

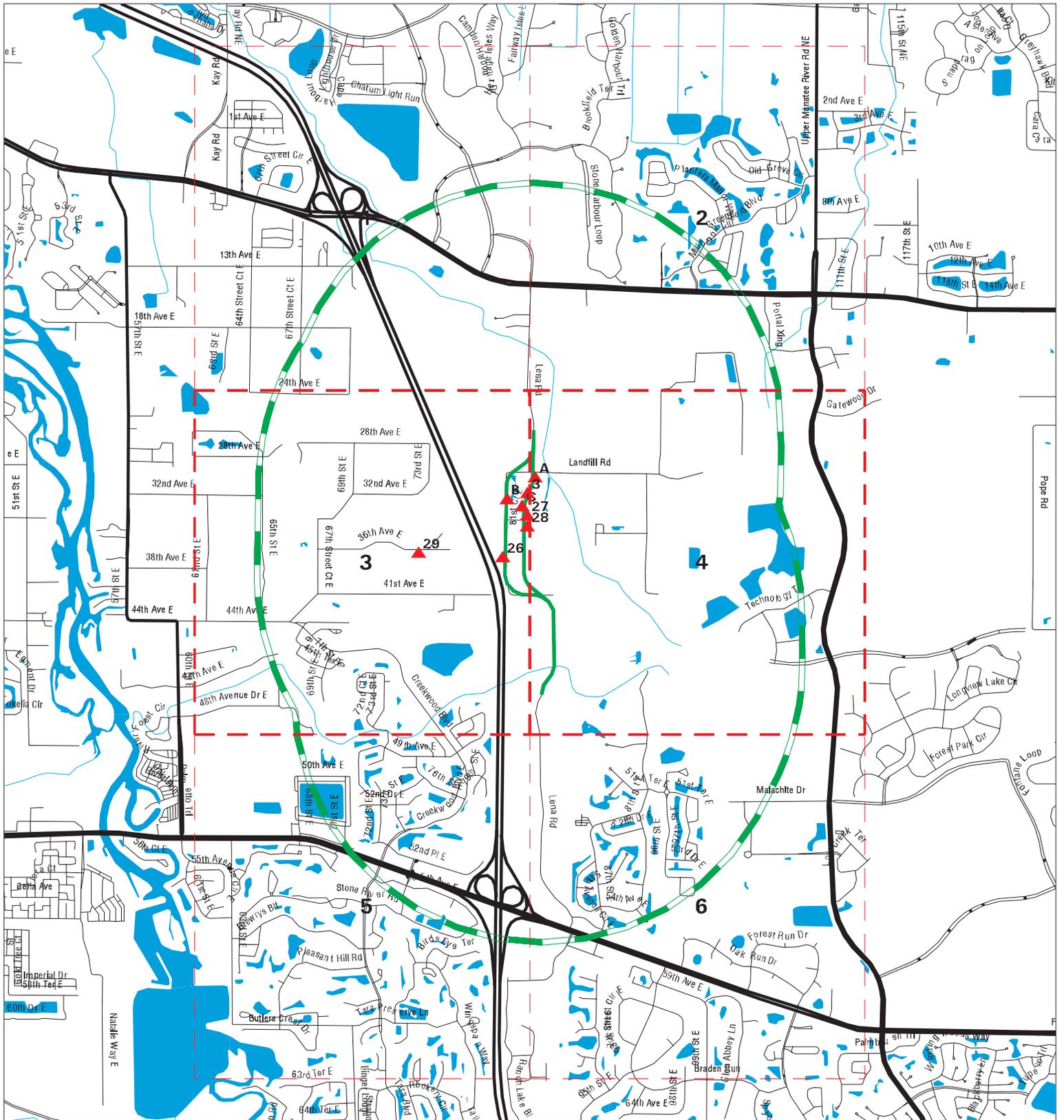
<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DAVIS CONCRETE Database: AST, Date of Government Version: 01/26/2021 Facility-Site Id: 9807566 Facility Status: OPEN Facility Status: OPEN	3331 81ST CT E	E 0 - 1/8 (0.018 mi.)	27 / 3	207

MAPPED SITES SUMMARY

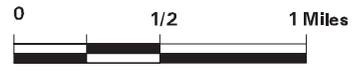
Target Property:
 LENA ROAD
 BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A1 / 4	RIOS DRYCLEANING TO	3101 81ST CT E	EDR Hist Cleaner	TP
A2 / 4	PRESTIGE GUNITE - BR	3132 EAST 81 COURT	TIER 2	TP
3 / 3	AMERICAN PRIDE GOLF	3208 81ST CT E	SWF/LF	TP
B4 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	ECHO	TP
B5 / 3	SOUTHEAST REGIONAL W	3331 LENA ROAD	FINDS	TP
B6 / 3	SOUTHEAST REGIONAL W	3331 LENA ROAD	RMP	TP
B7 / 3	SOUTHEAST WATER RECL	3331 LENA ROAD	SPILLS, TIER 2, NPDES	TP
B8 / 3	BIOSOLIDS DRYER/SOUT	3331 LENA ROAD	TIER 2	TP
B9 / 3	MANATEE CNTY EAST PL	3331 LENA RD	AST	TP
B10 / 3	MANATEE COUNTY PUBLI	3331 LENA ROAD	AST, TIER 2	TP
B11 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	FINDS, ECHO	TP
B12 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	ECHO	TP
B13 / 3	MANATEE COUNTY FLEET	3333 LENA RD	RCRA-VSQQ, FINDS, ECHO	TP
B14 / 3	MANATEE COUNTY UTILI	3333 LENA ROAD	ICIS, US AIRS	TP
B15 / 3	LENA ROAD CLASS I LA	3333 LENA ROAD	FINDS, ECHO	TP
B16 / 3	LENA RD LANDFILL - P	3333 LENA ROAD	FINDS, ECHO	TP
B17 / 3	MANATEE COUNTY LENA	3333 LENA RD # B	RCRA-SQG	TP
B18 / 3	MANATEE COUNTY FLEET	3333 LENA RD	RCRA-SQG	TP
B19 / 3	PACIFIC TOMATO GROWE	3333 LENA RD	FINDS, ECHO	TP
B20 / 3	MANATEE CNTY-LANDFIL	3333 LENA RD	SWF/LF, UST, AST, AIRS, Financial Assura...	TP
B21 / 3	MANATEE CNTY-SE WWTP	3335 LENA RD	UST, AST, Financial Assurance	TP
B22 / 3	MANATEE COUNTY LFGTE	3415 LENA RD	FINDS	TP
C23 / 3	SOUTHERN GUNITE, INC	3302 81ST CT E	AST	TP
C24 / 3	PRESTIGE GUNITE OF B	3302 EAST 81ST COURT	FINDS, ECHO	TP
C25 / 3	SOUTHERN GUNITE-BRAD	3302 81ST CT E	AIRS, Financial Assurance	TP
26 / 3	LENA TOWERS BUSINESS	3730 LENA RD	FINDS, ECHO	TP
27 / 3	DAVIS CONCRETE	3331 81ST CT E	AST	93 0.018 East
28 / 3	FREEDOM RECYCLING C&	3407 81ST COURT, EAS	SWF/LF	93 0.018 East
29 / 3	TIRE AND WHEEL OUTLE	7218 36TH AVE E	SWF/LF	2275 0.431 West

Key Map - 6558351.5s



- ▲ Sites
- - - Target Property
- - - Search Buffer
- - - Focus Map - No Sites
- Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- FL Brownfield
- Indian Reservations BIA



SITE NAME: Lena Road
ADDRESS: Lena Road
CITY/STATE: Bradenton FL
ZIP: 34211

CLIENT: HDR Engineering Inc.
CONTACT: Chelsea Williams
INQUIRY #: 6558351.5s
DATE: 06/30/21 10:34 PM

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	2	0	0	NR	NR	NR	2
RCRA-VSQG	0.250	1	0	0	NR	NR	NR	1
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500	2	1	0	1	NR	NR	4
<i>State and tribal leaking storage tank lists</i>								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FF TANKS	0.250		0	0	NR	NR	NR	0
UST	0.250	2	0	0	NR	NR	NR	2
AST	0.250	5	1	0	NR	NR	NR	6
INDIAN UST TANKS	0.250		0	0	NR	NR	NR	0
	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
FI Sites	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP	1	NR	NR	NR	NR	NR	1
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP	1	NR	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	9	NR	NR	NR	NR	NR	9
ECHO	TP	9	NR	NR	NR	NR	NR	9
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP	2	NR	NR	NR	NR	NR	2
ASBESTOS	TP		NR	NR	NR	NR	NR	0
CLEANUP SITES	TP		NR	NR	NR	NR	NR	0
DEDB	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		0	0	0	NR	NR	0
Financial Assurance	TP	3	NR	NR	NR	NR	NR	3
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
HW GEN	0.250	1	0	0	NR	NR	NR	1
RESP PARTY	0.500		0	0	0	NR	NR	0
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	TP	5	NR	NR	NR	NR	NR	5
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP	2	NR	NR	NR	NR	NR	2
MINES MRDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>EDR HIGH RISK HISTORICAL RECORDS</u>								
<i>EDR Exclusive Records</i>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125	1	0	NR	NR	NR	NR	1
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		48	2	0	1	0	0	51

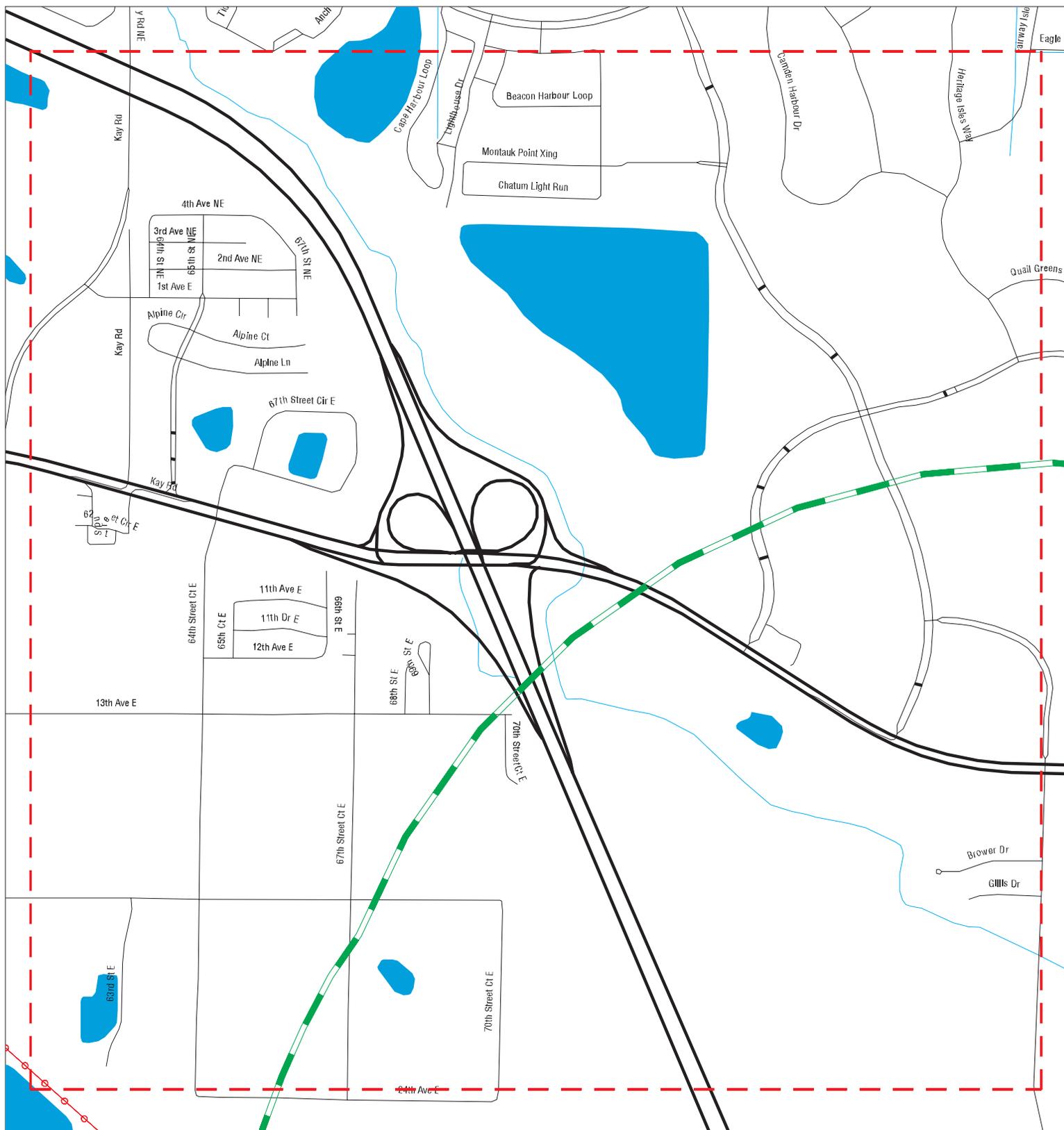
NOTES:

TP = Target Property

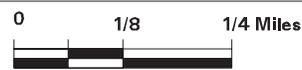
NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Focus Map - 1 - 6558351.5s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- ▬ Focus Map - Sites
- ▬ Power Line
- ▬ Pipe Line
- ▬ National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- FL Brownfield



SITE NAME: Lena Road
 ADDRESS: Lena Road
 CITY/STATE: Bradenton FL
 ZIP: 34211

CLIENT: HDR Engineering Inc.
 CONTACT: Chelsea Williams
 INQUIRY #: 6558351.5s
 DATE: 06/30/21

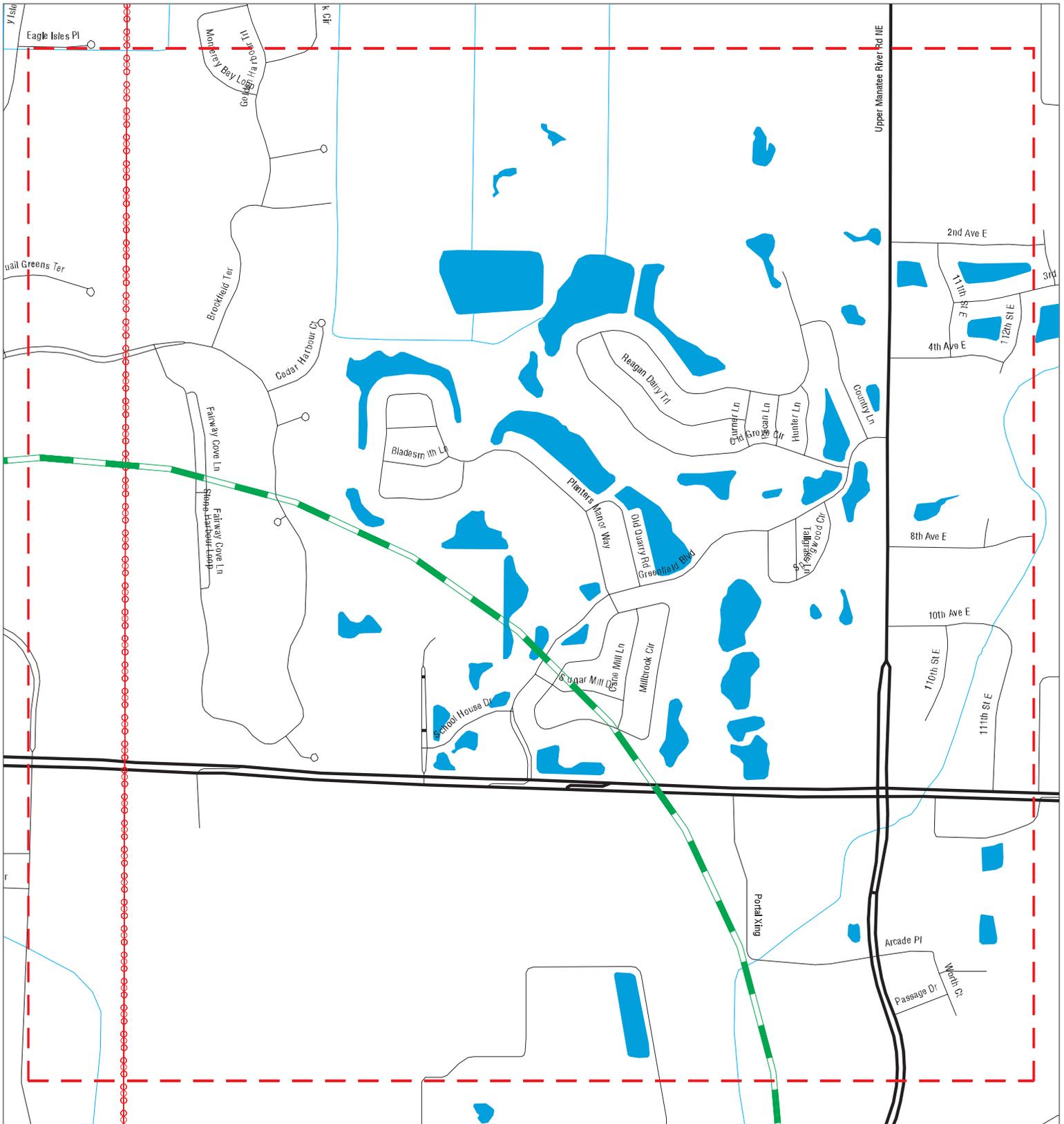
MAPPED SITES SUMMARY - FOCUS MAP 1

Target Property:
LENA ROAD
BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 2 - 6558351.5s



- | | | |
|----------------------|------------------------------|-------------------------|
| Sites | Focus Map - Sites | Dept. Defense Sites |
| Target Property | Power Line | Indian Reservations BIA |
| Search Buffer | Pipe Line | FL Brownfield |
| Focus Map - No Sites | National Priority List Sites | |



SITE NAME: Lena Road
 ADDRESS: Lena Road
 CITY/STATE: Bradenton FL
 ZIP: 34211

CLIENT: HDR Engineering Inc.
 CONTACT: Chelsea Williams
 INQUIRY #: 6558351.5s
 DATE: 06/30/21

MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
LENA ROAD
BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

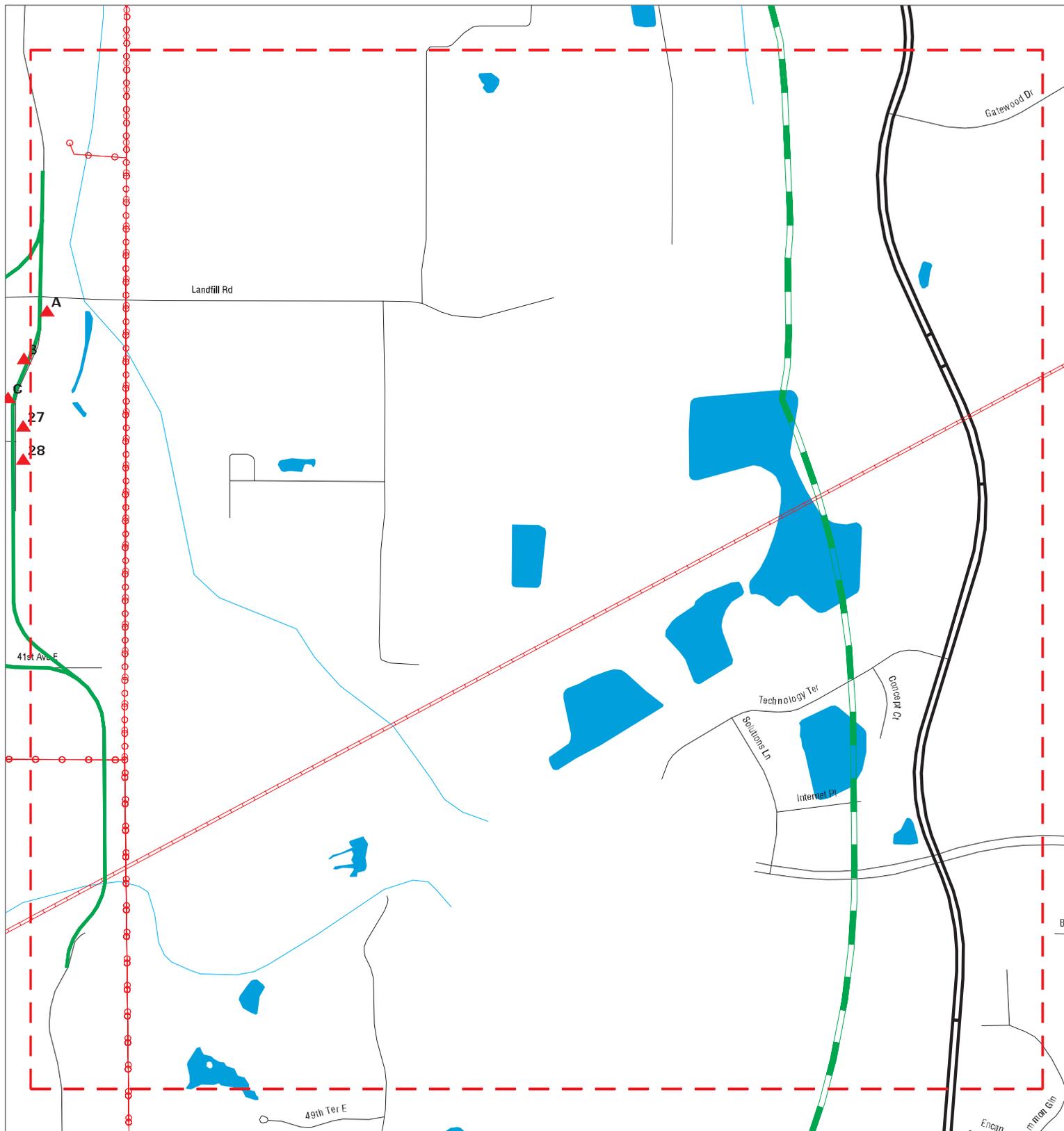
NO MAPPED SITES FOUND

MAPPED SITES SUMMARY - FOCUS MAP 3

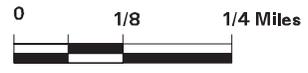
Target Property:
 LENA ROAD
 BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
3 / 3	AMERICAN PRIDE GOLF	3208 81ST CT E	SWF/LF	TP
B4 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	ECHO	TP
B5 / 3	SOUTHEAST REGIONAL W	3331 LENA ROAD	FINDS	TP
B6 / 3	SOUTHEAST REGIONAL W	3331 LENA ROAD	RMP	TP
B7 / 3	SOUTHEAST WATER RECL	3331 LENA ROAD	SPILLS, TIER 2, NPDES	TP
B8 / 3	BIOSOLIDS DRYER/SOUT	3331 LENA ROAD	TIER 2	TP
B9 / 3	MANATEE CNTY EAST PL	3331 LENA RD	AST	TP
B10 / 3	MANATEE COUNTY PUBLI	3331 LENA ROAD	AST, TIER 2	TP
B11 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	FINDS, ECHO	TP
B12 / 3	MANATEE COUNTY SOUTH	3331 LENA RD	ECHO	TP
B13 / 3	MANATEE COUNTY FLEET	3333 LENA RD	RCRA-VSQG, FINDS, ECHO	TP
B14 / 3	MANATEE COUNTY UTILI	3333 LENA ROAD	ICIS, US AIRS	TP
B15 / 3	LENA ROAD CLASS I LA	3333 LENA ROAD	FINDS, ECHO	TP
B16 / 3	LENA RD LANDFILL - P	3333 LENA ROAD	FINDS, ECHO	TP
B17 / 3	MANATEE COUNTY LENA	3333 LENA RD # B	RCRA-SQG	TP
B18 / 3	MANATEE COUNTY FLEET	3333 LENA RD	RCRA-SQG	TP
B19 / 3	PACIFIC TOMATO GROWE	3333 LENA RD	FINDS, ECHO	TP
B20 / 3	MANATEE CNTY-LANDFIL	3333 LENA RD	SWF/LF, UST, AST, AIRS, Financial Assura...	TP
B21 / 3	MANATEE CNTY-SE WWTP	3335 LENA RD	UST, AST, Financial Assurance	TP
B22 / 3	MANATEE COUNTY LFGTE	3415 LENA RD	FINDS	TP
C23 / 3	SOUTHERN GUNITE, INC	3302 81ST CT E	AST	TP
C24 / 3	PRESTIGE GUNITE OF B	3302 EAST 81ST COURT	FINDS, ECHO	TP
C25 / 3	SOUTHERN GUNITE-BRAD	3302 81ST CT E	AIRS, Financial Assurance	TP
26 / 3	LENA TOWERS BUSINESS	3730 LENA RD	FINDS, ECHO	TP
27 / 3	DAVIS CONCRETE	3331 81ST CT E	AST	93 0.018 East
28 / 3	FREEDOM RECYCLING C&	3407 81ST COURT, EAS	SWF/LF	93 0.018 East
29 / 3	TIRE AND WHEEL OUTLE	7218 36TH AVE E	SWF/LF	2275 0.431 West

Focus Map - 4 - 6558351.5s



- | | | | | | |
|--|----------------------|--|------------------------------|--|-------------------------|
| | Sites | | Focus Map - Sites | | Dept. Defense Sites |
| | Target Property | | Power Line | | Indian Reservations BIA |
| | Search Buffer | | Pipe Line | | FL Brownfield |
| | Focus Map - No Sites | | National Priority List Sites | | |



SITE NAME: Lena Road ADDRESS: Lena Road CITY/STATE: Bradenton FL ZIP: 34211	CLIENT: HDR Engineering Inc. CONTACT: Chelsea Williams INQUIRY #: 6558351.5s DATE: 06/30/21
--	--

MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property:
LENA ROAD
BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
A1 / 4	RIOS DRYCLEANING TO	3101 81ST CT E	EDR Hist Cleaner	TP
A2 / 4	PRESTIGE GUNITE - BR	3132 EAST 81 COURT	TIER 2	TP

Focus Map - 5 - 6558351.5s



- | | | |
|----------------------|------------------------------|-------------------------|
| Sites | Focus Map - Sites | Dept. Defense Sites |
| Target Property | Power Line | Indian Reservations BIA |
| Search Buffer | Pipe Line | FL Brownfield |
| Focus Map - No Sites | National Priority List Sites | |



SITE NAME: Lena Road
 ADDRESS: Lena Road
 CITY/STATE: Bradenton FL
 ZIP: 34211

CLIENT: HDR Engineering Inc.
 CONTACT: Chelsea Williams
 INQUIRY #: 6558351.5s
 DATE: 06/30/21

MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property:
LENA ROAD
BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
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NO MAPPED SITES FOUND

MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
LENA ROAD
BRADENTON, FL 34211

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRESTIGE GUNITE - BRADENTON (Continued)

S108247347

Site Plan Document: Not reported
Private Location: False
Location: CENTER OF PROPERTY

Report Year: 2006
Tier 2 Report ID: 96362
Chemical ID: 252562
CAS Number: 68476346
Chemical Name: DIESEL FUEL OIL (HIGH SULFUR)
Chemical Date: 2/12/2007
Average Amount: 4
Maximum Amount: 74000
Location ID: 432177
Chemical State: LIQUID
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 74000
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: ADJACENT TO BLDG.

Report Year: 2005
Tier 2 Report ID: 95013
Chemical ID: 247030
CAS Number: 65997151
Chemical Name: PORTLAND CEMENT
Chemical Date: 10/9/2006
Average Amount: 4
Maximum Amount: 125000
Location ID: 425311
Chemical State: Solid
Mixture: True
Mixture Percent: .00
Container: H - SILO
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 125000
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: CENTER OF PROPERTY NEXT TO BATCH PLANT

Report Year: 2005
Tier 2 Report ID: 95013
Chemical ID: 247029
CAS Number: 68476346

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRESTIGE GUNITE - BRADENTON (Continued)

S108247347

Chemical Name: DIESEL FUEL OIL (HIGH SULFUR)
Chemical Date: 10/9/2006
Average Amount: 4
Maximum Amount: 74000
Location ID: 425310
Chemical State: LIQUID
Mixture: True
Mixture Percent: .00
Containter: B - BELOW GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 74000
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: ADJACENT TO BUILDING

Company Info:

Company Name: PRESTIGE MANAGEMENT COMPANY, SOUTH
Company Address: 7228-C WESTPORT PLACE
Company City,St,Zip: WEST PALM BEACH, FL 33413
Company Phone: 561-478-9980
Company Fax: 561-478-2911
Company Email: mmahoney@prestige-gunite.com
FEI Number: 650252164
Company Contact Name: MIKE MAHONEY
Cmpny Contact Phone: 561-478-9980
Reduced Fees: True
Exempt Fees: False
Electronic Filing: False
Employee: 0
Comments: 10-3-06: PER DAVID HAGEN THE FEI#'S ON THE TIER II'S ARE NOT REGISTERED WITH THEM. ONLY THE #'S ON THE ARF. RM

3
Target
Property

AMERICAN PRIDE GOLF CART SERVICES
3208 81ST CT E
BRADENTON, FL 34211

SWF/LF **S125068836**
N/A

Actual:
29 ft.
Focus Map:
3

SWF/LF:
Name: AMERICAN PRIDE GOLF CART SERVICES
Address: 3208 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Facility ID: 105066
District: SWD
Lat/Long: :: / ::
Class Type: 754
Classification: WASTE TIRE COLLECTOR
Class Status: INACTIVE (I)
Section: Not reported
Township: Not reported
Range: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN PRIDE GOLF CART SERVICES (Continued)

S125068836

Responsible Authority Name: Not reported
Responsible Authority Address: Not reported
Responsible Authority City,St,Zip: Not reported
Responsible Authority Phone: Not reported
EMail Address1: Not reported
EMail Address2: Not reported
Site Supervisor Name: Not reported
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: Not reported
Land Owner Name: Not reported
Land Owner Address: Not reported
Land Owner City/State/Zip: Not reported
Land Owner Telephone: Not reported

Click here for Florida Oculus:

B4 **MANATEE COUNTY SOUTHEAST REGIONAL WWTF**
Target **3331 LENA RD**
Property **BRADENTON, FL 34211**

ECHO **1010737975**
N/A

Site 1 of 19 in cluster B

Actual: ECHO:
30 ft. Envid: 1010737975
Focus Map: Registry ID: 110033633968
3 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110033633968>
Name: MANATEE COUNTY SOUTHEAST REGIONAL WWTF
Address: 3331 LENA RD
City,State,Zip: BRADENTON, FL 34211

B5 **SOUTHEAST REGIONAL WASTEWATER TREATMENT FACILITY**
Target **3331 LENA ROAD**
Property **BRADENTON, FL 34211**

FINDS **1011262762**
N/A

Site 2 of 19 in cluster B

Actual: FINDS:
30 ft. Registry ID: 110020728113
Focus Map:
3 Click Here:

Environmental Interest/Information System:

US EPA Risk Management Plan (RMP) database stores the risk management plans reported by companies that handle, manufacture, use, or store certain flammable or toxic substances, as required under section 112(r) of the Clean Air Act (CAA).
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SOUTHEAST REGIONAL WASTEWATER TREATMENT FACILITY (Continued)

1011837665

Does RMP contain attachments: False
 Was certification letter received: True
 RMP submission method: RMP*Submit
 Does RMP contain CBI substantiation: False
 Does RMP contain electronic waiver: False
 Date RMP postmarked: 1999-06-21 00:00:00
 Is RMP complete: True
 Date of de-registration: 2002-03-20 00:00:00
 Date de-registration is effective: 2000-09-15 00:00:00
 Anniversary date: 2004-06-21 00:00:00
 Does RMP contain CBI data: False
 Does RMP contain unsanitized CBI version: False
 RMP version #: 1.1.7
 FRS latitude: 27.468330000000002
 FRS longitude: -82.4488900000000006
 FRS Description: PROCESS UNIT
 FRS Method: GPS CARRIER PHASE STATIC RELATIVE POSITION

Emergency Responses:

ER plan most recent review date: 1997-09-15 00:00:00
 ER plan most recent employee training date: 1998-05-31 00:00:00
 Local agency coordinating ER plan: Braden River Fire Department
 Telephone of the coordinating local agency: 9417515611
 Federal regulation: True
 OSHA 1910 120: True
 SPCC: False
 RCRA: False
 OPA 90: False
 EPCRA: False
 Other Regulations: Not reported

Processes:

Process ID: 17650
 Optional facility description: Chlorination
 Program level: 3
 Record contains CBI data: False

Process NAICS:

NAICS code description: Sewage Treatment Facilities

Prevention Program 3:

Safety review date: 1999-06-17 00:00:00
 Most recent PHA date: 1999-04-29 00:00:00
 Process Hazard Analysis: HAZOP
 Expected PHA changes completion date: 1999-12-31 00:00:00
 Major Hazard: Toxic Release, Fire, Explosion, Overpressurization, Corrosion, Contamination, Equipment failure, Cooling loss, Floods, Tornado, Hurricanes
 Process Control: Vents, Relief valves, Check valves, Manual shutoffs, Interlocks, Alarms, Emergency air supply, Emergency power, Grounding equipment
 Mitigation Systems: None
 Monitoring/Detection: Process area detector
 Changes since the last process hazard analysis: No changes since last PHA
 Most recent review of op. procedures: 1999-06-17 00:00:00
 Most recent training progs review/update: 1999-06-17 00:00:00
 Training: Classroom
 Competency testing: Demonstration, Observation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST REGIONAL WASTEWATER TREATMENT FACILITY (Continued)

1011837665

Most recent maintenance review date: 1999-06-17 00:00:00
Most recent equipment inspection date: 1999-06-17 00:00:00
Equipment tested: all chlorine service equipment inspected daily
Most recent changes by mgmt: Not reported
Date of most recent review/update: 1999-06-17 00:00:00
Date of pre-start review: 1999-06-17 00:00:00
Most recent compliance audit date: 1999-05-01 00:00:00
Expected date of audit completion: 1999-05-01 00:00:00
Most recent incident investigation: Not reported
Expected date of investigation changes: Not reported
Date of participation plan review: 1999-06-17 00:00:00
Date of hot work permit review: 1999-06-17 00:00:00
Date of contractor safety review: 1999-06-17 00:00:00
Date of contractor safety eval. review: Not reported
Record has CBI data: False

Process Chemicals:

Chemical name: Public OCA Chemical
Process chemical qty in 100s lbs: 0

Toxics Alt Releases:

Percent weight of chemical: 100
Physical state: a
Analytical basic: EPA's RMP*Comp(TM)
Scenario: Not reported
Quantity released in pounds: Not reported
Release duration in minutes: Not reported
Release rate in pounds per second: Not reported
Wind speed in meters/second: 3
Stability class: D
Topography: a
Distance to endpoint in miles: Not reported
Residential population: Not reported
Public receptors: Not reported
Environmental receptors: Not reported
Passive mitigation: Not reported
Active mitigation: Chlorine gas leak detectors

Toxics Worst Case:

Percent weight of chemical: 100
Physical state: c
Analytical basic: EPA's RMP*Comp(TM)
Scenario: Not reported
Quantity released in pounds: Not reported
Release duration in minutes: 10
Release rate in pounds per second: Not reported
Wind speed in meters/second: 1.5
Stability class: F
Topography: a
Distance to endpoint in miles: Not reported
Residential population: Not reported
Public receptors: Not reported
Environmental receptors: Not reported
Passive mitigation: Not reported

Chemical name: Chlorine

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST REGIONAL WASTEWATER TREATMENT FACILITY (Continued)

1011837665

Process chemical qty in 100s lbs: 40000

B7 **SOUTHEAST WATER RECLAMATION FACILITY**
Target **3331 LENA ROAD**
Property **BRADENTON, FL 34202**

SPILLS **S109211083**
TIER 2 **N/A**
NPDES

Site 4 of 19 in cluster B

Actual: **30 ft.** **SPILLS:**
Focus Map: **3** Name: Not reported
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL
OHMIT Incident Number: 9820
Incident Legacy: 00-41-0990Z
On-Scene Response: No
Criminal Indicator: No
Hurricane Indicator: No
Incident Date: 12/18/2000
Incident Status: Closed
Incident Report Date: Not reported

TIER 2:

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2019
Facility Id: 6633883
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/20/2020
First Submit Date: 02/20/2020
Data Submitted By: Christian Collins
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2019
Facility Id: 6633883
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6633883
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6633883
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6633883
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6633883

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2018
Facility Id: 6365465
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/21/2019
First Submit Date: 02/12/2019
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:
Contact ID: Not reported
Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6365465
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext.5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2017
Facility Id: 6084698
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/28/2018
First Submit Date: 02/28/2018
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:
Contact ID: Not reported
Year: 2017
Facility Id: 6084698
Contact Type: Emergency Contact
Contact Name: Victor Boucher
Contact Title: Not reported
Contact Phone: (941) 932-6122
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8028
Contact Telephone 3: Not reported
Contact Telephone 4: (941) 792-8811 ext 5162

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Contact Telephone 5: Not reported
Contact Telephone 6: (941) 792-8811 ext.5162
Contact Email: Victor.Boucher@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2016
Facility Id: 5840457
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/22/2017
First Submit Date: 02/22/2017
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2016
Facility Id: 5840457
Contact Type: Emergency Contact
Contact Name: Dalton Cook
Contact Title: Not reported
Contact Phone: (941) 713-0269
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8021
Contact Telephone 3: Not reported
Contact Telephone 4: (941) 792-8811 ext 5162
Contact Telephone 5: Not reported
Contact Telephone 6: (941) 792-8811
Contact Email: Dalton.Cook@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2014
Facility Id: 5115468
Active Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4680454874654
Longitude: -82.45146641014656
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 4952
SIC Code 2: Not reported
NAICS Code: 22132
Last Modified Date: 06/08/2015
First Submit Date: 06/08/2015
Data Submitted By: Chris Collins / Supervisor
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2014
Facility Id: 5115468
Contact Type: Emergency Contact
Contact Name: Chuck Froman
Contact Title: Not reported
Contact Phone: 941-773-6830
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: chuck.froman@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2013
Facility Id: 4566766
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4676
Longitude: -82.449900
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 4952
SIC Code 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

NAICS Code: 11111
Last Modified Date: 04/02/2014
First Submit Date: 04/02/2014
Data Submitted By: DALTON COOK, CHIEF OPERATOR
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:
Contact ID: Not reported
Year: 2013
Facility Id: 4566766
Contact Type: Emergency Contact
Contact Name: CHUCK FROMAN
Contact Title: Not reported
Contact Phone: 941-773-6830
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: chuck.froman@mymanatee.org

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2012
Facility Id: 4218254
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4676
Longitude: -82.449900
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 4952
SIC Code 2: Not reported
NAICS Code: 11111
Last Modified Date: 06/14/2013
First Submit Date: 06/14/2013
Data Submitted By: DALTON COOK, CHIEF OPERATOR
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:
Contact ID: Not reported
Year: 2012
Facility Id: 4218254
Contact Type: Tier II Secondary Contact
Contact Name: DALTON COOK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: Not reported
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Not reported

Contact ID: Not reported
Year: 2012
Facility Id: 4218254
Contact Type: Owner / Operator
Contact Name: CHRIS COLLINS
Contact Title: Not reported
Contact Phone: 941-920-2083
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: UNKNOWN

Contact ID: Not reported
Year: 2012
Facility Id: 4218254
Contact Type: Tier II Emergency Contact
Contact Name: CHUCK FROMAN
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-773-6830
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: UNKNOWN

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2011
Facility Id: 3990509
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4676
Longitude: -82.449900
LEPC District: Not reported
Counties: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: 11/12/2012
First Submit Date: 11/09/2012
Data Submitted By: Florida Division of Emergency Management
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2011
Facility Id: 3990509
Contact Type: Tier II Secondary Contact
Contact Name: DALTON COOK
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: Not reported
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Not reported

Contact ID: Not reported
Year: 2011
Facility Id: 3990509
Contact Type: Tier II Emergency Contact
Contact Name: PAMALA KEYES
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: Not reported
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Not reported

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2010
Facility Id: Not reported
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4684
Longitude: -82.45

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: Not reported
First Submit Date: Not reported
Data Submitted By: Not reported
Company Name: Not reported
Comments: Not reported

Chemical Code: 8016817
Chemical Name: DISTILLED TALL OIL
Chemical State: LIQUID
Location Name: Bio Solids Dryer Building
Container Code: A
Pressure Code: 1
Temperature Code: 4
Average Quantity: 40100
Maximum Quantity: 40100
Days On Site: 365

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2010
Facility Id: Not reported
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4684
Longitude: -82.45
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: Not reported
First Submit Date: Not reported
Data Submitted By: Not reported
Company Name: Not reported
Comments: Not reported

Chemical Code: 7727379
Chemical Name: Nitrogen
Chemical State: LIQUEFIED GAS
Location Name: Bio Solids Dryer Building
Container Code: A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Pressure Code: 2
Temperature Code: 6
Average Quantity: 20235
Maximum Quantity: 20235
Days On Site: 365

[Click this hyperlink](#) while viewing on your computer to access
3 additional FL_TIER2: record(s) in the EDR Site Report.

WASTEWATER:

Name: MANATEE COUNTY SOUTHEAST REGIONAL WWTF
Address: 3331 LENA RD
City,State,Zip: BRADENTON, FL
Facility ID: FLR20DY53
Facility Type: Construction Generic Dewatering
Status: Active - Existing, permitted facility/site for which effluent,
reclaimed water or wastewater residual discharge into the environment
and/or monitoring is taking place.

District Office: TLST
NPDES Permitted Site: Not reported
Environmental Interest: Not reported
Owner Type: County
Permit Capacity: Not reported
Party Name: Daniel Copeland, Project Engineer
Company Name: TLC Diversified
RP Address: 2719 17th St E
RP Address 2: Not reported
RP City,Stat,Zip: Palmetto FL 34221-9314
Telephone: 9417220621
Email: dcopeland@tlcdiversified.com
Issue Date: 10/19/2020
Effective Date: 10/19/2020
Expiration Date: 10/18/2025
DOC Description: Generic Permit
Latitude Degrees: 27
Latitude Minutes: 27
Latitude Seconds: 49.22
Longitude Degrees: 82
Longitude Minutes: 26
Longitude Seconds: 23.64
Treatment: Not reported
Decode For Fstatus: Active

Name: SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA RD
City,State,Zip: BRADENTON, FL
Facility ID: FLRNEE423
Facility Type: Stormwater No Exposure Certification
Status: Active - Existing, permitted facility/site for which effluent,
reclaimed water or wastewater residual discharge into the environment
and/or monitoring is taking place.

District Office: TLST
NPDES Permitted Site: Not reported
Environmental Interest: Not reported
Owner Type: County
Permit Capacity: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Party Name: Mike Gore, PMTE
Company Name: MANATEE COUNTY UTILITIES
RP Address: 4410 66th Street West
RP Address 2: Not reported
RP City,Stat,Zip: Bradenton FL 34210
Telephone: 9417928811
Email: mike.gore@mymanatee.org
Issue Date: 11/02/2015
Effective Date: 11/02/2015
Expiration Date: 11/01/2020
DOC Description: Generic Permit
Latitude Degrees: 27
Latitude Minutes: 28
Latitude Seconds: 4
Longitude Degrees: 82
Longitude Minutes: 26
Longitude Seconds: 51
Treatment: Not reported
Decode For Fstatus: Active

Name: MANATEE COUNTY SOUTHEAST REGIONAL WWTF
Address: 3331 LENA RD
City,State,Zip: BRADENTON, FL
Facility ID: FLA012618
Facility Type: Domestic WWTP
Status: Active - Existing, permitted facility/site for which effluent, reclaimed water or wastewater residual discharge into the environment and/or monitoring is taking place.

District Office: SWD
NPDES Permitted Site: No
Environmental Interest: Not reported
Owner Type: County
Permit Capacity: 11
Party Name: Jeff Goodwin, Wastewater Division Manager
Company Name: Manatee County Utilities
RP Address: 4520 66th Street West
RP Address 2: Not reported
RP City,Stat,Zip: Bradenton FL 34210
Telephone: 9417928811
Email: jeff.goodwin@mymanatee.org
Issue Date: 08/10/2015
Effective Date: 11/16/2015
Expiration Date: 11/15/2025
DOC Description: Permit Revision
Latitude Degrees: Not reported
Latitude Minutes: Not reported
Latitude Seconds: Not reported
Longitude Degrees: Not reported
Longitude Minutes: Not reported
Longitude Seconds: Not reported
Treatment: Type I Conventional Activated Sludge (Carrousel)
Decode For Fstatus: Active

Name: MANATEE COUNTY SEWRF
Address: 3331 LENA RD
City,State,Zip: BRADENTON, FL
Facility ID: FLG072647

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S109211083

Facility Type:	Dewatering GP
Status:	Active - Existing, permitted facility/site for which effluent, reclaimed water or wastewater residual discharge into the environment and/or monitoring is taking place.
District Office:	SWD
NPDES Permitted Site:	Yes
Environmental Interest:	Industrial Wastewater Program
Owner Type:	County
Permit Capacity:	Not reported
Party Name:	Dylan R Parker, APM
Company Name:	Poole & Kent Company of Florida
RP Address:	1715 W Lemon St
RP Address 2:	Not reported
RP City,Stat,Zip:	Tampa FL 33606
Telephone:	Not reported
Email:	dylanp@pkflorida.com
Issue Date:	03/02/2020
Effective Date:	03/02/2020
Expiration Date:	03/01/2025
DOC Description:	Generic Permit
Latitude Degrees:	Not reported
Latitude Minutes:	Not reported
Latitude Seconds:	Not reported
Longitude Degrees:	Not reported
Longitude Minutes:	Not reported
Longitude Seconds:	Not reported
Treatment:	Not reported
Decode For Fstatus:	Active

**B8
 Target
 Property**

**BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILI
 3331 LENA ROAD
 BRADENTON, FL 34202**

**TIER 2 S120696616
 N/A**

Site 5 of 19 in cluster B

**Actual:
 30 ft.
 Focus Map:
 3**

TIER 2:	
Name:	BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY
Address:	3331 LENA ROAD
City,State,Zip:	BRADENTON, FL 34211
Year:	2019
Facility Id:	6633884
Active Date:	Not reported
Inactive Date:	Not reported
Sale Pending:	Not reported
Original Date:	Not reported
PLOT Source:	Not reported
Latitude:	Not reported
Longitude:	Not reported
LEPC District:	Not reported
Counties:	Not reported
SERC:	Not reported
Program Level:	Not reported
PRIME:	Not reported
SIC Code:	Not reported
SIC Code 2:	Not reported
NAICS Code:	221320
Last Modified Date:	02/20/2020

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S120696616

First Submit Date: 02/20/2020
Data Submitted By: Christian Collins
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2019
Facility Id: 6633884
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext. 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6633884
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext. 8025
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chris.Collins@mymanatee.org

Name: BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2018
Facility Id: 6365466
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S120696616

NAICS Code: 221320
Last Modified Date: 02/21/2019
First Submit Date: 02/12/2019
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2018
Facility Id: 6365466
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext. 5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6365466
Contact Type: Owner / Operator
Contact Name: Manatee County Utilities Department
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext. 5162
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Chuck.Froman@mymanatee.org

Name: BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2017
Facility Id: 6084699
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S120696616

SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/28/2018
First Submit Date: 02/28/2018
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2017
Facility Id: 6084699
Contact Type: Emergency Contact
Contact Name: Dalton Cook
Contact Title: Not reported
Contact Phone: (941) 713-0269
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8021
Contact Telephone 3: Not reported
Contact Telephone 4: (941) 792-8811 ext 5162
Contact Telephone 5: Not reported
Contact Telephone 6: (941) 792-8811 ext. 5162
Contact Email: Dalton.Cook@mymanatee.org

Name: BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202

Year: 2016
Facility Id: 5840458
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/22/2017
First Submit Date: 02/22/2017
Data Submitted By: Charles Froman
Company Name: Manatee County Utilities Department
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2016
Facility Id: 5840458

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BIOSOLIDS DRYER/SOUTHEAST WATER RECLAMATION FACILITY (Continued)

S120696616

Contact Type: Emergency Contact
Contact Name: Dalton Cook
Contact Title: Not reported
Contact Phone: (941) 713-0269
Contact 24Hr Phone: Not reported
Contact Telephone 2: (941) 792-8811 ext 8021
Contact Telephone 3: Not reported
Contact Telephone 4: (941) 792-8811 ext 5162
Contact Telephone 5: Not reported
Contact Telephone 6: (941) 792-8811
Contact Email: Dalton.Cook@mymanatee.org

B9 MANATEE CNTY EAST PLANT
Target 3331 LENA RD
Property BRADENTON, FL 34202

AST A100180535
N/A

Site 6 of 19 in cluster B

Actual: 30 ft. AST:
Focus Map: 3
Name: MANATEE CNTY EAST PLANT
Address: 3331 LENA RD
Facility ID: 9800685
Facility Status: CLOSED
Type Description: County Government
Facility Phone: Not reported
DEP Contractor Own: P
Region: STATE
Positioning Method: ADDM
Lat/Long (dms): 27 28 31.1645 / 82 27 23.6866999

Owner:
Owner Id: 5436
Owner Name: SIEMENS WATER TECHNOLOGIES
Owner Address: 2650 TALLEVAST RD
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: SARASOTA, FL 34243
Owner Contact: CHARLES MALTBY
Owner Phone: 9413597942

Tank Id: 1
Status: Removed
Status Date: 02/16/2001
Install Date: 7/1/1996
Substance: Hazardous substance
Content Description: Hazardous Substance
Gallons: 3000
Tank Location: ABOVEGROUND

[Click here for Florida Oculus:](#)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

B10 MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP
Target 3331 LENA ROAD
Property BRADENTON, FL 34202

AST S107720669
TIER 2 N/A

Site 7 of 19 in cluster B

Actual: 30 ft.
Focus Map: 3

AST:
Name: MANATEE CNTY-SE WWTP
Address: 3331 LENA RD
Facility ID: 9800602
Facility Status: CLOSED
Type Description: Chemical user
Facility Phone: 9417928811
DEP Contractor Own: D
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 27 28 4 / 82 26 52

Owner:
Owner Id: 5436
Owner Name: SIEMENS WATER TECHNOLOGIES
Owner Address: 2650 TALLEVAST RD
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: SARASOTA, FL 34243
Owner Contact: CHARLES MALTBY
Owner Phone: 9413597942

Tank Id: 2
Status: Removed
Status Date: 05/01/2012
Install Date: 6/1/2008
Substance: Hazardous substance
Content Description: Hazardous Substance
Gallons: 6510
Tank Location: ABOVEGROUND

Tank Id: 1
Status: Removed
Status Date: 08/01/2000
Install Date: 1/1/1998
Substance: Waste oil
Content Description: Waste Oil
Gallons: 1000
Tank Location: ABOVEGROUND

[Click here for Florida Oculus:](#)

TIER 2:
Name: MANATEE COUNTY LANDFILL
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2014
Facility Id: 5115472
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.473603725708656
Longitude: -82.44684628390382
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 4953
SIC Code 2: Not reported
NAICS Code: 562219
Last Modified Date: 06/08/2015
First Submit Date: 06/08/2015
Data Submitted By: BRYAN WHITE, LANDFILL SUPERINTENDENT
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2014
Facility Id: 5115472
Contact Type: Emergency Contact
Contact Name: ANTHONY DEWEILER
Contact Title: Not reported
Contact Phone: 941-812-8796
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Not Listed

Name: MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP
Address: 3331 LENA ROAD
City,State,Zip: BRADENTON, FL 34202
Year: Not reported
Facility Id: Not reported
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: False
Original Date: Not reported
PLOT Source: Google Maps
Latitude: 27.467600
Longitude: -82.449900
LEPC District: 8
Counties: Pinellas,Pasco,Manatee,Hillsborough,
SERC: 30699
Program Level: 0
PRIME: 3545
SIC Code: 4952
SIC Code 2: Not reported
NAICS Code: 22132

Other Chemical Data:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

Report Year: 2007
Tier 2 Report ID: 101014
Chemical ID: 283711
CAS Number: 1310732
Chemical Name: Sodium hydroxide
Chemical Date: 2/27/2008
Average Amount: 4
Maximum Amount: 6374
Location ID: 471726
Chemical State: Liquid
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 6374
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: EAST OF ADMIN BLDG. WEST OF LANDFILL

Report Year: 2007
Tier 2 Report ID: 101014
Chemical ID: 283709
CAS Number: 68476346
Chemical Name: DIESEL FUEL OIL (HIGH SULFUR)
Chemical Date: 2/27/2008
Average Amount: 5
Maximum Amount: 112640
Location ID: 471725
Chemical State: LIQUID
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 5
Maximum Amount: 112640
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: DIRECTLY BEHIND ADMIN BLDG.

Report Year: 2007
Tier 2 Report ID: 101014
Chemical ID: 283708
CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 2/27/2008
Average Amount: 4
Maximum Amount: 64680
Location ID: 471724

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

Chemical State: Liquid
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 64680
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: CHEMICAL STORAGE BLDG. NW END OF PLANT SOUTH OF HWY 64

Report Year: 2006
Tier 2 Report ID: 95587
Chemical ID: 270335
CAS Number: 68476346
Chemical Name: DIESEL FUEL OIL (HIGH SULFUR)
Chemical Date: 7/16/2007
Average Amount: 5
Maximum Amount: 118400
Location ID: 455243
Chemical State: LIQUID
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 5
Maximum Amount: 118400
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: SEE MAP

Report Year: 2006
Tier 2 Report ID: 95587
Chemical ID: 270334
CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 7/16/2007
Average Amount: 4
Maximum Amount: 64680
Location ID: 455241
Chemical State: Liquid
Mixture: True
Mixture Percent: .00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 64680
Days on Site: 365

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: CEHMICAL STORAGE BLDG. - NW END OF PALNT SOUTH OF HWY 64

Report Year: 2005
Tier 2 Report ID: 91247
Chemical ID: 224971
CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 1/30/2006
Average Amount: 4
Maximum Amount: 64680
Location ID: 395842
Chemical State: Liquid
Mixture: True
Mixture Percent: .00
Containter: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 64680
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: CHEMICAL STORAGE BLDG. NW END OF PLANT SOUTH OF HWY 64

Report Year: 2004
Tier 2 Report ID: 88662
Chemical ID: 205955
CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 3/15/2005
Average Amount: 4
Maximum Amount: 64680
Location ID: 371040
Chemical State: Liquid
Mixture: False
Mixture Percent: 100.00
Containter: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 64680
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: Not reported

Report Year: 2003
Tier 2 Report ID: 83750
Chemical ID: 178242

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 1/2/1972
Average Amount: 4
Maximum Amount: 32220
Location ID: 336305
Chemical State: Liquid
Mixture: False
Mixture Percent: 100.00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 32220
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: SEE SITE PLAN

Report Year: 2002
Tier 2 Report ID: 79653
Chemical ID: 165307
CAS Number: 7681529
Chemical Name: Sodium hypochlorite
Chemical Date: 1/2/1972
Average Amount: 4
Maximum Amount: 32220
Location ID: 320595
Chemical State: Liquid
Mixture: False
Mixture Percent: 100.00
Container: A - ABOVE GROUND TANK
Pressure: 1 - AMBIENT PRESSURE
Temperature: 4 - AMBIENT TEMPERATURE
Average Amount: 4
Maximum Amount: 32220
Days on Site: 365
Site Plan: False
Site Plan Document: Not reported
Private Location: False
Location: SEE MAP ATTACHED

Company Info:

Company Name: MANATEE COUNTY - PROPERTY MANAGEMENT
Company Address: POST OFFICE BOX 1000
Company City,St,Zip: BRADENTON, FL 34210
Company Phone: 941-792-8811
Company Fax: Not reported
Company Email: Not reported
FEI Number: 596000727
Comany Contact Name: DAN GRAY, DIRECTOR
Cmpny Contact Phone: 941-729-8811
Reduced Fees: False
Exempt Fees: True

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY PUBLIC UTILITIES - SE REGIONAL WWTP (Continued)

S107720669

Electronic Filing: True
Employee: Not reported
Comments: Not reported

B11 **MANATEE COUNTY SOUTHEAST REGIONAL WWTF**
Target **3331 LENA RD**
Property **BRADENTON, FL 34211**

FINDS **1009686319**
ECHO **N/A**

Site 8 of 19 in cluster B

Actual: **FINDS:**
30 ft. **Registry ID:** 110027955988

Focus Map:
3 **Click Here:**

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Registry ID: 110033633968

Click Here:

Environmental Interest/Information System:

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Registry ID: 110064416118

Click Here:

Environmental Interest/Information System:

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Registry ID: 110028292498

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY SOUTHEAST REGIONAL WWTF (Continued)

1009686319

Click Here:

Environmental Interest/Information System:

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality. Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1009686319
 Registry ID: 110064416118
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110064416118>
 Name: SEWRF
 Address: 3331 LENA RD
 City,State,Zip: BRADENTON, FL 34211

Envid: 1009686319
 Registry ID: 110027955988
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110027955988>
 Name: MANATEE COUNTY SOUTHEAST REGIONAL WWTF
 Address: 3331 LENA RD
 City,State,Zip: BRADENTON, FL 34211

B12 **MANATEE COUNTY SOUTHEAST REGIONAL WWTF**
Target **3331 LENA RD**
Property **BRADENTON, FL 34211**

ECHO **1010015624**
N/A

Site 9 of 19 in cluster B

Actual: **ECHO:**
30 ft. Envid: 1010015624
Focus Map: Registry ID: 110028292498
3 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110028292498>
 Name: MANATEE COUNTY SOUTHEAST REGIONAL WWTF
 Address: 3331 LENA RD
 City,State,Zip: BRADENTON, FL 34211

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

B13 **MANATEE COUNTY FLEET SERVICE**
Target **3333 LENA RD**
Property **BRADENTON, FL 34211**

RCRA-VSQQ **1014468201**
FINDS **FLT970059135**
ECHO

Site 10 of 19 in cluster B

Actual: 30 ft.	RCRA-VSQQ:		
	Date Form Received by Agency:		1997-11-26 00:00:00.0
Focus Map: 3	Handler Name:	PACIFIC TOMATO GROWERS	
	Handler Address:	3333 LENA RD	
	Handler City,State,Zip:	BRADENTON, FL 34211-9458	
	EPA ID:	FLT970059135	
	Contact Name:	Not reported	
	Contact Address:	Not reported	
	Contact City,State,Zip:	Not reported	
	Contact Telephone:	Not reported	
	Contact Fax:	Not reported	
	Contact Email:	Not reported	
	Contact Title:	Not reported	
	EPA Region:	04	
	Land Type:	Other	
	Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator	
	Non-Notifier:	Not reported	
	Biennial Report Cycle:	Not reported	
	Accessibility:	Not reported	
	Active Site Indicator:	Handler Activities	
	State District Owner:	FL	
	State District:	SW	
	Mailing Address:	Not reported	
	Mailing City,State,Zip:	Not reported	
	Owner Name:	Not reported	
	Owner Type:	Not reported	
	Operator Name:	Not reported	
	Operator Type:	Not reported	
	Short-Term Generator Activity:	Yes	
	Importer Activity:	No	
	Mixed Waste Generator:	No	
	Transporter Activity:	No	
	Transfer Facility Activity:	No	
	Recycler Activity with Storage:	No	
	Small Quantity On-Site Burner Exemption:	No	
	Smelting Melting and Refining Furnace Exemption:	No	
	Underground Injection Control:	No	
	Off-Site Waste Receipt:	No	
	Universal Waste Indicator:	No	
	Universal Waste Destination Facility:	No	
	Federal Universal Waste:	No	
	Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported	
	Active Site Converter Treatment storage and Disposal Facility:	Not reported	
	Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported	
	Active Site State-Reg Handler:	---	
	Federal Facility Indicator:	Not reported	
	Hazardous Secondary Material Indicator:	NN	
	Sub-Part K Indicator:	Not reported	
	Commercial TSD Indicator:	No	
	Treatment Storage and Disposal Type:	Not reported	
	2018 GPRA Permit Baseline:	Not on the Baseline	
	2018 GPRA Renewals Baseline:	Not on the Baseline	
	Permit Renewals Workload Universe:	Not reported	

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1014468201

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2011-06-23 16:56:54.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Historic Generators:

Receive Date:	1997-11-26 00:00:00.0
Handler Name:	PACIFIC TOMATO GROWERS
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found
--------------	----------------------

Facility Has Received Notices of Violations:

Violations:	No Violations Found
-------------	---------------------

Evaluation Action Summary:

Evaluations:	No Evaluations Found
--------------	----------------------

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1014468201

FINDS:

Registry ID: 110005584518

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1014468201
 Registry ID: 110005584518
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110005584518>
 Name: MANATEE COUNTY FLEET SERVICE
 Address: 3333 LENA RD
 City,State,Zip: BRADENTON, FL 34211

B14 **MANATEE COUNTY UTILITY OPERATIONS DEPT.**
Target **3333 LENA ROAD**
Property **BRADENTON, FL 34211**

ICIS **1005614030**
US AIRS **N/A**

Site 11 of 19 in cluster B

Actual:
30 ft.

Focus Map:
3

ICIS:
 Enforcement Action ID: FL000A0000120810005500046
 FRS ID: 110012324047
 Action Name: MANATEE COUNTY UTILITY OPERATIONS DEPT. 120810005500046
 Facility Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
 Facility Address: 3333 LENA ROAD
 BRADENTON, FL 34211
 Enforcement Action Type: Notice of Violation
 Facility County: MANATEE
 Program System Acronym: AIR
 Enforcement Action Forum Desc: Administrative - Informal
 EA Type Code: NOV
 Facility SIC Code: 4953
 Federal Facility ID: Not reported
 Latitude in Decimal Degrees: 27.470256
 Longitude in Decimal Degrees: -82.444294
 Permit Type Desc: Not reported
 Program System Acronym: FL0000001208100055
 Facility NAICS Code: 562212
 Tribal Land Code: Not reported

Enforcement Action ID: FL000A0000120810005500004
 FRS ID: 110012324047
 Action Name: MANATEE COUNTY UTILITY OPERATIONS DEPT. 120810005500004
 Facility Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Facility Address: 3333 LENA ROAD
BRADENTON, FL 34211

Enforcement Action Type: Administrative Order

Facility County: MANATEE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO

Facility SIC Code: 4953

Federal Facility ID: Not reported

Latitude in Decimal Degrees: 27.470256

Longitude in Decimal Degrees: -82.444294

Permit Type Desc: Not reported

Program System Acronym: FL0000001208100055

Facility NAICS Code: 562212

Tribal Land Code: Not reported

Enforcement Action ID: FL000A0000120810005500002

FRS ID: 110012324047

Action Name: MANATEE COUNTY UTILITY OPERATIONS DEPT. 120810005500002

Facility Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Facility Address: 3333 LENA ROAD
BRADENTON, FL 34211

Enforcement Action Type: Notice of Violation

Facility County: MANATEE

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV

Facility SIC Code: 4953

Federal Facility ID: Not reported

Latitude in Decimal Degrees: 27.470256

Longitude in Decimal Degrees: -82.444294

Permit Type Desc: Not reported

Program System Acronym: FL0000001208100055

Facility NAICS Code: 562212

Tribal Land Code: Not reported

US AIRS (AFS):

Envid: 1005614030

Region Code: 04

County Code: FL081

Programmatic ID: AIR FL0000001208100055

Facility Registry ID: 110012324047

D and B Number: Not reported

Facility Site Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Primary SIC Code: 4953

NAICS Code: 562212

Default Air Classification Code: MAJ

Facility Type of Ownership Code: CNG

Air CMS Category Code: TVM

HPV Status: Not reported

US AIRS (AFS):

Region Code: 04

Programmatic ID: AIR FL0000001208100055

Facility Registry ID: 110012324047

Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2014-05-28 00:00:00
Activity Status Date: 2015-06-30 14:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2014-08-20 00:00:00
Activity Status Date: 2015-07-16 07:18:27
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-03-10 00:00:00
Activity Status Date: 2015-07-17 14:27:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2015-07-31 14:25:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-07-02 00:00:00
Activity Status Date: 2015-08-03 08:04:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2016-03-02 00:00:00
Activity Status Date: 2016-04-04 12:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2016-06-16 00:00:00
Activity Status Date: 2016-08-18 08:28:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2007-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2007-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2008-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2009-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2009-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2009-09-22 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2011-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2011-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2011-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2012-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2012-12-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2014-05-28 00:00:00
Activity Status Date: 2015-06-30 14:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2014-08-20 00:00:00
Activity Status Date: 2015-07-16 07:18:27
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-03-10 00:00:00
Activity Status Date: 2015-07-17 14:27:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2015-07-31 14:25:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-07-02 00:00:00
Activity Status Date: 2015-08-03 08:04:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2016-03-02 00:00:00
Activity Status Date: 2016-04-04 12:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2016-06-16 00:00:00
Activity Status Date: 2016-08-18 08:28:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2007-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2007-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2008-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2009-01-29 00:00:00

Map ID
Direction
Distance
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2009-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2009-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2011-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2011-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2011-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2012-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2012-12-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2014-05-28 00:00:00
Activity Status Date: 2015-06-30 14:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2014-08-20 00:00:00
Activity Status Date: 2015-07-16 07:18:27
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-03-10 00:00:00
Activity Status Date: 2015-07-17 14:27:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2015-07-31 14:25:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-07-02 00:00:00
Activity Status Date: 2015-08-03 08:04:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2016-03-02 00:00:00
Activity Status Date: 2016-04-04 12:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2016-06-16 00:00:00
Activity Status Date: 2016-08-18 08:28:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2003-12-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2003-12-30 00:00:00

Map ID
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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2006-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2007-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2007-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2008-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
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Database(s)

EDR ID Number
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MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2009-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2009-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2009-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2011-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2011-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2011-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2012-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2012-12-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-05-28 00:00:00
Activity Status Date: 2015-06-30 14:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-08-20 00:00:00
Activity Status Date: 2015-07-16 07:18:27
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-03-10 00:00:00
Activity Status Date: 2015-07-17 14:27:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2015-07-31 14:25:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-06-04 00:00:00

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: 2015-08-04 07:48:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-07-02 00:00:00
Activity Status Date: 2015-08-03 08:04:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2016-03-02 00:00:00
Activity Status Date: 2016-04-04 12:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2016-06-16 00:00:00
Activity Status Date: 2016-08-18 08:28:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2001-12-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-12-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-12-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04

Map ID
Direction
Distance
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
Direction
Distance
Elevation

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Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-12-13 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-02-14 00:00:00
Activity Status Date: 2011-04-19 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-04-06 00:00:00
Activity Status Date: 2015-12-01 14:33:01
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2002-12-09 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-05-28 00:00:00
Activity Status Date: 2015-06-30 14:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-08-20 00:00:00
Activity Status Date: 2015-07-16 07:18:27
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-03-10 00:00:00
Activity Status Date: 2015-07-17 14:27:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-04-06 00:00:00
Activity Status Date: 2015-12-01 14:34:29
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2015-07-31 14:25:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-06-04 00:00:00
Activity Status Date: 2015-08-04 07:48:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-07-02 00:00:00
Activity Status Date: 2015-08-03 08:04:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-03-02 00:00:00
Activity Status Date: 2016-04-04 12:52:09
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-06-16 00:00:00
Activity Status Date: 2016-08-18 08:28:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-12-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2001-12-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-02-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-12-11 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-12-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-01-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2005-05-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-07-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-09-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-12-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-12-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-01-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-03-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-03-03 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-02-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-12-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-07-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 04

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY UTILITY OPERATIONS DEPT. (Continued)

1005614030

Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-10-04 00:00:00
Activity Status Date: 2000-10-04 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-08-19 00:00:00
Activity Status Date: 1999-08-19 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 04
Programmatic ID: AIR FL0000001208100055
Facility Registry ID: 110012324047
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-02-14 00:00:00
Activity Status Date: 2011-02-14 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

B15 **LENA ROAD CLASS I LANDFILL**
Target **3333 LENA ROAD**
Property **BRADENTON, FL 34211**

FINDS **1014882686**
ECHO **N/A**

Site 12 of 19 in cluster B

Actual: **FINDS:**
30 ft. Registry ID: 110043790662

Focus Map:
3 Click Here:

Environmental Interest/Information System:
GREENHOUSE GAS REPORTER

[Click this hyperlink](#) while viewing on your computer to access
additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1014882686
Registry ID: 110043790662
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110043790662>
Name: LENA ROAD CLASS I LANDFILL
Address: 3333 LENA ROAD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LENA ROAD CLASS I LANDFILL (Continued)

1014882686

City,State,Zip: BRADENTON, FL 34211

B16 LENA RD LANDFILL - PHASE II
Target 3333 LENA ROAD
Property BRADENTON, FL 34211

FINDS 1016097904
ECHO N/A

Site 13 of 19 in cluster B

Actual: FINDS:
30 ft. Registry ID: 110012324047

Focus Map:
3 Click Here:

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MAJOR

Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

HAZARDOUS AND CRITERIA AIR POLLUTANT MAJOR

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1016097904
Registry ID: 110012324047
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110012324047>
Name: LENA RD LANDFILL - PHASE II
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

B17 **MANATEE COUNTY LENA RD LANDFILL**
Target **3333 LENA RD # B**
Property **BRADENTON, FL 34211**

RCRA-SQG **1000821470**
FLD984244392

Site 14 of 19 in cluster B

Actual:
30 ft.

Focus Map:
3

RCRA-SQG:		
Date Form Received by Agency:		1995-05-30 00:00:00.0
Handler Name:	MANATEE COUNTY LENA RD LANDFILL	
Handler Address:	3333 LENA RD # B	
Handler City,State,Zip:	BRADENTON, FL 34211-9458	
EPA ID:	FLD984244392	
Contact Name:	GUS DIFONZO	
Contact Address:	PO BOX 25010	
Contact City,State,Zip:	BRADENTON, FL 34206-5010	
Contact Telephone:	941-792-8811	
Contact Fax:	Not reported	
Contact Email:	Not reported	
Contact Title:	MANAGER	
EPA Region:	04	
Land Type:	Other	
Federal Waste Generator Description:	Small Quantity Generator	
Non-Notifier:	Not reported	
Biennial Report Cycle:	Not reported	
Accessibility:	Not reported	
Active Site Indicator:	Handler Activities	
State District Owner:	FL	
State District:	SW	
Mailing Address:	PO BOX 25010	
Mailing City,State,Zip:	BRADENTON, FL 34206-5010	
Owner Name:	GUS DIFONZO	
Owner Type:	Private	
Operator Name:	GUS DIFONZO	
Operator Type:	County	
Short-Term Generator Activity:	No	
Importer Activity:	No	
Mixed Waste Generator:	No	
Transporter Activity:	No	
Transfer Facility Activity:	No	
Recycler Activity with Storage:	No	
Small Quantity On-Site Burner Exemption:	No	
Smelting Melting and Refining Furnace Exemption:	No	
Underground Injection Control:	No	
Off-Site Waste Receipt:	No	
Universal Waste Indicator:	No	
Universal Waste Destination Facility:	No	
Federal Universal Waste:	No	
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported	
Active Site Converter Treatment storage and Disposal Facility:	Not reported	
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported	
Active Site State-Reg Handler:	---	
Federal Facility Indicator:	Not reported	
Hazardous Secondary Material Indicator:	NN	
Sub-Part K Indicator:	Not reported	
Commercial TSD Indicator:	No	
Treatment Storage and Disposal Type:	Not reported	
2018 GPRA Permit Baseline:	Not on the Baseline	
2018 GPRA Renewals Baseline:	Not on the Baseline	
Permit Renewals Workload Universe:	Not reported	

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY LENA RD LANDFILL (Continued)

1000821470

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2016-12-14 18:29:12.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GUS DIFONZO
Legal Status:	County
Date Became Current:	1992-08-15 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY LENA RD LANDFILL (Continued)

1000821470

Owner/Operator Name:	GUS DIFONZO
Legal Status:	County
Date Became Current:	1992-08-15 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	GUS DIFONZO
Legal Status:	Private
Date Became Current:	1999-03-23 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MANATEE COUNTY LENA RD LANDFILL
Legal Status:	County
Date Became Current:	1992-08-15 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	GUS DIFONZO
Legal Status:	Private
Date Became Current:	1999-03-23 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MANATEE COUNTY LENA RD LANDFILL
Legal Status:	County
Date Became Current:	1992-08-15 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 25010
Owner/Operator City,State,Zip:	BRADENTON, FL 34206-5010
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY LENA RD LANDFILL (Continued)

1000821470

Owner/Operator Email: Not reported
Owner/Operator Indicator: Operator
Owner/Operator Name: MANATEE COUNTY LENA RD LANDFILL
Legal Status: County
Date Became Current: 1992-08-15 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 25010
Owner/Operator City,State,Zip: BRADENTON, FL 34206-5010
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1995-05-30 00:00:00.0
Handler Name: MANATEE COUNTY LENA RD LANDFILL
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 2007-12-27 00:00:00.0
Handler Name: MANATEE COUNTY LENA RD LANDFILL
Federal Waste Generator Description: Not a generator, verified
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 562111
NAICS Description: SOLID WASTE COLLECTION

Facility Has Received Notices of Violation:

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY LENA RD LANDFILL (Continued)

1000821470

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	1995-05-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	TBD
Evaluation Responsible Sub-Organization:	SW
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

B18 **MANATEE COUNTY FLEET SERVICE**
Target **3333 LENA RD**
Property **BRADENTON, FL 34211**

RCRA-SQG **1000700555**
FLD982122004

Site 15 of 19 in cluster B

Actual:	RCRA-SQG:	
30 ft.	Date Form Received by Agency:	1995-05-30 00:00:00.0
Focus Map:	Handler Name:	MANATEE COUNTY FLEET SERVICE
3	Handler Address:	3333 LENA RD
	Handler City,State,Zip:	BRADENTON, FL 34211-9458
	EPA ID:	FLD982122004
	Contact Name:	JACK LEWELLYN
	Contact Address:	26TH AVE E

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1000700555

Contact City,State,Zip:	BRADENTON, FL 34208-3928
Contact Telephone:	941-749-7105
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	OP MG
EPA Region:	04
Land Type:	Other
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	FL
State District:	SW
Mailing Address:	26TH AVE E
Mailing City,State,Zip:	BRADENTON, FL 34208-3928
Owner Name:	JACK LEWELLYN
Owner Type:	Private
Operator Name:	Not reported
Operator Type:	Not reported
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1000700555

Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDU Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2011-06-23 16:56:54.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code: D001
 Waste Description: IGNITABLE WASTE

Waste Code: F001
 Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
 Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F004
 Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Handler - Owner Operator:
 Owner/Operator Indicator:

Owner

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1000700555

Owner/Operator Name: JACK LEWELLYN
Legal Status: Private
Date Became Current: 1996-10-18 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1108 26TH AVE E
Owner/Operator City,State,Zip: BRADENTON, FL 34208-3928
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: JACK LEWELLYN
Legal Status: Private
Date Became Current: 1996-10-18 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 1108 26TH AVE E
Owner/Operator City,State,Zip: BRADENTON, FL 34208-3928
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 1995-05-30 00:00:00.0
Handler Name: MANATEE COUNTY FLEET SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 1989-06-22 00:00:00.0
Handler Name: MANATEE COUNTY FLEET SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violation:

Found Violation: No

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE COUNTY FLEET SERVICE (Continued)

1000700555

Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:

Evaluation Date: 1995-05-30 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: CWK
Evaluation Responsible Sub-Organization: SW
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Site Supervisor Name: ROBERT BENNETT
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: 9417485543
Land Owner Name: SMR DEVELOPMENT CORP
Land Owner Address: 6000 LORRAINE RD
Land Owner City/State/Zip: BRADENTON, FL 34202
Land Owner Telephone: Not reported

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Name: LENA RD COUNTY LF
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 44795
District: SWD
Lat/Long: 27:28:12 / 82:26:37
Class Type: 330
Classification: SOURCE-SEPARATED ORGANICS PROC. FAC. (SOPF)
Class Status: UNDER SOLID WASTE PERMIT (W)
Section: 01
Township: 35S
Range: 18E
Responsible Authority Name: MANATEE COUNTY PUBLIC UTIL.
Responsible Authority Address: 4415 66TH ST WEST
Responsible Authority City,St,Zip: BRADENTON, FL 34210
Responsible Authority Phone: 9417485543
EMail Address1: Not reported
EMail Address2: bob.bennett@mymanatee.org
Site Supervisor Name: ROBERT BENNETT
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: 9417485543
Land Owner Name: SMR DEVELOPMENT CORP
Land Owner Address: 6000 LORRAINE RD
Land Owner City/State/Zip: BRADENTON, FL 34202
Land Owner Telephone: Not reported

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Name: LENA RD COUNTY LF
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 44795
District: SWD
Lat/Long: 27:28:12 / 82:26:37
Class Type: 710
Classification: WASTE TIRE PROCESSING FACILITY
Class Status: ACTIVE (A)
Section: 01
Township: 35S
Range: 18E
Responsible Authority Name: MANATEE COUNTY PUBLIC UTIL.
Responsible Authority Address: 4415 66TH ST WEST
Responsible Authority City,St,Zip: BRADENTON, FL 34210
Responsible Authority Phone: 9417485543
EMail Address1: Not reported

Map ID
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

E-Mail Address2: bob.bennett@mymanatee.org
Site Supervisor Name: ROBERT BENNETT
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: 9417485543
Land Owner Name: SMR DEVELOPMENT CORP
Land Owner Address: 6000 LORRAINE RD
Land Owner City/State/Zip: BRADENTON, FL 34202
Land Owner Telephone: Not reported

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Name: LENA RD COUNTY LF
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 44795
District: SWD
Lat/Long: 27:28:12 / 82:26:37
Class Type: 910
Classification: DISASTER DEBRIS MANAGEMENT SITE
Class Status: INACTIVE (I)
Section: 01
Township: 35S
Range: 18E
Responsible Authority Name: MANATEE COUNTY PUBLIC UTIL.
Responsible Authority Address: 4415 66TH ST WEST
Responsible Authority City,St,Zip: BRADENTON, FL 34210
Responsible Authority Phone: 9417485543
E-Mail Address1: Not reported
E-Mail Address2: bob.bennett@mymanatee.org
Site Supervisor Name: ROBERT BENNETT
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: 9417485543
Land Owner Name: SMR DEVELOPMENT CORP
Land Owner Address: 6000 LORRAINE RD
Land Owner City/State/Zip: BRADENTON, FL 34202
Land Owner Telephone: Not reported

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UST:

Facility Id: 8630173
Facility Status: OPEN
Type Description: Local Government
Facility Phone: 9417087513
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 27 28 25 / 82 26 49

Owner:

Owner Id: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address 2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Owner Contact: BENJAMIN D WILLIAMS JR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Phone: 9417087513

Tank Info:

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City: BRADENTON
Zip: 34211
Tank Id: 31
Status: Removed
Status Date: 12/01/1999
Install Date: 11/1/1989
Substance: Unleaded gas
Content Description: Unleaded Gas
Gallons: 1000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: D

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City: BRADENTON
Zip: 34211
Tank Id: 32
Status: Removed
Status Date: 12/01/1999
Install Date: 11/1/1989
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 10000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: D

Construction:

Tank Id: 32
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Flow shut-Off

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 32
Construction Category: Secondary Containment
Construction Description: Double wall

Tank Id: 32
Construction Category: Miscellaneous Attributes
Construction Description: Compartmented

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Ball check valve

Tank Id: 32
Construction Category: Primary Construction
Construction Description: Fiberglass

Monitoring:

Tank ID: 32
Monitoring Description: Monitor dbl wall tank space

Tank ID: 32
Monitoring Description: Visual inspection of ASTs

Tank ID: 32
Monitoring Description: Continuous electronic sensing

Tank ID: 32
Monitoring Description: Visual inspect dispenser liners

Tank ID: 32
Monitoring Description: Manually sampled wells

Piping:

Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Dispenser liners

Tank ID: 32
Piping Category: Corrosion Protection
Piping Description: External protective coating

Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Pressurized piping system

Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 32
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

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AST:
Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 8630173
Facility Status: OPEN
Type Description: Local Government
Facility Phone: 9417087513
DEP Contractor Own: D
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 27 28 25 / 82 26 49

Owner:

Owner Id: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address 2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Owner Contact: BENJAMIN D WILLIAMS JR
Owner Phone: 9417087513

Tank Id: 2
Status: Removed
Status Date: 11/30/1989
Install Date: 7/1/1984
Substance: Unleaded gas
Content Description: Unleaded Gas
Gallons: 1000
Tank Location: ABOVEGROUND

Tank Id: 32
Status: In service
Status Date: 07/01/1999
Install Date: 7/1/1999
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 20000
Tank Location: ABOVEGROUND

Construction:

Tank Id: 32
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Flow shut-Off

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 32
Construction Category: Secondary Containment
Construction Description: Double wall

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Tank Id: 32
Construction Category: Miscellaneous Attributes
Construction Description: Compartmented

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 32
Construction Category: Overfill/Spill
Construction Description: Ball check valve

Tank Id: 32
Construction Category: Primary Construction
Construction Description: Fiberglass

Monitoring:
Tank ID: 32
Monitoring Description: Monitor dbl wall tank space

Tank ID: 32
Monitoring Description: Visual inspection of ASTs

Tank ID: 32
Monitoring Description: Continuous electronic sensing

Tank ID: 32
Monitoring Description: Visual inspect dispenser liners

Tank ID: 32
Monitoring Description: Manually sampled wells

Piping:
Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Dispenser liners

Tank ID: 32
Piping Category: Corrosion Protection
Piping Description: External protective coating

Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Pressurized piping system

Tank ID: 32
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 32
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank Id: 1
Status: Removed
Status Date: 11/30/1989

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Install Date: 7/1/1979
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 10000
Tank Location: ABOVEGROUND

[Click here for Florida Oculus:](#)

AIRS:

Name: MANATEE COUNTY LENA RD LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810055
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Manatee County Utility Operations Dept.
SIC Code: Electric, Gas And Sanitary Services
Title V: Y
Contact Name: Chris Collins
Contact Address: 3331 Lena Rd
Contact Address 2: Not reported
Contact City: Bradenton
Issue Date: 05/30/2014
Contact Zip Code: 34202
Contact Zip4: Not reported
Contact Phone: 941-792-8811
Contact EMail: chris.collins@mymanatee.org
Permit Number: 0810055010AC
Expiration Date: 02/16/2015
UTM Zone: 17
UTM North: 3039.08
UTM East: 357.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 3.8754
Longitude Direction: 82
Longitude Minute: 26
Longitude Second: 49.8723
NAICS: Not reported
Type: Not reported
Primary Resp. Official: Not reported
Primary Resp. Official Address 1: Not reported
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Not reported
Primary Resp. Official State: Not reported
Primary Resp. Official Zip5: Not reported
Primary Resp. Official Phone: Not reported
Primary Resp. Official Email: Not reported
Owner/Auth. Representative Address1: Not reported
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: Not reported
Owner/Auth. Representative State: Not reported
Owner/Auth. Representative Zip5: Not reported
Owner/Auth. Representative Phone: Not reported
Owner/Auth. Representative Email: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Name: MANATEE COUNTY LENA RD LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810055
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Manatee County Utility Operations Dept.
SIC Code: Electric, Gas And Sanitary Services
Title V: Y
Contact Name: Chris Collins
Contact Address: 3331 Lena Rd
Contact Address 2: Not reported
Contact City: Bradenton
Issue Date: 10/08/2019
Contact Zip Code: 34202
Contact Zip4: Not reported
Contact Phone: 941-792-8811
Contact EMAIL: chris.collins@mymanatee.org
Permit Number: 0810055015AV
Expiration Date: 10/08/2024
UTM Zone: 17
UTM North: 3039.08
UTM East: 357.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 3.8754
Longitude Direction: 82
Longitude Minute: 26
Longitude Second: 49.8723
NAICS: Solid Waste Landfill
Type: Municipal Solid Waste Landfill
Primary Resp. Official: Robert Shankle
Primary Resp. Official Address 1: 3333 Leana Road
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Bradenton
Primary Resp. Official State: FL
Primary Resp. Official Zip5: 34211
Primary Resp. Official Phone: 941-748-5543
Primary Resp. Official Email: robert.shankle@mymanatee.org
Owner/Auth. Representative Address1: 4410 66th St W
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: Bradenton
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 34210
Owner/Auth. Representative Phone: Not reported
Owner/Auth. Representative Email: mike.gore@mymanatee.org

Name: MANATEE COUNTY LENA RD LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810055
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Manatee County Utility Operations Dept.
SIC Code: Electric, Gas And Sanitary Services

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Title V: Y
Contact Name: Chris Collins
Contact Address: 3331 Lena Rd
Contact Address 2: Not reported
Contact City: Bradenton
Issue Date: 04/29/2016
Contact Zip Code: 34202
Contact Zip4: Not reported
Contact Phone: 941-792-8811
Contact EMAIL: chris.collins@mymanatee.org
Permit Number: 0810055014AV
Expiration Date: 04/29/2021
UTM Zone: 17
UTM North: 3039.08
UTM East: 357.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 3.8754
Longitude Direction: 82
Longitude Minute: 26
Longitude Second: 49.8723
NAICS: Solid Waste Landfill
Type: Municipal Solid Waste Landfill
Primary Resp. Official: Robert Shankle
Primary Resp. Official Address 1: 3333 Leana Road
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Bradenton
Primary Resp. Official State: FL
Primary Resp. Official Zip5: 34211
Primary Resp. Official Phone: 941-748-5543
Primary Resp. Official Email: robert.shankle@mymanatee.org
Owner/Auth. Representative Address1: 4410 66th St W
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: Bradenton
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 34210
Owner/Auth. Representative Phone: Not reported
Owner/Auth. Representative Email: mike.gore@mymanatee.org

Name: MANATEE COUNTY LENA RD LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810055
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Manatee County Utility Operations Dept.
SIC Code: Electric, Gas And Sanitary Services
Title V: Y
Contact Name: Chris Collins
Contact Address: 3331 Lena Rd
Contact Address 2: Not reported
Contact City: Bradenton
Issue Date: 03/16/2016
Contact Zip Code: 34202
Contact Zip4: Not reported
Contact Phone: 941-792-8811

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Contact EMAIL: chris.collins@mymanatee.org
Permit Number: 0810055013AC
Expiration Date: 12/31/2016
UTM Zone: 17
UTM North: 3039.08
UTM East: 357.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 3.8754
Longitude Direction: 82
Longitude Minute: 26
Longitude Second: 49.8723
NAICS: Solid Waste Landfill
Type: Municipal Solid Waste Landfill
Primary Resp. Official: Robert Shankle
Primary Resp. Official Address 1: 3333 Leana Road
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Bradenton
Primary Resp. Official State: FL
Primary Resp. Official Zip5: 34211
Primary Resp. Official Phone: 941-748-5543
Primary Resp. Official Email: robert.shankle@mymanatee.org
Owner/Auth. Representative Address1: 4410 66th St W
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: Bradenton
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 34210
Owner/Auth. Representative Phone: Not reported
Owner/Auth. Representative Email: mike.gore@mymanatee.org

Name: MANATEE COUNTY LENA RD LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810055
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Manatee County Utility Operations Dept.
SIC Code: Electric, Gas And Sanitary Services
Title V: Y
Contact Name: Chris Collins
Contact Address: 3331 Lena Rd
Contact Address 2: Not reported
Contact City: Bradenton
Issue Date: 02/24/2015
Contact Zip Code: 34202
Contact Zip4: Not reported
Contact Phone: 941-792-8811
Contact EMAIL: chris.collins@mymanatee.org
Permit Number: 0810055012AV
Expiration Date: 02/24/2020
UTM Zone: 17
UTM North: 3039.08
UTM East: 357.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 3.8754

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Longitude Direction: 82
Longitude Minute: 26
Longitude Second: 49.8723
NAICS: Solid Waste Landfill
Type: Municipal Solid Waste Landfill
Primary Resp. Official: Robert Shankle
Primary Resp. Official Address 1: 3333 Leana Road
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Bradenton
Primary Resp. Official State: FL
Primary Resp. Official Zip5: 34211
Primary Resp. Official Phone: 941-748-5543
Primary Resp. Official Email: robert.shankle@mymanatee.org
Owner/Auth. Representative Address1: 4410 66th St W
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: Bradenton
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 34210
Owner/Auth. Representative Phone: Not reported
Owner/Auth. Representative Email: mike.gore@mymanatee.org

AIRS:

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H118
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H106
Annual Emission:	Not reported
Emission Method:	Not reported
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	Not reported
Not Emitted:	X
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H114
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H128
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H167
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H156
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H009
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H104
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H119
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	PM10
Annual Emission:	Not reported
Emission Method:	Not reported
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	Not reported
Not Emitted:	X
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H017
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H034
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H123
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H166
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: CO
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	SO2
Annual Emission:	Not reported
Emission Method:	Not reported
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	Not reported
Not Emitted:	X
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H089
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H094
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H184
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H185
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H2S
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	NMOC
Annual Emission:	19.27
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 2-1 for calculations. There is no emission threshold for NMOC.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H186
Annual Emission:	Not reported
Emission Method:	Not reported
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	HAPS
Annual Emission:	3.811
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 2-3 for calculations.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Municipal Solid Waste Landfill
EU ID:	3
EU Status:	A
SCC:	50100402
Pollutant:	H176
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H085
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H087
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H061
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H041
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H043
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H032
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: NOX
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: VOC
Annual Emission: 20.76
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 2-2 for calculations.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H088
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H033
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Municipal Solid Waste Landfill
EU ID: 3
EU Status: A
SCC: 50100402
Pollutant: H169
Annual Emission: 1.36
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 2-3 for calculations. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: H114
Annual Emission: 0
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: CO
Annual Emission: 0.019
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: NOX
Annual Emission: 0.133
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: SO2
Annual Emission: 0
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: NMOC
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: PM
Annual Emission: 0.006
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: VOC
Annual Emission: 0.004
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 39900601
Pollutant: PM10
Annual Emission: 0.006
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100421
Pollutant: NOX
Annual Emission: 0.32
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-2.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100421
Pollutant:	CO
Annual Emission:	0.055
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-2.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100421
Pollutant:	NMOC
Annual Emission:	0.0466
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-3. There is no threshold for NMOC.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100421
Pollutant:	PM
Annual Emission:	0.08
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-2.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100421
Pollutant:	PM10
Annual Emission:	0.08
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-2.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100421
Pollutant: H114
Annual Emission: 8e-006
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-2.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100421
Pollutant: SO2
Annual Emission: 0.134
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-2.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100421
Pollutant: VOC
Annual Emission: 0.018
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 6-3.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100791
Pollutant: H114
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100791
Pollutant: NMOC
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100791
Pollutant: NOX
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100791
Pollutant:	CO
Annual Emission:	Not reported
Emission Method:	Not reported
Emission Factor:	Not reported
Emission Calculation:	Not reported
Below Threshold:	Not reported
Not Emitted:	X
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100791
Pollutant:	PM
Annual Emission:	0.015
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-4. PM10 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100791
Pollutant: VOC
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Sludge Dryer
EU ID: 4
EU Status: A
SCC: 50100791
Pollutant: SO2
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: Not reported
Not Emitted: X
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Office:	SWD
Title V:	810055
EU Description:	Sludge Dryer
EU ID:	4
EU Status:	A
SCC:	50100791
Pollutant:	PM10
Annual Emission:	0.015
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 6-4. PM10 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Dried product handling system
EU ID:	5
EU Status:	A
SCC:	50100799
Pollutant:	PM
Annual Emission:	0.004
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 7-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	127
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Office: SWD
Title V: 810055
EU Description: Dried product handling system
EU ID: 5
EU Status: A
SCC: 50100799
Pollutant: PM10
Annual Emission: 0.004
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 7-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Two Dried Product Storage Silos
EU ID: 6
EU Status: A
SCC: 50100799
Pollutant: PM
Annual Emission: 0.004
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 7-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Title V: 810055
EU Description: Two Dried Product Storage Silos
EU ID: 6
EU Status: A
SCC: 50100799
Pollutant: PM10
Annual Emission: 0.004
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 7-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD

Title V: 810055
EU Description: Dried Product Truck Loadout Station
EU ID: 7
EU Status: A
SCC: 50100799
Pollutant: PM10
Annual Emission: 0.359
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 7-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 127
Secondary Control: 62
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

EU Description:	Dried Product Truck Loadout Station
EU ID:	7
EU Status:	A
SCC:	50100799
Pollutant:	PM
Annual Emission:	0.359
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 7-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	127
Secondary Control:	62
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	CO
Annual Emission:	91.36
Emission Method:	3A
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-1.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H2S
Annual Emission:	19.15
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-1.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H088
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H089
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H184
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H118
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H128
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H041
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: VOC
Annual Emission: 12.12
Emission Method: 3A
Emission Factor: Not reported
Emission Calculation: See Attachment 3-1.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H185
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H167
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H106
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported

Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: NOX
Annual Emission: 10.82
Emission Method: 3A
Emission Factor: Not reported
Emission Calculation: See Attachment 3-1.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H156
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported

Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H104
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H094
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H043
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H186
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H176
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H169
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H166
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H123
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H114
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	PM
Annual Emission:	3.15
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H119
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H085
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H033
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H032
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H034
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H017
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID: 12
EU Status: A
SCC: 20100807
Pollutant: H087
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	H061
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	LFG Fired Engine Generator Set (w/LFG Gas Treatment System)
EU ID:	12
EU Status:	A
SCC:	20100807
Pollutant:	NMOC
Annual Emission:	31.09
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 3-1.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	Not reported
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H156
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H106
Annual Emission:	1.299
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055

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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H094
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	CO
Annual Emission:	56.44
Emission Method:	3A
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-1.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: H2S
Annual Emission: 2.57
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 4-1.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 23
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: VOC
Annual Emission: 0.35
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 4-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 23
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H128
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H176
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H034
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H033
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	NMOC
Annual Emission:	0.89
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-1.
Below Threshold:	Not reported
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H119
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H061
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	PM2.5
Annual Emission:	3.16
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-1. PM2.5 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	PM
Annual Emission:	3.16
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H186
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H184
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H166
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H085
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H167
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: H118
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 23
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: H043
Annual Emission: Not reported
Emission Method: Not reported
Emission Factor: Not reported
Emission Calculation: Not reported
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H088
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H032
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: H104
Annual Emission: Not reported
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 23
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Landfill Gas (LFG) Flare
EU ID: 13
EU Status: A
SCC: 50100410
Pollutant: NOX
Annual Emission: 11.29
Emission Method: 3A
Emission Factor: Not reported
Emission Calculation: See Attachment 4-1.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 23
Secondary Control: Not reported
Emission Comment: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H169
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H123
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H114
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H089
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H087
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	PM10
Annual Emission:	3.16
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-1. PM10 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H017
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H041
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H185
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Landfill Gas (LFG) Flare
EU ID:	13
EU Status:	A
SCC:	50100410
Pollutant:	H009
Annual Emission:	Not reported
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 4-2. Only HAPs above the 0.5 tpy threshold are reported in the AOR.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	23
Secondary Control:	Not reported
Emission Comment:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Three Diesel Emergency Generators (NSPS)
EU ID: 14
EU Status: A
SCC: 20200102
Pollutant: NOX
Annual Emission: 0.104
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Three Diesel Emergency Generators (NSPS)
EU ID: 14
EU Status: A
SCC: 20200102
Pollutant: NMHC+NOX
Annual Emission: 0.104
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: Not reported
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: Not reported
Secondary Control: Not reported
Emission Comment: There is no threshold for NMOC

Facility ID: 810055

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Three Diesel Emergency Generators (NSPS)
EU ID:	14
EU Status:	A
SCC:	20200102
Pollutant:	PM10
Annual Emission:	0.0073
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 5-1. PM10 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	139
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Three Diesel Emergency Generators (NSPS)
EU ID:	14
EU Status:	A
SCC:	20200102
Pollutant:	CO
Annual Emission:	0.022
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 5-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	139
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Three Diesel Emergency Generators (NSPS)
EU ID: 14
EU Status: A
SCC: 20200102
Pollutant: SO2
Annual Emission: 0.007
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Three Diesel Emergency Generators (NSPS)
EU ID: 14
EU Status: A
SCC: 20200102
Pollutant: PM
Annual Emission: 0.0073
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Three Diesel Emergency Generators (NSPS)
EU ID: 14
EU Status: A
SCC: 20200102
Pollutant: VOC
Annual Emission: 0.008
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Four Diesel Emergency Generators (Pre-NSPS)
EU ID: 15
EU Status: A
SCC: 20200102
Pollutant: SO2
Annual Emission: 0.018
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Four Diesel Emergency Generators (Pre-NSPS)
EU ID: 15
EU Status: A
SCC: 20200102
Pollutant: CO
Annual Emission: 0.059
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Four Diesel Emergency Generators (Pre-NSPS)
EU ID: 15
EU Status: A
SCC: 20200102
Pollutant: NOX
Annual Emission: 0.275
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

Facility ID: 810055
Facility Name: MANATEE COUNTY LENA RD LANDFILL
Facility Status: A
Owner Name: MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Four Diesel Emergency Generators (Pre-NSPS)
EU ID:	15
EU Status:	A
SCC:	20200102
Pollutant:	PM10
Annual Emission:	0.019
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 5-1. PM10 emissions are assumed to be identical to PM emissions.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	139
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.
Type:	Not reported
CO:	Not reported
NOX:	Not reported
PM10:	Not reported
SO2:	Not reported
VOC:	Not reported
Facility Office:	SWD
Title V:	810055
EU Description:	Four Diesel Emergency Generators (Pre-NSPS)
EU ID:	15
EU Status:	A
SCC:	20200102
Pollutant:	PM
Annual Emission:	0.019
Emission Method:	3B
Emission Factor:	Not reported
Emission Calculation:	See Attachment 5-1.
Below Threshold:	X
Not Emitted:	Not reported
Percent Control Efficiency:	Not reported
Primary Control:	139
Secondary Control:	Not reported
Emission Comment:	Not reported
Facility ID:	810055
Facility Name:	MANATEE COUNTY LENA RD LANDFILL
Facility Status:	A
Owner Name:	MANATEE COUNTY UTILITY OPERATIONS DEPT.

Map ID
Direction
Distance
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Type: Not reported
CO: Not reported
NOX: Not reported
PM10: Not reported
SO2: Not reported
VOC: Not reported
Facility Office: SWD
Title V: 810055
EU Description: Four Diesel Emergency Generators (Pre-NSPS)
EU ID: 15
EU Status: A
SCC: 20200102
Pollutant: VOC
Annual Emission: 0.022
Emission Method: 3B
Emission Factor: Not reported
Emission Calculation: See Attachment 5-1.
Below Threshold: X
Not Emitted: Not reported
Percent Control Efficiency: Not reported
Primary Control: 139
Secondary Control: Not reported
Emission Comment: Not reported

FL Financial Assurance 1:

Name: LENA ROAD CLASS I LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211
Facility Id: 00044795
Region: 1
District: SW
Class: 100
Bond Issuer: Not reported
Bond Amount: Not reported
Insurance Company: Not reported
Insurance Amount: Not reported
Letter of Credit Bank: Not reported
Letter of Credit Amount: Not reported
Trustee: Not reported
Trust Fund Balance: Not reported
Financial Test: Fin. Test
Escrow: Not reported
Permitee Name: Manatee County
Financial Assurance Type: Fin Test
Contact Address: Post Office Box 25400
Contact City Zip: Bradenton 34206

FL Financial Assurance 3:

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - BOND RATING TEST
Insurance Company: Not reported
Effective Date: 08/14/2003
Expire Date: 10/01/2018
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - FINANCIAL TEST
Insurance Company: Not reported
Effective Date: 02/01/2015
Expire Date: 01/31/2016
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - FINANCIAL TEST
Insurance Company: Not reported
Effective Date: Not reported
Expire Date: Not reported
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR

Map ID
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 02/01/2016
Expire Date: 01/31/2017
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 02/01/2017
Expire Date: 01/31/2018
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Insurance Company: Not reported
Effective Date: 02/01/2018
Expire Date: 01/31/2019
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-LANDFILL
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8630173
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 10/01/2019
Expire Date: 03/29/2021
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

HW GEN:

Site ID: 45069
Name: MANATEE COUNTY FLEET SERVICE
Address: 3333 LENA RD
City,State,Zip: BRADENTON, FL 34211 9458
Type: Small
Handler ID: FLD982122004
Office: SWD
Notified Date: 05/15/1989
Last Inspection Date: 05/30/1995
Facility Installation: -
Object ID: 794
Documents: <https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982122004/facility!search>

TIER 2:

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211-9458

Year: 2019
Facility Id: 6673256
Active Date: Not reported

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 02/19/2020
First Submit Date: 02/19/2020
Data Submitted By: Bryan White
Company Name: Manatee County Landfill
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2019
Facility Id: 6673256
Contact Type: Owner / Operator
Contact Name: Manatee County Landfill
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: 9417928811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: anthony.detweiler@mymanatee.org

Contact ID: Not reported
Year: 2019
Facility Id: 6673256
Contact Type: Owner / Operator
Contact Name: Manatee County Landfill
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: 9417928811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: anthony.detweiler@mymanatee.org

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211-9458

Year: 2018

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Id: 6367774
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: 221320
Last Modified Date: 01/14/2019
First Submit Date: 01/14/2019
Data Submitted By: Bryan White
Company Name: Manatee County Landfill
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2018
Facility Id: 6367774
Contact Type: Owner / Operator
Contact Name: Manatee County Landfill
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: 9417485543
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: anthony.detweiler@mymanatee.org

Contact ID: Not reported
Year: 2018
Facility Id: 6367774
Contact Type: Owner / Operator
Contact Name: Manatee County Landfill
Contact Title: Not reported
Contact Phone: Not reported
Contact 24Hr Phone: Not reported
Contact Telephone 2: 9417485543
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: anthony.detweiler@mymanatee.org

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Year: 2017
Facility Id: 6189473
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: Not reported
Longitude: Not reported
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 4953
SIC Code 2: Not reported
NAICS Code: 562212
Last Modified Date: 06/12/2018
First Submit Date: 06/12/2018
Data Submitted By: BRYAN WHITE, LANDFILL SUPERINTENDENT
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2017
Facility Id: 6189473
Contact Type: Emergency Contact
Contact Name: ANTHONY DEWEILER
Contact Title: Not reported
Contact Phone: 941-812-8796
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: 941-812-2455
Contact Telephone 4: 941-792-8811
Contact Telephone 5: Not reported
Contact Telephone 6: 941-792-8811
Contact Email: Anthony.Deweiler@MyManatee.org

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2013
Facility Id: 4566770
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.47053
Longitude: -82.458410
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

PRIME: Not reported
SIC Code: 1111
SIC Code 2: Not reported
NAICS Code: 562219
Last Modified Date: 04/02/2014
First Submit Date: 04/02/2014
Data Submitted By: BRYAN WHITE, LANDFILL SUPERINTENDENT
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2013
Facility Id: 4566770
Contact Type: Emergency Contact
Contact Name: BRYAN WHITE
Contact Title: Not reported
Contact Phone: 941-812-2455
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: UNKNOWN

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2012
Facility Id: 4218258
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.47053
Longitude: -82.458410
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: 1111
SIC Code 2: Not reported
NAICS Code: 562219
Last Modified Date: 06/14/2013
First Submit Date: 06/14/2013
Data Submitted By: BRYAN WHITE, LANDFILL SUPERINTENDENT
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2012

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Facility Id: 4218258
Contact Type: Tier II Secondary Contact
Contact Name: ANTHONY DEWEILER
Contact Title: Not reported
Contact Phone: 941-812-8796
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-792-8811
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: BRYAON.WHITE@MYMANATEE.ORG

Contact ID: Not reported
Year: 2012
Facility Id: 4218258
Contact Type: Owner / Operator
Contact Name: BRYAN WHITE
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-812-2455
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: UNKNOWN

Contact ID: Not reported
Year: 2012
Facility Id: 4218258
Contact Type: Tier II Emergency Contact
Contact Name: BRYAN WHITE
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: 941-812-2455
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Bryan.White@MyManatee.org

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34211

Year: 2011
Facility Id: 3993868
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.47053

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Longitude: -82.458410
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: 11/12/2012
First Submit Date: 11/09/2012
Data Submitted By: Florida Division of Emergency Management
Company Name: MANATEE COUNTY UTILITIES DEPARTMENT
Comments: Not reported

Contact:

Contact ID: Not reported
Year: 2011
Facility Id: 3993868
Contact Type: Tier II Secondary Contact
Contact Name: ANTHONY DEWEILER
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: Not reported
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Not reported

Contact ID: Not reported
Year: 2011
Facility Id: 3993868
Contact Type: Tier II Emergency Contact
Contact Name: BRYAN WHITE
Contact Title: Not reported
Contact Phone: 941-792-8811
Contact 24Hr Phone: Not reported
Contact Telephone 2: Not reported
Contact Telephone 3: Not reported
Contact Telephone 4: Not reported
Contact Telephone 5: Not reported
Contact Telephone 6: Not reported
Contact Email: Bryan.White@MyManatee.org

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34210

Year: 2010
Facility Id: Not reported
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

PLOT Source: Not reported
Latitude: 27.4736
Longitude: -82.45
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: Not reported
First Submit Date: Not reported
Data Submitted By: Not reported
Company Name: Not reported
Comments: Not reported

Chemical Code: 68476346
Chemical Name: Diesel Fuel Oil (low sulfur)
Chemical State: LIQUID
Location Name: Maintenance Building
Container Code: A
Pressure Code: 1
Temperature Code: 4
Average Quantity: 111000
Maximum Quantity: 111000
Days On Site: 365

Name: MANATEE COUNTY LANDFILL
Address: 3333 LENA ROAD
City,State,Zip: BRADENTON, FL 34210

Year: 2010
Facility Id: Not reported
Active Date: Not reported
Inactive Date: Not reported
Sale Pending: Not reported
Original Date: Not reported
PLOT Source: Not reported
Latitude: 27.4736
Longitude: -82.45
LEPC District: Not reported
Counties: Not reported
SERC: Not reported
Program Level: Not reported
PRIME: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
NAICS Code: Not reported
Last Modified Date: Not reported
First Submit Date: Not reported
Data Submitted By: Not reported
Company Name: Not reported
Comments: Not reported

Chemical Code: 8006619
Chemical Name: GASOLINE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MANATEE CNTY-LANDFILL (Continued)

U001360673

Chemical State: LIQUID
 Location Name: Maintenance Building
 Container Code: A
 Pressure Code: 1
 Temperature Code: 4
 Average Quantity: 3200
 Maximum Quantity: 3200
 Days On Site: 365

WASTEWATER:

Name: LENA ROAD LANDFILL
 Address: 3333 LENA RD
 City,State,Zip: BRADENTON, FL
 Facility ID: FLR05F797
 Facility Type: Multi-Sector Stormwater GP
 Status: Active - Existing, permitted facility/site for which effluent, reclaimed water or wastewater residual discharge into the environment and/or monitoring is taking place.
 District Office: TLST
 NPDES Permitted Site: Not reported
 Environmental Interest: Not reported
 Owner Type: Private
 Permit Capacity: Not reported
 Party Name: Mike Gore, PMTE
 Company Name: Manatee County Government
 RP Address: 4410 66th St W
 RP Address 2: Not reported
 RP City,Stat,Zip: Bradenton FL 34210
 Telephone: 9417928811
 Email: Mike.Gore@MyManatee.org
 Issue Date: 01/17/2019
 Effective Date: 01/17/2019
 Expiration Date: 01/16/2024
 DOC Description: Generic Permit
 Latitude Degrees: 27
 Latitude Minutes: 28
 Latitude Seconds: 16.77
 Longitude Degrees: 82
 Longitude Minutes: 26
 Longitude Seconds: 46.76
 Treatment: Not reported
 Decode For Fstatus: Active

B21 **MANATEE CNTY-SE WWTP-1**
Target **3335 LENA RD**
Property **BRADENTON, FL 34211**

UST **U001360880**
AST **N/A**
Financial Assurance

Site 18 of 19 in cluster B

Actual: **UST:**
30 ft. Facility Id: 8944388
Focus Map: Facility Status: OPEN
3 Type Description: County Government
 Facility Phone: 9417087513
 Region: STATE
 Positioning Method: AGPS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Lat/Long (dms): 27 28 3 / 82 27 5
Owner:
Owner Id: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address 2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Owner Contact: BENJAMIN D WILLIAMS JR
Owner Phone: 9417087513

Tank Info:
Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City: BRADENTON
Zip: 34211
Tank Id: 60
Status: Removed
Status Date: 02/01/2002
Install Date: 1/1/1987
Substance: Diesel-emergen generator
Content Description: Emerg Generator Diesel
Gallons: 6000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: D

[Click here for Florida Oculus:](#)

AST:
Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
Facility ID: 8944388
Facility Status: OPEN
Type Description: County Government
Facility Phone: 9417087513
DEP Contractor Own: D
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 27 28 3 / 82 27 5

Owner:
Owner Id: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address 2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Owner Contact: BENJAMIN D WILLIAMS JR
Owner Phone: 9417087513

Tank Id: 78
Status: In service
Status Date: 12/01/2001
Install Date: 12/1/2001
Substance: Diesel-emergen generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Content Description: Emerg Generator Diesel
Gallons: 8000
Tank Location: ABOVEGROUND

Construction:

Tank Id: 78
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 78
Construction Category: Primary Construction
Construction Description: Concrete

Tank Id: 78
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 78
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 78
Construction Category: Secondary Containment
Construction Description: Double wall - tank jacket

Tank Id: 78
Construction Category: Overfill/Spill
Construction Description: Tight fill

Monitoring:

Tank ID: 78
Monitoring Description: Visual inspection of ASTs

Tank ID: 78
Monitoring Description: Monitor dbl wall tank space

Tank ID: 78
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 78
Monitoring Description: Monitor piping/liner space

Tank ID: 78
Monitoring Description: Continuous electronic sensing

Piping:

Tank ID: 78
Piping Category: Secondary Containment
Piping Description: Double wall - pipe jacket

Tank ID: 78
Piping Category: Primary Construction
Piping Description: Fiberglass

Tank ID: 78
Piping Category: Secondary Containment

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Piping Description: Pipe trench liner

Tank ID: 78
Piping Category: Corrosion Protection
Piping Description: External protective coating

Tank ID: 78
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank Id: 79
Status: In service
Status Date: 12/01/2001
Install Date: 12/1/2001
Substance: Diesel-emergen generator
Content Description: Emerg Generator Diesel
Gallons: 8000
Tank Location: ABOVEGROUND

Construction:

Tank Id: 79
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 79
Construction Category: Primary Construction
Construction Description: Concrete

Tank Id: 79
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 79
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 79
Construction Category: Secondary Containment
Construction Description: Double wall - tank jacket

Tank Id: 79
Construction Category: Overfill/Spill
Construction Description: Tight fill

Monitoring:

Tank ID: 79
Monitoring Description: Visual inspection of ASTs

Tank ID: 79
Monitoring Description: Monitor dbl wall tank space

Tank ID: 79
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 79
Monitoring Description: Monitor piping/liner space

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Tank ID: 79
Monitoring Description: Continuous electronic sensing

Piping:
Tank ID: 79
Piping Category: Corrosion Protection
Piping Description: External protective coating

Tank ID: 79
Piping Category: Primary Construction
Piping Description: Fiberglass

Tank ID: 79
Piping Category: Secondary Containment
Piping Description: Double wall - pipe jacket

Tank ID: 79
Piping Category: Secondary Containment
Piping Description: Pipe trench liner

Tank ID: 79
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

[Click here for Florida Oculus:](#)

FL Financial Assurance 3:

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - BOND RATING TEST
Insurance Company: Not reported
Effective Date: 08/14/2003
Expire Date: 10/01/2018
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - FINANCIAL TEST
Insurance Company: Not reported
Effective Date: 02/01/2015
Expire Date: 01/31/2016
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: LOCAL GOVERNMENTS - FINANCIAL TEST
Insurance Company: Not reported
Effective Date: Not reported
Expire Date: Not reported
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 02/01/2016
Expire Date: 01/31/2017
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 02/01/2017
Expire Date: 01/31/2018
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D
Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 02/01/2018
Expire Date: 01/31/2019
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

Name: MANATEE CNTY-SE WWTP-1
Address: 3335 LENA RD
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 8944388
Facility Phone: 9417087513
Facility Status: OPEN
Facility Type: I
Type Description: County Government
DEP CO: D

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MANATEE CNTY-SE WWTP-1 (Continued)

U001360880

Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company: Not reported
Effective Date: 10/01/2019
Expire Date: 03/29/2021
Owner ID: 13457
Owner Name: MANATEE CNTY - FUEL SRVCS OFFICE
Owner Address: 2908 12TH ST CT E
Owner Address2: ATTN: BEN WILLIAMS JR
Owner City,St,Zip: BRADENTON, FL 34208
Contact: BENJAMIN D WILLIAMS JR
Resp Party Phone: 9417087513

B22 **MANATEE COUNTY LFGTE**
Target **3415 LENA RD**
Property **BRADENTON, FL 34211**

FINDS **1024609769**
N/A

Site 19 of 19 in cluster B

Actual: FINDS:
30 ft. Registry ID: 110070398130

Focus Map:
3 Click Here:

Environmental Interest/Information System:
ELECTRIC GENERATOR

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

C23 **SOUTHERN GUNITE, INC.**
Target **3302 81ST CT E**
Property **BRADENTON, FL 34211**

AST **U004053762**
N/A

Site 1 of 3 in cluster C

Actual: AST:
29 ft. Name: SOUTHERN GUNITE, INC.
Focus Map: Address: 3302 81ST CT E
3 Facility ID: 9808317
Facility Status: OPEN
Type Description: Fuel user/Non-retail
Facility Phone: 9415674052
DEP Contractor Own: P
Region: STATE
Positioning Method: Not reported
Lat/Long (dms): Not reported

Owner:
Owner Id: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address 2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Owner Contact: STEVE HARTER
Owner Phone: 9415674052

Tank Id: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE, INC. (Continued)

U004053762

Status: In service
Status Date: 09/10/2014
Install Date: 7/1/2006
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 10000
Tank Location: ABOVEGROUND

Construction:

Tank Id: 1
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Tank Id: 1
Construction Category: Secondary Containment
Construction Description: Double wall

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Monitoring:

Tank ID: 1
Monitoring Description: Visual inspection of ASTs

Tank ID: 1
Monitoring Description: Monitor dbl wall tank space

Piping:

Tank ID: 1
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank ID: 1
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 1
Piping Category: Miscellaneous Attributes
Piping Description: Pressurized piping system

[Click here for Florida Oculus:](#)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Contact EMail:	yvonne@southerngunite.com
Permit Number:	0810239001AG
Expiration Date:	07/27/2018
UTM Zone:	17
UTM North:	3039.32
UTM East:	356.01
Latitude Direction:	27
Latitude Minute:	28
Latitude Second:	11.4204
Longitude Direction:	82
Longitude Minute:	27
Longitude Second:	26.2656
NAICS:	Not reported
Type:	Not reported
Primary Resp. Official:	Not reported
Primary Resp. Official Address 1:	Not reported
Primary Resp. Official Address2:	Not reported
Primary Resp. Official City:	Not reported
Primary Resp. Official State:	Not reported
Primary Resp. Official Zip5:	Not reported
Primary Resp. Official Phone:	Not reported
Primary Resp. Official Email:	Not reported
Owner/Auth. Representative Address1:	Not reported
Owner/Auth. Representative Address2:	Not reported
Owner/Auth. Representative City:	Not reported
Owner/Auth. Representative State:	Not reported
Owner/Auth. Representative Zip5:	Not reported
Owner/Auth. Representative Phone:	Not reported
Owner/Auth. Representative Email:	Not reported
Name:	SOUTHERN GUNITE-BRADENTON PLT.
Address:	3302 81ST CT E
City,State,Zip:	BRADENTON, FL 34211
Facility ID:	810239
Facility Status:	A
Office:	SWD
Category:	POINT
Owner Name:	Southern Gunite, Inc.
SIC Code:	Stone, Clay, Glass And Concrete Products
Title V:	N
Contact Name:	Yvonne Tucker
Contact Address:	9395 Weisman Way
Contact Address 2:	Not reported
Contact City:	West Palm Beach
Issue Date:	06/30/2019
Contact Zip Code:	33411
Contact Zip4:	3620
Contact Phone:	561-351-8744
Contact EMail:	yvonne@southerngunite.com
Permit Number:	0810239003AG
Expiration Date:	06/30/2024
UTM Zone:	17
UTM North:	3039.32
UTM East:	356.01
Latitude Direction:	27
Latitude Minute:	28
Latitude Second:	11.4204

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Longitude Direction: 82
Longitude Minute: 27
Longitude Second: 26.2656
NAICS: Not reported
Type: Concrete Plant
Primary Resp. Official: Not reported
Primary Resp. Official Address 1: Not reported
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Not reported
Primary Resp. Official State: Not reported
Primary Resp. Official Zip5: Not reported
Primary Resp. Official Phone: Not reported
Primary Resp. Official Email: Not reported
Owner/Auth. Representative Address1: 9395b Weisman Way
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: West Palm Beach
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 33411
Owner/Auth. Representative Phone: 561-351-8744
Owner/Auth. Representative Email: yvonne@southerngunite.com

Name: SOUTHERN GUNITE-BRADENTON PLT.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Facility ID: 810239
Facility Status: A
Office: SWD
Category: POINT
Owner Name: Southern Gunite, Inc.
SIC Code: Stone, Clay, Glass And Concrete Products
Title V: N
Contact Name: Yvonne Tucker
Contact Address: 9395 Weisman Way
Contact Address 2: Not reported
Contact City: West Palm Beach
Issue Date: 07/27/2018
Contact Zip Code: 33411
Contact Zip4: 3620
Contact Phone: 561-351-8744
Contact EMail: yvonne@southerngunite.com
Permit Number: 0810239002AG
Expiration Date: 06/30/2019
UTM Zone: 17
UTM North: 3039.32
UTM East: 356.01
Latitude Direction: 27
Latitude Minute: 28
Latitude Second: 11.4204
Longitude Direction: 82
Longitude Minute: 27
Longitude Second: 26.2656
NAICS: Not reported
Type: Concrete Plant
Primary Resp. Official: Not reported
Primary Resp. Official Address 1: Not reported
Primary Resp. Official Address2: Not reported
Primary Resp. Official City: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Primary Resp. Official State: Not reported
Primary Resp. Official Zip5: Not reported
Primary Resp. Official Phone: Not reported
Primary Resp. Official Email: Not reported
Owner/Auth. Representative Address1: 9395b Weisman Way
Owner/Auth. Representative Address2: Not reported
Owner/Auth. Representative City: West Palm Beach
Owner/Auth. Representative State: FL
Owner/Auth. Representative Zip5: 33411
Owner/Auth. Representative Phone: 561-351-8744
Owner/Auth. Representative Email: yvonne@southerngunite.com

FL Financial Assurance 3:

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: BERKLEY INSURANCE COMPANY
Effective Date: 08/22/2014
Expire Date: 08/22/2015
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2008
Expire Date: 08/21/2009
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2009
Expire Date: 08/21/2010
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2010
Expire Date: 08/21/2011
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2011

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Expire Date: 08/21/2012
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2013
Expire Date: 08/21/2014
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/21/2014
Expire Date: 08/21/2015
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: NAUTILUS INSURANCE COMPANY
Effective Date: 10/01/2016
Expire Date: 10/01/2017
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: NAUTILUS INSURANCE COMPANY
Effective Date: 10/01/2017
Expire Date: 10/01/2018
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST
Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

Name: SOUTHERN GUNITE, INC.
Address: 3302 81ST CT E
City,State,Zip: BRADENTON, FL 34211
Region: 3
Facility ID: 9808317
Facility Phone: 9415674052
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Financial Responsibility: INSURANCE
Insurance Company: NAUTILUS INSURANCE COMPANY
Effective Date: 10/01/2018
Expire Date: 10/01/2019
Owner ID: 70301
Owner Name: SOUTHERN GUNITE, INC.
Owner Address: 3302 81ST COURT EAST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SOUTHERN GUNITE-BRADENTON PLT. (Continued)

S113719778

Owner Address2: Not reported
Owner City,St,Zip: BRADENTON, FL 34211
Contact: STEVE HARTER
Resp Party Phone: 9415674052

26 **LENA TOWERS BUSINESS PARK**
Target **3730 LENA RD**
Property **BRADENTON, FL 34211**

FINDS **1009313603**
ECHO **N/A**

FINDS:
Registry ID: 110024387215

Actual:
29 ft.

Click Here:

Focus Map:
3

Environmental Interest/Information System:

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality. Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1009313603
Registry ID: 110024387215
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110024387215>
Name: LENA TOWERS BUSINESS PARK
Address: 3730 LENA RD
City,State,Zip: BRADENTON, FL 34211

27 **DAVIS CONCRETE**
East **3331 81ST CT E**
< 1/8 **BRADENTON, FL 34211**
0.018 mi.
93 ft.

AST **A100282475**
N/A

Actual:
29 ft.

AST:
Name: DAVIS CONCRETE
Address: 3331 81ST CT E
Facility ID: 9807566
Facility Status: OPEN
Type Description: Fuel user/Non-retail
Facility Phone: 9417489149
DEP Contractor Own: P
Region: STATE
Positioning Method: Not reported
Lat/Long (dms): Not reported

Focus Map:
3

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DAVIS CONCRETE (Continued)

A100282475

Owner:

Owner Id: 5388
Owner Name: DAVIS CONCRETE INC
Owner Address: 1670 SUNSHINE DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: CLEARWATER, FL 33765
Owner Contact: RANDY DAVIS
Owner Phone: 7277333141

Tank Id: 1
Status: In service
Status Date: 08/01/2005
Install Date: 8/1/2005
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 12000
Tank Location: ABOVEGROUND

Construction:

Tank Id: 1
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 1
Construction Category: Secondary Containment
Construction Description: Double wall

Tank Id: 1
Construction Category: Miscellaneous Attributes
Construction Description: Compartmented

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Spill containment bucket

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 1
Construction Category: Overfill/Spill
Construction Description: Ball check valve

Monitoring:

Tank ID: 1
Monitoring Description: Monitor dbl wall tank space

Tank ID: 1
Monitoring Description: Visual inspection of ASTs

Tank ID: 1
Monitoring Description: Visual inspect dispenser liners

Piping:

Tank ID: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

DAVIS CONCRETE (Continued)

A100282475

Piping Category: Miscellaneous Attributes
Piping Description: Suction piping system

Tank ID: 1
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 1
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank ID: 1
Piping Category: Miscellaneous Attributes
Piping Description: Dispenser liners

[Click here for Florida Oculus:](#)

28
East
< 1/8
0.018 mi.
93 ft.

FREEDOM RECYCLING C&DD WASTE PROCESSING FACILITY
3407 81ST COURT, EAST
BRADENTON, FL 34211

SWF/LF S106966952
N/A

Actual:
29 ft.
Focus Map:
3

SWF/LF:
Name: FREEDOM RECYCLING C&DD WASTE PROCESSING FACILITY
Address: 3407 81ST COURT, EAST
City,State,Zip: BRADENTON, FL 34211
Facility ID: 93193
District: SWD
Lat/Long: 27:28:5.4273 / 82:27:19.1378
Class Type: 545
Classification: MATERIAL RECOVERY FACILITY - C & D
Class Status: NEVER OPERATED, PERMIT NEVER USED (O)
Section: 1
Township: 35S
Range: 18E
Responsible Authority Name: Not reported
Responsible Authority Address: Not reported
Responsible Authority City,St,Zip: Not reported
Responsible Authority Phone: Not reported
EMail Address1: Not reported
EMail Address2: Not reported
Site Supervisor Name: Not reported
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: Not reported
Land Owner Name: Not reported
Land Owner Address: Not reported
Land Owner City/State/Zip: Not reported
Land Owner Telephone: Not reported

[Click here for Florida Oculus:](#)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

29 **TIRE AND WHEEL OUTLET**
West **7218 36TH AVE E**
1/4-1/2 **BRADENTON, FL 34208**
0.431 mi.
2275 ft.

SWF/LF **S125068868**
N/A

Actual:
27 ft.

Focus Map:
3

SWF/LF:
Name: TIRE AND WHEEL OUTLET
Address: 7218 36TH AVE E
City,State,Zip: BRADENTON, FL 34208
Facility ID: 106138
District: SWD
Lat/Long: :: / ::
Class Type: 754
Classification: WASTE TIRE COLLECTOR
Class Status: INACTIVE (I)
Section: Not reported
Township: Not reported
Range: Not reported
Responsible Authority Name: Not reported
Responsible Authority Address: Not reported
Responsible Authority City,St,Zip: Not reported
Responsible Authority Phone: Not reported
EMail Address1: Not reported
EMail Address2: Not reported
Site Supervisor Name: Not reported
Site Supervisor Addr: Not reported
Site Supervisor City/State/Zip: Not reported
Site Supervisor Telephone: Not reported
Land Owner Name: Not reported
Land Owner Address: Not reported
Land Owner City/State/Zip: Not reported
Land Owner Telephone: Not reported

[Click here for Florida Oculus:](#)

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BRADEN RIVER	S105461093		I-75 NORTH BOUND, NORTH OF UNIVERSITY PARKWAY		SPILLS
BRADENTON	2016146395		/// BRADEN RIVER ///		ERNS
BRADENTON	2000528255		EXIT 64 OFF I-75		ERNS
BRADENTON	S100889007	LENA RD. LANDFILL	LENA RD.		FI Sites
BRADENTON	2000028116		I-75		HMIRS
BRADENTON	2000028117		I-75		HMIRS
BRADENTON	S105184006		SR 64 .1 MILE W OF I-75 (6513 HWY 64 E)		SPILLS
BRADENTON	S105186596		SR 70 & I-75		SPILLS
BRADENTON	S105186812		I-75 SOUTHBOUND, S OF SR 64		SPILLS
BRADENTON	S105186819		I-75, 2 MILES SOUTH OF STATE ROAD 64		SPILLS
BRADENTON	S105189451		I-75 AT STATE ROAD 64		SPILLS
BRADENTON	S105192250		I-75 SOUTHBOUND @ EXIT 42		SPILLS
BRADENTON	S105192358		I-75		SPILLS
BRADENTON	S105189634		I-75 AT NORTHBOUND EXIT TO SR 64		SPILLS
BRADENTON	S105187070		27 MILES EAST OF I-75 ON 64		SPILLS
BRADENTON	S105187110		I-75 AT MILE MARKER 220		SPILLS
BRADENTON	S105190085		WOODED AREA NEAR I-75 AND SR 70		SPILLS
BRADENTON	S105190127		HIGHWAY 64 WEST OF I-75		SPILLS
BRADENTON	S105461082		SR 70 NEAR I-75 (SPILL LOCATED IN THE MEDIAN)		SPILLS
BRADENTON	S105459941		MANATEE RIVER, UNDER THE MIDDLE OF THE I-75 BRIDGE		SPILLS
BRADENTON	S105459988		BOYS & GIRLS CLUB PARKING LOT, 5231 34TH ST. W.		SPILLS
BRADENTON	S125404038		I-75 NB AT MM 221		SPILLS
BRADENTON	S117899186		I-75 SB AT MM 225		SPILLS
BRADENTON	S121314703		I-75 MM213 NB		SPILLS
BRADENTON	S105459484		I-75 RAMP, GOING N. BOND I-75 TO W. BOUND SR 64		SPILLS
BRADENTON	S122440791		I-75 AT MM 213N		SPILLS
BRADENTON	S106804040		I-75 SB RAMP TO UNIVERSITY PARKWAY		SPILLS
BRADENTON	S111067467		SR 64 WESTBOUND, WEST OF I-75		SPILLS
BRADENTON	S118427928		I-75 NORTHBOUND AT MM 219 - 220		SPILLS
BRADENTON	S121702761		I-75 SB, 1 MILE SOUTH OF SR 70		SPILLS
BRADENTON	S111381896		SR 64 WEST OF I-75		SPILLS
BRADENTON	S120045555		I-75 SB, S OF MM 224, 1 MILE S OF US301		SPILLS
BRADENTON	S120045930		MM 222SB ON I-75		SPILLS
BRADENTON	S120045993		MANATEE RIVER, NEAR I-75 MM 223, TIDEWATER PRESERVE		SPILLS
BRADENTON	S118683285		BRADEN RIVER BEHIND 603 DUNWURKEN LANE		SPILLS
BRADENTON	S118685405		BRADEN RIVER, BY 1804 45 ST CT E		SPILLS
BRADENTON	S118685493		BRADEN RIVER, BEHIND 1804 45 ST CT E		SPILLS
BRADENTON	S118684699		BRADEN RIVER, BY 2415 51ST BLVD E		SPILLS
BRADENTON	S125068974		I-75 MM216 NB		SPILLS
BRADENTON	S125404019		MM 222 NB I-75		SPILLS
BRADENTON	S121163729		I-75 SB MM 214.5, WEST SHOULDER		SPILLS
BRADENTON	S123315130		I-75 @ MM 221 NORTHBOUND		SPILLS
BRADENTON	S109007473		I-75 SOUTHBOUND, SOUTH SIDE MANATEE RIVER BRIDGE		SPILLS

Count: 56 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BRADENTON	S109006457		BRADEN RIVER BOAT RAMP		SPILLS
BRADENTON	S109007961		SR 70 ON-RAMP TO NB I-75		SPILLS
BRADENTON	S109007962		NORTHBOUND ON-RAMP TO I-75 FROM SR 70		SPILLS
BRADENTON	S109008007		SOUTHBOUND I-75, NORTH OF STATE RD 70 NEAR EXIT217		SPILLS
BRADENTON	S108645689		STATE ROAD 64 E, WEST OF I-75		SPILLS
BRADENTON	S108645861		I-75 NB AT MM 224 OVER THE MANATEE RIVER BRIDGE		SPILLS
BRADENTON	S113724560		I-75, MILE MARKER 224		SPILLS
BRADENTON	S125403880		I-75 AT MM221 SOUTHBOUND		SPILLS
BRADENTON	S125404098		I-75 MM 217 SB		SPILLS
BRADENTON	1025433650	G & S SUPPLY, INC.	5002 LENA RD #101	34211	SSTS
BRADENTON	1016277301	PIER PROPERTY DRUM	SOUTHEAST OF I-75 AT SR 64	34203	FINDS
BRADENTON	S126321828	LENA ROAD LANDFILL AREA PART A-1983	LENA ROAD		DWM CONTAM
LAKEWOOD RANCH	S118686250		INTERSECTION OF I-75 & UNIVERSITY PARKWAY		SPILLS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 07/26/2021
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021	Source: EPA
Date Data Arrived at EDR: 03/23/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (404) 562-8651
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/09/2021	Source: Department of the Navy
Date Data Arrived at EDR: 02/11/2021	Telephone: 843-820-7326
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 05/05/2021
Number of Days to Update: 39	Next Scheduled EDR Contact: 08/23/2021
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2021

Date Data Arrived at EDR: 03/24/2021

Date Made Active in Reports: 06/17/2021

Number of Days to Update: 85

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 06/17/2021

Next Scheduled EDR Contact: 10/04/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Florida's State-Funded Action Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 01/13/2020

Date Data Arrived at EDR: 02/19/2020

Date Made Active in Reports: 04/28/2020

Number of Days to Update: 69

Source: Department of Environmental Protection

Telephone: 850-488-0190

Last EDR Contact: 05/21/2020

Next Scheduled EDR Contact: 08/30/2021

Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/12/2021

Date Data Arrived at EDR: 04/13/2021

Date Made Active in Reports: 06/28/2021

Number of Days to Update: 76

Source: Department of Environmental Protection

Telephone: 850-922-7121

Last EDR Contact: 04/13/2021

Next Scheduled EDR Contact: 07/26/2021

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Petroleum Contamination Detail Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/25/2021

Date Data Arrived at EDR: 01/27/2021

Date Made Active in Reports: 04/16/2021

Number of Days to Update: 79

Source: Department of Environmental Protection

Telephone: 850-245-8839

Last EDR Contact: 04/27/2021

Next Scheduled EDR Contact: 08/09/2021

Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

The file for Leaking Aboveground Storage Tanks. Please remember STCM does not track the source of the discharge so the agency provides a list of facilities with an aboveground tank and an open discharge split by facilities with aboveground tanks only and facilities with aboveground and underground tanks.

Date of Government Version: 02/01/2021

Date Data Arrived at EDR: 02/02/2021

Date Made Active in Reports: 04/23/2021

Number of Days to Update: 80

Source: Department of Environmental Protection

Telephone: 850-245-8799

Last EDR Contact: 04/21/2021

Next Scheduled EDR Contact: 08/09/2021

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020	Source: EPA Region 10
Date Data Arrived at EDR: 12/16/2020	Telephone: 206-553-2857
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020	Source: EPA, Region 5
Date Data Arrived at EDR: 12/16/2020	Telephone: 312-886-7439
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3372
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6271
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-8677
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2020	Source: EPA Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 06/11/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021	Source: FEMA
Date Data Arrived at EDR: 02/17/2021	Telephone: 202-646-5797
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

FF TANKS: Federal Facilities Listing
A listing of federal facilities with storage tanks.

Date of Government Version: 03/29/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/30/2021	Telephone: 850-245-8250
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/15/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/26/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/28/2021	Telephone: 850-245-8839
Date Made Active in Reports: 02/02/2021	Last EDR Contact: 04/21/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 01/26/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/28/2021	Telephone: 850-245-8839
Date Made Active in Reports: 02/02/2021	Last EDR Contact: 04/21/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/07/2020	Source: EPA Region 5
Date Data Arrived at EDR: 12/16/2020	Telephone: 312-886-6136
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-7591
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 06/11/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6137
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA Region 9
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3368
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-9424
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/12/2020	Source: EPA Region 10
Date Data Arrived at EDR: 12/16/2020	Telephone: 206-553-2857
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

TANKS: Storage Tank Facility List

This listing includes storage tank facilities that do not have tank information. The tanks have either be closed or removed from the site, but the facilities were still registered at some point in history.

Date of Government Version: 01/26/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/28/2021	Telephone: 850-245-8841
Date Made Active in Reports: 02/02/2021	Last EDR Contact: 04/21/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 03/29/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/30/2021	Telephone: 850-245-8927
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/24/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 03/29/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/30/2021	Telephone: 850-245-8927
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/24/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/15/2021
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites

Listing of closed and active voluntary cleanup sites.

Date of Government Version: 12/13/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/29/2021
Number of Days to Update: 75

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites Database

Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 01/06/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 06/24/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Semi-Annually

BSRA: Brownfield Site Rehabilitation Agreements Listing

The BSRA provides DEP and the public assurance that site rehabilitation will be conducted in accordance with Florida Statutes and DEP's Contaminated Site Cleanup Criteria rule. In addition, the BSRA provides limited liability protection for the voluntary responsible party. The BSRA contains various commitments by the voluntary responsible party, including milestones for completion of site rehabilitation tasks and submittal of technical reports and plans. It also contains a commitment by DEP to review technical reports according to an agreed upon schedule. Only those brownfield sites with an executed BSRA are eligible to apply for a voluntary cleanup tax credit incentive pursuant to Section 376.30781, Florida Statutes.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 09/29/2020
Date Made Active in Reports: 12/17/2020
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 06/24/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

BROWNFIELDS AREAS: Brownfields Areas Database

A "brownfield area" means a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. This layer provides a polygon representation of the boundaries of these designated Brownfield Areas in Florida.

Date of Government Version: 12/28/2020
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 06/24/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/15/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/16/2021	Telephone: 202-566-2777
Date Made Active in Reports: 06/10/2021	Last EDR Contact: 06/10/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Centers

A listing of recycling centers located in the state of Florida.

Date of Government Version: 12/03/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/15/2019	Telephone: 850-245-8718
Date Made Active in Reports: 03/14/2019	Last EDR Contact: 04/16/2021
Number of Days to Update: 58	Next Scheduled EDR Contact: 07/26/2021
	Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 04/22/2021
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/14/2021
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/22/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 11/10/2020
Date Made Active in Reports: 01/27/2021
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

FL SITES: Sites List

This summary status report was developed from a number of lists including the Eckhardt list, the Moffitt list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/07/2020
Date Data Arrived at EDR: 12/09/2020
Date Made Active in Reports: 03/02/2021
Number of Days to Update: 83

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 10/27/2020
Date Made Active in Reports: 11/06/2020
Number of Days to Update: 10

Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/03/2021	Telephone: 202-564-6023
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/22/2021	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/24/2021	Telephone: 202-366-4555
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

SPILLS: Oil and Hazardous Materials Incidents

Statewide oil and hazardous materials inland incidents.

Date of Government Version: 04/05/2021	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/06/2021	Telephone: 850-245-2010
Date Made Active in Reports: 06/24/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/04/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 60	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/06/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 47

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/16/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 04/30/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 05/07/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 05/17/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/30/2021
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/20/2021	Source: EPA
Date Data Arrived at EDR: 01/21/2021	Telephone: 202-564-4203
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 04/20/2021
Number of Days to Update: 60	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 703-416-0223
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2021	Telephone: 202-564-8600
Date Made Active in Reports: 05/11/2021	Last EDR Contact: 04/19/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 202-564-6023
Date Made Active in Reports: 03/05/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 50	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020	Source: EPA
Date Data Arrived at EDR: 01/08/2021	Telephone: 202-566-0500
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 04/09/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 07/19/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/29/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/08/2021	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/11/2021	Telephone: 301-415-7169
Date Made Active in Reports: 05/11/2021	Last EDR Contact: 04/16/2021
Number of Days to Update: 61	Next Scheduled EDR Contact: 08/02/2021
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 05/27/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 05/27/2021
Number of Days to Update: 251	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/07/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 08/16/2021
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 06/22/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 04/27/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/09/2021
	Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/13/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 68

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/06/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/27/2021
Date Data Arrived at EDR: 05/27/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 14

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/26/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 05/27/2021
Number of Days to Update: 97	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/23/2021	Source: Department of Interior
Date Data Arrived at EDR: 03/25/2021	Telephone: 202-208-2609
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/14/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021	Source: EPA
Date Data Arrived at EDR: 03/03/2021	Telephone: (404) 562-9900
Date Made Active in Reports: 04/05/2021	Last EDR Contact: 05/18/2021
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2020	Telephone: 202-564-0527
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/06/2021	Telephone: 202-564-2280
Date Made Active in Reports: 06/25/2021	Last EDR Contact: 04/06/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 07/19/2021
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

AIRS: Permitted Facilities Listing

A listing of Air Resources Management permits.

Date of Government Version: 01/26/2021
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 02/03/2021
Number of Days to Update: 6

Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-717-9086
Last EDR Contact: 05/12/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

CLEANUP SITES: DEP Cleanup Sites - Contamination Locator Map Listing

This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 866-282-0787
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

DEDB: Ethylene Dibromide Database Results

Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 12/09/2020
Date Data Arrived at EDR: 12/10/2020
Date Made Active in Reports: 02/25/2021
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities

The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/09/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 04/20/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Semi-Annually

DWM CONTAM: DWM CONTAMINATED SITES

A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/10/2021
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 850-245-7503
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 01/25/2021
Date Data Arrived at EDR: 01/27/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 04/26/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities.

Date of Government Version: 01/07/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 04/26/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Semi-Annually

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 01/26/2021
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 02/03/2021
Number of Days to Update: 6

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 04/21/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 01/10/2020
Date Made Active in Reports: 02/11/2020
Number of Days to Update: 32

Source: Department of Environmental Protection
Telephone: 850-245-4444
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: No Update Planned

HW GEN: Hazardous Waste Generators

Small Quantity Hazardous Waste Generators are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities greater than 100 Kg but less than 1,000 Kg in any one calendar month. Large Quantity Generators of Hazardous Waste are tracked in this coverage based on their notification to the Department of Environmental Protection as to their handler status, or based on inspections conducted at their facilities. These facilities are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities equal to or greater than 1,000 Kg in any one calendar month.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/23/2021
Date Data Arrived at EDR: 03/24/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

RESP PARTY: Responsible Party Sites Listing
Open, inactive and closed responsible party sites

Date of Government Version: 03/29/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/21/2021
Number of Days to Update: 83

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

SITE INV SITES: Site Investigation Section Sites Listing
Statewide coverage of Site Investigation Section (SIS) sites. Site Investigation is a Section within the Bureau of Waste Cleanup, Division of Waste Management. SIS provides technical support to FDEP District Waste Cleanup Programs and conducts contamination assessments throughout the state.

Date of Government Version: 02/16/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/07/2021
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8953
Last EDR Contact: 05/14/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing
A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/05/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 75

Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC: Underground Injection Wells Database Listing
A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 01/20/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 04/12/2021
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 04/14/2021
Next Scheduled EDR Contact: 08/02/2021
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database
Domestic and industrial wastewater facilities.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/02/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/16/2021
Data Release Frequency: Quarterly

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Florida.

Date of Government Version: N/A	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Florida.

Date of Government Version: N/A	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/10/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 193	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Florida.

Date of Government Version: N/A	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

FACILITY LIST ALACHUA: Facility List

List of all regulated facilities in Alachua County.

Date of Government Version: 03/19/2021	Source: Alachua County Environmental Protection Department
Date Data Arrived at EDR: 03/23/2021	Telephone: 352-264-6800
Date Made Active in Reports: 06/09/2021	Last EDR Contact: 06/15/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Annually

BROWARD COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST BROWARD: Aboveground Storage Tanks

Aboveground storage tank locations in Broward County.

Date of Government Version: 02/12/2021
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 06/11/2021
Number of Days to Update: 1

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

UST BROWARD: Underground Storage Tanks

All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 02/12/2021
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 06/11/2021
Number of Days to Update: 1

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

HILLSBOROUGH COUNTY:

LF HILLSBOROUGH: Hillsborough County LF

Hillsborough county landfill sites.

Date of Government Version: 04/07/2021
Date Data Arrived at EDR: 04/07/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 78

Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

DADE CO AP: Air Permit Sites

Facilities that release or have a potential to release pollutants.

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

DADE CO AW: Agricultural Waste Listing

A listing of agricultural waste sites

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 78

Source: Miami-Dade County Division of Environmental Resources Management
Telephone: 305-372-6715
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

DADE CO LW: Liquid Waste Transporter List

The Liquid Waste Transporter permit regulates the transportation of various types of liquid and solid waste, including hazardous waste, waste oil and oily waste waters, septic and grease trap waste, biomedical waste, spent radiator fluid, photo chemical waste, dry sewage sludge, and other types of non-hazardous industrial waste. The Liquid Waste Transporter permits needed to protect the environment and the public from improperly handled and transported waste.

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 78

Source: DERM
Telephone: 305-372-6755
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DADE GTO: Grease Trap Sites

Any non-residential facility that discharges waste to a sanitary sewer.

Date of Government Version: 02/23/2021

Date Data Arrived at EDR: 02/23/2021

Date Made Active in Reports: 05/12/2021

Number of Days to Update: 78

Source: Dade County Dept. of Env. Resources Mgmt.

Telephone: 305-372-6508

Last EDR Contact: 05/24/2021

Next Scheduled EDR Contact: 09/06/2021

Data Release Frequency: Semi-Annually

DADE MOP: Marine Facilities Operating Permit

What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 02/23/2021

Date Data Arrived at EDR: 02/23/2021

Date Made Active in Reports: 05/12/2021

Number of Days to Update: 78

Source: DERM

Telephone: 305-372-3576

Last EDR Contact: 05/24/2021

Next Scheduled EDR Contact: 09/06/2021

Data Release Frequency: Quarterly

DADE MRE: Maimi River Enforcement

The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 06/05/2013

Date Data Arrived at EDR: 06/06/2013

Date Made Active in Reports: 08/06/2013

Number of Days to Update: 61

Source: DERM

Telephone: 305-372-3576

Last EDR Contact: 05/24/2021

Next Scheduled EDR Contact: 09/06/2021

Data Release Frequency: Quarterly

DADE_IW2_4: Industrial Waste Type 2-4 Sites

IW2s are facilities having reclaim or recycling systems with no discharges, aboveground holding tanks or spill prevention and countermeasure plans. IW4s are facilities that discharge an effluent to the ground.

Date of Government Version: 02/23/2021

Date Data Arrived at EDR: 02/23/2021

Date Made Active in Reports: 05/12/2021

Number of Days to Update: 78

Source: Department of Environmental Resources Management

Telephone: 305-372-6700

Last EDR Contact: 05/24/2021

Next Scheduled EDR Contact: 09/06/2021

Data Release Frequency: Semi-Annually

DADE_IW5: Industrial Waste Type 5 Sites

Generally these facilities fall under the category of "conditionally exempt small quantity generator" or "small quantity generator".

Date of Government Version: 02/23/2021

Date Data Arrived at EDR: 02/23/2021

Date Made Active in Reports: 05/12/2021

Number of Days to Update: 78

Source: Department of Environmental Resources Management

Telephone: 305-372-6700

Last EDR Contact: 05/24/2021

Next Scheduled EDR Contact: 09/06/2021

Data Release Frequency: Semi-Annually

DADE_IW6: Industrial Waste Type 6

Permits issued to those non-residential land uses located within the major drinking water wellfield protection areas that are not served by sanitary sewers. These facilities do not handle hazardous materials but are regulated because of the env. sensitivity of the areas where they are located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

DADE_IWP: Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 02/23/2021
Date Data Arrived at EDR: 02/23/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

ENF: Enforcement Case Tracking System Sites

Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 02/25/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

SPILLS DADE: Fuel Spills Cases

DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

UST DADE: Storage Tanks

A listing of aboveground and underground storage tank site locations.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 11/19/2020
Date Made Active in Reports: 02/03/2021
Number of Days to Update: 76

Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 05/24/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

LF PALM BEACH: Palm Beach County LF

Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 10/05/2020
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/11/2021
Next Scheduled EDR Contact: 08/23/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/19/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/30/2021
Next Scheduled EDR Contact: 08/09/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/09/2021
Next Scheduled EDR Contact: 07/26/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/13/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Department of Children & Families

Source: Provider Information

Telephone: 850-488-4900

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Department of Environmental Protection

Telephone: 850-245-8238

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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Appendix F – Pond Siting Memo

Pond Siting

Technical Memorandum

Lena Road

Project Development and Corridor Study Report

November 2021



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Executive Summary

Manatee County is preparing a study of the Lena Road corridor located east of I-75 in western Manatee County, within Sections 01 and 12, Township 35S, Range 18E - shown in **Figure 1-1**. Study limits begin at the northern termini of the southern segment of Lena Road, and extend approximately 0.7-miles north to 81st Court East. The study corridor then continues approximately 0.35-miles north along 81st Court East to Powell Johnson Road – Landfill Road. North of Powell Johnson Road, 81st Court East becomes Lena Road. The study corridor continues north along Lena Road 0.26-miles. The Lena Road Corridor Study includes alternatives for reducing congestion, improving safety and operational performance, and addressing future transportation needs. Proposed improvements include a new north-south connection between the southern segment of Lena Road and 81st Court East. Proposed improvements also include a new intersection at 44th Avenue East – an extension of 44th Avenue being developed by Manatee County.

This Pond Siting Memorandum is included within the Lena Road Corridor Study to assess right of way acquisition alternatives for required stormwater ponds and floodplain impact compensation. Analysis follows Southwest Florida Water Management District (SWFWMD) and Manatee County requirements and guidelines. Stormwater analysis herein is preliminary and does not benefit for detailed survey or geotechnical investigation.

The existing southern segment of Lena Road is a two lane (one lane each way) north-south rural roadway with valley gutter along the edge of pavement. Existing 81st Court East and the existing northern segment of Lena Road are two lane (one lane each way) north-south rural roadways with flush shoulders and ditches.

Three alternative typical sections are provided. Typical Section 1 includes an 84-foot right of way, two 11-foot lanes (one lane each way), curb and gutter, a 22' raised grassed median, and a 5-foot sidewalk along the northbound and southbound right of ways. Typical Section 2 includes an 84-foot right of way, two 11-foot lanes (one lane each way), curb and gutter, an 18' raised grassed median, a 5-foot sidewalk along the northbound right of way, and a 12-foot shared use path along the southbound right of way. Typical Section 3 is the same as Typical Section 1 except for the raised median, which is replaced by a 14-foot two-way left turn lane.

Typical Section 2 is recommended from the beginning of the project to the southern limits of Lena Road Business Park at station 241+00. Typical Section 2 is also recommended from just north of Lena Road Business Park at station 263+72 to the end of the project at SR 64. Typical Section 3 is proposed within Lena Road Business Park, from station 241+00 to station 263+72. Pond sizing analysis is based on the recommended typical sections.

Drainage Maps are found in **Appendix A**. The study corridor includes three stormwater runoff basins. Basins 1 outfalls to Braden River Below Ward Lake (WBID 1876). Basins 2 and 3 outfall to Cypress Strand (WBID 1875). WBID 1876 and WBID 1875 are not impaired for nutrients or dissolved oxygen. The proposed project requires an Environmental Resource Permit (ERP) from SWFWMD. All project tailwaters are estimated to be hydrologically isolated from the influence of sea level rise.

Right of way acquisition is not required to provide stormwater facilities for Basins 1 and 3. Therefore only one pond site alternative is provided for each. Two pond site alternatives are provided for Basin 2, which does require right of way acquisition. Basin 1 runoff outfalls to Pond 1. The 44th Avenue East project currently in design will include final design of Pond 1 and all of Basin 1 except for the portion of Lena Road north of the roundabout at 44th Avenue East (station 281+00). However, final design of Pond 1 included with the 44th Avenue East project will include stormwater treatment and attenuation capacity for all of Basin 1 including the portion of Lena Road north of the roundabout. The 44th Avenue East project refers to Basin 1 and Pond 1 as SMF 12 ROW and SMF 12, respectively. Two alternative wet detention pond sites, Pond 2A and Pond 2B, are provided for Basin 2 which requires right of way acquisition. Pond 2A is recommended as it results in a smaller floodplain impact and does not require modification of an existing pond. Pond 3 is a wet detention facility located on County

property in the Central County Complex project. The final location of Pond 3 within the County project will be determined with final design of that project.

Table 1 | Preferred Pond Sites

Basin	Preferred Pond Site	Right of Way Acquisition
1	Pond 1	0.00 Acres ^A
2	Pond 2A	1.87 Acres
3	Pond 3	0.00 Acres ^B

^A Known as SMF 12 in the 44th Avenue East project. Right of way acquisition is included with that project.

^B Pond located on existing County property.

1.0 Introduction

Manatee County Government is conducting a Project Development and Corridor Study for Lena Road to develop corridor alternatives for reducing congestion, improving safety and operational performance, and addressing future transportation needs. The project will add vehicular capacity and shared use access to Lena Road.

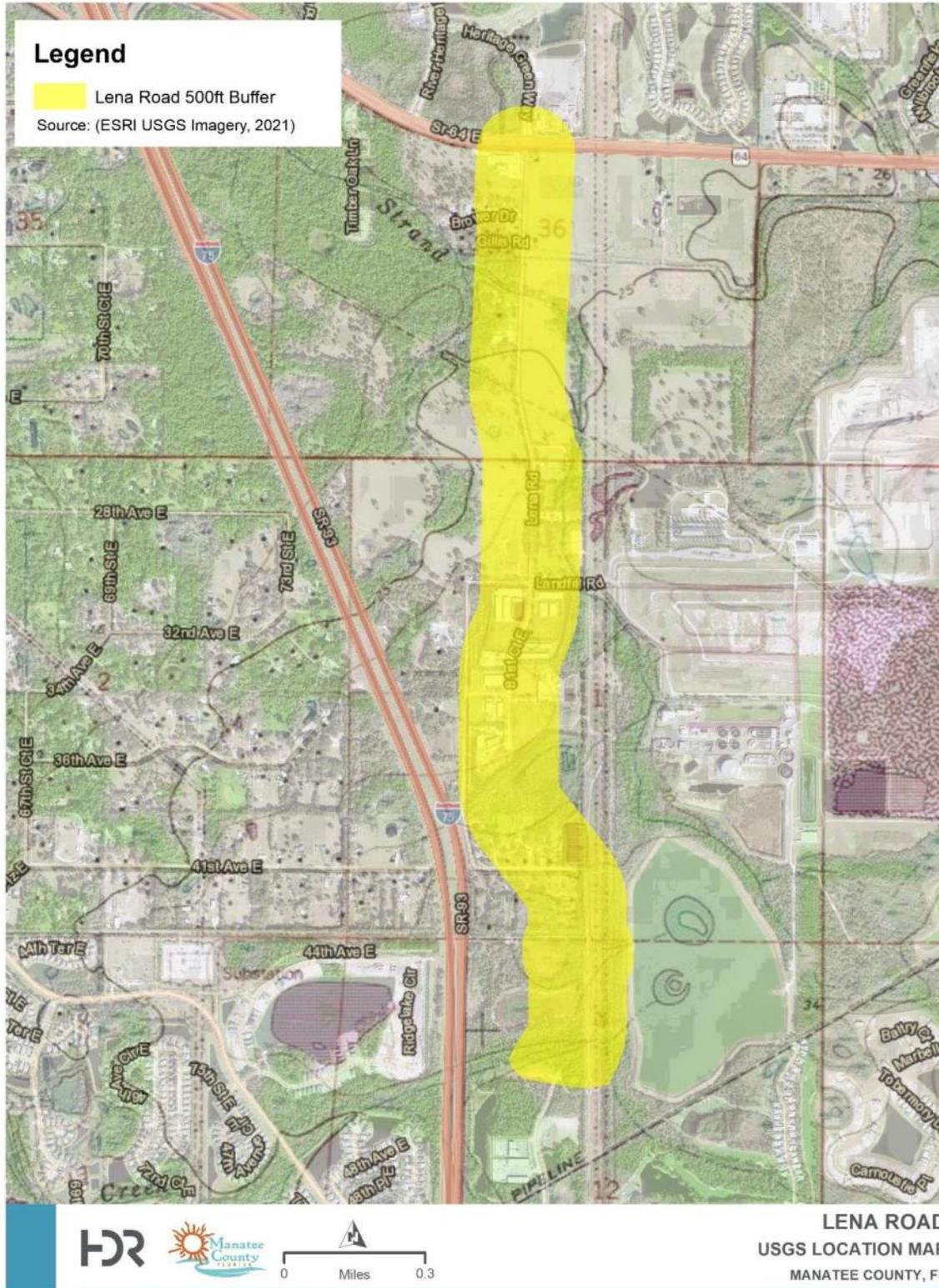
Proposed improvements connect two north-south roadways – Lena Road and 81st Court East – to create a continuous corridor from SR 70 to SR 64. Proposed improvements also include a new intersection at 44th Avenue East – an extension of 44th Avenue being developed by Manatee County.

This Preliminary Pond Siting Report is included within the Lena Road Corridor Study to assess right of way acquisition alternatives for required stormwater treatment facilities and floodplain impact compensation areas. The stormwater and pond site sizing analysis herein are preliminary and does not benefit for detailed survey or geotechnical investigation.

1.1 Project Location

The study corridor located east of I-75 in western Manatee County, within Sections 01 and 12, Township 35S, Range 18E – shown below in **Figure 1-1**. Study limits begin at the northern termini of the southern segment of Lena Road, and extend approximately 0.7-miles north to 81st Court East. The study corridor continues along 81st Court East approximately 0.35-miles to Powell Johnson Road – Landfill Road. North of Powell Johnson Road, 81st Court East becomes Lena Road. The study corridor continues north along Lena Road 0.26-miles.

Figure 1-1 | Location Map



1.2 Project Description

The project will add vehicular capacity and shared use access to Lena Road. Proposed improvements connect two north-south roadways – Lena Road and 81st Court East – to create a continuous corridor from SR 70 to SR 64. Proposed improvements also include new intersection at 44th Avenue East – an extension of 44th Avenue being developed by Manatee County. Depending on the typical section chosen, improvements will either include a shared use path along the southbound right of way or sidewalks and bike lanes in both directions.

2.0 Vertical Datum

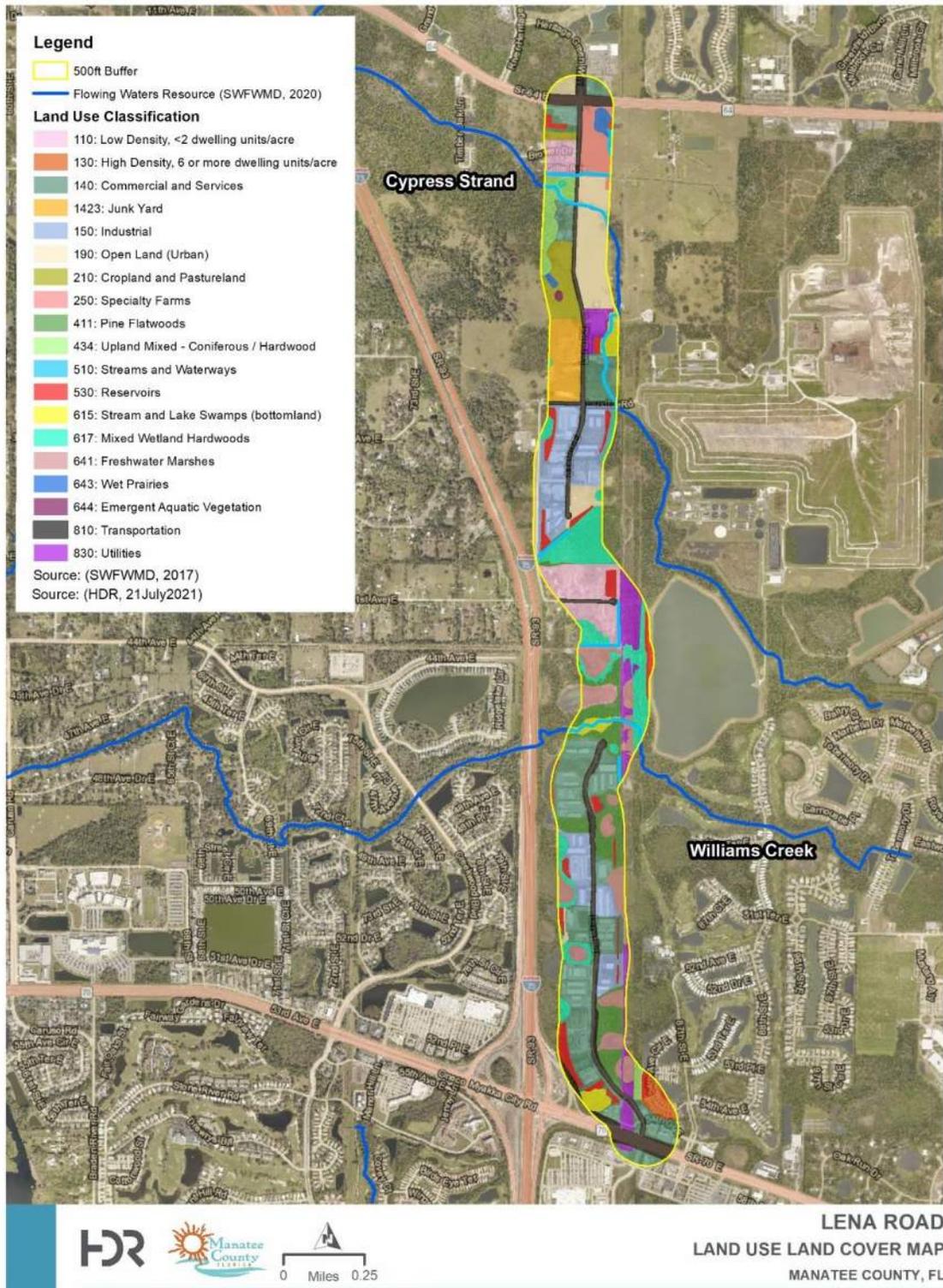
All analysis herein is in North American Vertical Datum 1988 (NAVD 88). Data sources in National Geodetic Vertical Datum 1929 (NGVD 29) such as historical plans are converted to NAVD 88. Per the NOAA NGS Coordinate Conversion and Transformation Tool, the conversion from NGVD 29 to NAVD 88 is:

$$\text{NAVD 88} = \text{NGVD 29} + 1.65'$$

3.0 Land Use

The study corridor land use is shown below on **Figure 3-1**. Predominant corridor land uses include industrial, low density residential, cropland and pastureland, and natural areas such as pine flatwoods, freshwater marshes, forested wetlands, and wet prairies.

Figure 3-1 | Land Use



4.0 Soil

Soil classification, and hydrologic soil group figures, and a United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Custom Soil Resource Report are provided in **Appendix B**. Soils are predominately fine sands with hydrologic soil group A/D.

5.0 Floodplains

Lena Road is within Manatee County Unincorporated Area shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) 12081C0329E and 12081C0327E, both with an effective date March 17, 2014. FIRMs and Flood Insurance Study (FIS) excerpts are found in **Appendix C**. The study corridor impacts multiple floodplain areas associated with Cypress Strand. Floodplains from south of 44th Avenue East to Powell Johnson Road are designated Zone A, meaning the areas are within the 1% annual chance flood but do not have established flood elevations. North of Powell Johnson Road, floodplains continue along the northbound Lena Road right of way. Then, beginning south of the Cypress Strand cross drain beneath Lena Road and continuing to SR 64, Lena Road right of way is included in the floodplain. Floodplains north of Powell Johnson road are designated Zone AE, meaning they are within 1% annual chance flood and have established flood elevations. Flood elevation drops from 30' at Powell Johnson Road to 20' downstream of the Cypress Strand cross drain beneath Lena Road. The study corridor also impacts the Manatee County 25-year floodplain in the vicinity of the Cypress Strand cross drain beneath Lena Road.

6.0 Sea Level Rise

The FDOT Drainage Manual specifies coastal projects must incorporate sea-level rise analysis to assess the vulnerability of flooding over the design life of the facility. The closest NOAA Sea Level Trends tide gauge is station 8726520 in St. Petersburg. The mean higher high tide (MHHW) at this station is elevation 0.78-feet. The NOAA estimated relative sea level trend is an increase of 2.75-mm per year based on monthly mean sea-level data from 1947 to 2017. The FEMA FIS Flood Profile for Cypress Strand indicates Lena Road is 1.6 miles upstream of combined coastal and riverine effects. All project tailwaters are estimated to be hydrologically isolated from the influence of sea level rise. Other project tailwaters, including Williams Creek and a tributary leading to Braden River above Ward lake, are both beyond the FEMA limits of detailed study, upstream of the limits of combined coastal and riverine effects, and outside of the 500-year floodplain.

7.0 Existing Typical Section

Existing Lena Road is divided into two segments. The first segment, from the beginning of the project at the Lena Road cul-de-sac to the 81st Court East cul-de-sac at station 242+00, is through predominately undeveloped land. The second segment, along 81st Court East and then Lena Road, is a two lane (one lane each way) rural section with approximately 55-feet to 80-feet of right of way, 12-foot lanes, unpaved shoulders, and should swales.

8.0 Existing Cross Drains

Table 8-1 summarizes the two existing cross drains within the project limits.

Table 8-1 | Existing Cross Drains

Station	Size	Flow Direction	Channel
251+00	36"	East	Cypress Strand Tributary
294+00	Unknown	West	Cypress Strand

9.0 Existing Drainage

Corridor drainage patterns can be found on the **Appendix A** Drainage Maps. Runoff basins are delineated using 44th Avenue East project survey, historical plans and permit documents, and aerials.

9.1 Watersheds

Existing corridor runoff is divided between three watersheds: Williams Creek (WBID 1901), Braden River Below Ward Lake (WBID 1876), and Cypress Strand (WBID 1875). The existing area within the project limits from the beginning of the project to south of 44th Avenue East (station 212+00) outfalls to Williams Creek which flows westward beneath I-75 into the Braden River. This portion of Basin 1 is routed to Braden River Below Ward Lake (WBID 1875) in the proposed condition to avoid additional wetland impacts for an additional pond site. Corridor runoff from south of 44th Avenue (station 212+00) to 34th Avenue East (station 248+00) outfalls to a network of wetlands leading to a channel which flows west, beneath I-75 on the north side of 44th Avenue East. The channel ultimately flows to Braden River and is within the Braden River Below Ward Lake Watershed. From 34th Avenue East (station 248+00) to the end of the project, runoff flows northeast to Cypress Strand. Cypress Strand flows north to Manatee River. Williams Creek is listed as impaired for nutrients on the FDEP comprehensive study list. Braden River Below Ward Lake and Cypress Strand are impaired for nutrients or dissolved oxygen.

9.2 Runoff Conveyance

South of the 81st Court East cul-de-sac the corridor is predominately undeveloped area which drains via a series of connected depressions and channels. Developed residential areas south of the cul-de-sac drain via shoulder swales. North of the cul-de-sac the corridor follows 81st Court East and Lena Road which drain via shoulder swales.

9.3 Environmental Resource Permits

Table 9-1 summarizes the existing Environmental Resource Permits for within the study corridor. Existing permit excerpts are included in **Appendix E**. Permits are organized around two business and industrial parks, each of which includes multiple permit modifications as parcels were build-out. The only existing runoff within the corridor which drains to permitted treatment facilities is within Lena Road Business Park, within Basin 2. No stormwater facility modifications are proposed to Creekwood East Corp Park which is located at the southern limits of the study corridor.

Table 9-1 | Environmental Resource Permits

Permit Number	Project
3143.004	Lena Road Business Park
5641.021	Creekwood East Corp Park

10.0 Proposed Typical Sections

Analysis includes three alternative roadway typical sections. All alternatives follow the same alignment. Proposed typical sections are shown below on **Figures 10-1, 10-2, and 10-3**. **Typical Section 1** includes an 84-foot right of way, two 12-foot lanes (one lane each way), 4-foot bike lanes, curb and gutter, a 22' raised grassed median, and a 5-foot sidewalk along the northbound and southbound right of ways. **Typical Section 2** includes an 84-foot right of way, two 11-foot lanes (one lane each way), curb and gutter, an 18' raised grassed median, a 5-foot sidewalk along the northbound right of way, and a 12-foot shared use path along the southbound right of way. **Typical Section 3** is the same as Typical Section 1 except for the raised median, which is replaced by a 14-foot two-way left turn lane.

Typical Section 2 is recommended from the beginning of the project to the southern limits of Lena Road Business Park at station 241+00. **Typical Section 2** is also recommended from just north of Lena Road Business Park at station 263+72 to the end of the project at SR 64. **Typical Section 3** is proposed within Lena Road Business Park, from station 241+00 to station 263+72. Pond sizing is based on the recommended typical sections.

Figure 10-1 | Proposed Typical Section 1

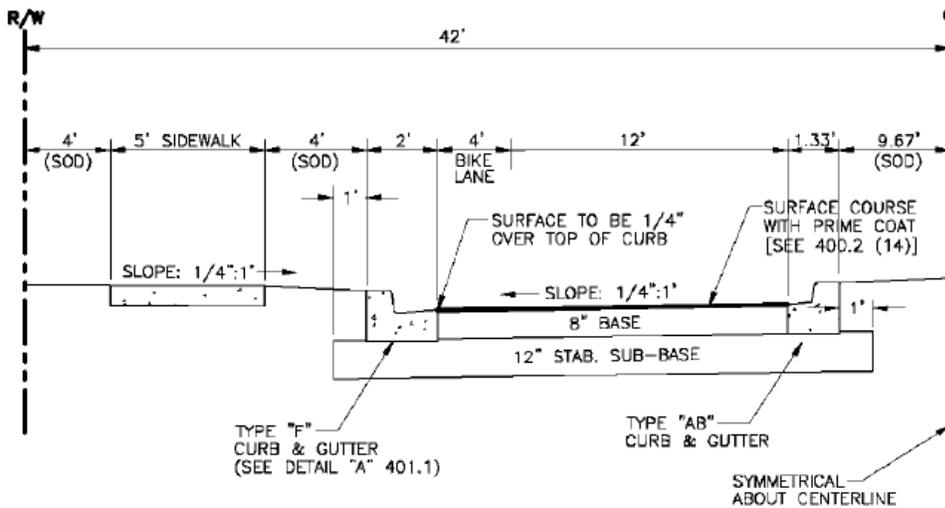


Figure 10-2 | Proposed Typical Section 2

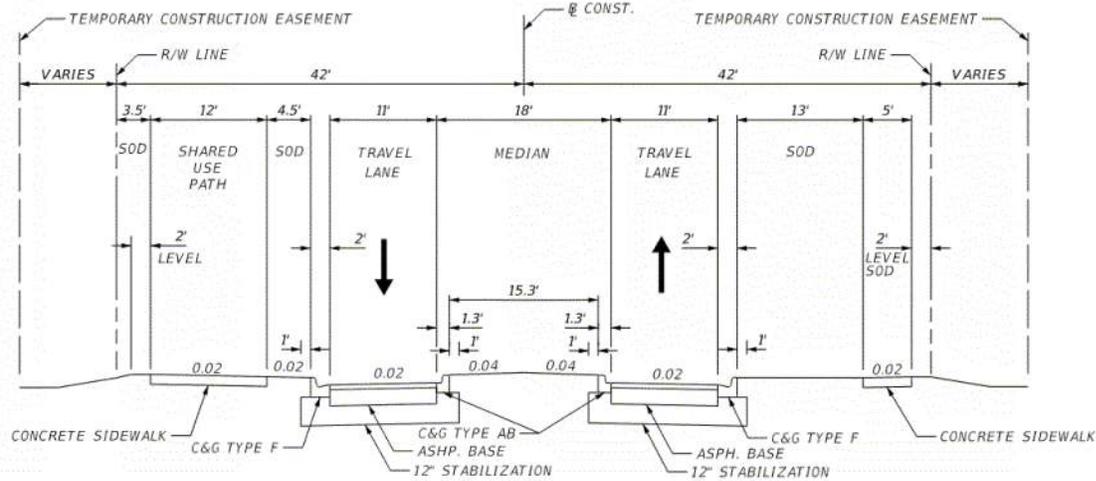
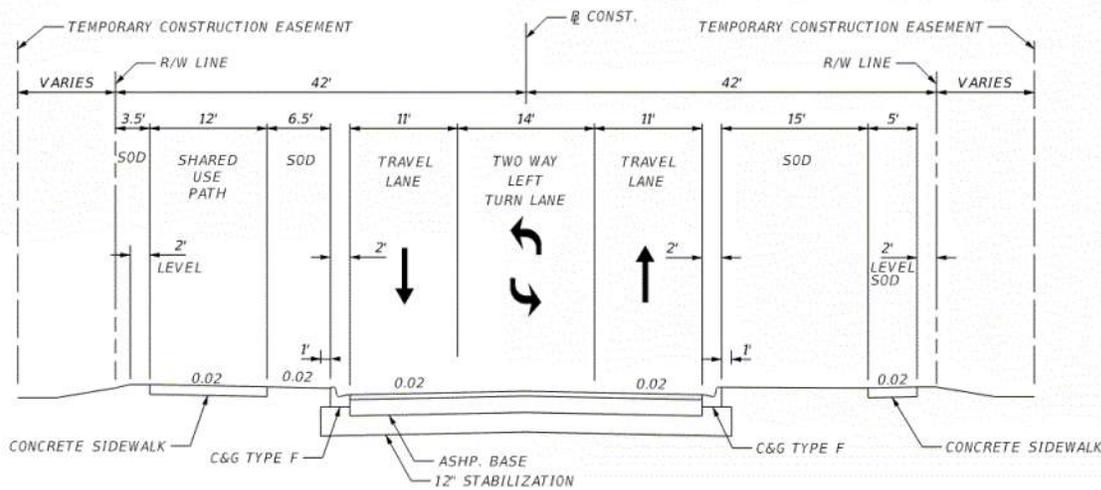


Figure 10-3 | Proposed Typical Section 3



11.0 Floodplain Impacts

Floodplain impacts are anticipated to Zones A and AE associated with Cypress Strand. No-rise certification will be required for impacts to the FEMA floodplain. Analysis assumes the required floodplain compensation is equal in total area to the total impacted floodplain area. Floodplain impacts and compensation within Basin 1 south of 41st Avenue East are documented in the 44th Avenue East design and are therefore not included herein.

Floodplain impact and compensation areas are shown on the Drainage Maps found in **Appendix A**. The existing Lena Road Business Park includes floodplain compensation (ERP 3143.004). It is assumed that redeveloping areas in the floodplain that were previously developed for the business park, such as 81st Court East, will not result in additional floodplain impacts. Floodplain impacts are summarized below in **Table 11-1**. Floodplain impacts are based on the recommended typical sections and pond sites. 2.72-acres of floodplain impacts are proposed in the Braden River Below Ward Lake watershed. 6.08-acres of floodplain impacts are proposed in the Cypress Strand watershed.

Floodplain compensation is summarized below in **Table 11-2**. 44th Compensation includes 1.14-acres of surplus floodplain compensation within the 44th Avenue East project. The 44th Avenue East surplus and Floodplain Compensation Area 1 provide a total of 2.75-acres of compensation in the Braden River Below Ward Lake watershed. Floodplain Compensation Area 2 provides 6.22-acres of compensation in the Cypress Strand watershed. Constructing Pond 2B (Impact Area 4) rather than recommended Pond 2A (Impact Area 3) would result in 0.70-acres of additional impacts to the Cypress Strand floodplain. Compensation Area 2 could be expanded to accommodate this increase. Floodplain Compensation Area 2 is located on County property in the Central County Complex project. The final location of Floodplain Compensation Area 2 within County property will be determined with final design of that project.

Table 11-1 | Floodplain Impacts

Impact Area	Location	Watershed	Area (ac.)
1	Lena Road	Braden River Below Ward Lake	1.13
2	Lena Road	Braden River Below Ward Lake	1.59
3	Pond 2A	Cypress Strand	0.92
4*	Pond 2B	Cypress Strand	1.62*
5	Lena Road	Cypress Strand	5.16

*Not a recommended alternative

Table 11-2 | Floodplain Compensation

Compensation Area	Watershed	Area (ac.)
44 Ave E Surplus*	Braden River Below Ward Lake	1.14
1	Braden River Below Ward Lake	1.61
2	Cypress Strand	6.22

*Surplus compensation from the 44th Avenue E. project

12.0 Design Criteria

Preliminary pond sizing calculations found in **Appendix D** are based on SWFWMD water quality and water quantity requirements, and Manatee County stormwater design requirements. Design criteria are summarized below in **Table 12-1**.

Table 12-1 | Design Criteria

Design Element	Source	Criteria
Water Quality, Wet Detention	SWFWMD Applicant's Handbook Vol. II, Part IV, Section 4.1a.	A wet detention treatment system shall treat one inch of runoff from the contributing area.

Design Element	Source	Criteria
Water Quantity, Rate Control	SWFWMD Applicant's Handbook Vol. II, Part III, Section 3.1	<p>Off-site discharge is limited to amounts which will not cause adverse off-site impacts.</p> <p>a. For a project or portion of a project located within an open drainage basin, the allowable discharge is:</p> <ol style="list-style-type: none"> 1. historic discharge, which is the peak rate at which runoff leaves a parcel of land by gravity under existing site conditions, or the legally allowable discharge at the time of permit application; or 2. amounts determined in previous District permit actions relevant to the project. <p>b. Except in situations as described in Section 3.0 above, off-site discharges and peak stages for the existing and developed conditions shall be computed using the Southwest Florida Water Management District's 24-hour, 25-year rainfall maps...</p>
Freeboard	Manatee County Stormwater Management Design Manual, Section 2.3.16	Retention basins constructed for flow attenuation purposes must have sufficient volume to contain the volume of post development runoff from the design storm rainfall, or shall have sufficient volume to contain said runoff volume with a minimum of one (1) foot of freeboard.
Side Slope	Manatee County Stormwater Management Design Manual, Section 2.3.17	B. (2) The maximum allowable side slope is that of 4:1 (4 feet horizontally for every 1 foot vertical), and is to be maintained for a minimum of three (3) feet vertically below the normal water level
Storm Sewer & Cross Drain	Manatee County Stormwater Management Design Manual, Section 2.3.6	<p>New streets shall be designed with traffic lanes a minimum of six (6) inches freeboard above the design storm base flood elevation measured to the crown of the road.</p> <p>A. For all streets, bridges and culverts within the published FEMA 100 Year Floodplain, the design storm shall be one hundred (100) year return frequency.</p> <p>C. For local streets, bridges and culverts not in the published one hundred (100) year floodplain, the design storm shall be twenty-five (25) year frequency.</p>
Pond Access	Manatee County Stormwater Management Design Manual, Section 2.4.11	Detention and retention basins shall have an unobstructed access route at least 20-feetwide from the nearest street and shall have an unobstructed maintenance access area a minimum of 20-feet from the top of bank completely around their perimeter.

13.0 Permitting Requirements

Anticipated permit requirements include the following.

- An Environmental Resource Permit (ERP) from the Florida Department of Environmental Protection (FDEP) per F.A.C. 62-330.
- A National Pollutant Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA) per the Clean Water Act.

14.0 Proposed Cross Drains

The existing 36" cross drain at station 251+00 and the existing unknown size Cypress Strand cross drain at 294+00 are extended in the proposed design. Two additional cross drains are required, at 206+30 and 238+00. A 6'x6' box culvert is proposed at 206+30 to convey Williams Branch beneath proposed Lena Road. The conceptual cross drain size is based on the existing 6'x6' box culvert approximately 1300-feet downstream which conveys Williams Creek beneath I-75. A 42" cross drain is proposed at 238+00 to convey a wetland channel flowing west to Braden River. The conceptual cross drain size is based on an existing 54" cross drain beneath I-75 approximately 1900' downstream.

15.0 Proposed Drainage

The corridor is divided into three stormwater basins. Roadway runoff is conveyed to pond sites using piped conveyance. **Table 15-1** below summarizes the proposed runoff basins. The proposed design shifts some basin divides to avoid proposing pond sites which would impact environmentally sensitive areas. Attenuation analysis demonstrates the proposed outflow to each watershed does not exceed the existing condition. Corridor runoff from the beginning of the project to station 212+00 is routed away from the Williams Creek watershed to Pond 1 which outfalls into the Braden River Below Ward Lake watershed. Runoff from station 236+15 to 240+00 is routed away from the Braden River Below Ward Lake watershed and into Pond 2A which outfalls into the Cypress Strand watershed.

Table 15-1 | Proposed Basins

Basin	Begin Station	End Station	Recommended Pond	Tailwater
1	202+00	236+15	Pond 1 – Wet Detention	Braden River Below Ward Lake
2	236+15	261+03	Pond 2A – Wet Detention	Cypress Strand
3	261+03	309+79	Pond 3 – Wet Detention	Cypress Strand

16.0 Pond Design

Preliminary pond sizing calculations are found in **Appendix D**. Pond sizing is based on the recommended typical sections. Pond sizes are estimated by combining the required attenuation volume and treatment volume with 1-foot of freeboard. The required attenuation volume is calculated as the difference in runoff volume between the existing and proposed condition as determined using the NRCS rainfall excess method.

Pond site matrices are found in **Appendix G**. Two alternative pond sites are evaluated for Basin 2 which requires right of way acquisition for a pond. Only one pond site each is provided for Basins 1 and 3 which have sufficient

right of way for ponds. All ponds are assumed to be wet detention based on evident high groundwater. Ponds were not modeled using storm routing software.

16.1 Basin 1

Basin 1 includes 44th Avenue East and adjacent portions of proposed Lena Road through existing wetlands, undeveloped uplands, and residential parcels. The south end of the Lena Road corridor within Basin 1 connects to the existing Lena Road cul-de-sac within Creekwood East Corporate Park (ERP 5641.021). Basin 1 is included with the 44th Avenue East roadway project as "SMF 12 ROW". That project includes Stormwater Management Facility (SMF) 12 to treat and attenuate runoff from SMF 12 ROW (Basin 1 herein). SMF 12 is known herein as Pond 1. Pond 1 is a proposed wet detention facility on County-owned land which outflows into the Braden River Below Ward Lake watershed. Detailed analysis of Pond 1 is included with the 44th Avenue East project. The 44th Avenue East project also includes Floodplain Compensation Area 2 which includes surplus compensation volume, documented herein as Floodplain Compensation Area 1.

16.2 Basin 2

Existing Basin 2 includes wetlands, open land, and 81st Court East – within Lena Road Business Park (ERP 3143.004). Existing Basin runoff within Lena Road Business Park, outfalls to five existing wet detention ponds. All five existing stormwater facilities receive runoff from 81st Court East and adjacent parcels. Lake 1, Lake 2, and Lake 4 outfall east to Cypress Strand. Lake 5 and Lake 6 outfall south to adjacent wetlands which ultimately flow to Braden River. Analysis herein does not include the existing stormwater ponds as their impact on basin outflow is equal in the existing and proposed conditions. In the proposed condition the existing ponds will continue to receive runoff from Lena Road and adjacent parcels, and outfall to their existing tailwaters. Analysis herein determines the pond size and location required to supplement the capacity in the existing ponds.

Two pond site alternatives are provided. Alternative Pond 2A is a 1.87-acre wet detention facility proposed along northbound Lena Road. The pond outfalls east into Cypress Strand. Wetland impacts are not anticipated. The Natural Resources Assessment did not identify any wildlife in the area. The Cultural Resource Assessment did not locate any historic structures or archaeological sites within the pond site. The Contamination review did not identify any potential contamination. The Utilities Technical Memorandum identified utilities along 81st Court East which may be impacted to connect the Basin 4 collection system to the pond, including a 16" PVC force main and a 30" DIP reclaimed water line, both owned by Manatee County. No utilities were identified at the pond site. Alternative Pond 4A includes 0.92-acres of floodplain impacts.

Alternative Pond 2B converts an existing wet detention pond associated with Lena Road Business Park to a joint-use facility. The alternative expands the existing pond, requiring 1.62-acres of right of way acquisition. Wetland impacts are not anticipated. The Natural Resources Assessment did not identify any wildlife in the area. The Cultural Resource Assessment did not locate any historic structures or archaeological sites within the pond site. The Contamination review did not identify any potential contamination. The Utilities Technical Memorandum identified utilities along 81st Court East which may be impact by the Basin 4 collection system including a 16" PVC force main and a 30" DIP reclaimed water line, both owned by Manatee County. No utilities were identified at the pond site. The entire 1.62-acre pond site is a floodplain impact.

16.3 Basin 3

Basin 3 includes Lena Road from Powell Johnson Road – Landfill Road to SR 64. The majority of the northbound right of way within the basin is bordered by County parcel 1462800359, associated with the Central County Complex project. Only one pond site is provided as the final pond site (or multiple sites) will be selected within the existing County parcel in coordination with the Central County complex project. Pond 3 shown on the

Drainage Maps is provided as visual order-of-magnitude reference for that coordination process. Similarly, the final location of Floodplain Compensation Area 3 within the County parcel will be determined with final design of the Central County Complex project.

The final location of Pond 3 and Floodplain Compensation Area 3 within the Central County Complex project are unknown. The parcel includes wetlands and floodplains. However, there are locations within the property in which both facilities could avoid wetland and floodplain impacts. The Natural Resources Assessment identified a Bald Eagle in the area. The Cultural Resource Assessment did not locate any historic structures or archaeological sites within the parcel. The Contamination review identified an area of medium potential at the southwest corner of the parcel, adjacent to Lena Road. The Utilities Technical Memorandum identified utilities along Lena Road which may be impacted to connect the Basin 6 collection system to the pond, including Florida Power and Light distribution lines, and a 30" DIP reclaimed water line, a 16" PVC sewer force main, and buried fiber optic line - all owned by Manatee County.

16.4 Lena Road South of Basin 1

Lena Road from SR 70 north to the existing cul-de-sac at the southern limits of Basin 1 is outside of the project limits. Pond siting analysis was not performed for this segment of Lena Road. The segment traverses Creekwood East Corporate Park (ERP 5641.021) and drains to Williams Creek. Pond site opportunities are limited by adjacent development and wetlands. Design is further challenged by apparent high groundwater.

17.0 Conclusion

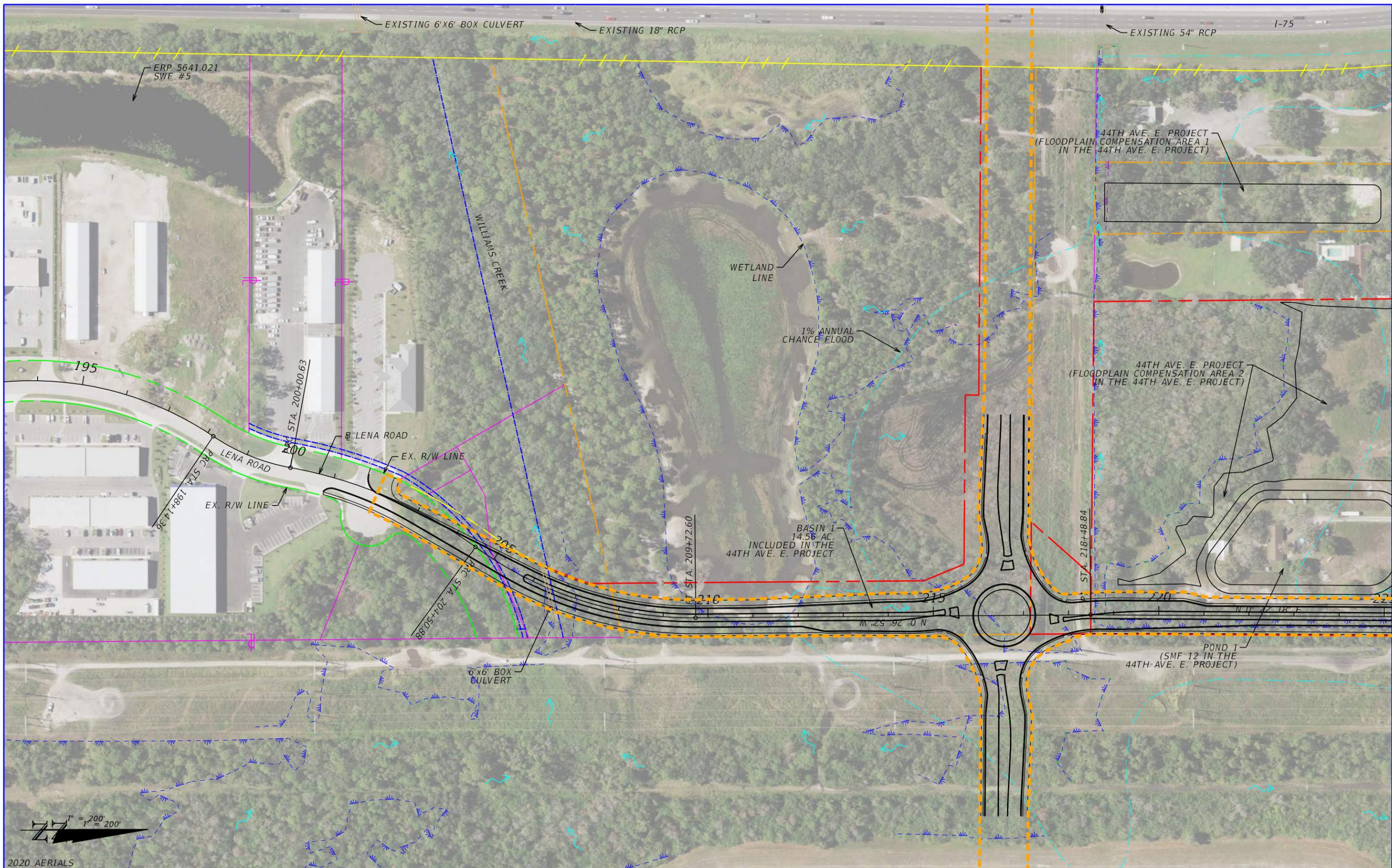
Pond sites are selected to minimize right of way acquisition, environmental impacts, and impacts to developed sites while meeting SWFWMD and Manatee County design and permitting requirements. Pond site matrices are found in **Appendix F**. Pond sizing, found in **Appendix D**, is based on the recommended typical sections. Two alternative pond sites are evaluated for Basin 2 which requires right of way acquisition for a pond. Only one pond site each is provided for Basins 1 and 3 which have sufficient existing County right of way for ponds.

Basin 1 runoff flows to Pond 1, a stormwater management facility associated with the 44th Avenue East project (SMF 12) which outfalls into the Braden River Below Ward lake watershed. Two wet detention pond site alternatives are provided for Basin 2. Alternative Pond 2A requires 1.87-acres of right of way acquisition and 0.92-acres of floodplain impacts. Alternative Pond 2B includes expanding Lake 1 (ERP 3143.004) and converting it into a joint-use facility. Alternative Pond 2B requires 1.62-acres of both right of way acquisition and floodplain impacts. Both alternatives outflow to the Cypress Strand watershed. Alternative Pond 2A is recommended to reduce floodplain impacts, to avoid modifying an existing pond, its central location within the basin, and its location adjacent the outfall ditch leading to Cypress Strand.

Only one pond site is provided for Basin 3. Pond 3 and Floodplain Compensation Area 3 are located on existing County property. The ultimate locations of Pond 3 and Floodplain Compensation Area 3 will be determined with final design of the Central County Complex project. Pond 3 outfalls to Cypress Strand.

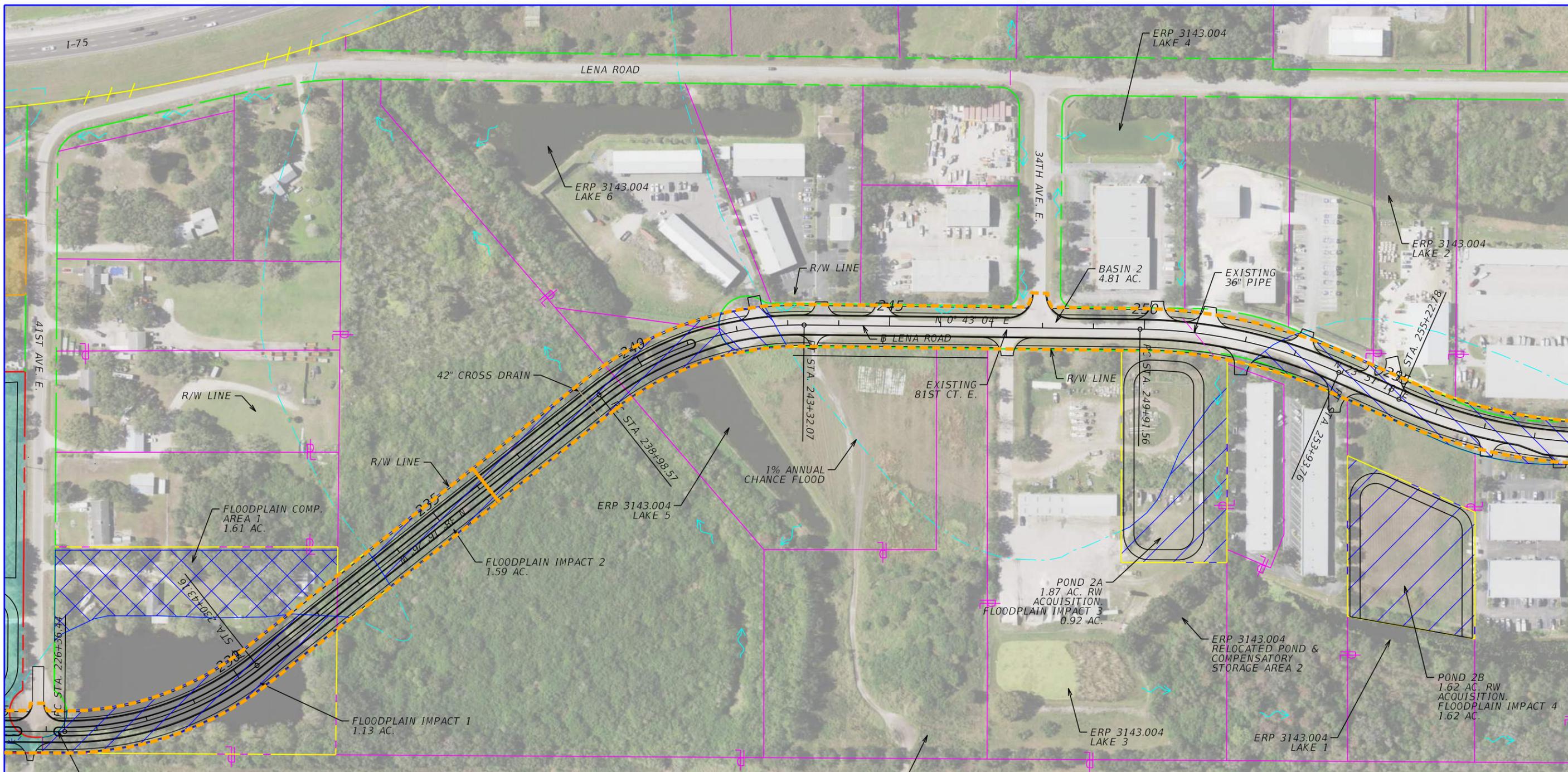
2.72-acres of impacts and 2.75-acres of compensation are proposed within the Braden River Below Ward Lake watershed. 6.08-acres of impacts and 6.22-acres of compensation are proposed within the Cypress Strand watershed.

Appendix A – Drainage Maps



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				SCALE	AS NOTED	HDR ENGINEERING, INC.		DATE	09/2021	 MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER	SCOTT ENNIS	DRAINAGE MAP (D)	SHEET NO.
				DESIGNED BY	SE	2601 CATTLEMEN ROAD, SUITE 400		PROJECT NO.	6045662		FL. LICENSE NO.	77068		
				DRAWN BY	SE	SARASOTA, FLORIDA 34232								
				CHECKED BY	BR									
No.	REVISIONS			DATE	BY			4:50:05 PM	11/9/2021		PW:\			



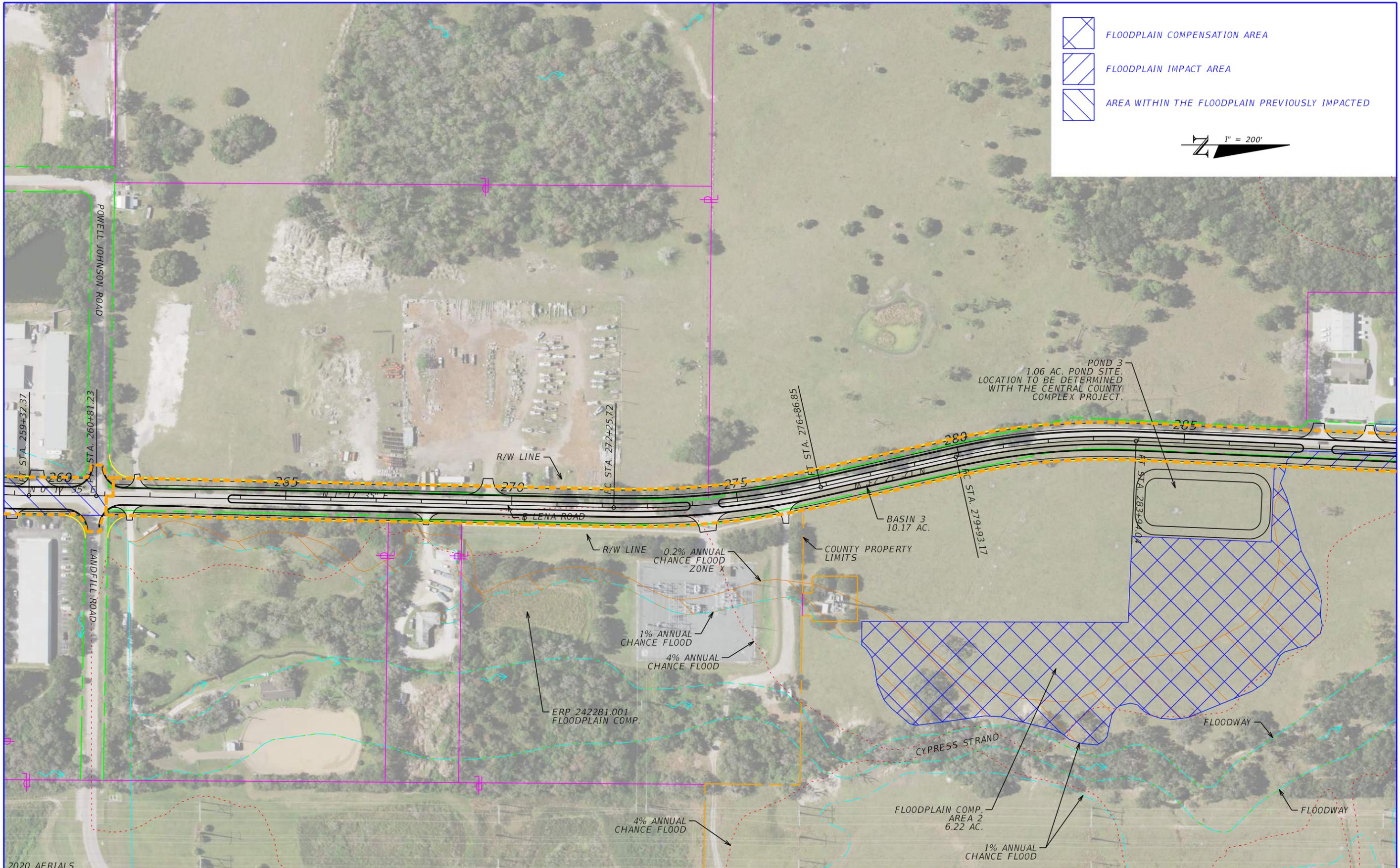
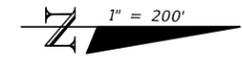
1" = 200'

FLOODPLAIN COMPENSATION AREA
 FLOODPLAIN IMPACT AREA
 AREA WITHIN THE FLOODPLAIN PREVIOUSLY IMPACTED

2020 AERIALS				SCALE AS NOTED	HDR ENGINEERING, INC. 2601 CATTLEMEN ROAD, SUITE 400 SARASOTA, FLORIDA 34232	DATE 09/2021	MANATEE COUNTY PUBLIC WORKS	DESIGN ENGINEER SCOTT ENNIS	<h2 style="margin: 0;">DRAINAGE MAP (2)</h2>	SHEET NO.
				DESIGNED BY SE	PROJECT NO. 6045662	FL. LICENSE NO. 77068				
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-  FLOODPLAIN COMPENSATION AREA
-  FLOODPLAIN IMPACT AREA
-  AREA WITHIN THE FLOODPLAIN PREVIOUSLY IMPACTED



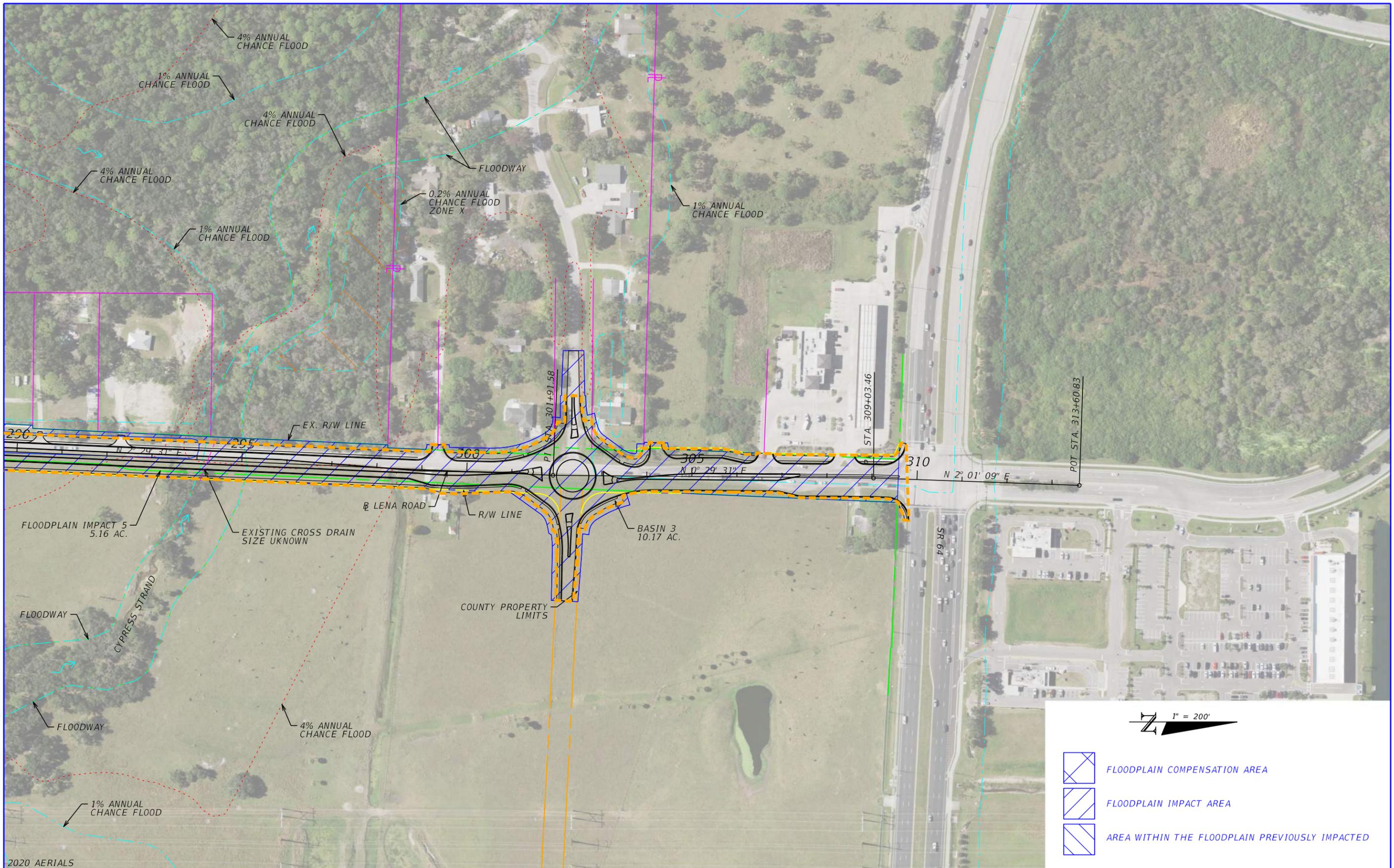
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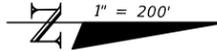


MANATEE COUNTY PUBLIC WORKS

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2020 AERIALS

 1" = 200'

-  FLOODPLAIN COMPENSATION AREA
-  FLOODPLAIN IMPACT AREA
-  AREA WITHIN THE FLOODPLAIN PREVIOUSLY IMPACTED

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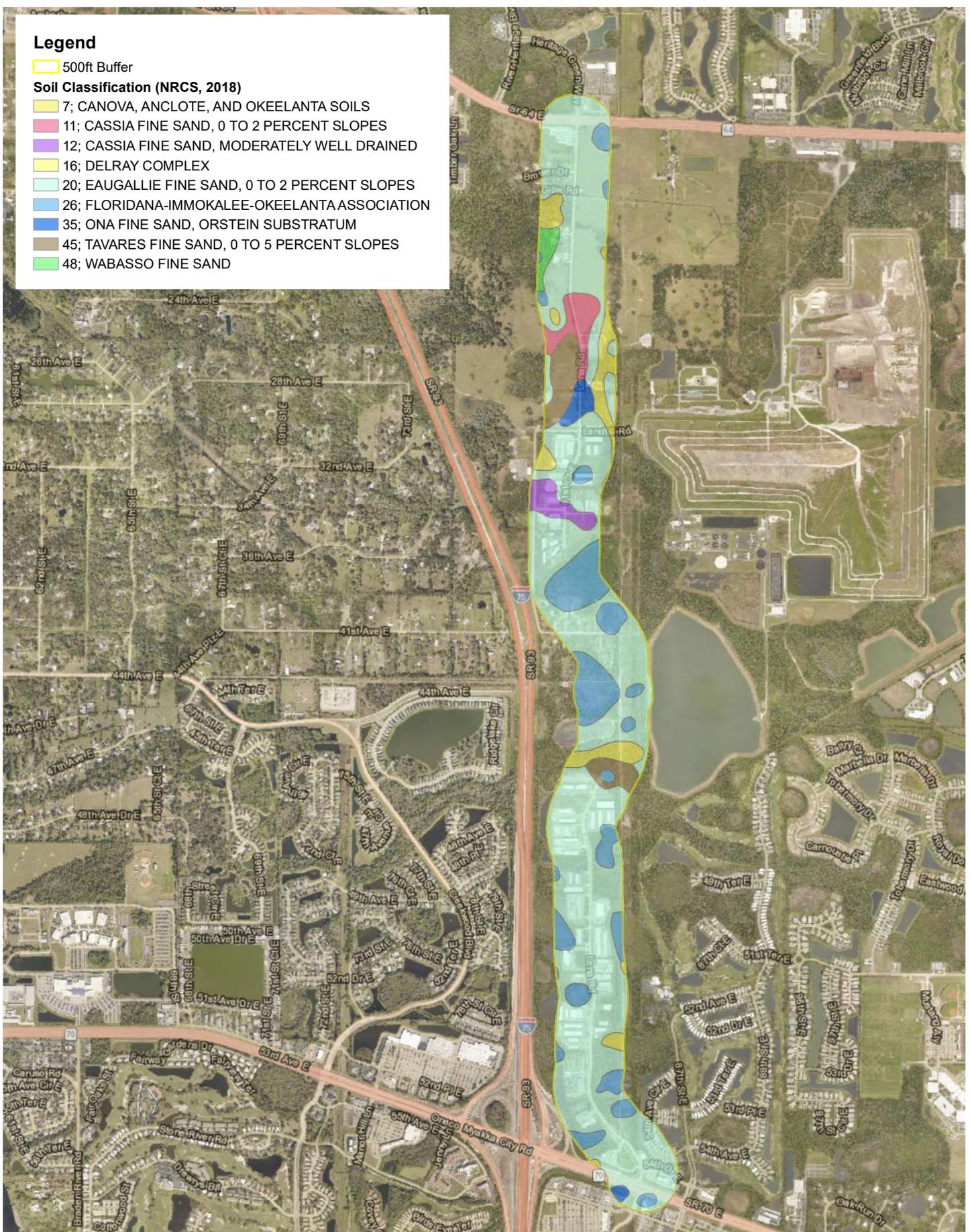
Appendix B – Soil Report and Figures

Legend

500ft Buffer

Soil Classification (NRCS, 2018)

- 7; CANOVA, ANCLOTE, AND OKEELANTA SOILS
- 11; CASSIA FINE SAND, 0 TO 2 PERCENT SLOPES
- 12; CASSIA FINE SAND, MODERATELY WELL DRAINED
- 16; DELRAY COMPLEX
- 20; EAUGALLIE FINE SAND, 0 TO 2 PERCENT SLOPES
- 26; FLORIDANA-IMMOKALEE-OKEELANTA ASSOCIATION
- 35; ONA FINE SAND, ORSTEIN SUBSTRATUM
- 45; TAVARES FINE SAND, 0 TO 5 PERCENT SLOPES
- 48; WABASSO FINE SAND



**LENA ROAD
SOILS MAP**

MANATEE COUNTY, FL

ENVIRONMENTAL ANALYSIS AND REPORTING



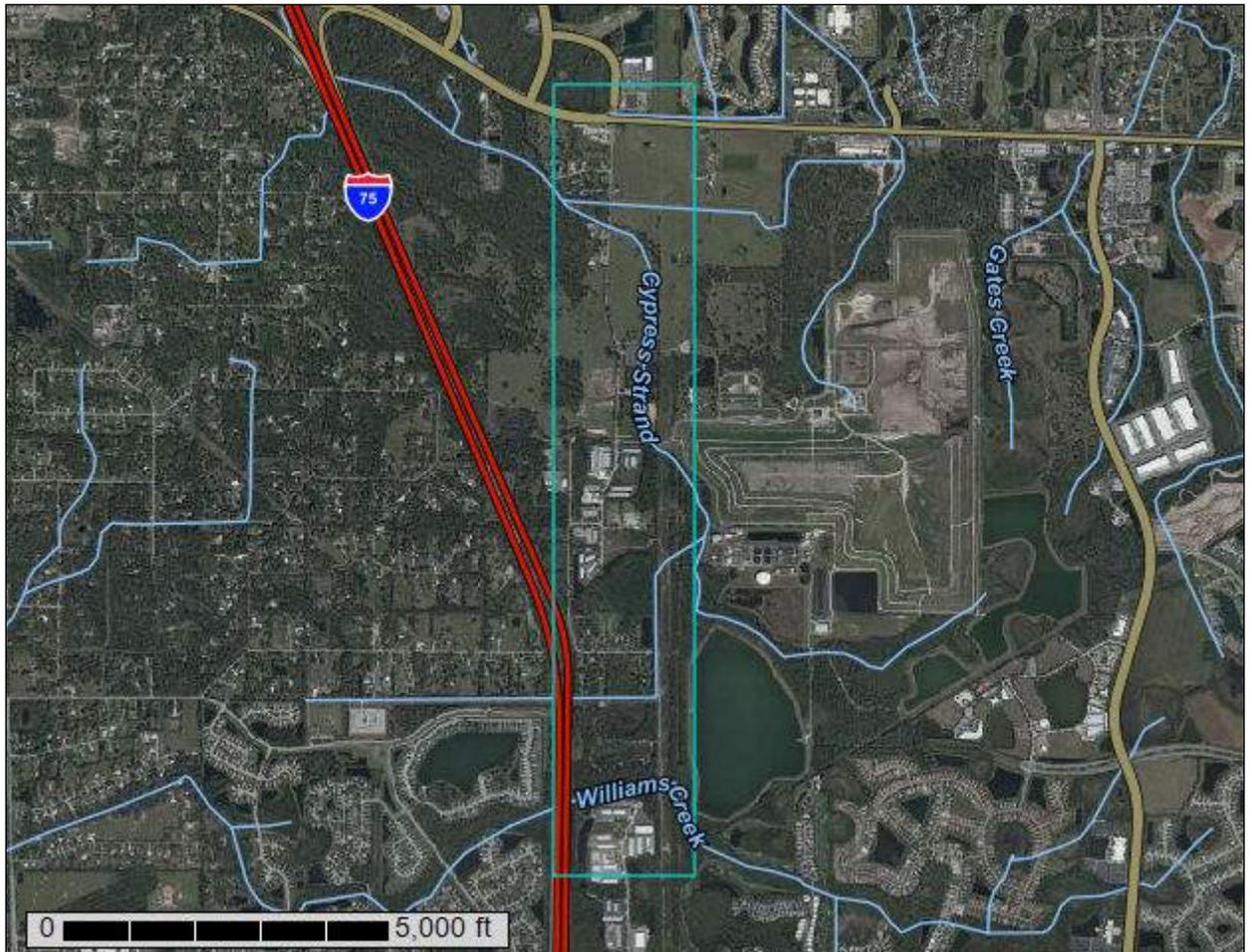
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Manatee County, Florida



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

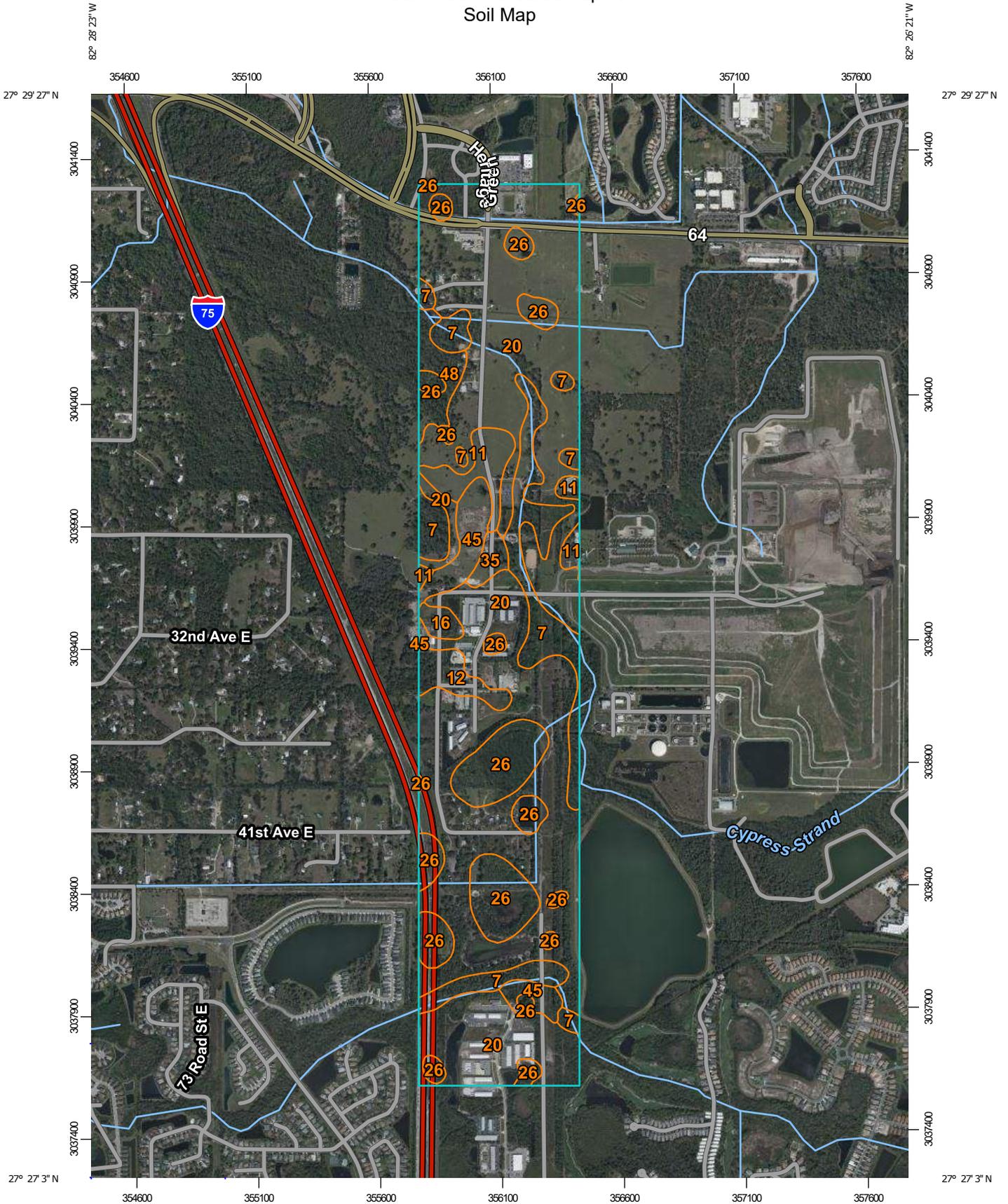
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:21,600 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Manatee County, Florida
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 5, 2020—Mar 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Canova, Anclote, and Okeelanta soils	66.1	11.0%
11	Cassia fine sand, 0 to 2 percent slopes	20.0	3.3%
12	Cassia fine sand, moderately well drained	11.7	2.0%
16	Delray complex	4.7	0.8%
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	382.4	63.6%
26	Floridana-Immokalee-Okeelanta association	77.0	12.8%
35	Ona fine sand, orstein substratum	5.3	0.9%
45	Tavares fine sand, 0 to 5 percent slopes	21.3	3.5%
48	Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes	12.8	2.1%
Totals for Area of Interest		601.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

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scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Manatee County, Florida

7—Canova, Anclote, and Okeelanta soils

Map Unit Setting

National map unit symbol: 1hg9b
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Canova and similar soils: 40 percent
Anclote and similar soils: 25 percent
Okeelanta and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canova

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy marine deposits

Typical profile

Oa - 0 to 8 inches: muck
A - 8 to 24 inches: fine sand
B/C - 24 to 68 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains
(G155XB645FL)

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Other vegetative classification: Organic soils in depressions and on flood plains
(G155XB645FL)
Hydric soil rating: Yes

Description of Anclote

Setting

Landform: Drainageways on marine terraces, depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 16 inches: fine sand
Cg2 - 16 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Description of Okeelanta

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Herbaceous organic material over sandy marine deposits

Typical profile

Oa - 0 to 20 inches: muck
C - 20 to 54 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained

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Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains (G155XB645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL)
Hydric soil rating: Yes

Minor Components

Manatee

Percent of map unit: 5 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Chobee

Percent of map unit: 5 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)
Hydric soil rating: Yes

Floridana

Percent of map unit: 5 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

11—Cassia fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tzx6

Elevation: 0 to 110 feet

Mean annual precipitation: 42 to 63 inches

Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Cassia and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cassia

Setting

Landform: Rises on flatwoods on marine terraces, knolls on flatwoods on marine terraces

Landform position (three-dimensional): Tread, rise, talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand

E - 5 to 26 inches: fine sand

Bh - 26 to 42 inches: fine sand

C - 42 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: About 18 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

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Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G155XB131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Minor Components

Myakka

Percent of map unit: 7 percent
Landform: Drainageways on flatwoods on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear
Across-slope shape: Linear, concave
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Pomello

Percent of map unit: 6 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: R155XY001FL - Sand Pine Scrub
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Satellite

Percent of map unit: 4 percent
Landform: Flatwoods on marine terraces, rises on marine terraces
Landform position (three-dimensional): Tread, talf, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Jonathan

Percent of map unit: 3 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, tread, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Hydric soil rating: No

12—Cassia fine sand, moderately well drained

Map Unit Setting

National map unit symbol: 1hg7q
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Cassia, moderately well drained, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cassia, Moderately Well Drained

Setting

Landform: Rises on marine terraces
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 29 inches: fine sand
Bh - 29 to 41 inches: fine sand
C - 41 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

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Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Minor Components

Pomello

Percent of map unit: 10 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

16—Delray complex

Map Unit Setting

National map unit symbol: 1hg7v
Elevation: 10 to 60 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Delray and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delray

Setting

Landform: Flats on marine terraces, drainageways on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear, concave
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 15 inches: fine sand
E - 15 to 55 inches: fine sand
Btg - 55 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Minor Components

Floridana, depressional

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on stream terraces, flood
plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds
(R155XY010FL)

Hydric soil rating: Yes

Gator

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Organic soils in depressions and on flood plains
(G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Felda, hydric

Percent of map unit: 5 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic
lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Anclote

Percent of map unit: 5 percent

Landform: Drainageways on marine terraces, depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear, concave

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Across-slope shape: Concave

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

Hydric soil rating: Yes

Ona, non-hydric

Percent of map unit: 5 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

20—EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2y9gx

Elevation: 10 to 150 feet

Mean annual precipitation: 45 to 61 inches

Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 335 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Eaugallie and similar soils: 70 percent

Eaugallie, wet, and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of EauGallie

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

E - 6 to 23 inches: fine sand

Bh - 23 to 47 inches: fine sand

Bw - 47 to 55 inches: fine sand

Btg - 55 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Custom Soil Resource Report

Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: R155XY003FL - South Florida Flatwoods
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Description of Eaugallie, Wet

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 17 inches: fine sand
Bh - 17 to 26 inches: fine sand
Bw - 26 to 48 inches: fine sand
E'g - 48 to 72 inches: fine sand
Btg - 72 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 3 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: R155XY003FL - South Florida Flatwoods

Custom Soil Resource Report

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Wabasso

Percent of map unit: 6 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Delray

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, convex, linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Pinellas

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Cabbage Palm Flatwoods (R155XY005FL)

Hydric soil rating: No

Myakka

Percent of map unit: 2 percent

Landform: Drainageways on flatwoods on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Riviera

Percent of map unit: 1 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

26—Floridana-Immokalee-Okeelanta association

Map Unit Setting

National map unit symbol: 1hg86

Elevation: 0 to 150 feet

Mean annual precipitation: 48 to 56 inches

Mean annual air temperature: 68 to 75 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Floridana, depressional, and similar soils: 35 percent

Immokalee and similar soils: 30 percent

Okeelanta and similar soils: 20 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Floridana, Depressional

Setting

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 19 inches: fine sand

E - 19 to 36 inches: fine sand

Btg - 36 to 63 inches: sandy clay loam

Cg - 63 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Custom Soil Resource Report

Hydrologic Soil Group: C/D

Forage suitability group: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL)

Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Description of Immokalee

Setting

Landform: Depressions on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 10 inches: fine sand

E - 10 to 34 inches: fine sand

Bh - 34 to 43 inches: fine sand

C - 43 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Description of Okeelanta

Setting

Landform: Depressions on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Parent material: Herbaceous organic material over sandy marine deposits

Custom Soil Resource Report

Typical profile

Oa - 0 to 20 inches: muck
C - 20 to 54 inches: sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Organic soils in depressions and on flood plains (G155XB645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Minor Components

Delray

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Anclote

Percent of map unit: 3 percent
Landform: Drainageways on marine terraces, depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Chobee

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave

Custom Soil Resource Report

Across-slope shape: Concave

Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

Hydric soil rating: Yes

Pomona, non-hydric

Percent of map unit: 2 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Manatee

Percent of map unit: 2 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Myakka, non-hydric

Percent of map unit: 2 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

35—Ona fine sand, orstein substratum

Map Unit Setting

National map unit symbol: 1hg8j

Elevation: 20 to 150 feet

Mean annual precipitation: 48 to 56 inches

Mean annual air temperature: 68 to 75 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Ona, non-hydric, and similar soils: 70 percent

Custom Soil Resource Report

Ona, hydric, and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ona, Non-hydric

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand

Bh - 5 to 16 inches: fine sand

E - 16 to 52 inches: fine sand

B'h1 - 52 to 68 inches: fine sand

B'h2 - 68 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Description of Ona, Hydric

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand

Bh - 5 to 16 inches: fine sand

E - 16 to 52 inches: fine sand

Custom Soil Resource Report

B'h1 - 52 to 68 inches: fine sand

B'h2 - 68 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Myakka, non-hydric

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

St. Johns, non-hydric

Percent of map unit: 4 percent

Landform: Seeps on marine terraces

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Wauchula, non-hydric

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), South Florida Flatwoods (R155XY003FL)

Custom Soil Resource Report

Hydric soil rating: No

Waveland, non-hydric

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

45—Tavares fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2sw00

Elevation: 0 to 130 feet

Mean annual precipitation: 42 to 63 inches

Mean annual air temperature: 66 to 77 degrees F

Frost-free period: 340 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Tavares and similar soils: 83 percent

Minor components: 17 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares

Setting

Landform: Flats on marine terraces, hills on marine terraces, ridges on marine terraces, knolls on marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, side slope, tread, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear, convex

Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

C - 6 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: About 18 to 42 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Minor Components

Cassia

Percent of map unit: 5 percent
Landform: Rises on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Pomello

Percent of map unit: 4 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: R155XY001FL - Sand Pine Scrub
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Apopka

Percent of map unit: 3 percent
Landform: Hills on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Astatula

Percent of map unit: 3 percent
Landform: Hills on marine terraces, ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope

Custom Soil Resource Report

Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands
(G155XB111FL)
Hydric soil rating: No

Adamsville

Percent of map unit: 2 percent
Landform: Rises on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G155XB131FL), Upland Hardwood Hammock (R155XY008FL)
Hydric soil rating: No

48—Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2y9dx
Elevation: 0 to 150 feet
Mean annual precipitation: 43 to 60 inches
Mean annual air temperature: 68 to 77 degrees F
Frost-free period: 335 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Wabasso and similar soils: 70 percent
Wabasso, wet, and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wabasso

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 24 inches: fine sand
Bh - 24 to 35 inches: fine sand
Bw - 35 to 39 inches: fine sand
Btg - 39 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent

Custom Soil Resource Report

Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Description of Wabasso, Wet

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 24 inches: fine sand
Bh - 24 to 35 inches: fine sand
Bw - 35 to 39 inches: fine sand
Btg - 39 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 3 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w

Custom Soil Resource Report

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: Yes

Minor Components

Eaugallie

Percent of map unit: 5 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Malabar

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Riviera

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic
lowlands (G155XB241FL), Slough (R155XY011FL)

Hydric soil rating: Yes

Aripeka

Percent of map unit: 2 percent

Landform: Rises on karstic marine terraces

Landform position (three-dimensional): Tread, rise

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Shallow or moderately deep, sandy or loamy soils
on rises and ridges of mesic uplands (G155XB521FL), Wetland Hardwood
Hammock (R155XY012FL)

Hydric soil rating: No

Basinger

Percent of map unit: 1 percent

Landform: Depressions on flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Custom Soil Resource Report

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Paisley

Percent of map unit: 1 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Wetland Hardwood Hammock (R155XY012FL),
Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL)

Hydric soil rating: Yes

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

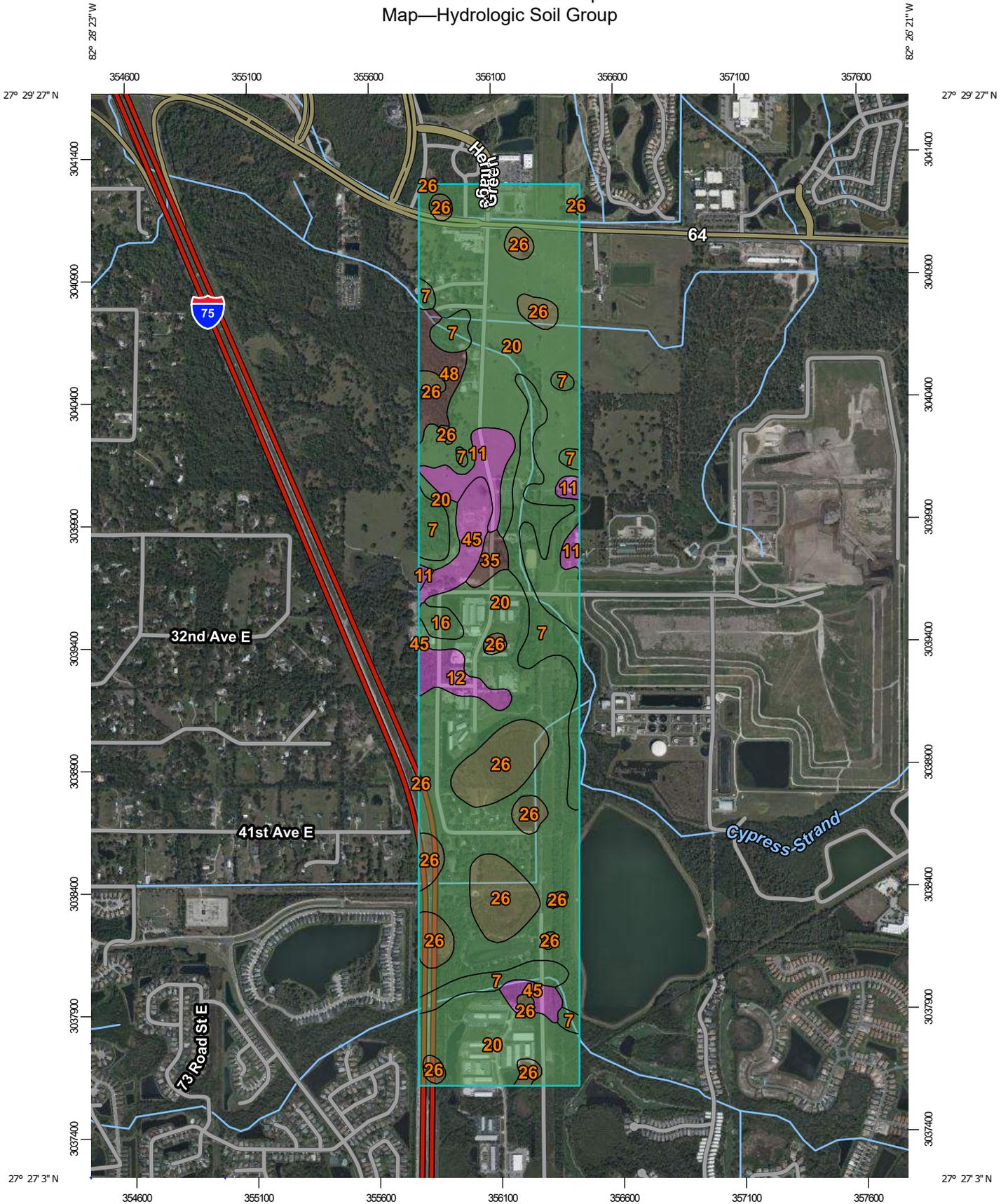
Custom Soil Resource Report

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report Map—Hydrologic Soil Group



Map Scale: 1:21,600 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D

C

C/D

D

Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Manatee County, Florida
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 5, 2020—Mar 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7	Canova, Anclote, and Okeelanta soils	A/D	66.1	11.0%
11	Cassia fine sand, 0 to 2 percent slopes	A	20.0	3.3%
12	Cassia fine sand, moderately well drained	A	11.7	2.0%
16	Delray complex	A/D	4.7	0.8%
20	EauGallie-EauGallie wet, fine sand, 0 to 2 percent slopes	A/D	382.4	63.6%
26	Floridana-Immokalee-Okeelanta association	C/D	77.0	12.8%
35	Ona fine sand, orstein substratum	B/D	5.3	0.9%
45	Tavares fine sand, 0 to 5 percent slopes	A	21.3	3.5%
48	Wabasso-Wabasso, wet, fine sand, 0 to 2 percent slopes	B/D	12.8	2.1%
Totals for Area of Interest			601.4	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix C – FEMA FIRMs and FIS Excerpts

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be identified for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations files contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that the BFEs shown on the FIRM represent modeled, shallow-water elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood hazard information. Accordingly, flood insurance data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only seaward of 417 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for the jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway width and other pertinent floodway data are provided in the Flood Insurance Study report for the jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for the jurisdiction.

The projection used in the preparation of this map was Florida State Plane west zone (FIPSZONE 0502). The horizontal datum was NAD83, GRS1980 approved. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. The information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
 NOAA NA25212
 National Geodetic Survey
 5500-3, #0202
 1315 East-West Highway
 Silver Spring, MD 20910-3302

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov/>.

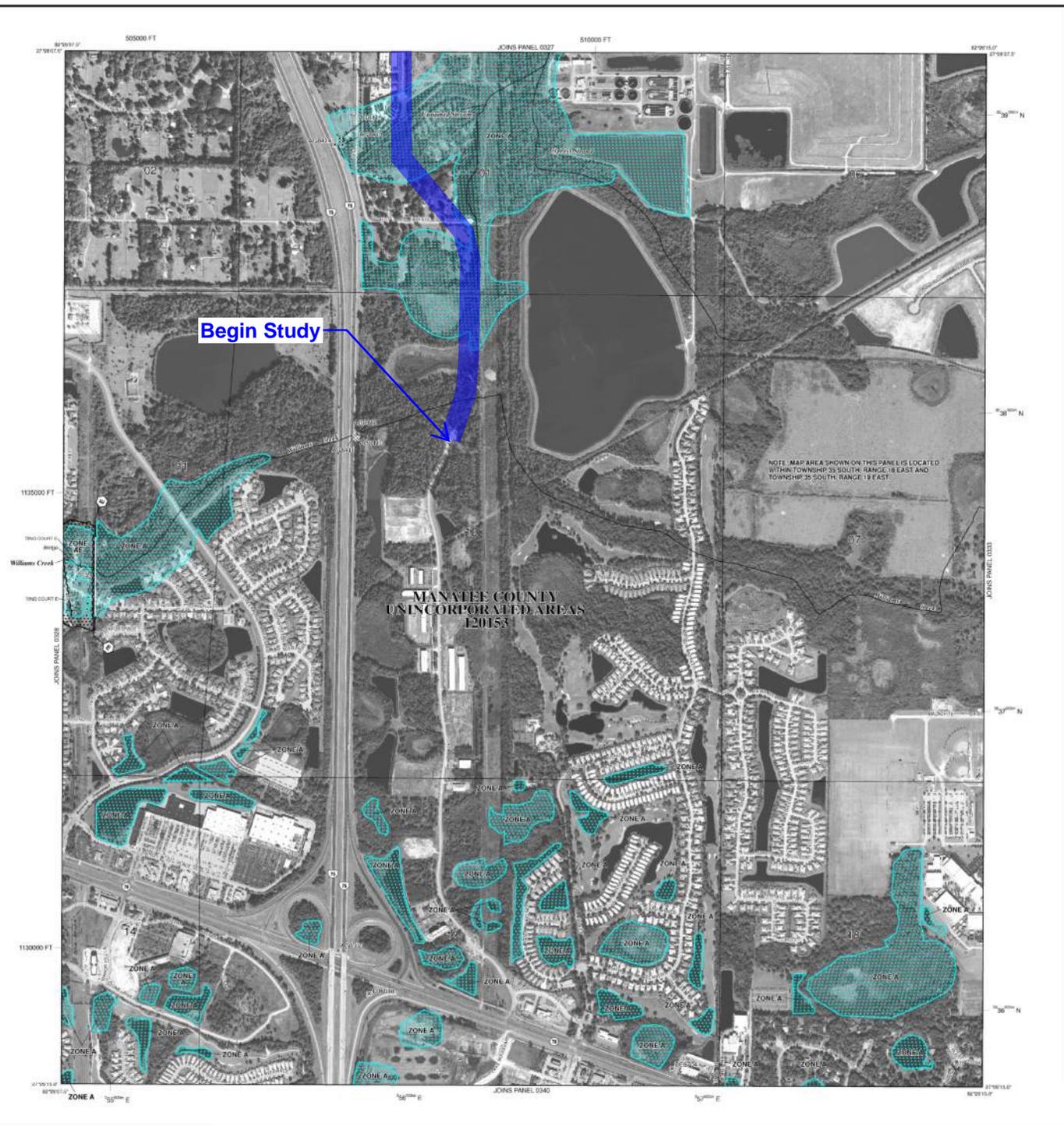
Base map orthorectification was obtained from Southeast Florida Water Management District (SEFWMD) from one-foot resolution digital orthorectified files in 2008 and 2009. Vector base map data was provided by Manatee County and SWFWMD. Vector information was compiled in 2003 - 2009 by Manatee County GIS department. The map may reflect more detailed or up to date stream channel configurations than those shown on the previous FIRM. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations and improved topographic data. The profile boundaries depicted on this map represent the hydraulic modeling boundaries that match the flood profiles and floodway data tables if applicable in the FIS report. As a result, the profile boundaries may deviate significantly from the new base map channel representation and may appear outside of the floodplain.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or dis-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities with National Flood Insurance Program status for each community as well as a listing of the panels on which each community is located.

For information and questions about this map, available products associated with this FIRM including historic versions of the FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information exchange at 1-877-FEMA-MAP (1-877-252-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information exchange.

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LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevations determined. Average depths determined for areas of shallow fast flooding, velocities also determined.

ZONE A99 Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was substantially destroyed. A flood control system that the flood control system is being retained to provide protection from the 1% annual chance flood or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage area less than 1 square mile, and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPA)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
 0.2% annual chance floodplain boundary
 Floodway boundary
 Zone A boundary
 Zone AE boundary
 CBRS and OPA boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
 Base Flood Elevation line and value; elevation in feet
 (ft. 5.07)
 Base Flood Elevation value when uniform within uniform elevation in feet

Referenced to the North American Vertical Datum of 1988 (NAVD 88)

1:1000
 1:2000
 1:5000
 1:10000
 1:20000
 1:50000
 1:100000
 1:200000
 1:500000
 1:1000000

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
 1000-meter Universal Transverse Mercator grid data, zone 17
 1000-foot grid data, Florida State Plane coordinate system, west zone (FIPSZONE 0502), Transverse Mercator

Bench mark (see explanation in Notes to Users section of this FIRM panel)

MT.5
 River Mile

MAP REPOSITORIES
 Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COMMERCIAL FLOOD INSURANCE RATE MAP
 March 17, 2014
 EFFECTIVE DATES OF REVISIONS TO THIS PANEL

For community map revision history prior to computerized mapping, refer to the Community Map History table located in the Flood Insurance Study report for the jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-9643.

MAP SCALE 1" = 500'
 0 500 1000 1500 2000
 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0329E

FIRM FLOOD INSURANCE RATE MAP

MANATEE COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 329 OF 575
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY: 12061C0329E
 COMPLEX: 12061C0329E
 NUMBER: 12061C0329E
 MANATEE COUNTY

MAP NUMBER 12061C0329E
 EFFECTIVE DATE MARCH 17, 2014
 Federal Emergency Management Agency

Notes to User: This Map Number should be used when referring to the Community Map Index above should be used on insurance applications for the subject community.

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible special or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **footcreeks** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations files contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that the BFEs shown on the FIRM represent modeled water-bench elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood hazard information. Accordingly, flood insurance data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to seaward of 1/2 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations file in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations file should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **footcreeks** were computed at cross sections and interpolated between cross sections. The footcreeks were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway width and other pertinent floodway data are provided in the Flood Insurance Study report for the jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was the Florida State Plane west zone 17-PROJZONE 0002. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. The information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
 NOAA/NAN5512
 National Geodetic Survey
 5500-3, #0202
 1315 East-West Highway
 Silver Spring, MD 20910-3202

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Flow map hydrotopography was obtained from Southeast Florida Water Management District (SEFWMD) from one-foot resolution digital orthophotography from 2008 and 2009. Vector base map data was provided by Manatee County and SWFWMD. Vector information was compiled in 2003 - 2009 by Manatee County GIS department. This map may reflect more detailed or up to date stream channel configurations than those shown on the previous FIRM. The footcreeks and footcreeks that were transferred from the previous FIRM may have been adjusted to conform to the new stream channel configurations and improved topographic data. The profile footcreeks depicted on this map represent the hydraulic modeling baselines that match the flood profiles and Floodway Data Tables if applicable in the FIS report. As a result, the profile baselines may deviate significantly from the new base map channel representation and may appear outside of the footcreek.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should consult appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of communities with containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information and questions about this map, available products associated with this FIRM including historic versions of the FIRM, how to order products or the National Flood Insurance Program in general, please call the FIRM Map Information Exchange at 1-877-FEMA-MAAP (1-877-256-2827) or visit the FEMA Map Service Center website at <http://maps.fema.gov>. Available products may include previously issued letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information Exchange.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6625.

For community map revision history prior to countywide mappings, refer to the Community Map History file located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6625.

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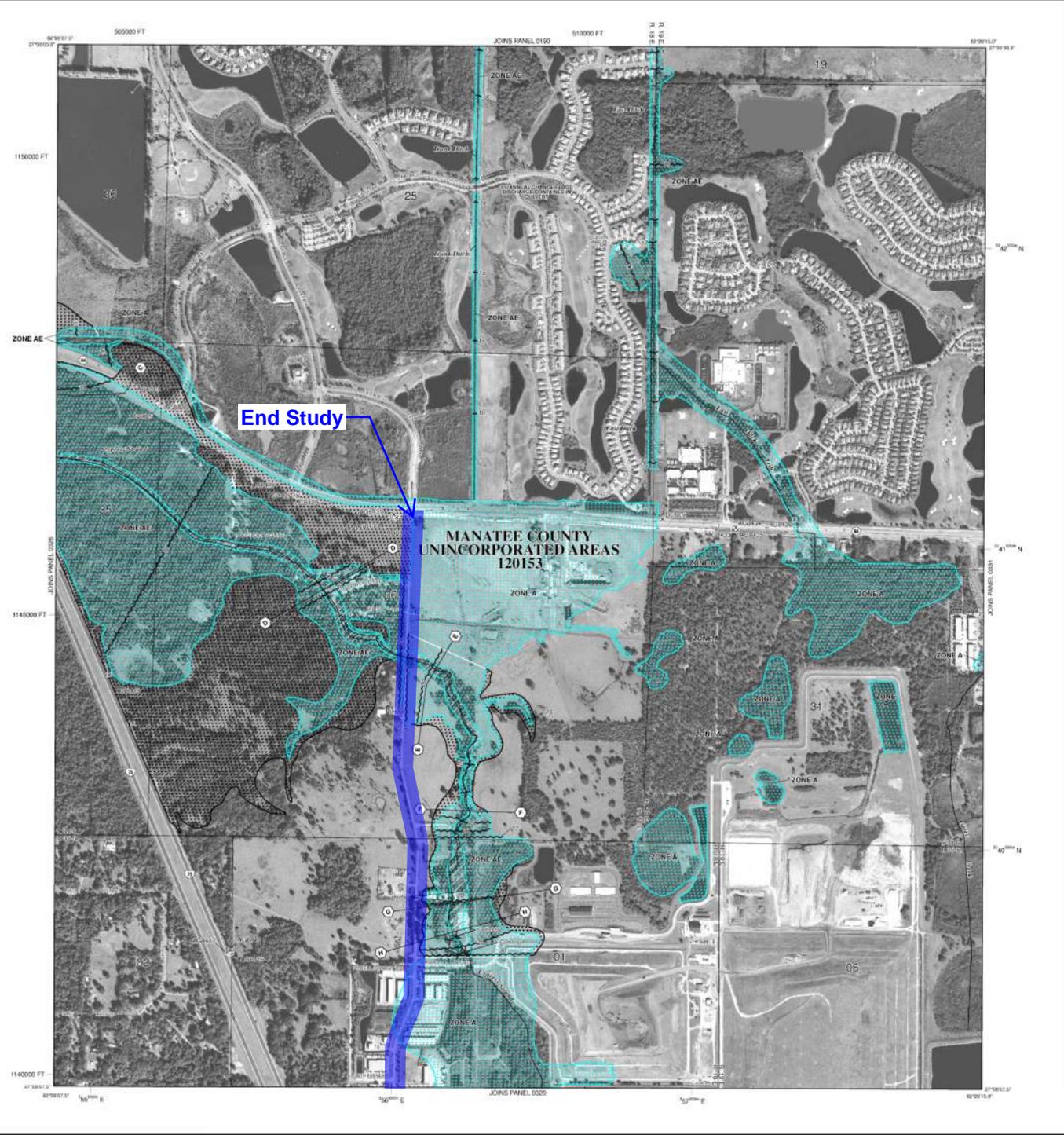
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LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INSURANCE BY THE ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AD, AA, AV, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A
 No Base Flood Elevations determined.

ZONE AE
 Base Flood Elevations determined.

ZONE AH
 Base Flood Elevations determined. Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevations determined.

ZONE AD
 Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevations determined. Areas of elevated fast flooding, velocities also determined.

ZONE AA
 Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was inadequately designed, designed for protection from a flood control system is being retained to provide protection from the 1% annual chance or greater flood.

ZONE AV
 Area to be protected from 1% annual chance flood by a Federal Flood protection system under construction; no Base Flood Elevations determined.

ZONE VE
 Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE V
 Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The footcreek is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial expense in flood heights.

OTHER FLOOD AREAS

ZONE S
 Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot and with drainage area less than 100 square miles, and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X
 Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D
 Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
 0.2% annual chance floodplain boundary
 Footcreek boundary
 Zone D boundary
 CBRS and OPA boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, Flood depths or flood velocities.
 Base Flood Elevation line and value; elevation in feet
 Base Flood Elevation value when within water within elevation in feet

Referenced to the North American Vertical Datum of 1988 (NAVD 88)

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
 1000-meter Universal Transverse Mercator grid data, zone 17
 5000-foot grid data, Florida State Plane coordinate system, west zone 17 (PROJZONE 0002), Transverse Mercator

Bench mark (see explanation in Notes to Users section of this FIRM panel)

MT.5
 River Mile

Refer to Map Repository for on Map Index

EFFECTIVE DATE OF CORRECTIVE FLOOD INSURANCE RATE MAP
 MARCH 17, 2014
 EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mappings, refer to the Community Map History file located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6625.

MAP SCALE 1" = 500'
 0 500 1000
 FEET
 0 150 300
 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0327E

FIRM
FLOOD INSURANCE RATE MAP
MANATEE COUNTY,
FLORIDA
AND INCORPORATED AREAS

PANEL 327 OF 575
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

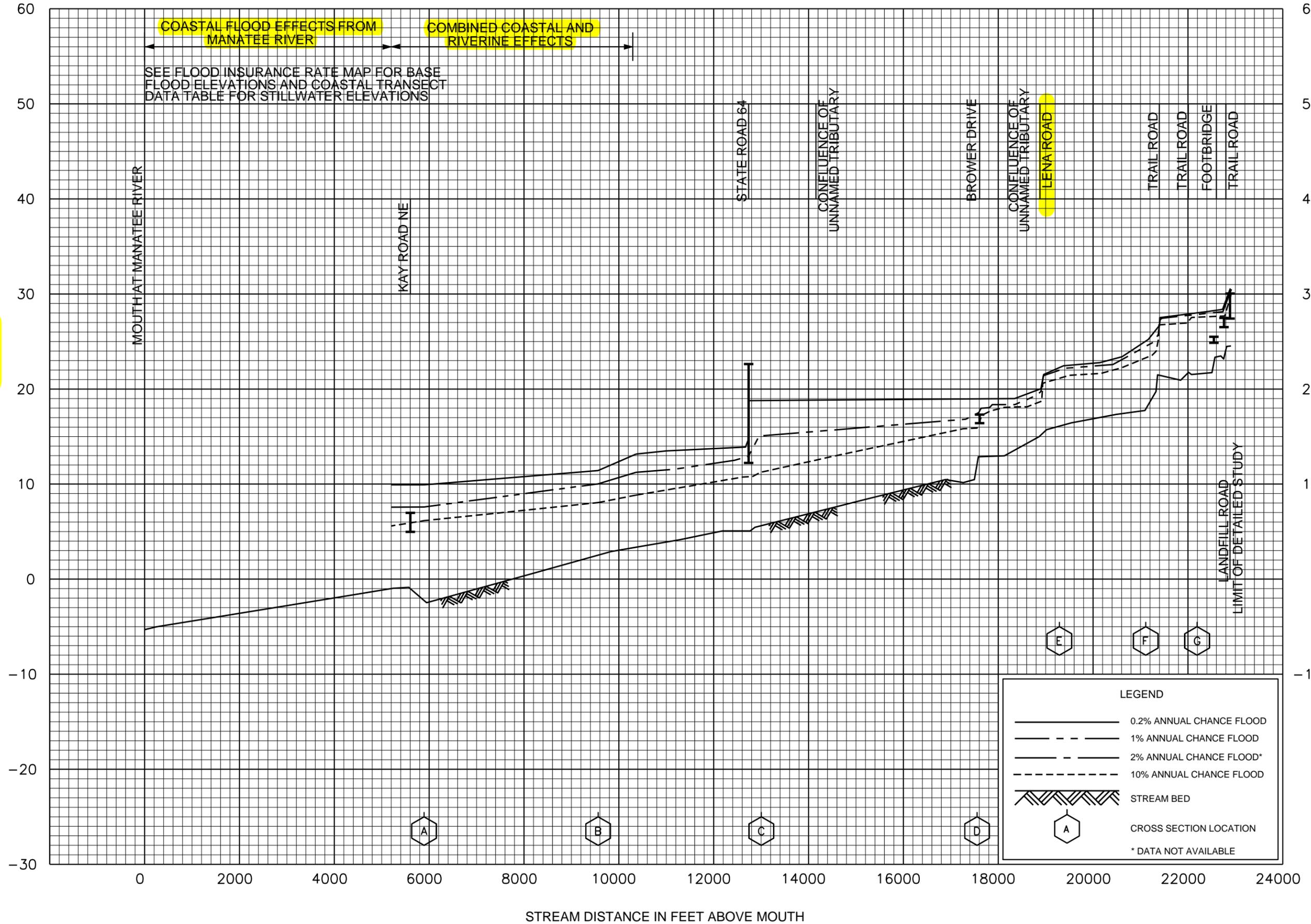
CONTAINS:
 COMMUNITY NUMBER PANEL SUPPL
 MANATEE COUNTY 120153 0327 E

Notice to User: The Map Number shown below should be used when making referrals to the Community Map History file located in the Flood Insurance Study report for this jurisdiction. Above should be used on insurance applications for the subject community.

MAP NUMBER 12061C0327E
EFFECTIVE DATE MARCH 17, 2014

Federal Emergency Management Agency

ELEVATION IN FEET (NAVD 88)



FLOOD PROFILES

CYPRESS STRAND

FEDERAL EMERGENCY MANAGEMENT AGENCY

MANATEE COUNTY, FL

AND INCORPORATED AREAS

Appendix D – Preliminary Pond Sizing

Basin 1 Stormwater Analysis

Existing CN

	Soil Type	CN	C	Area	
Open Space (Good)	D	80	0.20	0.46	
Impervious	-	98	0.95	0.20	
Drt Road	D	89	0.95	0.06	
Woods/ Forest (Good)	D	77	0.20	7.03	
Wetlands (Woods Poor)	D	93	0.20	4.02	
Water	-	100	1.00	0.84	
Total				12.61	ac.
			CN	84.1	
			C	0.27	

25-year, 24-hour rainfall, P = 8.72 in *NOAA Atlas 14*
 Soil Storage, S = 1.89 in *FDOT Drainage Design Guide Section 2.2.4.2*
 25-year, 24-hour runoff = 6.80 in
 25-year, 24-hour runoff volume = 7.15 ac-ft

Proposed CN and Runoff Coefficient

	Soil Type	CN	C	Area	
Impervious	-	98	0.95	10.43	
Pond Surface	-	100	1.00	1.64	
Open Space (Good)	A/D	80	0.20	5.69	
Total				17.76	ac.
			CN	92.4	
			C	0.71	

25-year, 24-hour rainfall, P = 8.72 in *NOAA Atlas 14*
 Soil Storage, S = 0.82 in *FDOT Drainage Design Guide Section 2.2.4.2*
 25-year, 24-hour runoff = 7.81 in
 25-year, 24-hour runoff volume = 11.55 ac-ft

Basin 1 Stormwater Analysis

Required Treatment Volume (Wet Detention)

Min. Water Quality Treatment Volume (1" of Runoff)

SWFWMD App. Handbook Vol. II, Section 4.1

$$TV = \text{Basin Area} \times 1.0" \times (1' / 12")$$

$$TV = 1.48 \text{ ac-ft}$$

Required Attenuation Volume

Required attenuation volume = proposed 25-year, 24-hour runoff - existing 25-year, 24-hour runoff

$$\text{Required attenuation volume} = 4.40 \text{ ac-ft}$$

Required Pond Volume

Required pond volume = required attenuation volume + required treatment volume

$$\text{Required pond volume} = 5.88 \text{ ac-ft}$$

Proposed Pond 2 (Wet Detention)

$$\text{Top of bank} = 32.00 \text{ ft}$$

SMF 12 top of bank per 44th Avenue East design

$$\text{Normal water elevation} = 27.74 \text{ ft}$$

Survey wetland water level

Max allowable peak stage = top of bank - 1' of freeboard

$$\text{Max allowable peak stage} = 31 \text{ ft}$$

Treatment depth + attenuation depth = Max allowable peak stage - normal water elevation

$$\text{Treatment depth + attenuation depth} = 3.26 \text{ ft}$$

Cubed pond footprint = required pond volume / (treatment depth + attenuation depth)

$$\text{Cubed pond footprint} = 1.81 \text{ ac}$$

$$\text{Cubed side length} = 280 \text{ ft}$$

$$\text{Bank length at NWL} = 267 \text{ ft}$$

$$\text{Area at NWL} = 1.64 \text{ ac}$$

$$\text{Bank length at design high water} = 293 \text{ ft}$$

$$\text{Area at design high water} = 1.98 \text{ ac}$$

$$\text{Top of bank length} = 314 \text{ ft}$$

$$\text{Maintenance berm width} = 20 \text{ ft}$$

$$\text{Back of maintenance berm length} = 354 \text{ ft}$$

$$\text{Back of maintenance berm area} = 2.88 \text{ ac}$$

$$\text{Factor of safety} = 5\%$$

$$\text{Back of maintenance berm area} = 3.03 \text{ ac}$$

$$\text{Back of maintenance berm length} = 363 \text{ ft}$$

Pond site length = Back of maintenance berm length + 5' on each side

$$\text{Pond site length} = 373 \text{ ft}$$

$$\text{Minimum pond site area} = 3.20 \text{ ac}$$

Pond 2A Stormwater Analysis

Existing CN

	Soil Type	CN	C	Area
Impervious	-	98	0.95	1.46
Open Space (Good)	A/D	80	0.20	4.81
Total				6.27

ac.

CN 84.2
C 0.37

25-year, 24-hour rainfall, P = 8.72 in
 Soil Storage, S = 1.88 in
 25-year, 24-hour runoff = 6.81 in
 25-year, 24-hour runoff volume = 3.56 ac-ft

NOAA Atlas 14
FDOT Drainage Design Guide Section 2.2.4.2

Proposed CN and Runoff Coefficient

	Soil Type	CN	C	Area
Impervious	-	98	0.95	3.50
Pond Surface	-	100	1.00	0.27
Open Space (Good)	A/D	80	0.20	2.50
Total				6.27

ac.

CN 90.9
C 0.65

25-year, 24-hour rainfall, P = 8.72 in
 Soil Storage, S = 1.00 in
 25-year, 24-hour runoff = 7.63 in
 25-year, 24-hour runoff volume = 3.98 ac-ft

NOAA Atlas 14
FDOT Drainage Design Guide Section 2.2.4.2

Pond 2A Stormwater Analysis

Required Treatment Volume (Wet Detention)

Min. Water Quality Treatment Volume (1" of Runoff)

SWFWMD App. Handbook Vol. II, Section 4.1

$$TV = \text{Basin Area} \times 1.0" \times (1' / 12")$$

$$TV = 0.52 \text{ ac-ft}$$

Required Attenuation Volume

Required attenuation volume = proposed 25-year, 24-hour runoff - existing 25-year, 24-hour runoff

$$\text{Required attenuation volume} = 0.42 \text{ ac-ft}$$

Required Pond Volume

Required pond volume = required attenuation volume + required treatment volume

$$\text{Required pond volume} = 0.95 \text{ ac-ft}$$

Proposed Pond 4A (Wet Detention)

$$\text{Top of bank} = 34.65 \text{ ft}$$

per ERP 3143.004 as-builts, Lake 3

$$\text{Normal water elevation} = 30.75 \text{ ft}$$

per ERP 3143.004 as-builts, Lake 3

Max allowable peak stage = top of bank - 1' of freeboard

$$\text{Max allowable peak stage} = 33.65 \text{ ft}$$

Treatment depth + attenuation depth = Max allowable peak stage - normal water elevation

$$\text{Treatment depth} + \text{attenuation depth} = 2.9 \text{ ft}$$

Cubed pond footprint = required pond volume / (treatment depth + attenuation depth)

$$\text{Cubed pond footprint} = 0.33 \text{ ac}$$

$$\text{Cubed side length} = 119 \text{ ft}$$

$$\text{Bank length at NWL} = 108 \text{ ft}$$

$$\text{Area at NWL} = 0.27 \text{ ac}$$

$$\text{Bank length at design high water} = 131 \text{ ft}$$

$$\text{Area at design high water} = 0.39 \text{ ac}$$

$$\text{Top of bank length} = 150 \text{ ft}$$

$$\text{Maintenance berm width} = 20 \text{ ft}$$

$$\text{Back of maintenance berm length} = 190 \text{ ft}$$

$$\text{Back of maintenance berm area} = 0.83 \text{ ac}$$

$$\text{Factor of safety} = 5\%$$

$$\text{Back of maintenance berm area} = 0.87 \text{ ac}$$

$$\text{Impact to Lake 5 (ERP 3143.004)} = 0.47 \text{ ac}$$

$$\text{Total back of maintenance berm area} = 1.34 \text{ ac}$$

$$\text{Back of maintenance berm length} = 242 \text{ ft}$$

Pond site length = Back of maintenance berm length + 5' on each side

$$\text{Pond site length} = 252 \text{ ft}$$

$$\text{Minimum pond site area} = 1.46 \text{ ac}$$

Pond 2B Stormwater Analysis

Required Treatment Volume (Wet Detention)

Min. Water Quality Treatment Volume (1" of Runoff)

SWFWMD App. Handbook Vol. II, Section 4.1

$$TV = \text{Basin Area} \times 1.0" \times (1 \frac{1}{12}')$$

$$TV = 0.54 \text{ ac-ft}$$

Required Attenuation Volume

Required attenuation volume = proposed 25-year, 24-hour runoff - existing 25-year, 24-hour runoff

$$\text{Required attenuation volume} = 0.45 \text{ ac-ft}$$

Required Pond Volume

Required pond volume = required attenuation volume + required treatment volume

$$\text{Required pond volume} = 0.99 \text{ ac-ft}$$

Proposed Pond 4B (Wet Detention)

$$\text{Top of bank} = 33.14 \text{ ft}$$

per ERP 3143.004 as-builts, Lake 1

$$\text{Normal water elevation} = 29.95 \text{ ft}$$

per ERP 3143.004 as-builts, Lake 1

Max allowable peak stage = top of bank - 1' of freeboard

$$\text{Max allowable peak stage} = 32.14 \text{ ft}$$

Treatment depth + attenuation depth = Max allowable peak stage - normal water elevation

$$\text{Treatment depth} + \text{attenuation depth} = 2.19 \text{ ft}$$

Cubed pond footprint = required pond volume / (treatment depth + attenuation depth)

$$\text{Cubed pond footprint} = 0.45 \text{ ac}$$

$$\text{Cubed side length} = 140 \text{ ft}$$

$$\text{Bank length at NWL} = 131 \text{ ft}$$

$$\text{Area at NWL} = 0.40 \text{ ac}$$

$$\text{Bank length at design high water} = 149 \text{ ft}$$

$$\text{Area at design high water} = 0.51 \text{ ac}$$

$$\text{Top of bank length} = 166 \text{ ft}$$

$$\text{Maintenance berm width} = 20 \text{ ft}$$

$$\text{Back of maintenance berm length} = 206 \text{ ft}$$

$$\text{Back of maintenance berm area} = 0.97 \text{ ac}$$

$$\text{Factor of safety} = 5\%$$

$$\text{Back of maintenance berm area} = 1.02 \text{ ac}$$

$$\text{Impact to Lake 5 (ERP 3143.004)} = 0.47 \text{ ac}$$

$$\text{Total back of maintenance berm area} = 1.49 \text{ ac}$$

$$\text{Back of maintenance berm length} = 255 \text{ ft}$$

Pond site length = Back of maintenance berm length + 5' on each side

$$\text{Pond site length} = 265 \text{ ft}$$

$$\text{Minimum pond site area} = 1.61 \text{ ac}$$

Pond 3 Stormwater Analysis

Existing CN

	Soil Type	CN	C	Area	
Impervious	-	98	0.95	1.67	
Open Space (Good)	A/D	80	0.20	10.09	
		Total		11.76	ac.

CN	82.6
C	0.31

25-year, 24-hour rainfall, P =	8.72	in	
Soil Storage, S =	2.11	in	<i>NOAA Atlas 14</i>
25-year, 24-hour runoff =	6.61	in	<i>FDOT Drainage Design Guide Section 2.2.4.2</i>
25-year, 24-hour runoff volume =	6.48	ac-ft	

Proposed CN and Runoff Coefficient

	Soil Type	CN	C	Area	
Impervious	-	98	0.95	6.93	
Pond Surface	-	100	1.00	0.62	
Open Space (Good)	A/D	80	0.20	4.21	
			Total	11.76	ac.

CN	91.7
C	0.68

25-year, 24-hour rainfall, P =	8.72	in	
Soil Storage, S =	0.91	in	<i>NOAA Atlas 14</i>
25-year, 24-hour runoff =	7.72	in	<i>FDOT Drainage Design Guide Section 2.2.4.2</i>
25-year, 24-hour runoff volume =	7.56	ac-ft	

Pond 3 Stormwater Analysis

Required Treatment Volume (Wet Detention)

Min. Water Quality Treatment Volume (1" of Runoff)

SWFWMD App. Handbook Vol. II, Section 4.1

$$TV = \text{Basin Area} \times 1.0" \times (1 \frac{1}{12}')$$

$$TV = 0.98 \text{ ac-ft}$$

Required Attenuation Volume

Required attenuation volume = proposed 25-year, 24-hour runoff - existing 25-year, 24-hour runoff

$$\text{Required attenuation volume} = 1.08 \text{ ac-ft}$$

Required Pond Volume

Required pond volume = required attenuation volume + required treatment volume

$$\text{Required pond volume} = 2.06 \text{ ac-ft}$$

Proposed Pond 6 (Wet Detention)

$$\text{Top of bank} = 22.0 \text{ ft}$$

Assumed at FEMA base flood elevation

$$\text{Normal water elevation} = 18.1 \text{ ft}$$

Assumed 2' above Cypress Strand channel bottom

Max allowable peak stage = top of bank - 1' of freeboard

$$\text{Max allowable peak stage} = 21.0 \text{ ft}$$

Treatment depth + attenuation depth = Max allowable peak stage - normal water elevation

$$\text{Treatment depth} + \text{attenuation depth} = 2.9 \text{ ft}$$

Cubed pond footprint = required pond volume / (treatment depth + attenuation depth)

$$\text{Cubed pond footprint} = 0.71 \text{ ac}$$

$$\text{Cubed side length} = 176 \text{ ft}$$

$$\text{Bank length at NWL} = 164 \text{ ft}$$

$$\text{Area at NWL} = 0.62 \text{ ac}$$

$$\text{Bank length at design high water} = 188 \text{ ft}$$

$$\text{Area at design high water} = 0.81 \text{ ac}$$

$$\text{Top of bank length} = 207 \text{ ft}$$

$$\text{Maintenance berm width} = 20 \text{ ft}$$

$$\text{Back of maintenance berm length} = 247 \text{ ft}$$

$$\text{Back of maintenance berm area} = 1.40 \text{ ac}$$

$$\text{Factor of safety} = 5\%$$

$$\text{Back of maintenance berm area} = 1.47 \text{ ac}$$

$$\text{Back of maintenance berm length} = 253 \text{ ft}$$

Pond site length = Back of maintenance berm length + 5' on each side

$$\text{Pond site length} = 263 \text{ ft}$$

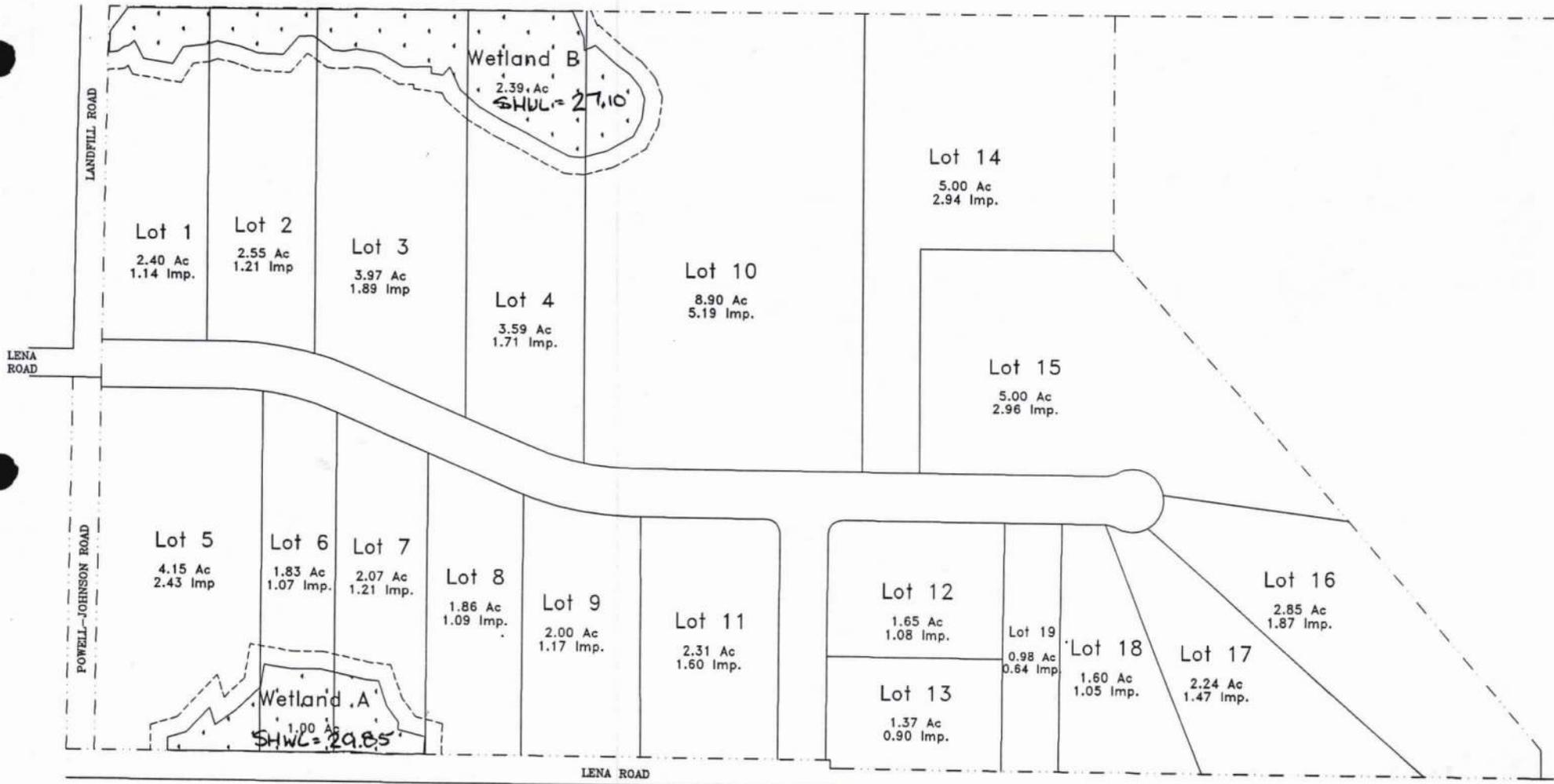
$$\text{Minimum pond site area} = 1.59 \text{ ac}$$

Appendix E – Existing Permit Excerpts

ERP 3143.004 - Lena Road Business Park



443143 . 04



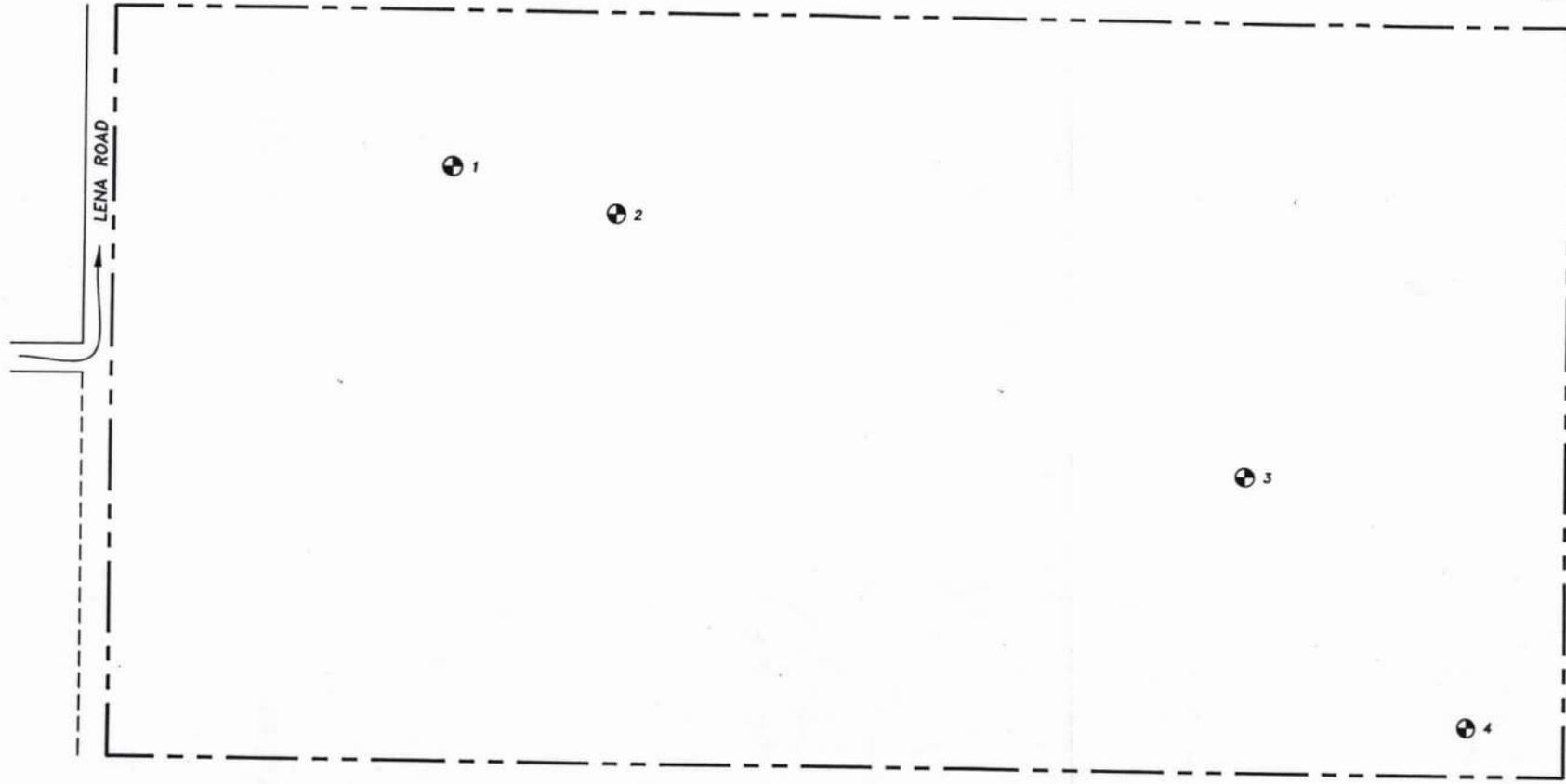
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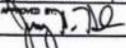


SCALE: 1"=200'

⊕ TEST BORING LOCATIONS



443143.04

			
Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants			
Test Locations			
Lena Road Business Park Manatee County, Florida			
DRAWN BY: KGS	CHECKED BY:	DATE: 7/28/99	
FILE NO.: 99-7707	APPROVED BY: 	FOUND:	1

Not Sealed

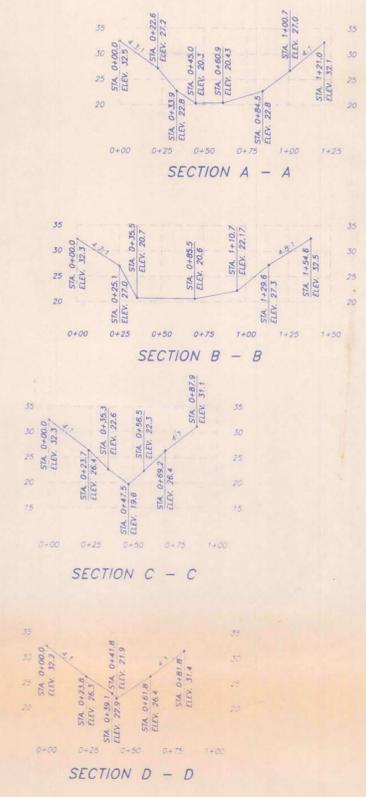
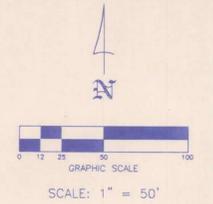
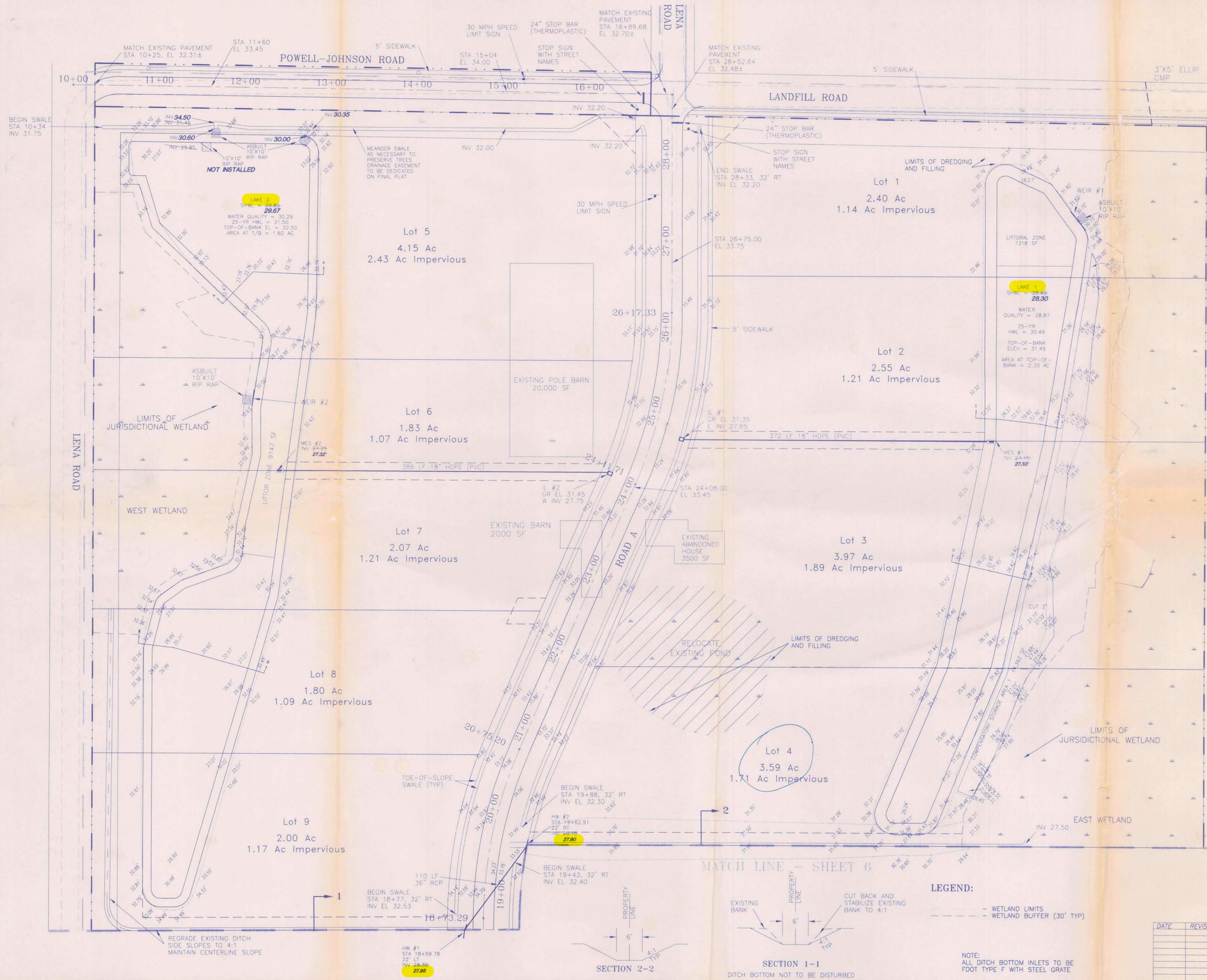
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Table 2 - EXISTING AND SEASONAL HIGH WATER TABLE

Boring Number	Existing Ground Surface	Existing Water Table		Seasonal High Water Table
	Elevation (feet, NGVD)	Elevation (feet, NGVD)	Date (Day-Mo-Yr)	Elevation (feet, NGVD)
1	30.4	27.1	26-Jul-99	28.4
2	32.4	27.8	26-Jul-99	29.1
3	29.5	27.0	26-Jul-99	28.4
4	29.8	27.5	26-Jul-99	28.7





Lena Road Business Park
PAVING & DRAINAGE
 ENGINEER:
WEN CHUNG, INC.
 4924 FRUITVILLE ROAD
 SARASOTA, FLORIDA 34232 (941) 379-3300
 SHEET 5 OF 17

BRITT SURVEYING, INC.
 LAND SURVEYORS AND MAPPERS
 4000 W. GULF BLVD., SUITE 100
 TAMPA, FLORIDA 33609 (813) 977-8888

RECORD DRAWING

AB # 44003143.004

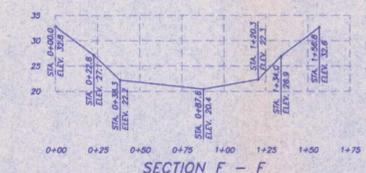
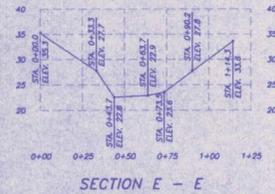
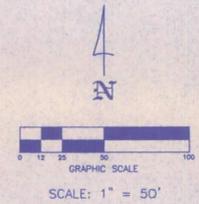
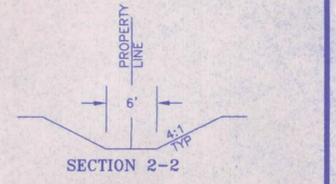
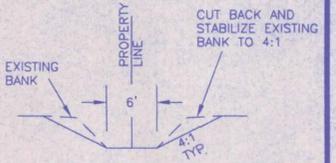
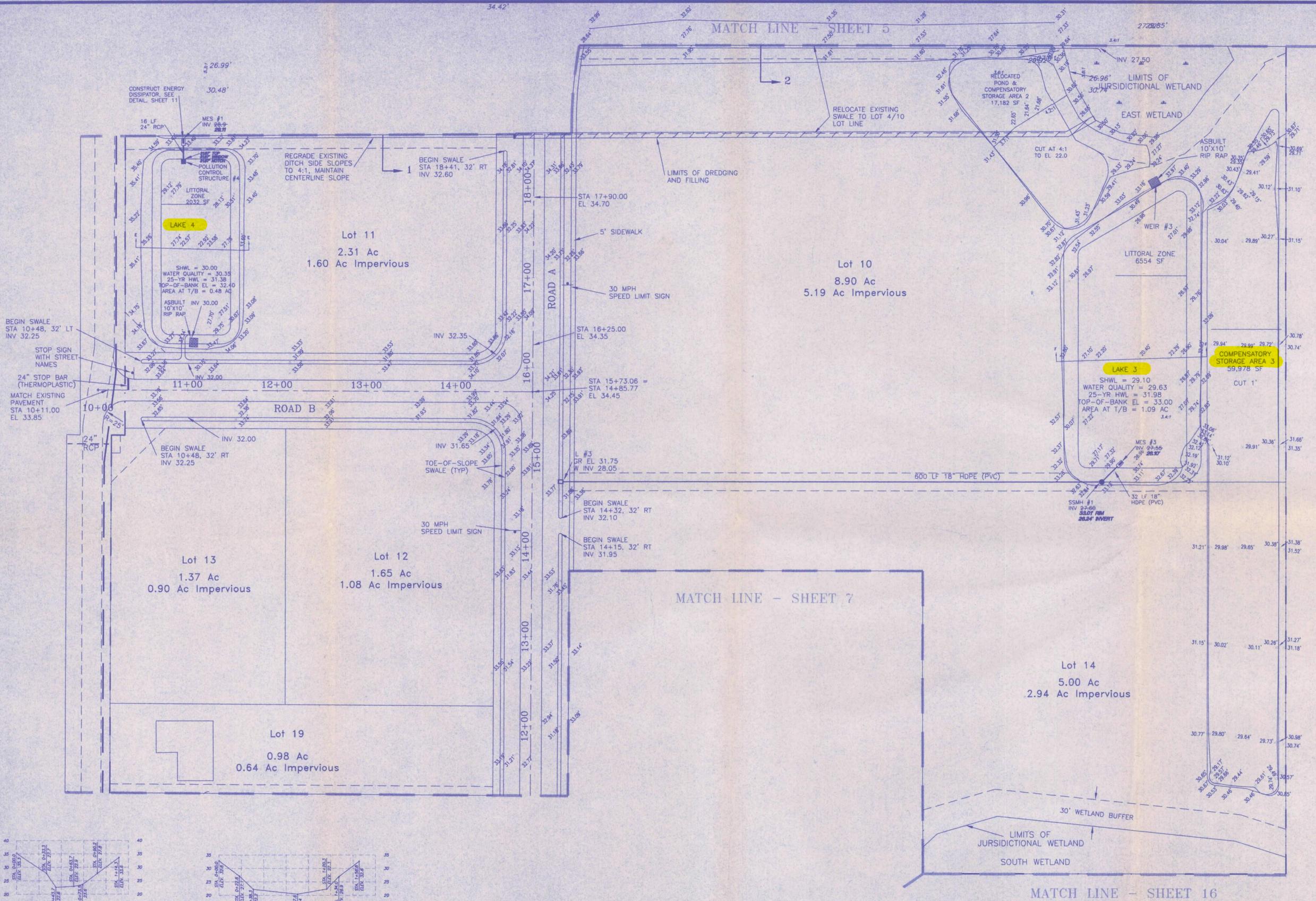


DATE	REVISION

- LEGEND:**
- WETLAND LIMITS
 - WETLAND BUFFER (30' TYP)

NOTE:
 ALL DITCH BOTTOM INLETS TO BE FOOT TYPE F WITH STEEL GRATE





LEGEND:
 --- WETLAND LIMITS
 - - - WETLAND BUFFER (30' TYP)

NOTE:
 ALL DITCH BOTTOM INLETS TO BE FOOT TYPE F WITH STEEL GRATE

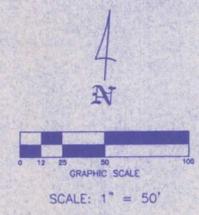
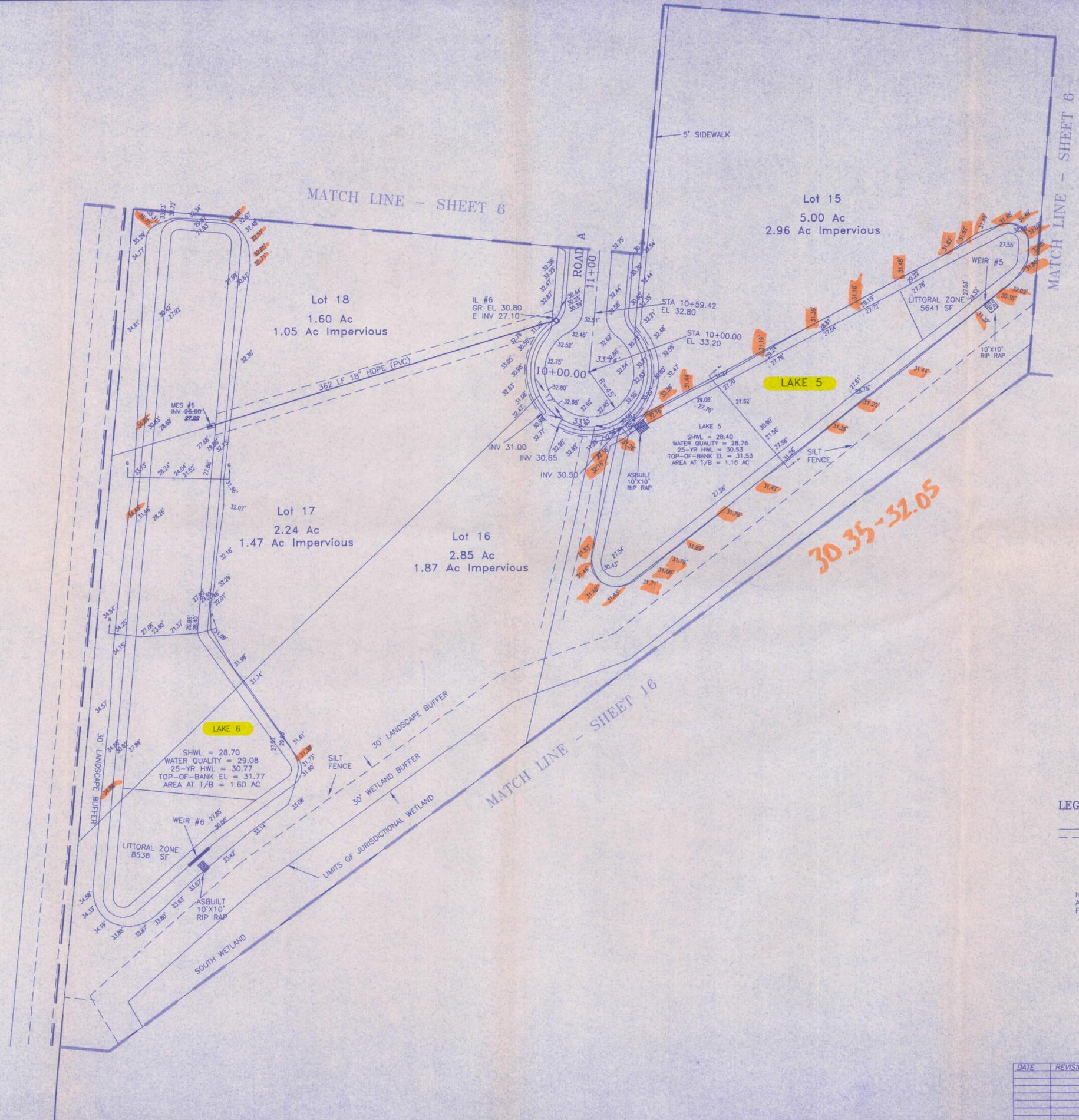
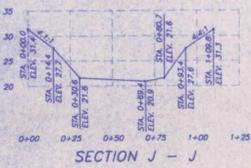
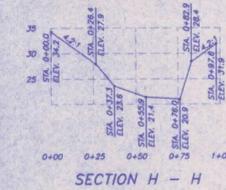
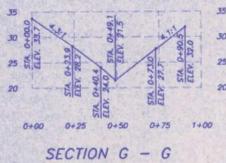
DATE	REVISION

Lena Road Business Park
 PAVING & DRAINAGE
 ENGINEER:
 WEN CHUNG, INC.
 4924 FRUITVILLE ROAD
 SARASOTA, FLORIDA 34232 (941) 379-3300
 SHEET 6 OF 17

BRITTS SURVEYING, INC.
 RECORD DRAWING



RECEIVED
 SEP 23 2002
 W.R. SHARSHA
 HERRING DISTRICT



LEGEND:
 - - - - - WETLAND LIMITS
 - - - - - WETLAND BUFFER (30' TYP)

NOTE:
 ALL DITCH BOTTOM INLETS TO BE
 FOOT TYPE F WITH STEEL GRATE

BRITT SURVEYING, INC.
 CERTIFIED SURVEYORS AND MAPPERS
 1100 W. GOLF COURSE BLVD. SUITE 100
 SARASOTA, FLORIDA 34232
 (941) 557-4200

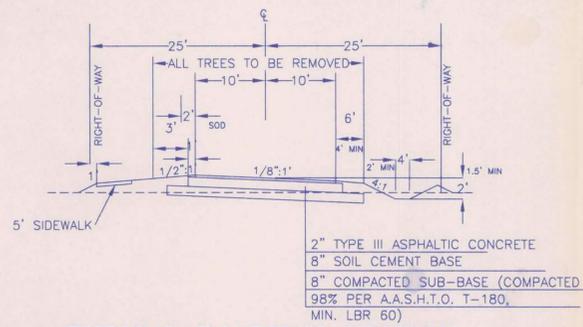
APR 19 2001
 DATE OF SURVEY
 M. J. P. [Signature]
 M. J. P. [Signature]
 M. J. P. [Signature]

Lena Road Business Park

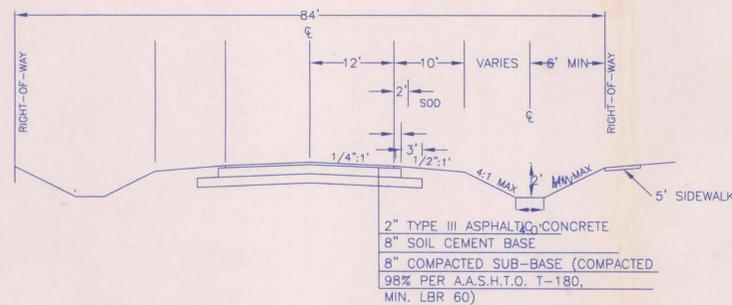
PAVING & DRAINAGE

ENGINEER:
 WEN CHUNG, INC.
 4924 FRUITVILLE ROAD
 SARASOTA, FLORIDA 34232 (941) 379-3300

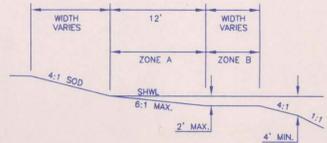
DATE	REVISION



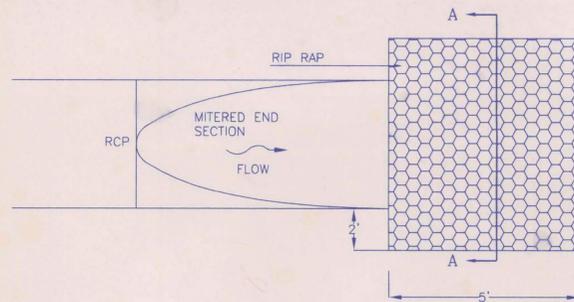
TYPICAL ROADWAY SECTION
POWELL-JOHNSON ROAD



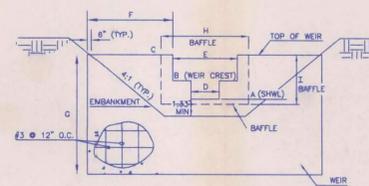
TYPICAL ROADWAY SECTION
INTERNAL ROADS
SYMMETRICAL ABOUT CENTERLINE



LITTORAL ZONE IN PONDS



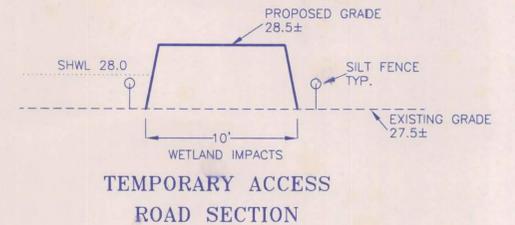
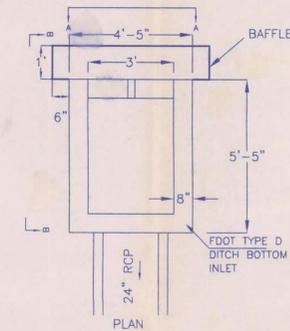
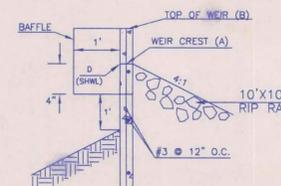
WEIR CROSS SECTION
FOR ALTERNATE 3



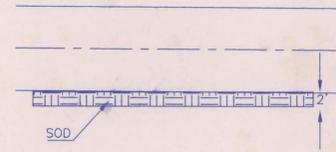
ALTERNATE 3 WEIR
ALTERNATE 3 WEIR TABLE

WEIR NUMBER	ELEV. A	ELEV. B	ELEV. C	D	E	F	G	H	I
1	28.30	30.67	30.67	0.60	0.60	9.00	5.00	2.60	2.67
2	29.67	30.17	31.40	1.25	6.25	4.00	5.00	9.30	1.00
3	29.25	32.05	32.05	0.75	0.75	9.00	5.00	2.70	3.15

ENERGY DISSIPATOR DETAIL

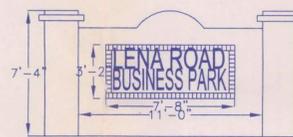


TEMPORARY ACCESS
ROAD SECTION

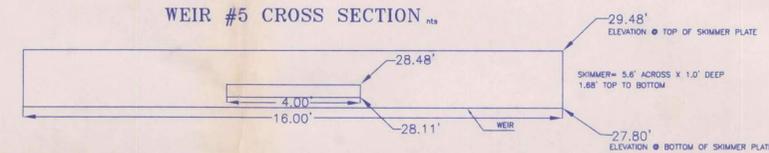


SOD DETAIL

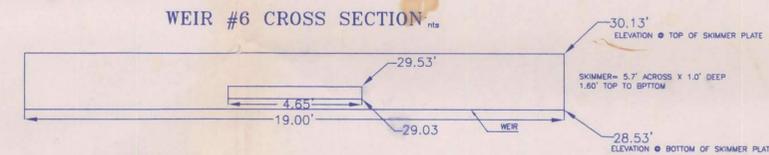
EDGE OF PAVEMENT TO BE SODDED



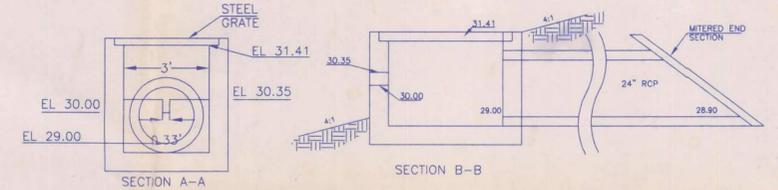
WALL DETAIL



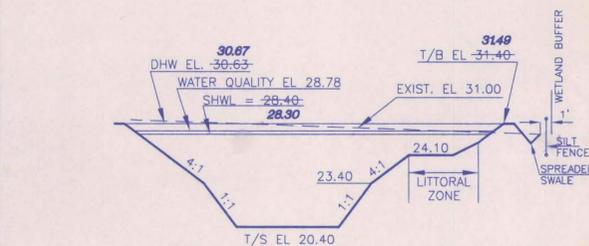
WEIR #5 CROSS SECTION



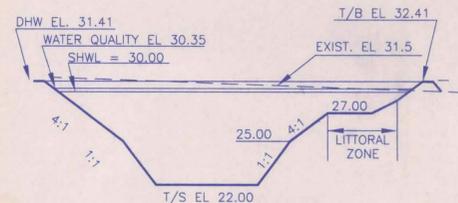
WEIR #6 CROSS SECTION



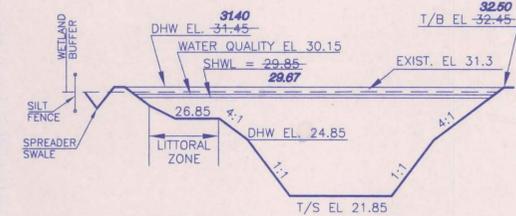
POLLUTION CONTROL
STRUCTURE 4



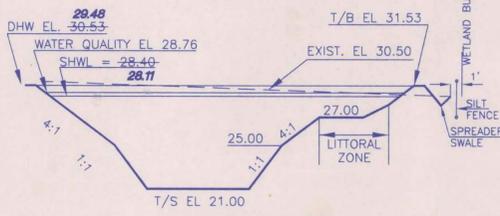
LAKE 1 CROSS SECTION



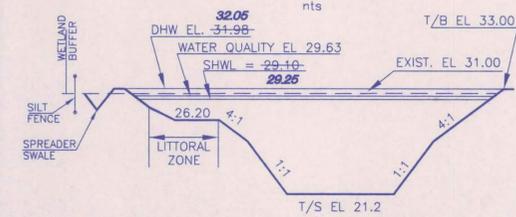
LAKE 4 CROSS SECTION



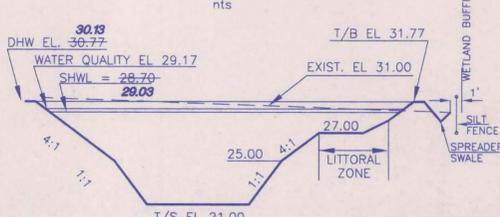
LAKE 2 CROSS SECTION



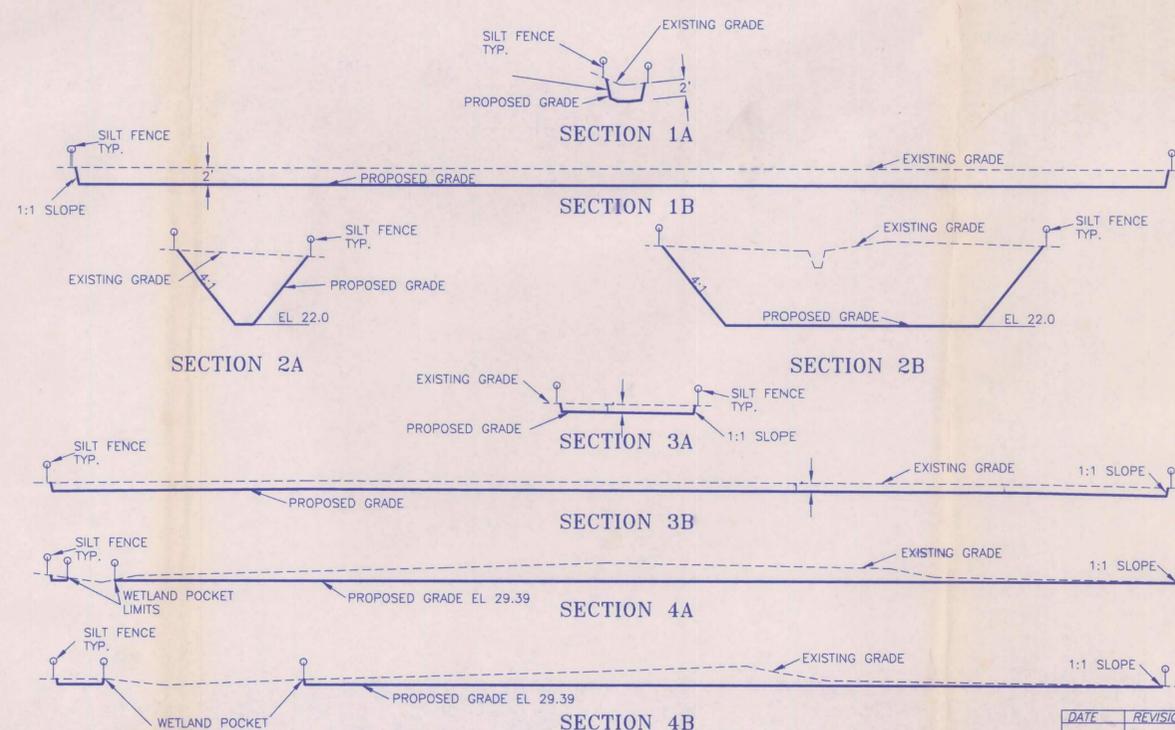
LAKE 5 CROSS SECTION



LAKE 3 CROSS SECTION



LAKE 6 CROSS SECTION



FLOODPLAIN COMPENSATION CROSS-SECTIONS

DATE	REVISION

Lena Road Business Park

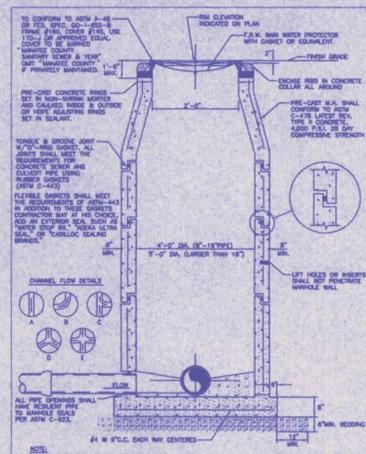
ROADWAY DETAILS

ENGINEER:
WEN CHUNG, INC.
4924 FRUITVILLE ROAD
SARASOTA, FLORIDA 34232

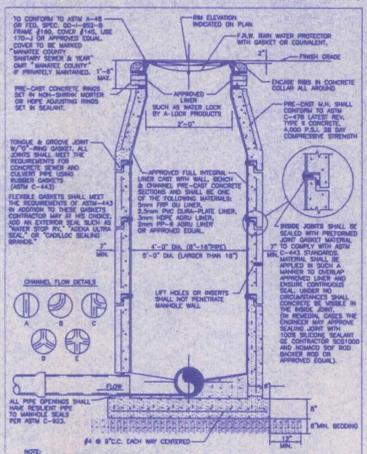
BRITT SURVEYING, INC.
REGISTERED PROFESSIONAL SURVEYOR
STATE OF FLORIDA
NO. 10000
DATE OF EXPIRATION: 12/31/2012

WEN CHUNG, INC.
REGISTERED PROFESSIONAL ENGINEER
STATE OF FLORIDA
NO. 10000
DATE OF EXPIRATION: 12/31/2012

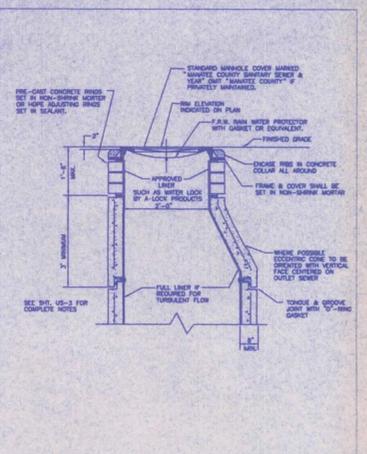
SEP 23 2012
R.B. SAKASUS
IMPROVEMENT DISTRICT



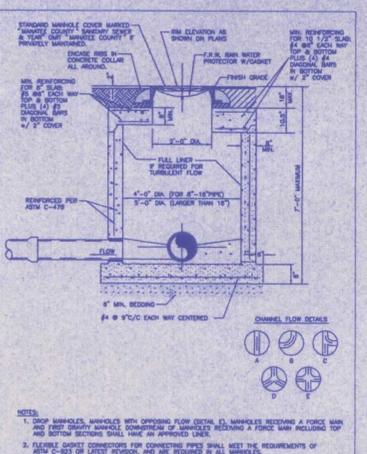
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	STANDARD PRE-CAST SANITARY SEWER MANHOLE FOR UNDISTURBED FLOW	US-3
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



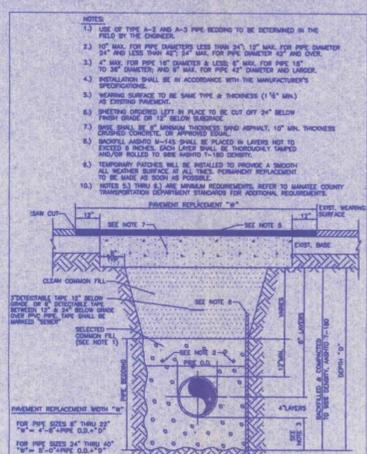
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	STANDARD PRE-CAST SANITARY SEWER MANHOLE FOR TURBULENT FLOW	US-3A
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



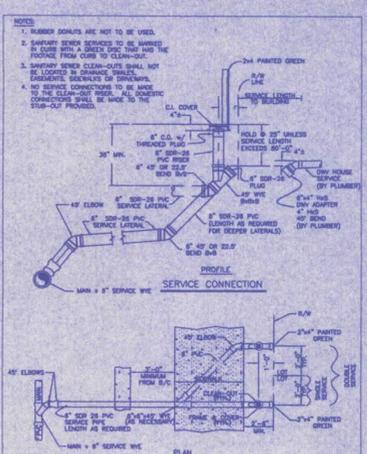
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	STANDARD PRE-CAST SANITARY SEWER ECCENTRIC MANHOLE	US-4
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



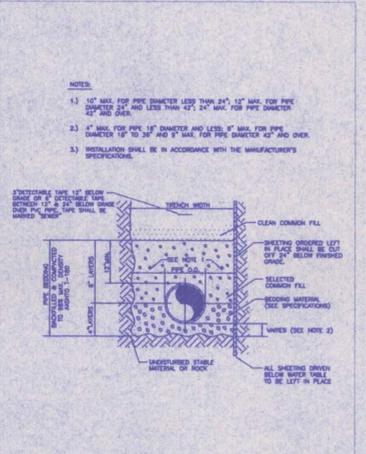
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	STANDARD PRE-CAST SHALLOW MANHOLE	US-5
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



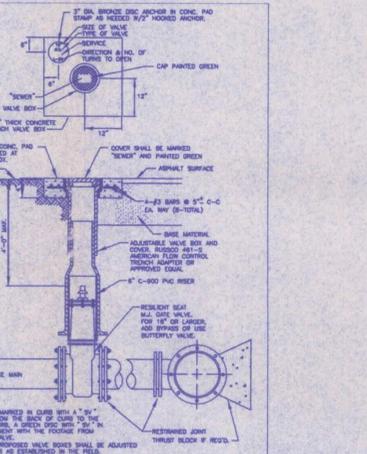
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH DETAIL ASPH. PAVEMENT SURFACE TYPE A-1 PIPE BEDDING	US-12
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



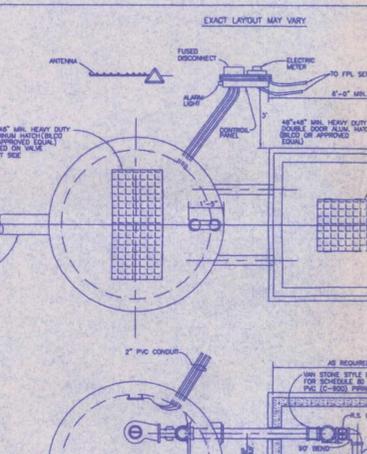
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SINGLE AND DOUBLE SERVICE CONNECTION DETAILS	US-17
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



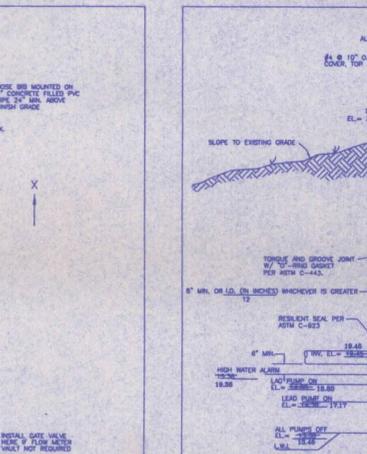
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH DETAIL TYPE A-2 PIPE BEDDING	US-14
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



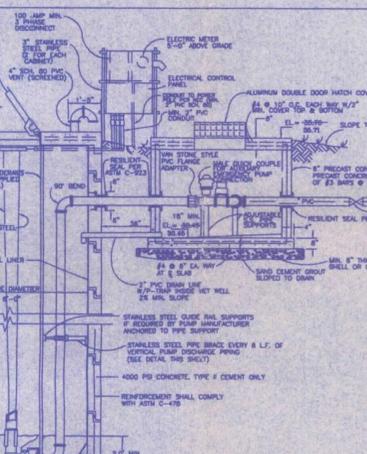
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	GATE VALVE, BOX, COVER AND TAG	US-16
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



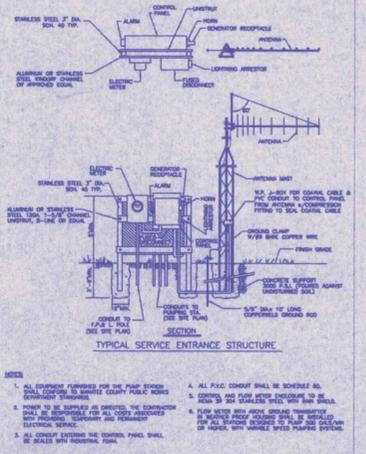
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20A
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



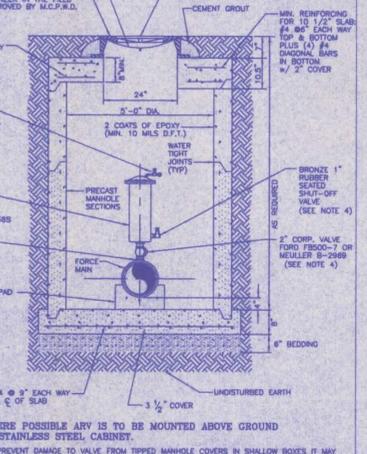
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20B
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



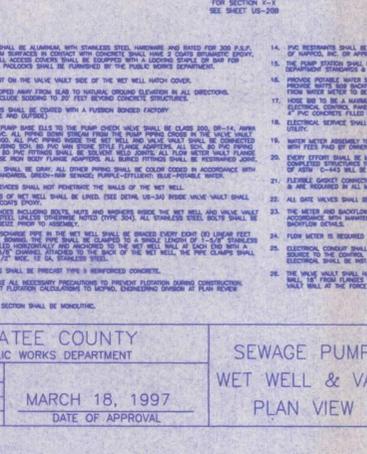
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20B
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



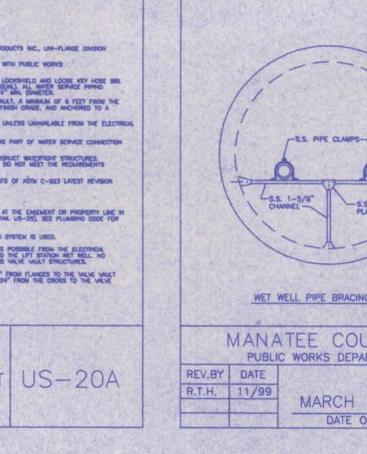
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION METER & ELECTRICAL DETAILS	US-20C
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



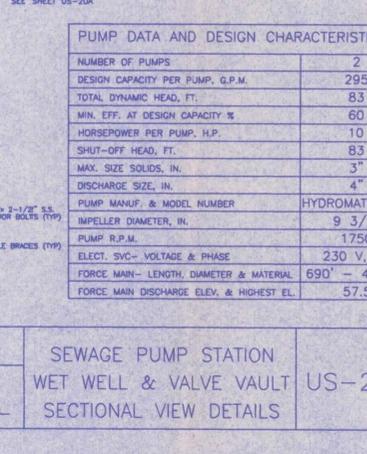
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	BELOW GRADE AIR RELEASE VALVE	US-21
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20A
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20A
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20B
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SEWAGE PUMP STATION WET WELL & VALVE VAULT	US-20B
REV. BY R.T.H.	DATE MARCH 18, 1997	DATE OF APPROVAL

MANATEE COUNTY PUBLIC WORKS DEPARTMENT

RECORD DRAWING

BRIT SURVEYING, INC.

DATE: APR 19, 2001

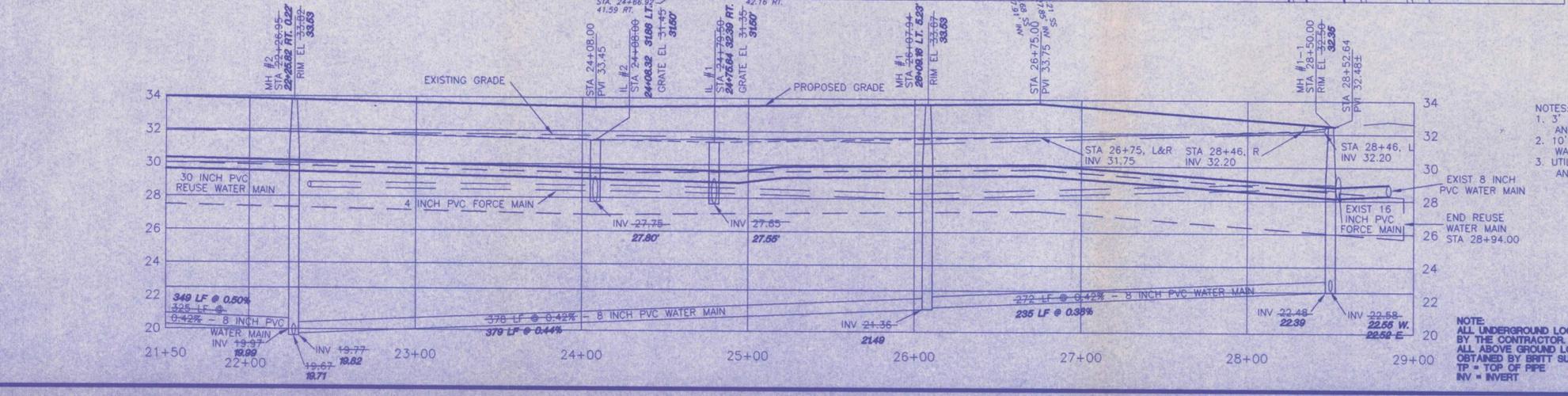
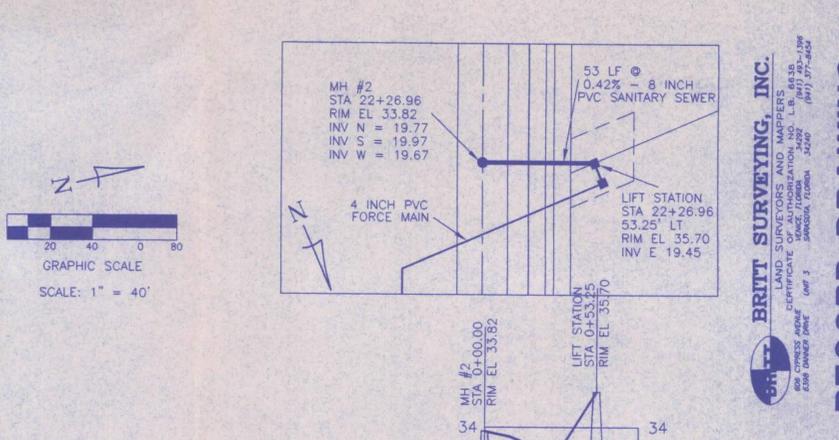
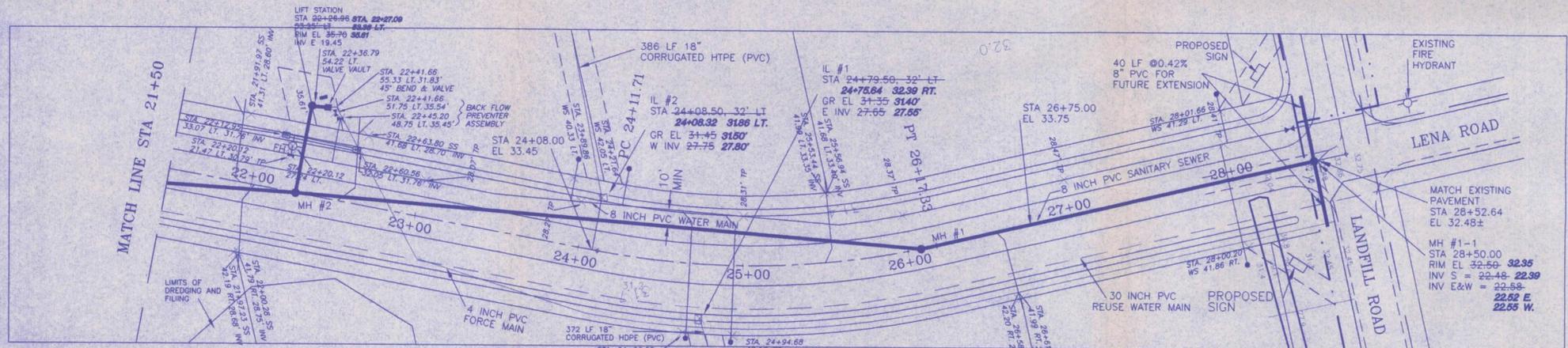
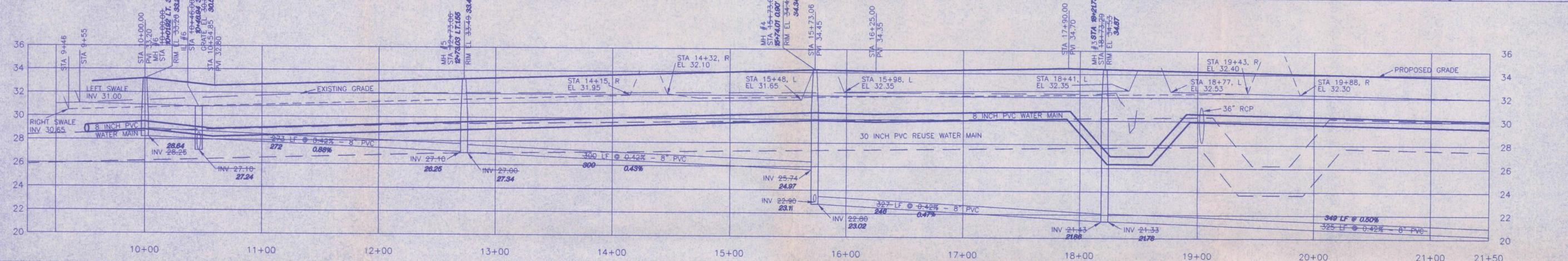
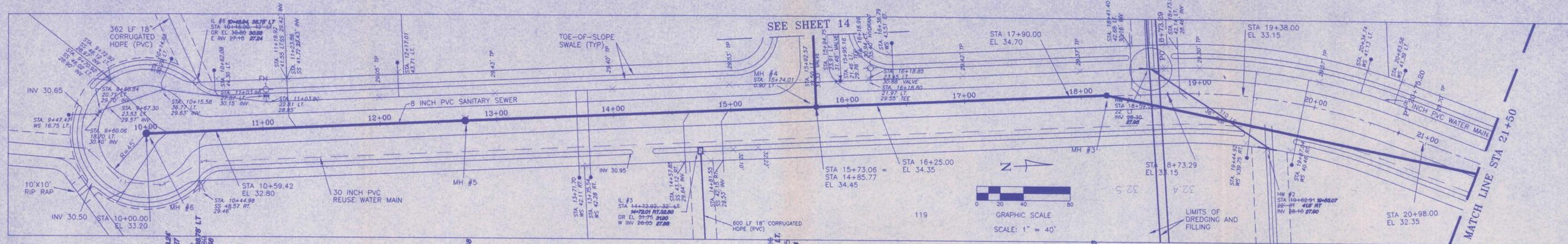
REVISIONS:

DATE	REVISION

SEWER DETAILS

ENGINEER:
WEN CHUNG, INC.
4924 FRUITVILLE ROAD
SARASOTA, FLORIDA 34232 (941) 379-3300

SHEET 13 OF 19



NOTES:

- 3' MINIMUM COVER FOR WATER AND FORCE MAINS.
- 10' MINIMUM SEPARATION BETWEEN WATER MAIN AND SEWER GRAVITY LINES.
- UTILITIES SHOWN ARE PUBLICLY OWNED AND MAINTAINED.

NOTE:
ALL UNDERGROUND LOCATION AND ELEVATIONS WERE SUPPLIED BY THE CONTRACTOR.
ALL ABOVE GROUND LOCATIONS AND CLEANOUT INVERTS WERE OBTAINED BY BRITT SURVEYING.
TP = TOP OF PIPE
INV = INVERT

Lena Road Business Park
PLAN AND PROFILE

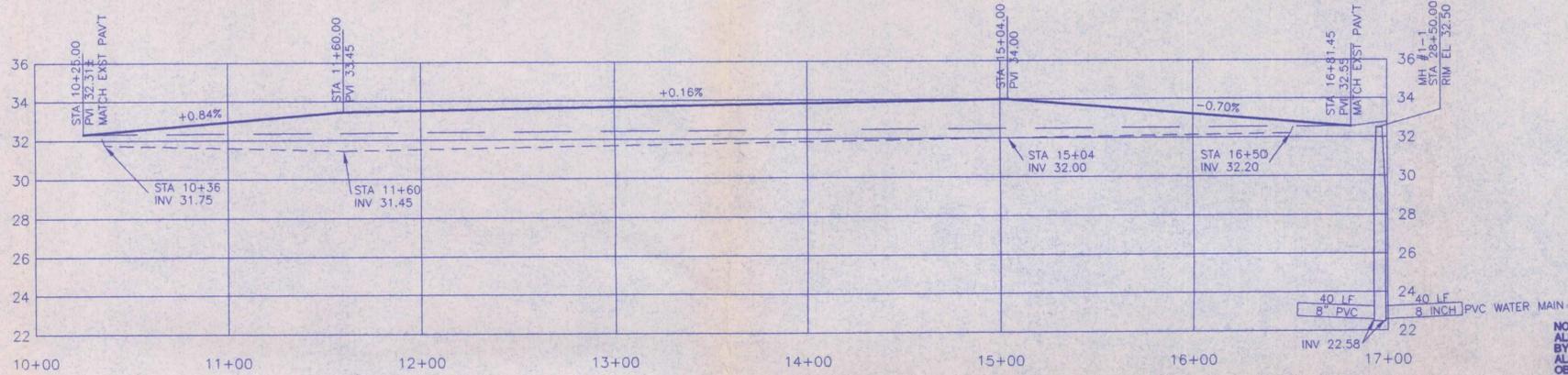
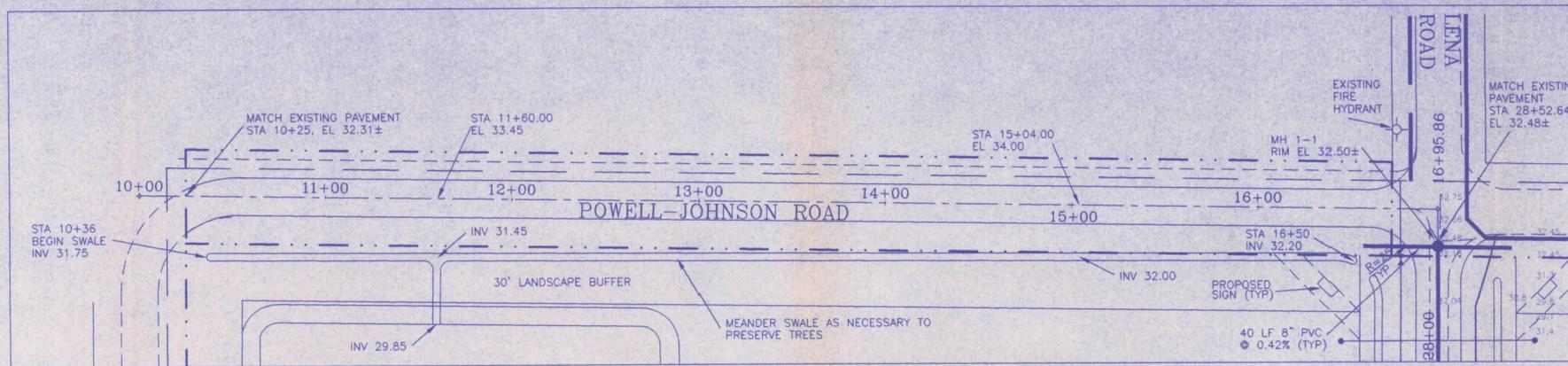
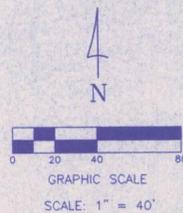
WEN CHUNG, INC.
4924 FRUITVILLE ROAD
SARASOTA, FLORIDA 34232 (941) 379-3300

DATE REVISION

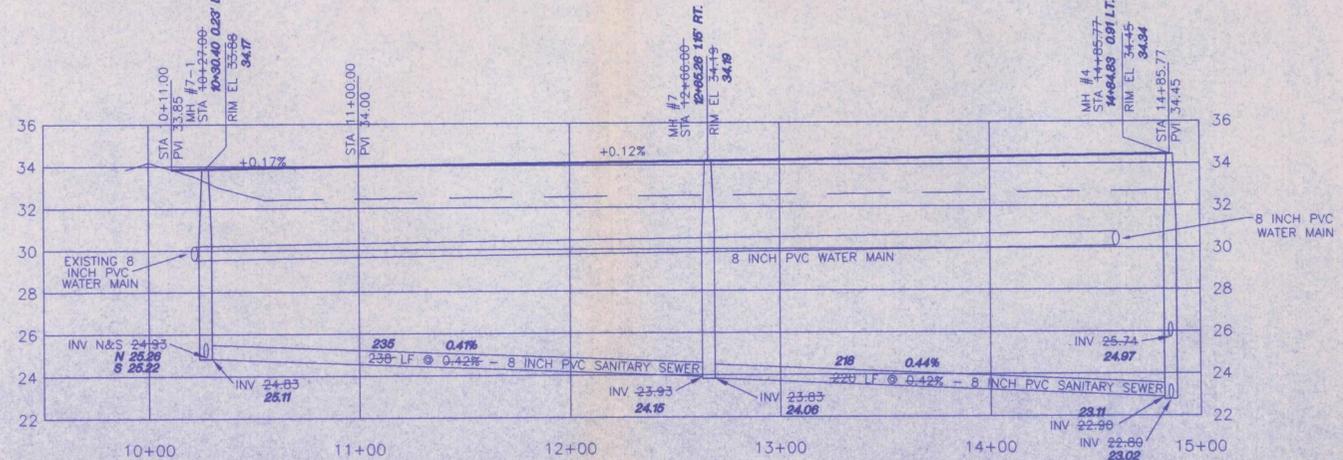
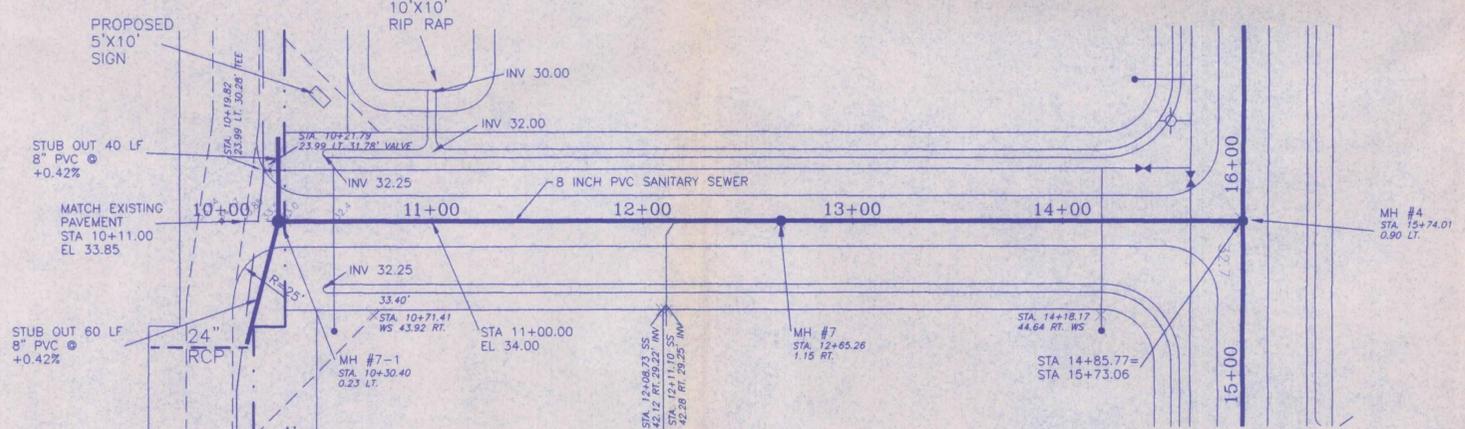
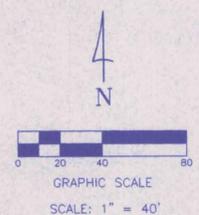
SHEET 14 OF 19

BRITT SURVEYING, INC.
LAND SURVEYORS AND MAPPERS
STATE OF FLORIDA
CERTIFICATE OF REGISTRATION NO. L.B. 61438-0001
609 ADDRESS ABOVE
609 OWNER DISTRICT OFFICE
SARASOTA, FLORIDA 34207 (941) 377-4624





NOTE:
ALL UNDERGROUND LOCATION AND ELEVATIONS WERE SUPPLIED BY THE CONTRACTOR.
ALL ABOVE GROUND LOCATIONS AND CLEANOUT INVERTS WERE OBTAINED BY BRITT SURVEYING.
TP = TOP OF PIPE
INV = INVERT



BRITT SURVEYING, INC.
LAND SURVEYORS AND MAPPERS
CERTIFICATE OF AUTHORIZATION NO. LB 01938-1398
646 CROSS CREEK COURT UNIT 3
SARASOTA, FLORIDA 34230 (941) 377-6424

RECORD DRAWING

APRIL 19, 2001
SARASOTA DISTRICT
SOUTHWEST FLORIDA
REGISTERED PROFESSIONAL ENGINEER
STATE OF FLORIDA
No. 2400
WEN CHUNG, INC.

**Lena Road Business Park
PLAN AND PROFILE**
WEN CHUNG, INC.
4924 FRUITVILLE ROAD
SARASOTA, FLORIDA 34232 (941) 379-3300
SHEET 15 OF 19

DATE	REVISION

ERP 5641.021 – Creekwood East Corp Park

1" = 100'

LEGEND

- EXISTING**
- - - - - EXISTING SANITARY SEWER
 - - - - - EXISTING CLEANOUT
 - - - - - EXISTING FORCE MAIN
 - - - - - EXISTING WATER MAIN
 - - - - - EXISTING WATER VALVE
 - - - - - EXISTING FIRE HYDRANT ASSEMBLY
 - - - - - EXISTING WATER SERVICE
 - - - - - EXISTING REDUCER
 - - - - - EXISTING SPOT ELEVATION
 - - - - - EXISTING DRAINAGE PIPE
 - - - - - CATCH BASIN
 - - - - - MITERED END SECTION
 - - - - - EXISTING CONTOUR LINE
 - - - - - EXISTING BURIED TELEPHONE
 - - - - - EXISTING BURIED FIBER OPTIC CABLE
 - - - - - EXISTING OVER HEAD ELECTRIC
 - - - - - EXISTING GAS MAIN
 - - - - - SILT SCREEN LOCATION

- PROPOSED**
- - - - - PROPOSED SANITARY SEWER
 - - - - - PROPOSED MANHOLE
 - - - - - PROPOSED CLEAN OUT
 - - - - - PROPOSED FORCE MAIN
 - - - - - PROPOSED WATER MAIN
 - - - - - PROPOSED WATER VALVE
 - - - - - PROPOSED FIRE HYDRANT ASSEMBLY
 - - - - - PROPOSED WATER SERVICE
 - - - - - PROPOSED REDUCER
 - - - - - PROPOSED SPOT ELEVATION
 - - - - - PROPOSED DRAINAGE PIPE
 - - - - - SUMP
- LOT # 00 AREA = 0.000 AC. PERMITTED IMPERVIOUS MAX. = 0.000 AC.

NOTE: INV. EL. = 0.00

RECORD DRAWING INFORMATION

RECORD DRAWING

GLOBAL SURVEYING, P.A.

CERTIFICATE OF AUTHORIZATION NO. 0000000000

BRADENTON

FLORIDA SURVEYORS BOARD

DATE OF THIS SURVEY: JANUARY 2004

REVISIONS

1

2

3

4

5

6

7

RECORD DRAWING OF

DRAINAGE AND GRADING PLAN

FOR CREEKWOOD EAST CORPORATE PARK

SECTION 12 & 13, TOWNSHIP 35 SOUTH, RANGE 18 EAST

MANATEE COUNTY, FLORIDA

THIS DRAWING DEPICTING RECORD LOCATIONS OF ENGINEERING FEATURES HAS BEEN CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER WHO IS SOLELY RESPONSIBLE FOR ITS ACCURACY AND COMPLIANCE WITH AGENCY RECORD DRAWING REQUIREMENTS. THE ENGINEER AND ZOLLER, NAJARA & SHROVER, L.C. BOTH DISCLAIM ANY LIABILITY OR RESPONSIBILITY FOR ANY DISCREPANCIES IN THE DRAWING.

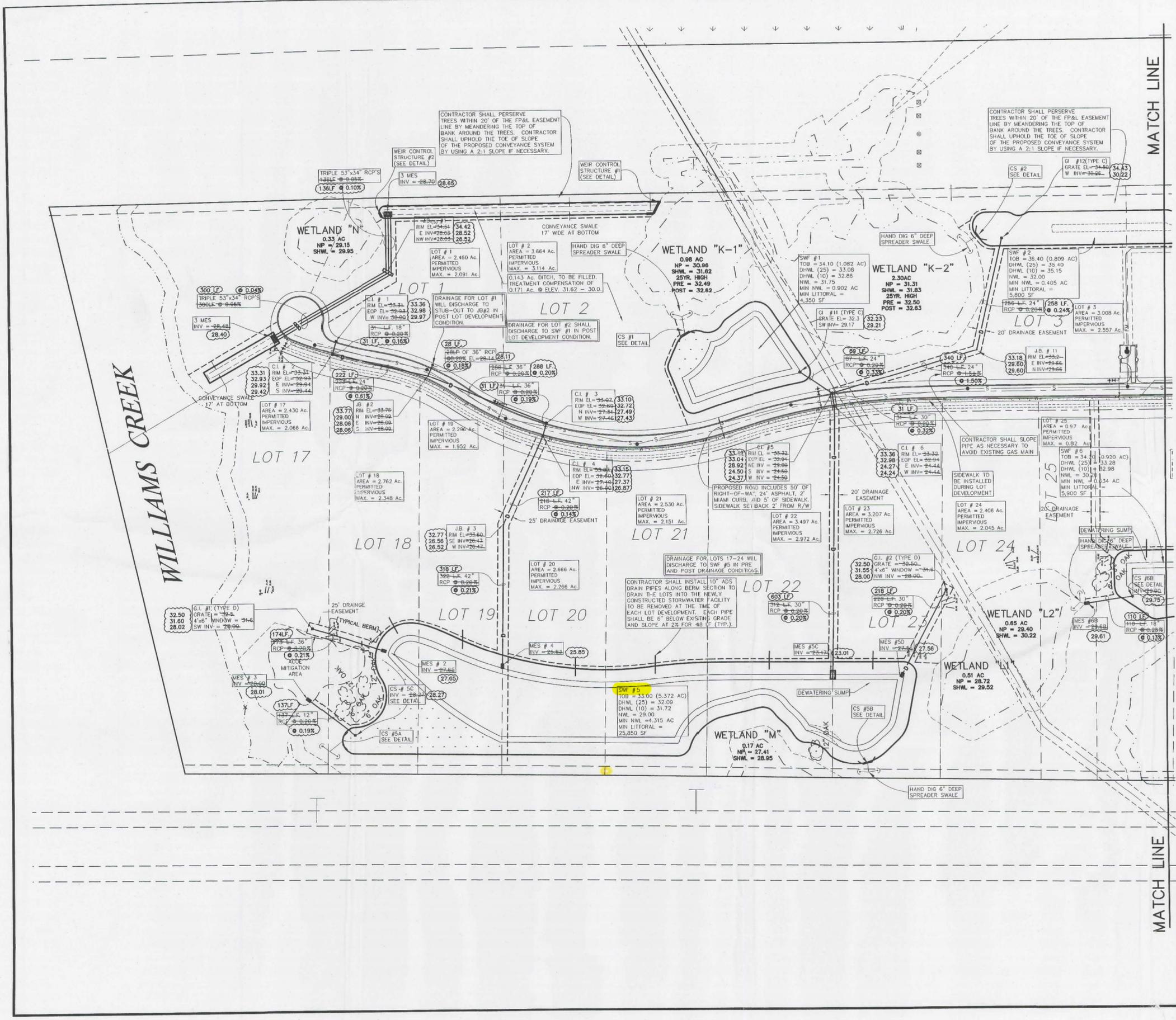
I, THE UNDERSIGNED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, NO DISCREPANCIES DEPICTED ON THIS RECORD DRAWING HAVE BEEN OBSERVED TO BE SUBSTANTIAL CONFLICTS WITH THE APPROVED PLANS.

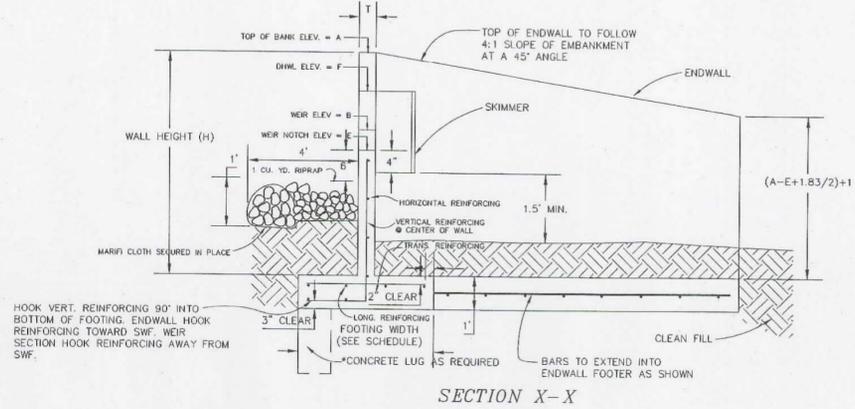
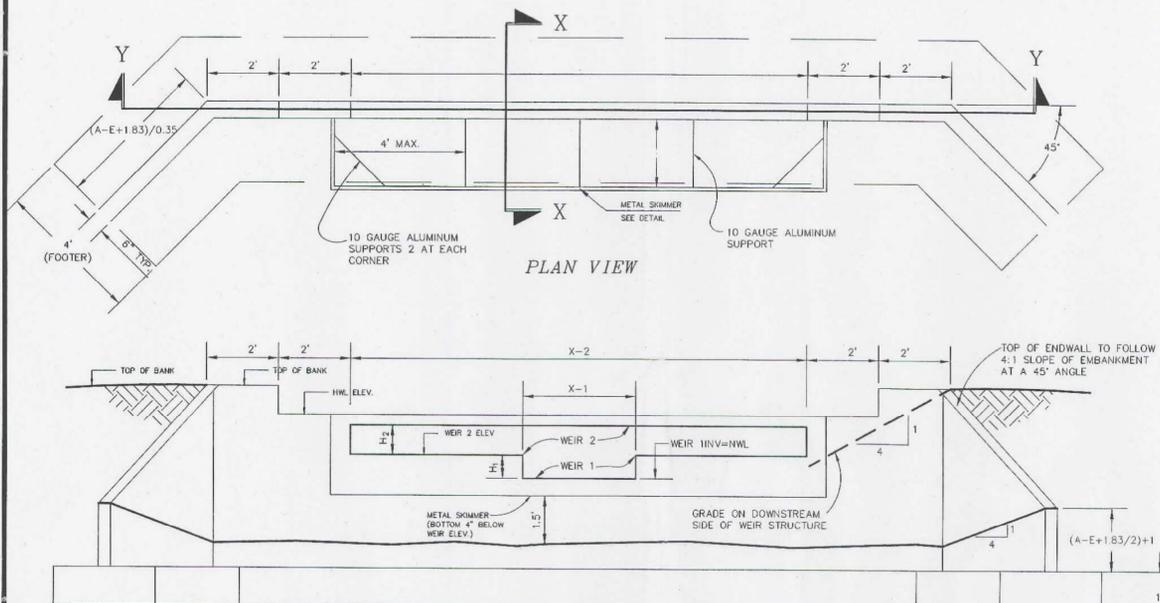
ZOLLER, NAJARA & SHROVER, L.C. 685 200 22 30
P. O. BOX 200 22 30
BRADENTON, FL 34105
DATE OF CERTIFICATION: 11/10/04

Imaged As Is

RECEIVED
JUN 18 2006
A.R. SHAW
SHEET 3

44005641.021

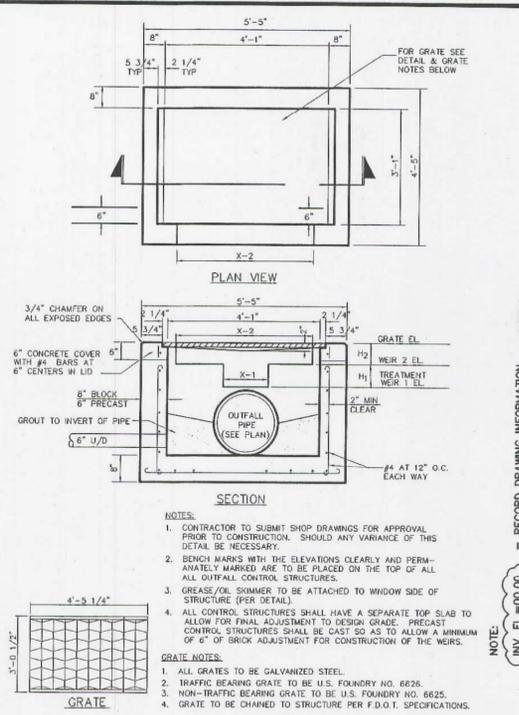




CANTILEVER RETAINING WALL SCHEDULE

WALL HT. MAX. H (ft)	WALL T (in)	FOOTING WIDTH	FOOTING REINFORCING		FOOTING REINFORCING	
			TRANS.	LONG.	VERT.	HORIZ.
2	6	1'-8"	-	(2) #5 CONT.	#4 @ 18" O.C.	#4 @ 16" O.C.
3	6	3'-0"	-	(3) #5 CONT.	#4 @ 18" O.C.	#4 @ 16" O.C.
4	6	4'-0"	-	(4) #5 CONT.	#4 @ 18" O.C.	#4 @ 16" O.C.
5	8	5'-0"	#4 @ 32" O.C.	(5) #5 CONT.	#5 @ 18" O.C.	#4 @ 12" O.C.
6	8	6'-0"	#4 @ 24" O.C.	(6) #5 CONT.	#5 @ 12" O.C.	#4 @ 12" O.C.

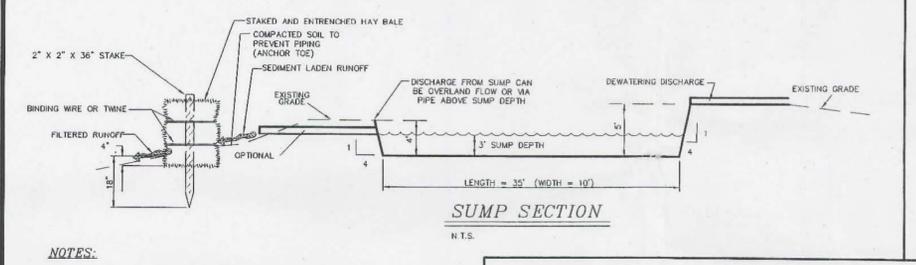
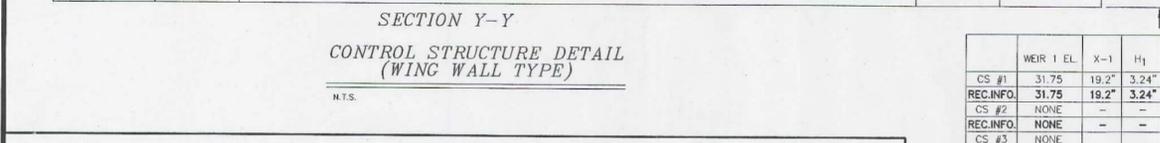
STRUCTURAL NOTES:
 1. CONCRETE STRENGTH: $f_c = 3000$ psi @ 28 DAYS
 2. REINFORCING STEEL: $F_y = 60$ ksi, ASTM A615
 3. MIN. SOIL BEARING CAPACITY = 1500 psf



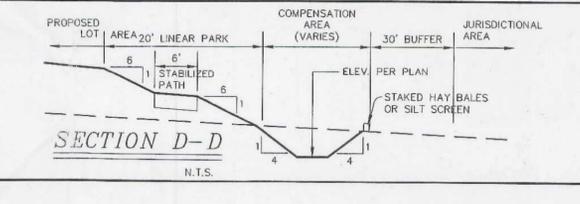
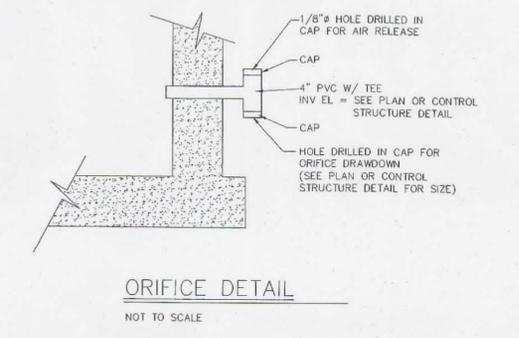
CONTROL STRUCTURE DETAIL TYPE "D" INLET

N.T.S.

CS #	WEIR 1 EL.	X-1	H ₁	WEIR 2 EL.	X-2	H ₂	GRATE EL.
REC.INFO.	31.75	19.2'	3.24'	32.02	19.2'	8"	-
CS #2	NONE	-	-	33.24	8"	8"	32.00 1.375'
REC.INFO.	NONE	-	-	33.24	8"	8"	32.02 1.44'
CS #3	NONE	-	-	34.84	26"	8"	33.60 1.625'
REC.INFO.	NONE	-	-	34.84	26"	8"	33.60 1.687'
CS #4	NONE	-	-	35.00	12"	8"	33.50 1.03'
REC.INFO.	NONE	-	-	34.98	12"	8"	33.50 1.08'
CS #5A	NONE	-	-	29.33	30"	8"	-
REC.INFO.	NONE	-	-	29.33	30"	8"	-
CS #5B	NONE	-	-	29.33	30"	8"	-
REC.INFO.	NONE	-	-	29.31	29.98	16"	8"
CS #6A	30.20	8"	6"	30.70	4"	8"	-
REC.INFO.	30.20	8"	6"	30.70	4"	8"	-
CS #7A	30.20	24"	3.96"	-	-	-	-
REC.INFO.	30.15	24"	3.24"	-	-	-	-
CS #7B	NONE	-	-	30.53	31.00	24"	8"
REC.INFO.	NONE	-	-	30.53	31.00	24"	8"
CS #8	30.60	60"	2.40"	30.80	-	-	-
REC.INFO.	30.61	60"	2.4"	30.81	-	-	-



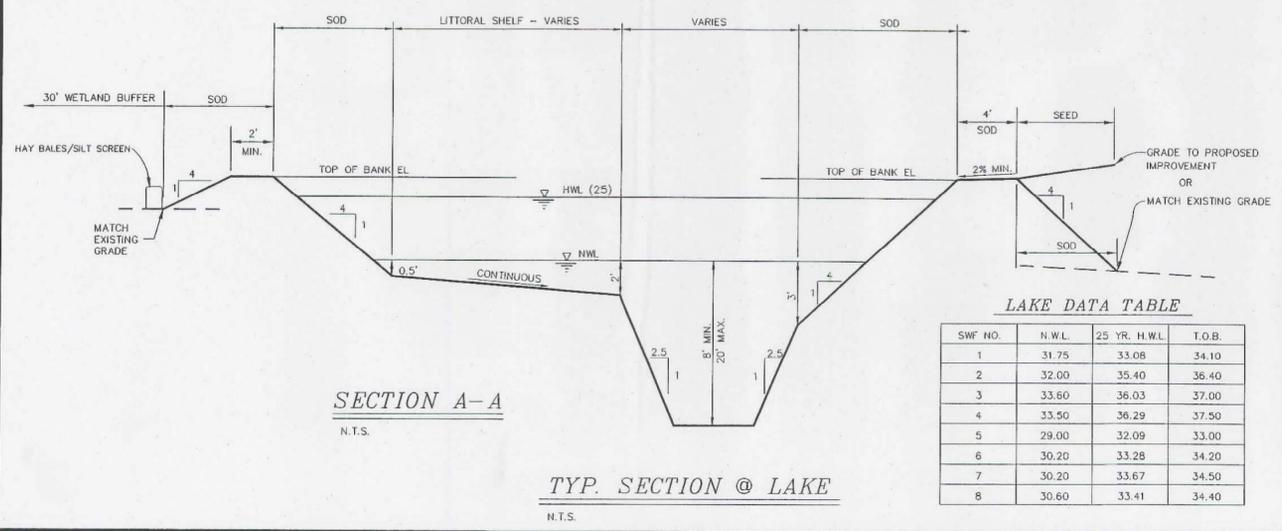
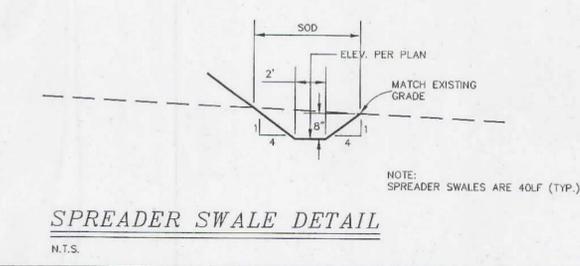
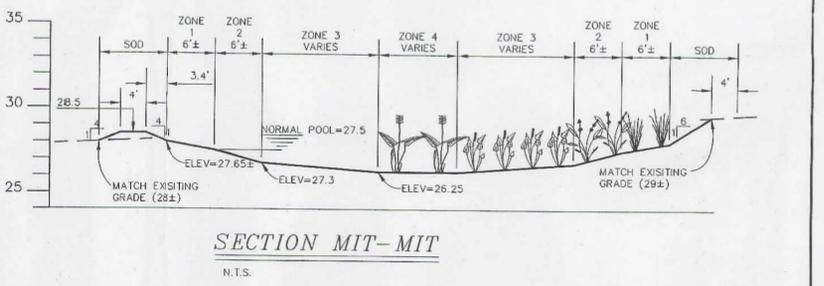
	WEIR 1 EL.	X-1	H ₁	TOP OF DRAWDOWN VOL.	INV EL. WEIR 2	X-2	H ₂	ORIFICE INV.	DIA.
CS #1	31.75	19.2'	3.24'	32.02	32.02	19.2'	8"	-	-
REC.INFO.	31.75	19.2'	3.24'	32.02	32.02	19.2'	8"	-	-
CS #2	NONE	-	-	33.24	33.24	8"	8"	32.00	1.375'
REC.INFO.	NONE	-	-	33.24	33.24	8"	8"	32.02	1.44'
CS #3	NONE	-	-	34.84	34.84	26"	8"	33.60	1.625'
REC.INFO.	NONE	-	-	34.84	34.84	26"	8"	33.60	1.687'
CS #4	NONE	-	-	35.00	35.00	12"	8"	33.50	1.03'
REC.INFO.	NONE	-	-	34.98	34.98	12"	8"	33.50	1.08'
CS #5A	NONE	-	-	29.33	29.33	30"	8"	-	-
REC.INFO.	NONE	-	-	29.33	29.33	30"	8"	-	-
CS #5B	NONE	-	-	29.33	30.00	16"	8"	-	-
REC.INFO.	NONE	-	-	29.31	29.98	16"	8"	-	-
CS #6A	30.20	8"	6"	30.70	30.70	4"	8"	-	-
REC.INFO.	30.20	8"	6"	30.70	30.70	4"	8"	-	-
CS #7A	30.20	24"	3.96"	-	-	-	-	-	-
REC.INFO.	30.15	24"	3.24"	-	-	-	-	-	-
CS #7B	NONE	-	-	30.53	31.00	24"	8"	-	-
REC.INFO.	NONE	-	-	30.53	31.00	24"	8"	-	-
CS #8	30.60	60"	2.40"	30.80	-	-	-	-	-
REC.INFO.	30.61	60"	2.4"	30.81	-	-	-	-	-



- NOTES:**
- CONTRACTOR TO INSURE THAT DEWATERING ACTIVITIES DO NOT CAUSE EROSION AND THAT SUMP IS UTILIZED TO ALLOW FOR PARTICLE SEDIMENTATION.
 - SEDIMENT SUMPS AND DISCHARGE EROSION CONTROL ARE TO BE IMPLEMENTED BEFORE ANY DEWATERING ACTIVITIES OR EARTHWORK CONSTRUCTION. STORMWATER TREATMENT FACILITIES INCLUDING OUTFALLS PER DETAIL ARE TO BE CONSTRUCTED AFTER SEDIMENT SUMPS.
 - SUMP SIZE BASED UPON AN ASSUMED DEWATERING DISCHARGE OF 5 cfs. CONTRACTOR IS TO NOTIFY ENGINEER IF GREATER DISCHARGE IS PROPOSED. SUMP SIZE CAN BE RECALCULATED PER SWFMD SECTION 3.2.4.8.
 - DEWATERING WITHDRAWALS ARE TO BE FROM THE TOP OF THE WATER AREAS TO ALLOW FOR THE ADEQUATE SETTLING OF PARTICLES AND INSURE WATER QUALITY.
 - THE SUM OF WITHDRAWAL PIPES SHOULD BE LESS THAN 4 INCHES. PIPES GREATER THAN 4 INCHES WILL REQUIRE A WATER USE PERMIT WHICH IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - CONTRACTOR IS TO NOTIFY SWFMD OF ANY MODIFICATIONS PROPOSED BY THE CONTRACTOR TO THE DEWATERING PLAN. CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF ANY REQUIRED PLANS AND PROCESSING OF SAME.
 - DISCHARGE FROM SUMPS SHOULD MAXIMIZE OVERLAND FLOW PRIOR TO ENTERING OUTFALL. STAKED HAYBALES WILL BE USED TO MINIMIZE SILTATION RUNOFF. CONTRACTOR IS RESPONSIBLE FOR UTILIZING ADEQUATE HAYBALES AT DISCHARGE LOCATIONS TO PREVENT SCOURING.
 - SEE PLAN VIEWS FOR EASEMENTS, EXISTING WETLAND LIMITS, ETC.

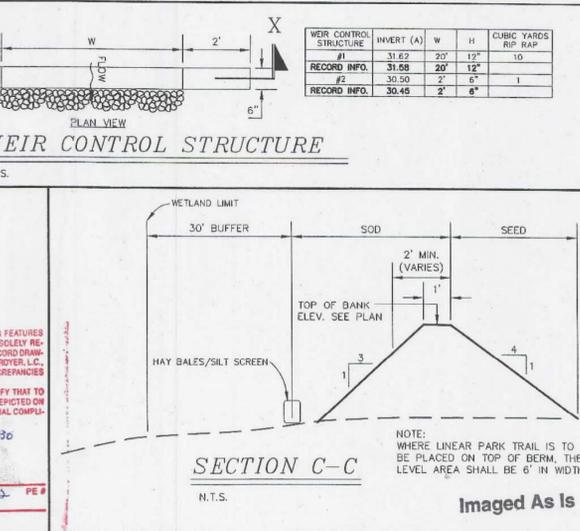
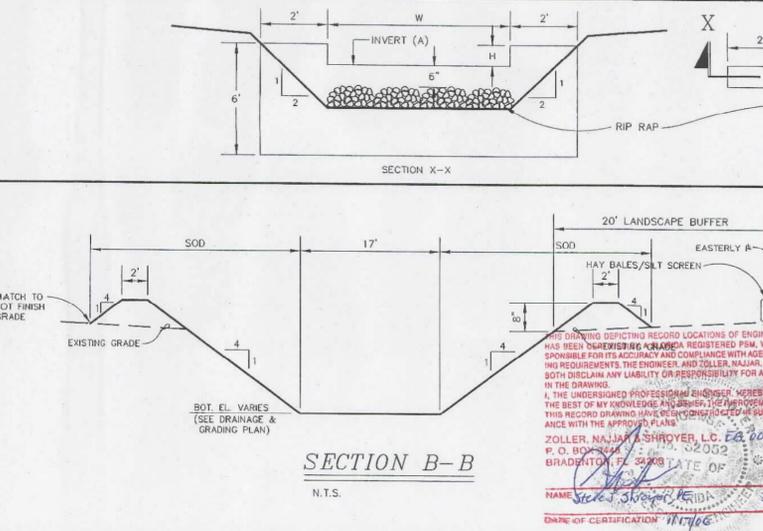
PLANTING LEGEND

KEY	SCIENTIFIC NAME	AREA	QUANTITY	SIZE	SPACING
Zone 1	<i>Spartina bakeri</i> <i>Panicum hemitomon</i>	3,400 sq. ft.	275 100	2" pot or bareroot eq. 2" pot or bareroot eq.	3' o.c. 3' o.c.
Zone 2	<i>Juncus effusus</i> <i>Sagittaria lanosifolia</i>	3,400 sq. ft.	70 300	2" pot or bareroot eq. 2" pot or bareroot eq.	3' o.c. 3' o.c.
Zone 3	<i>Pontederia cordata</i>	13,800 sq. ft.	1,505	2" pot or bareroot eq.	3' o.c.
Zone 4	<i>Thalia geniculata</i>	2,265 sq. ft.	250	2" pot or bareroot eq.	3' o.c.



LAKE DATA TABLE

SWF NO.	N.W.L.	25 YR. H.W.L.	T.O.B.
1	31.75	33.08	34.10
2	32.00	35.40	36.40
3	33.60	36.03	37.00
4	33.50	36.29	37.50
5	29.00	32.09	33.00
6	30.20	33.28	34.20
7	30.20	33.67	34.50
8	30.60	33.41	34.40



GLOBAL SURVEYING, P.A.
 CERTIFICATE OF AUTHORIZATION NO. 110,4451
 STATE OF FLORIDA
 BRADENTON, FLORIDA
 DATE OF FIELD SURVEY: 11/01/2024
 DATE OF PLOTTING: 11/01/2024
 DATE OF PLOTTING: 11/01/2024
 DATE OF PLOTTING: 11/01/2024

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		

RECORD DRAWING OF DRAINAGE DETAILS FOR CREEKWOOD EAST CORPORATE PARK
 LOCATED IN SECTION 12 & 13, TOWNSHIP 35 SOUTH, RANGE 18 EAST, MANATEE COUNTY, FLORIDA

SHEET 10

Imaged As Is
 44005041.021

DRAWN: ECA
 JOB NO. 20011
 COGO 20011
 SCALE: 1" = 100'
 FIELD DATE: 10/02/2000
 6/2/2000 11:13 AM

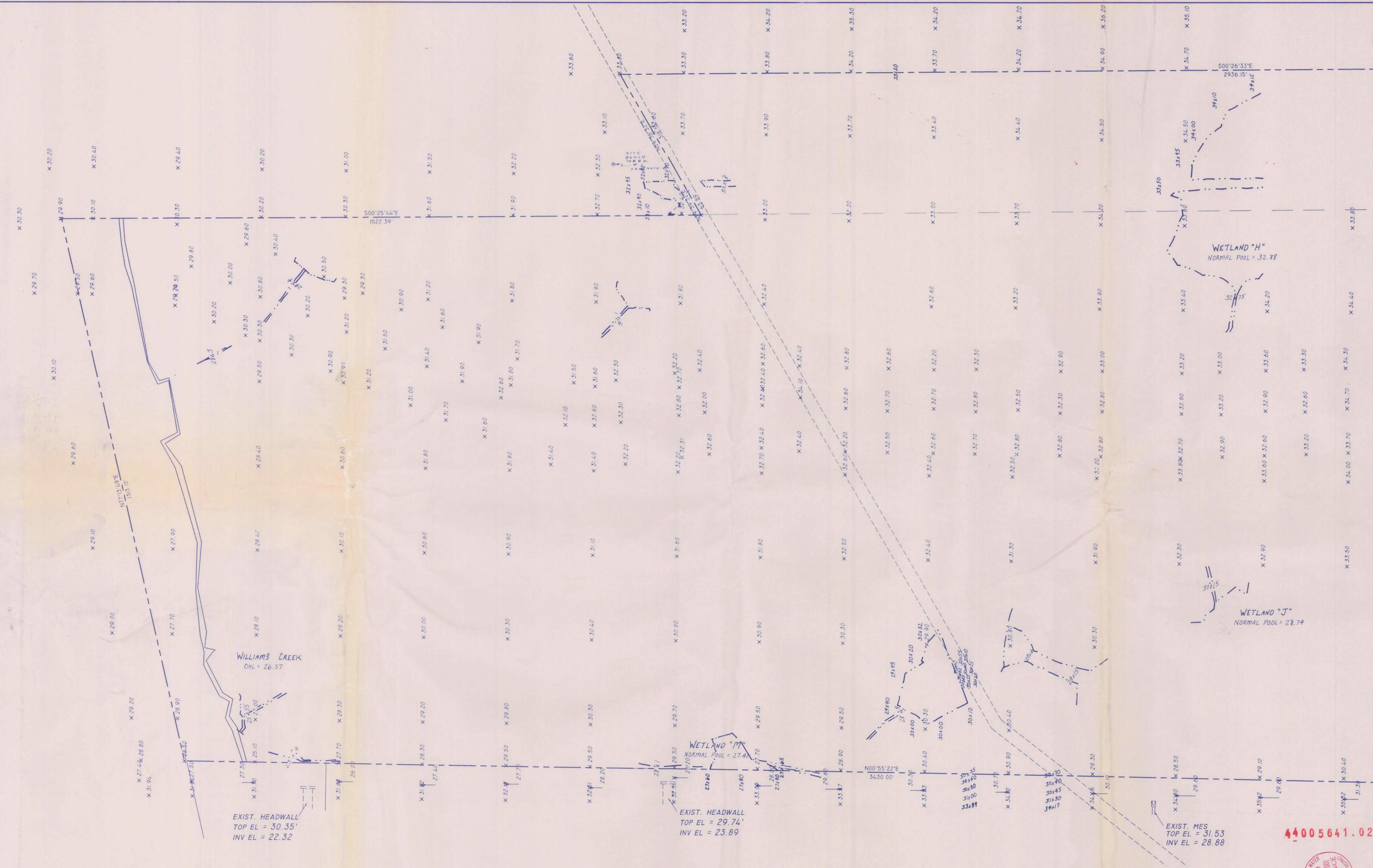
9908 32nd AVENUE EAST
 BRADENTON, FLORIDA 34208
 941.747.9777

Alpha
 Surveying
 Consultants
 EDWARD C. AHLF, P.E. 975

SHEET
 3/4

A TOPOGRAPHIC SURVEY OF "CREEKWOOD EAST
 CORPORATE PARK", BEING LOCATED IN
 SECTIONS 12 & 13, TOWNSHIP 35 SOUTH,
 RANGE 18 EAST, MANATEE COUNTY, FLORIDA

CLIENT:
 PRENEZ EN GRE, INC.
 C/O MARK OGLES
 1111 8th AVENUE WEST
 BRADENTON, FL 34205



44005641.020



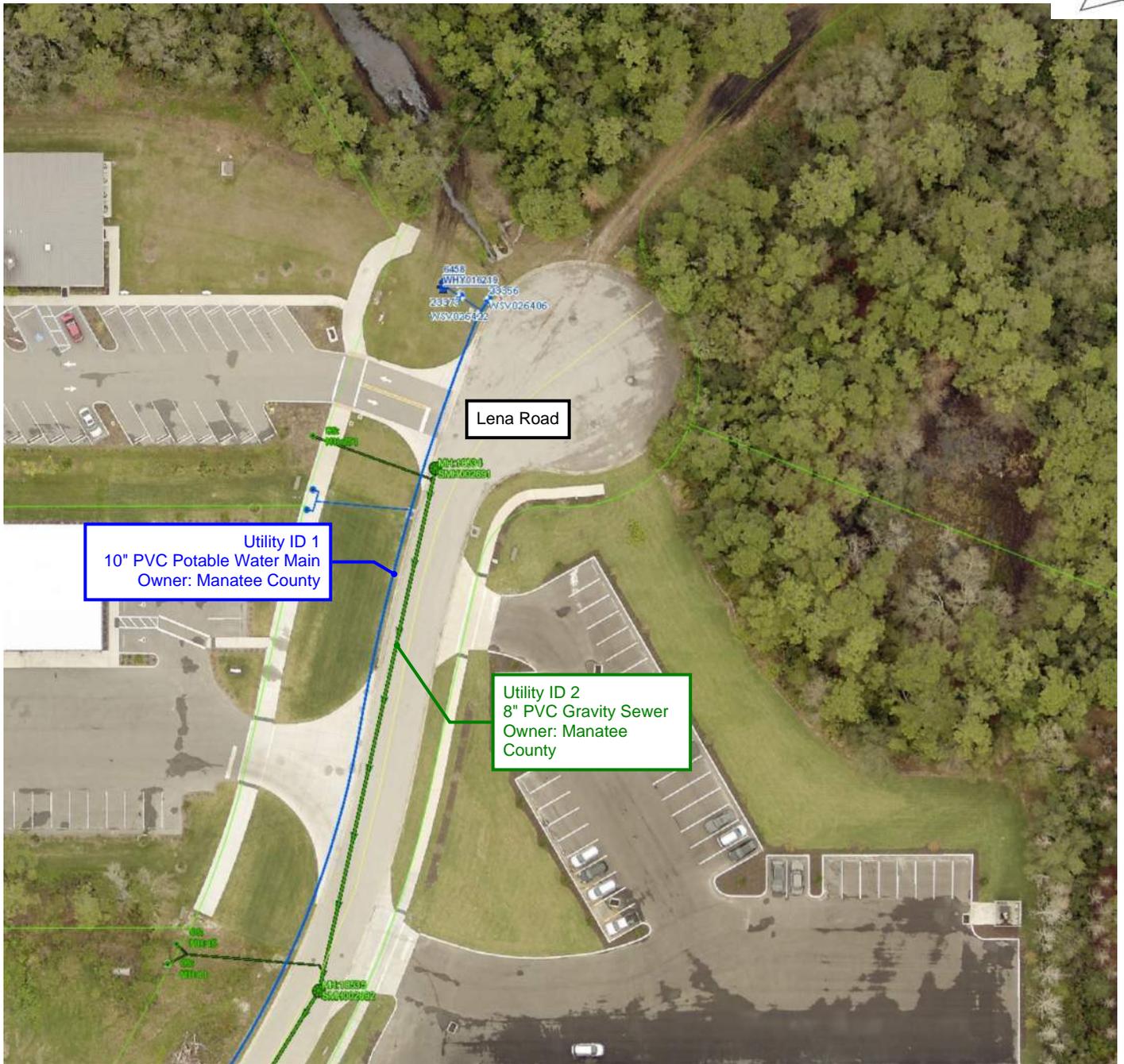
CERTIFICATE: The survey represented hereon meets the minimum standard requirements of Chapter 61017-6 Florida Administrative Code to the best of my knowledge and belief.

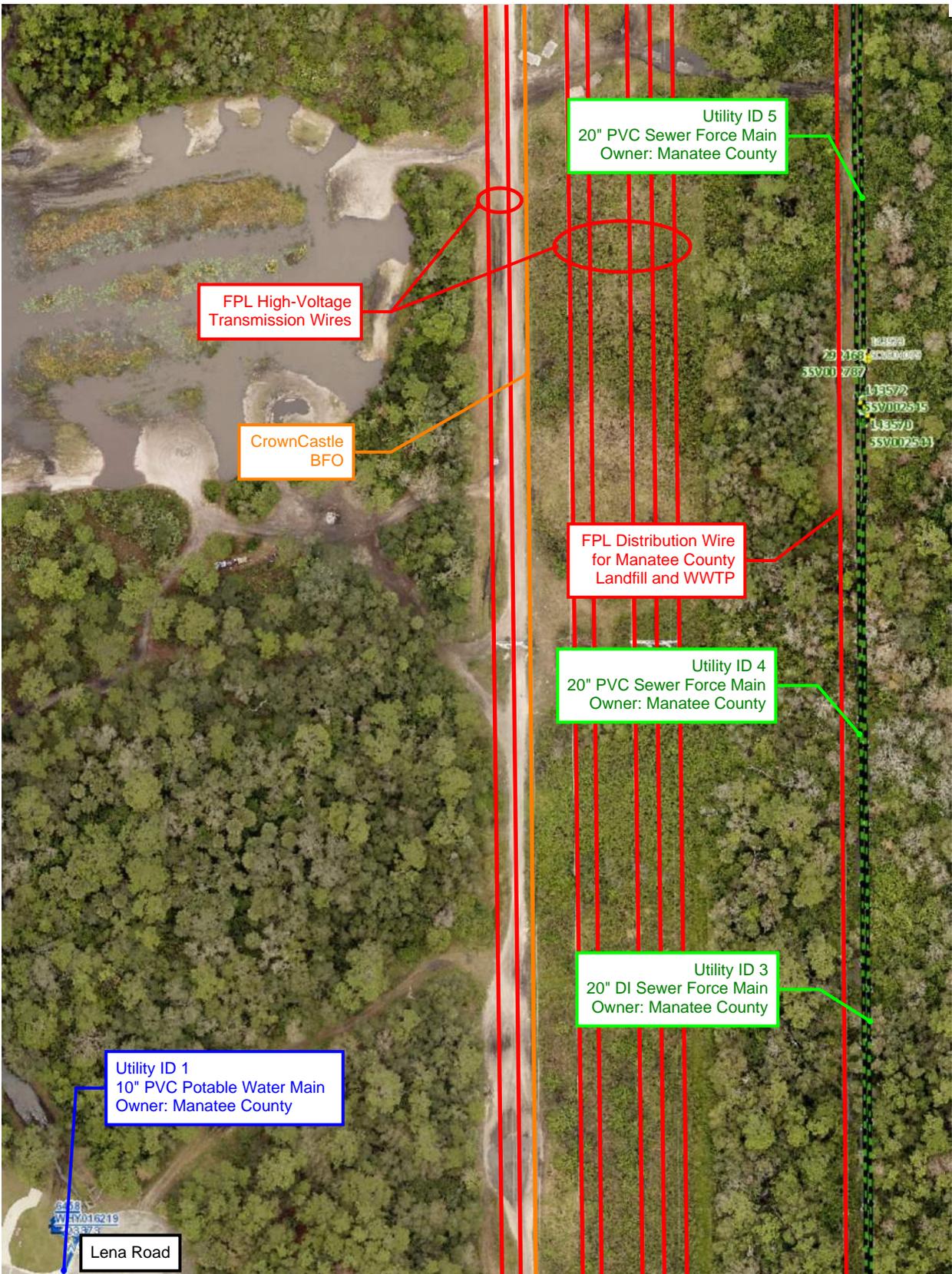
EDWARD C. AHLF, P.E.
 Florida Surveyor & Mapper Registration No. 3975
 Survey not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper. This survey made for the exclusive use of the current owners of the property and also those who purchase, mortgage or guarantee the title thereto within one (1) year from date hereof.

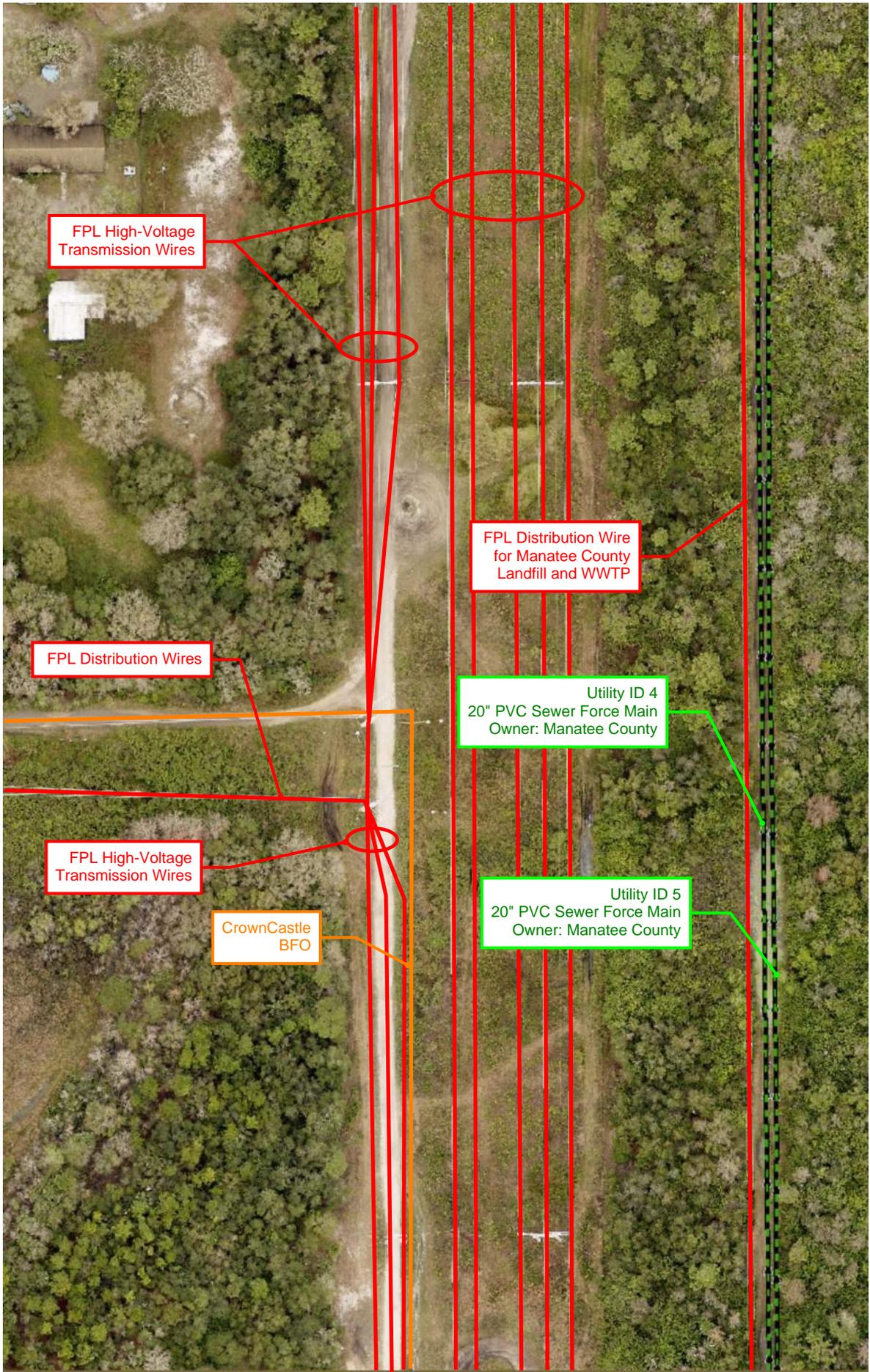
- LEGEND**
- SET 5/8" IRON ROD L&S 3975 (SIR)
 - SET 4" CONCRETE MONUMENT L&S 3975 (PRM)
 - FOUND 4" CONCRETE MONUMENT (FCM)
 - FOUND 5/8" IRON ROD (FIR)
 - SET NAIL & DISC L&S 3975
 - WIRE FENCE
 - UTILITY POLE & WIRES
 - SWALE OR DITCH
 - HW HEADWALL
 - RCP REINFORCED CONCRETE CULVERT PIPE
 - CMP CORRUGATED METAL CULVERT PIPE
 - BM BENCH MARK
 - X — EXISTING ELEVATION

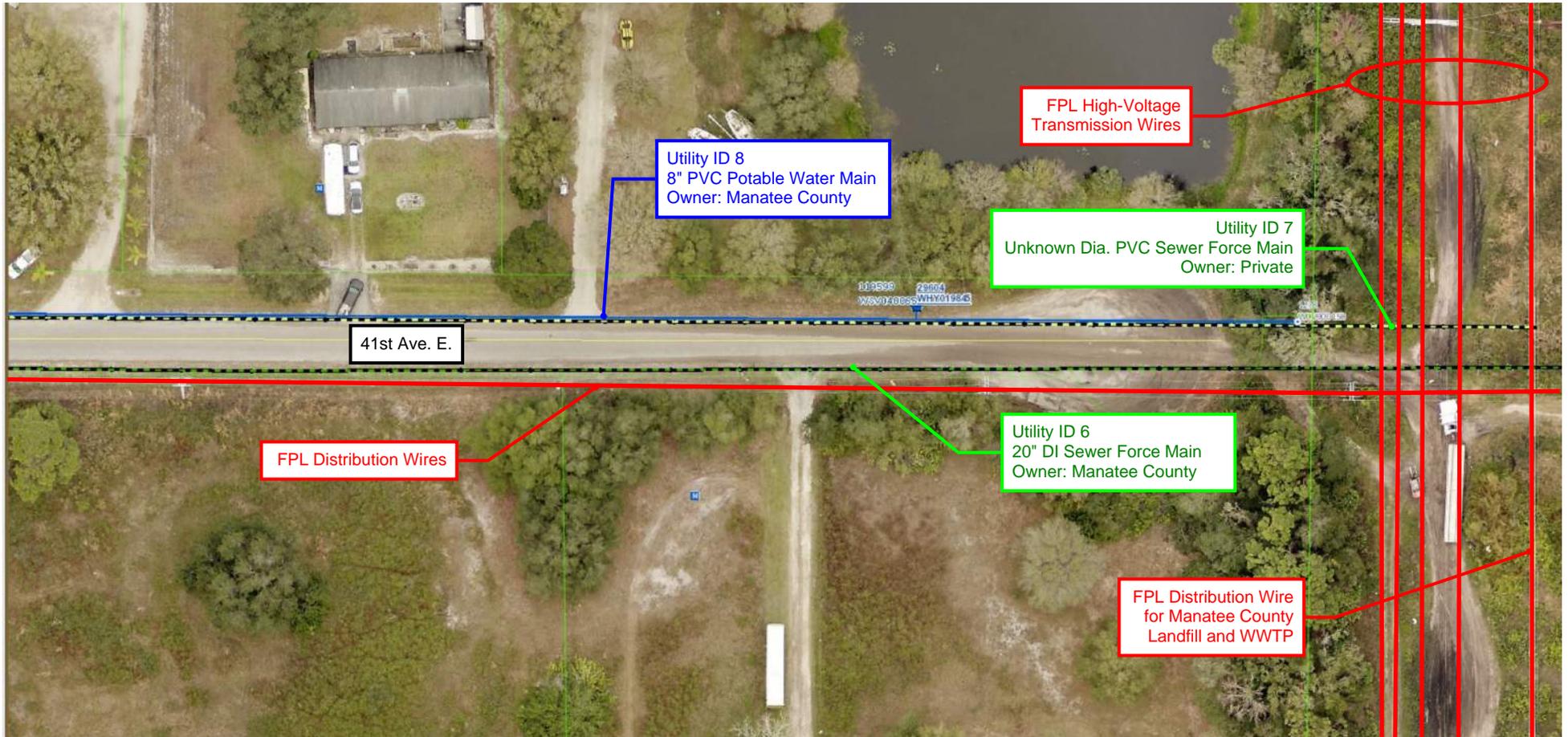
- NOTES:**
- 1) BEARINGS SHOWN HEREON ARE BASED ON THE WEST LINE OF THE EAST 1/2 OF SECTION 12, AS BEING S00°25'44"E (LOMBARDO & SKIPPER, INC. SURVEY FOR CREEKWOOD EAST DATED SEPTEMBER 1988).
 - 2) ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929. BENCH MARK (SITE BENCH MARK 1) USED WAS X-CUT FOUND IN WEST SIDE EDGE OF FOOTER OF STEEL POWER POLE #B1393 LOCATED NORTH 100' MORE OR LESS OF THE GAS LINE EASEMENT, ELEVATION = 36.64', AS PER ZOLLER, NAJJAR & SHROYER. SITE BENCH MARK 2 IS AN X-CUT FOUND IN WEST SIDE EDGE OF FOOTER OF STEEL POWER POLE #B1393 LOCATED NORTHERLY 1000' MORE OR LESS OF THE SOUTH PROPERTY LINE, ELEVATION = 39.54'.
 - 3) NOT ALL IMPROVEMENTS SUCH AS UTILITY POLES, INTERIOR FENCES, CULVERTS, PONDS OR DITCHES HAVE BEEN LOCATED OR SHOWN.
 - 4) FLOOD ZONE X, COMMUNITY #120153, PANEL #0354C, DATED JULY 15, 1992.
 - 5) LIMITS OF WETLANDS ARE NOT SHOWN ON THIS SURVEY.

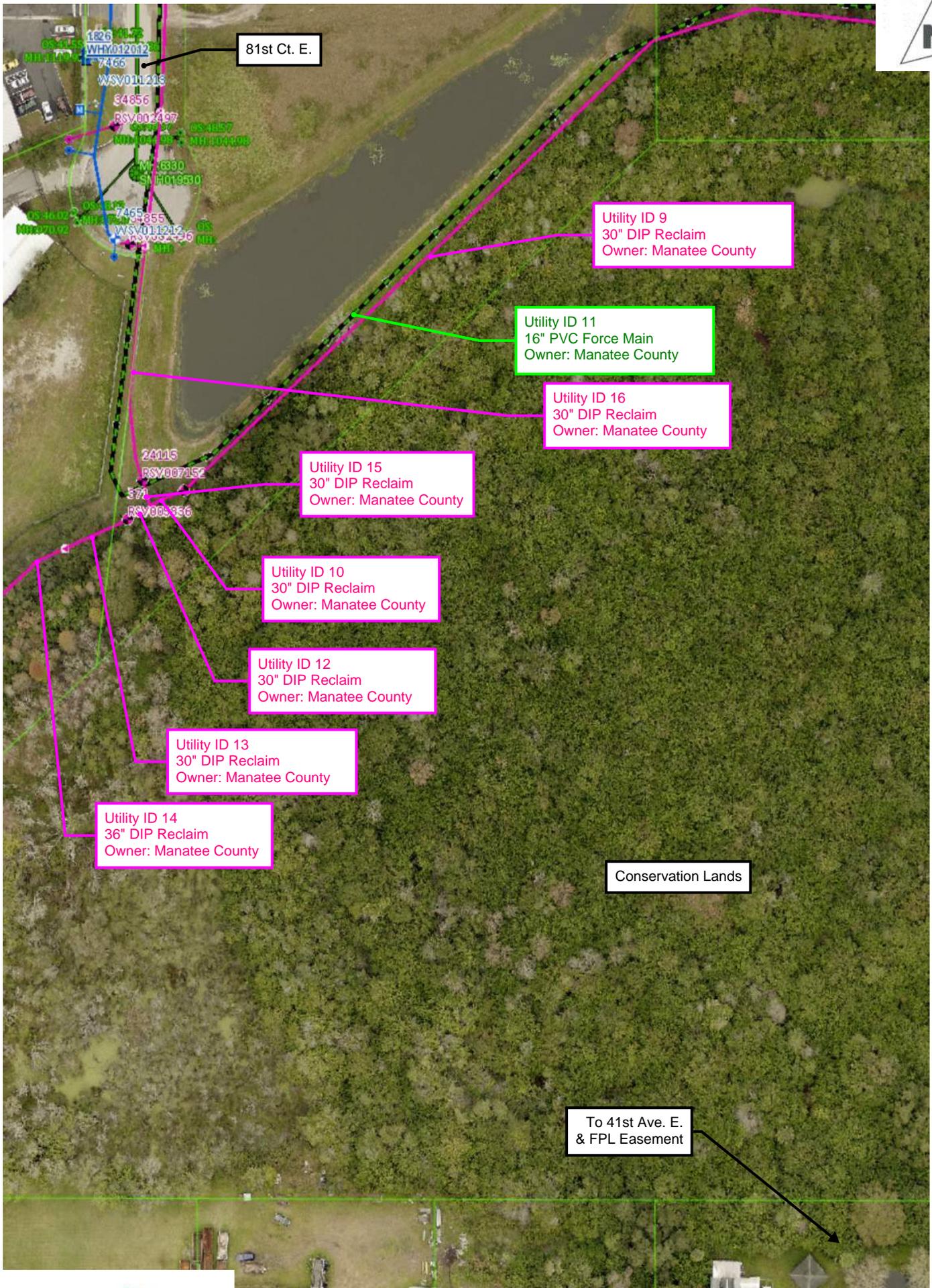
Appendix F – Utilities Figures











81st Ct. E.

Utility ID 9
30" DIP Reclaim
Owner: Manatee County

Utility ID 11
16" PVC Force Main
Owner: Manatee County

Utility ID 16
30" DIP Reclaim
Owner: Manatee County

Utility ID 15
30" DIP Reclaim
Owner: Manatee County

Utility ID 10
30" DIP Reclaim
Owner: Manatee County

Utility ID 12
30" DIP Reclaim
Owner: Manatee County

Utility ID 13
30" DIP Reclaim
Owner: Manatee County

Utility ID 14
36" DIP Reclaim
Owner: Manatee County

Conservation Lands

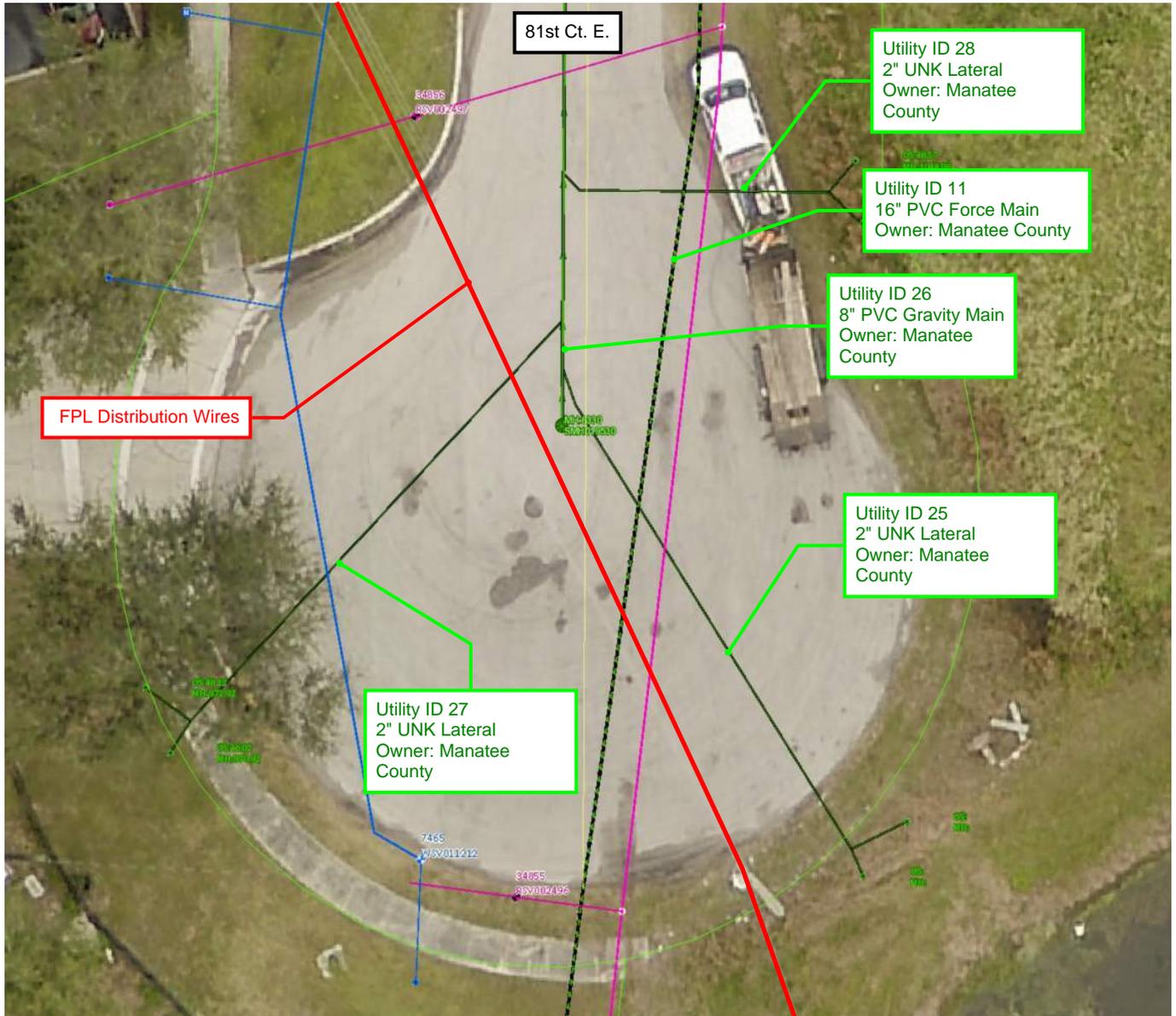
To 41st Ave. E.
& FPL Easement

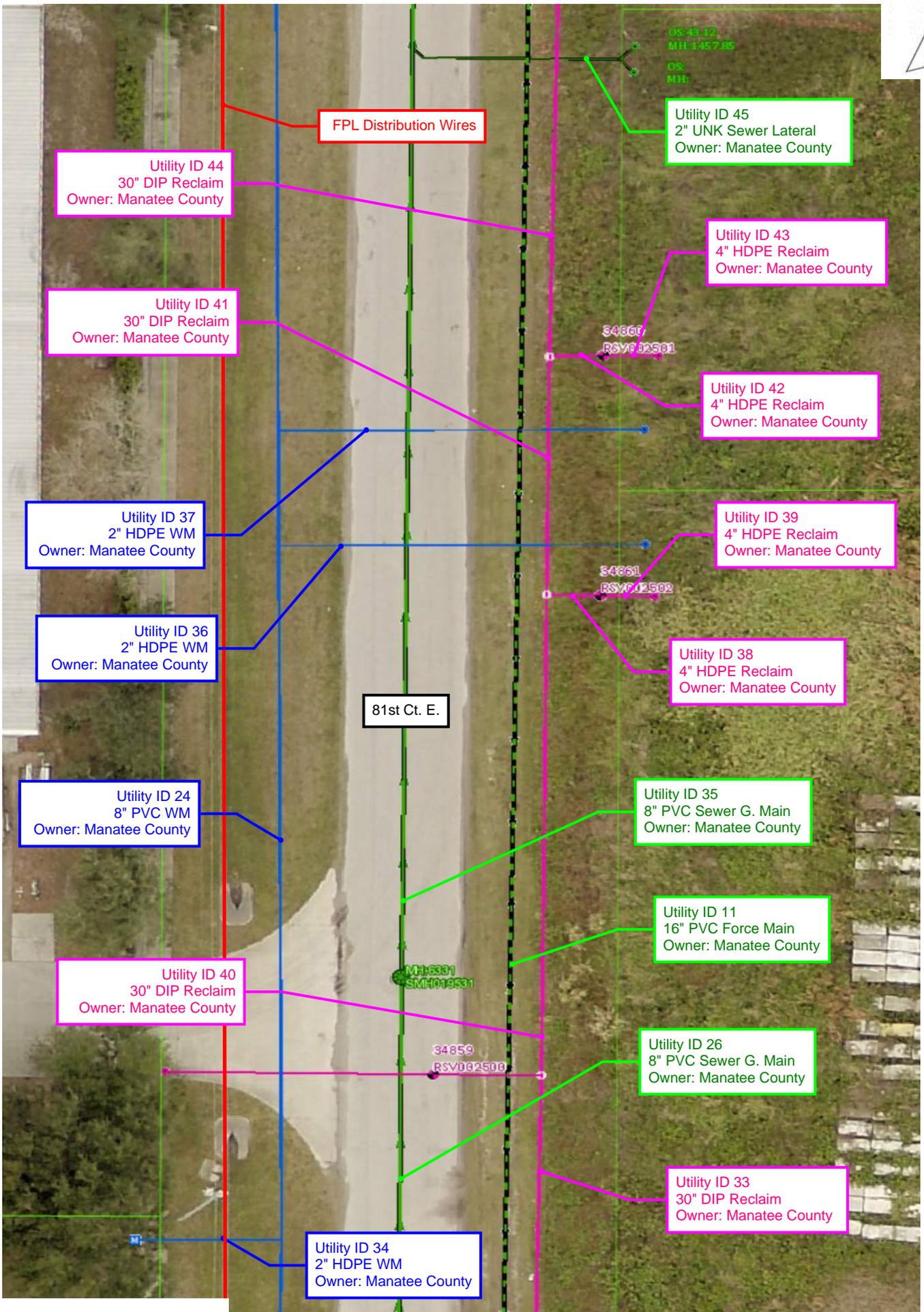


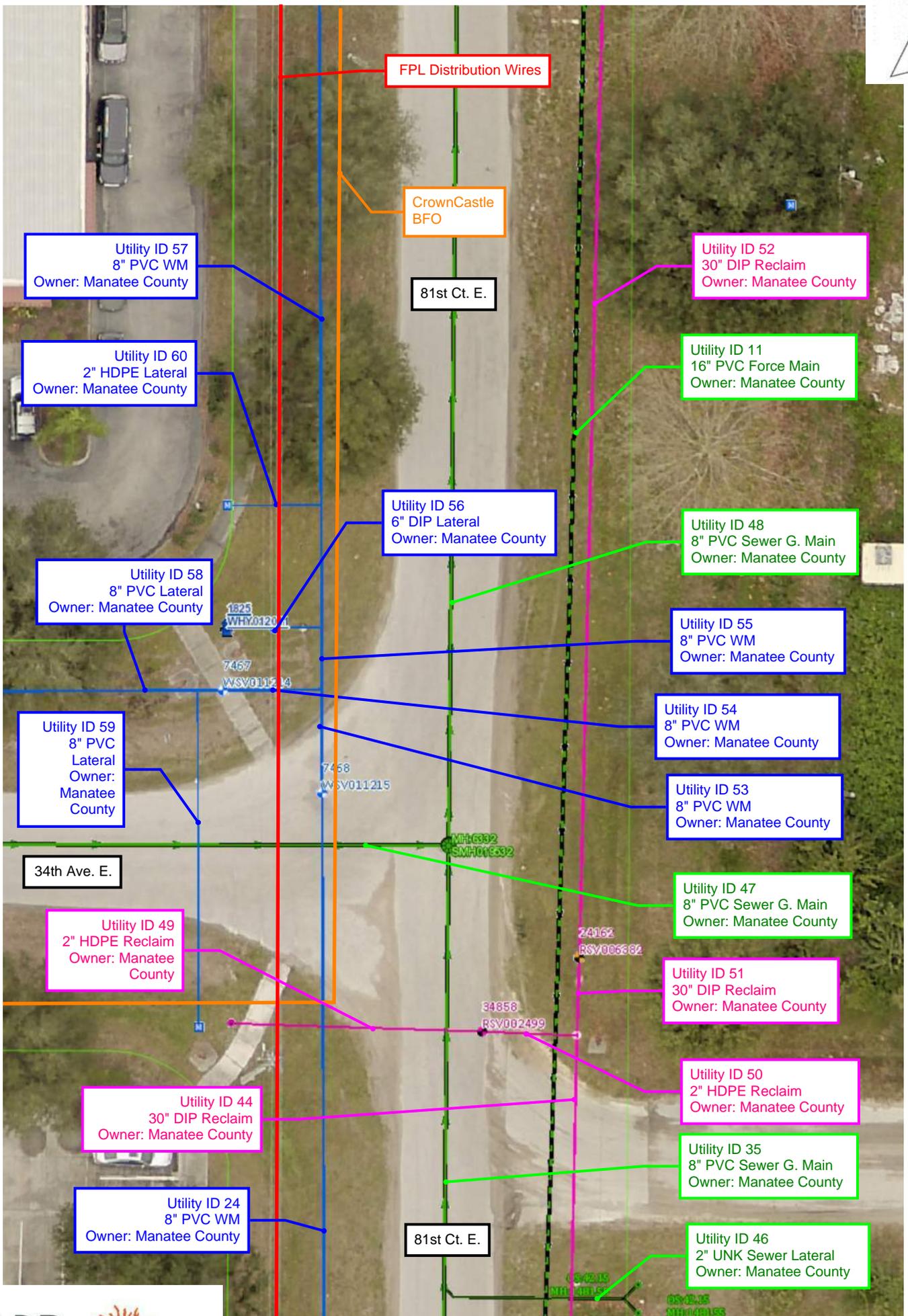
Detail Sheet



81st Ct. E. Cul-De-Sac Enlarged Utility Location Map with Sewer Utility Identification Call-outs







FPL Distribution Wires

CrownCastle BFO

Utility ID 57
8" PVC WM
Owner: Manatee County

81st Ct. E.

Utility ID 52
30" DIP Reclaim
Owner: Manatee County

Utility ID 60
2" HDPE Lateral
Owner: Manatee County

Utility ID 11
16" PVC Force Main
Owner: Manatee County

Utility ID 56
6" DIP Lateral
Owner: Manatee County

Utility ID 48
8" PVC Sewer G. Main
Owner: Manatee County

Utility ID 58
8" PVC Lateral
Owner: Manatee County

Utility ID 55
8" PVC WM
Owner: Manatee County

Utility ID 59
8" PVC Lateral
Owner: Manatee County

Utility ID 54
8" PVC WM
Owner: Manatee County

Utility ID 53
8" PVC WM
Owner: Manatee County

34th Ave. E.

Utility ID 47
8" PVC Sewer G. Main
Owner: Manatee County

Utility ID 49
2" HDPE Reclaim
Owner: Manatee County

Utility ID 51
30" DIP Reclaim
Owner: Manatee County

Utility ID 44
30" DIP Reclaim
Owner: Manatee County

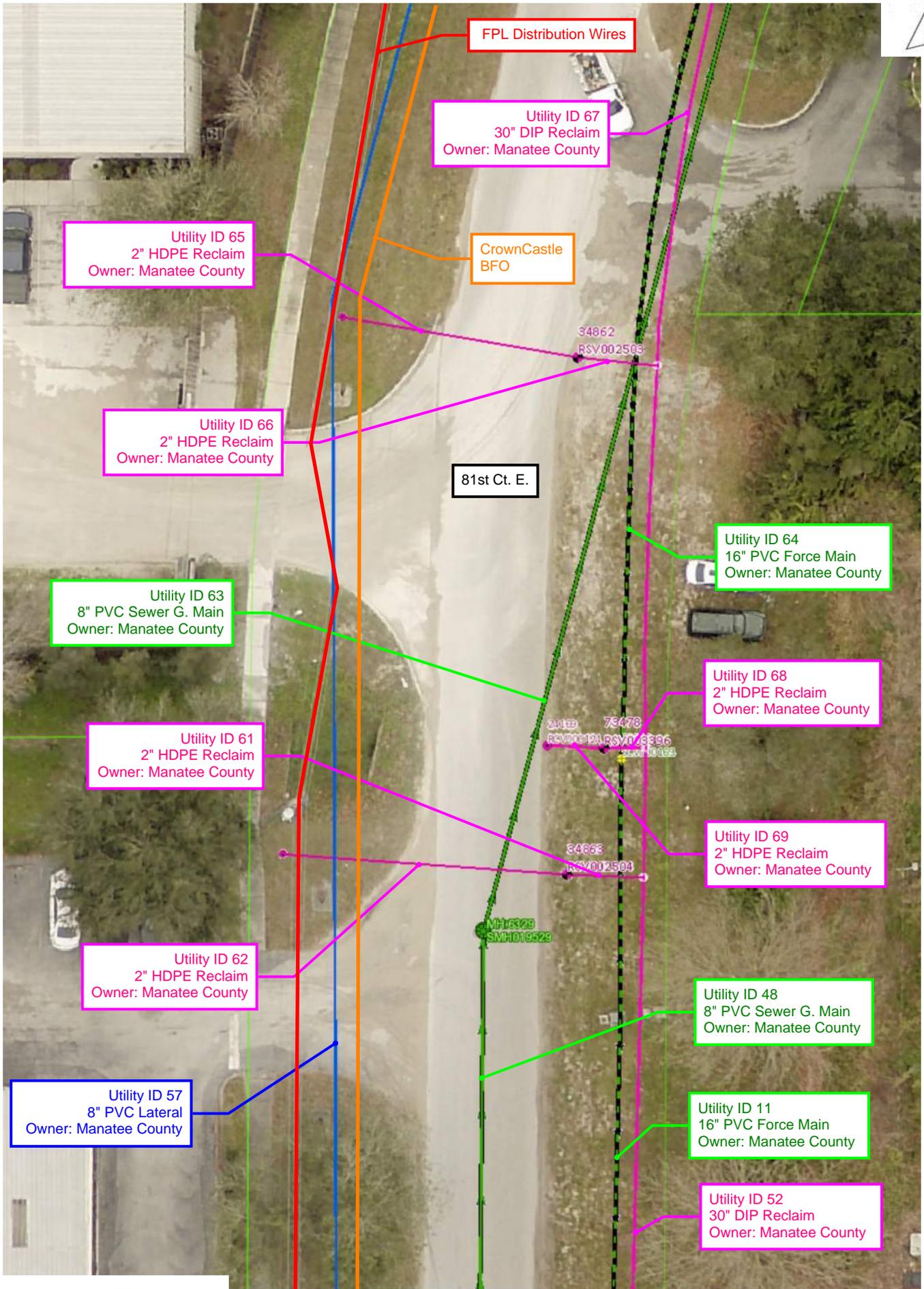
Utility ID 50
2" HDPE Reclaim
Owner: Manatee County

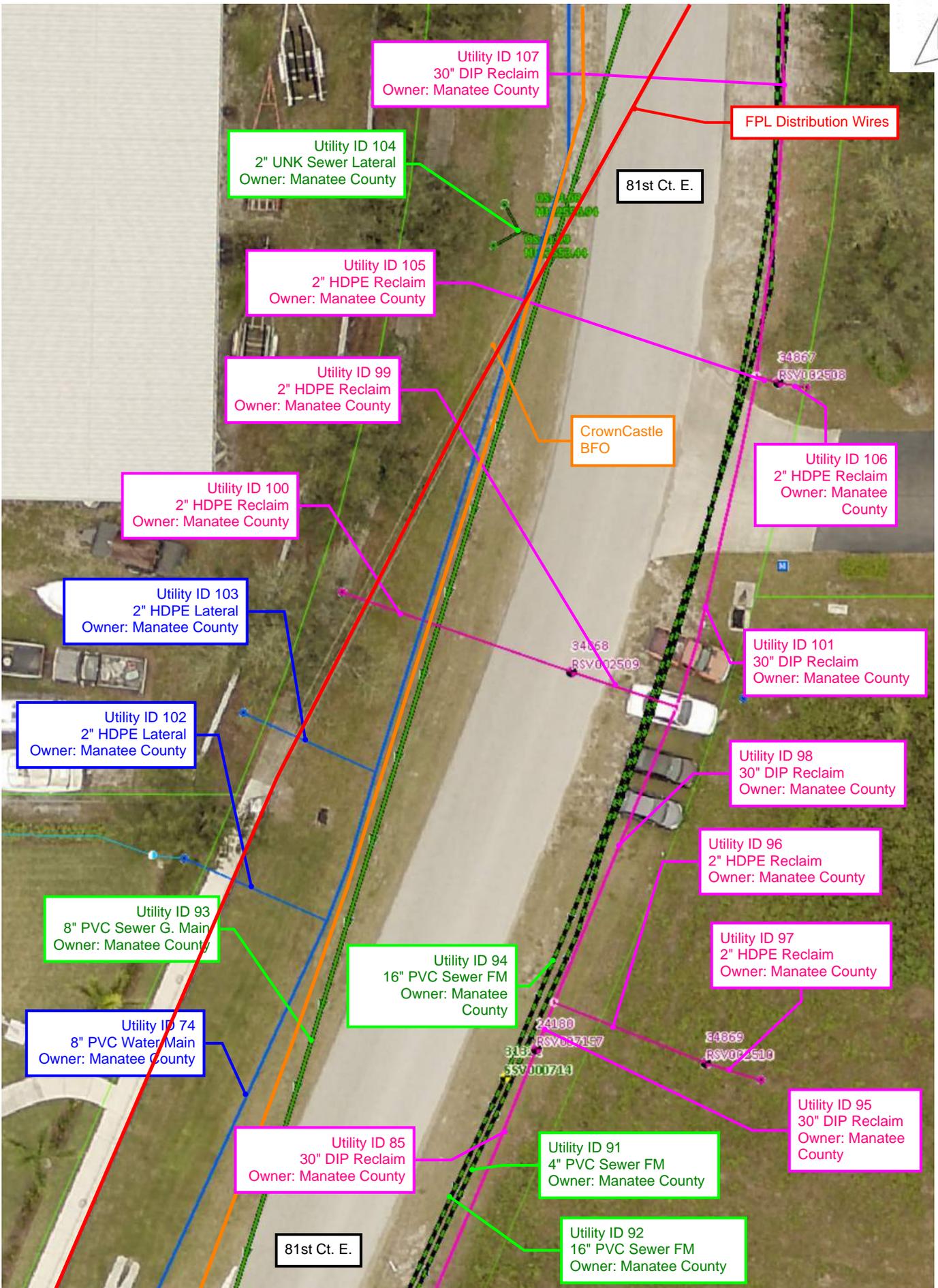
Utility ID 24
8" PVC WM
Owner: Manatee County

Utility ID 35
8" PVC Sewer G. Main
Owner: Manatee County

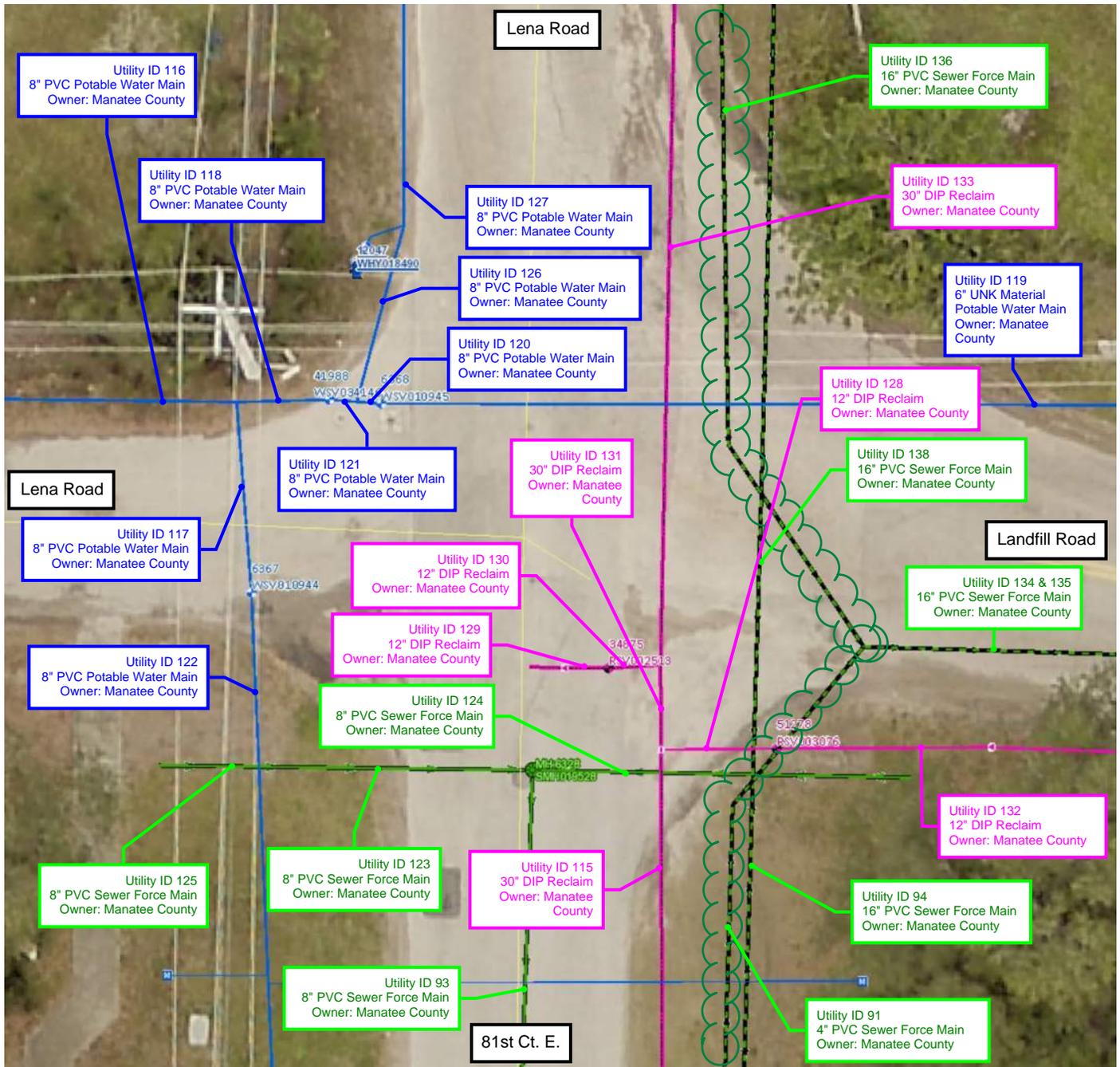
81st Ct. E.

Utility ID 46
2" UNK Sewer Lateral
Owner: Manatee County

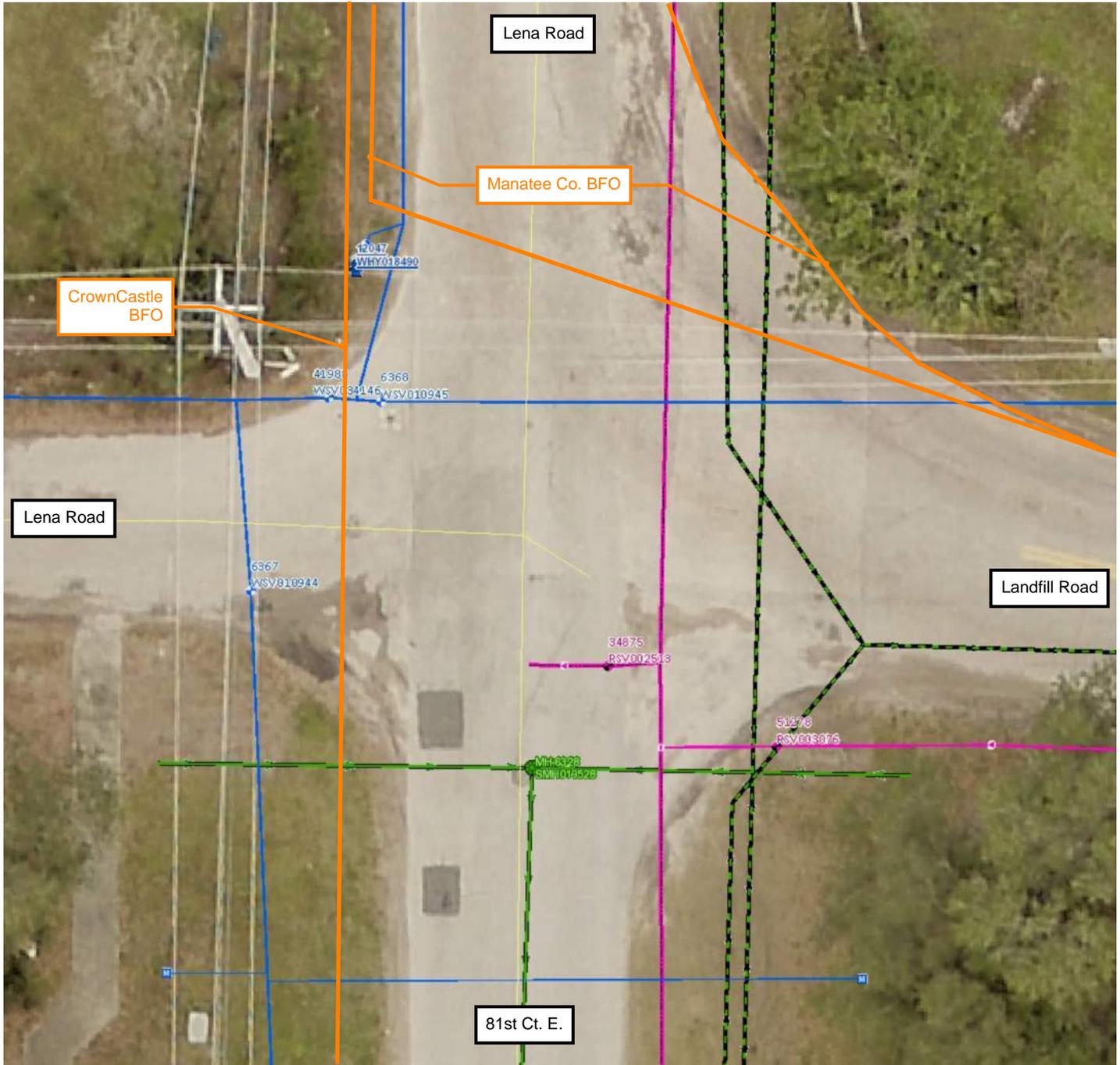


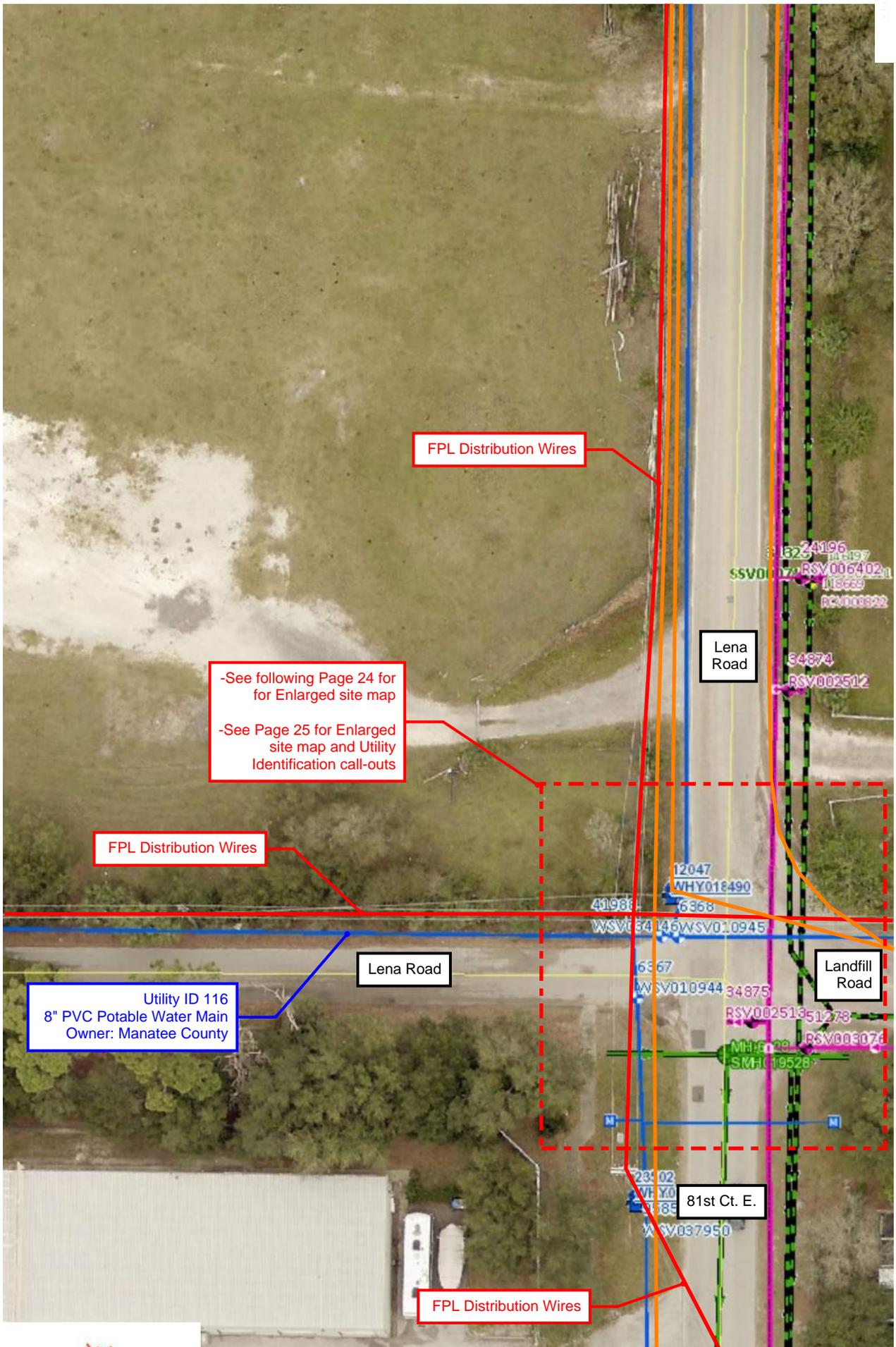


Lena Road, 81st Ct. E., & Landfill Road Intersection Enlarged Utility Location Map with Water and Sewer Utility Identification Call-outs



Lena Road, 81st Ct. E., & Landfill Road Intersection Enlarged Utility Location Map





FPL Distribution Wires

-See following Page 24 for
for Enlarged site map

-See Page 25 for Enlarged
site map and Utility
Identification call-outs

FPL Distribution Wires

Utility ID 116
8" PVC Potable Water Main
Owner: Manatee County

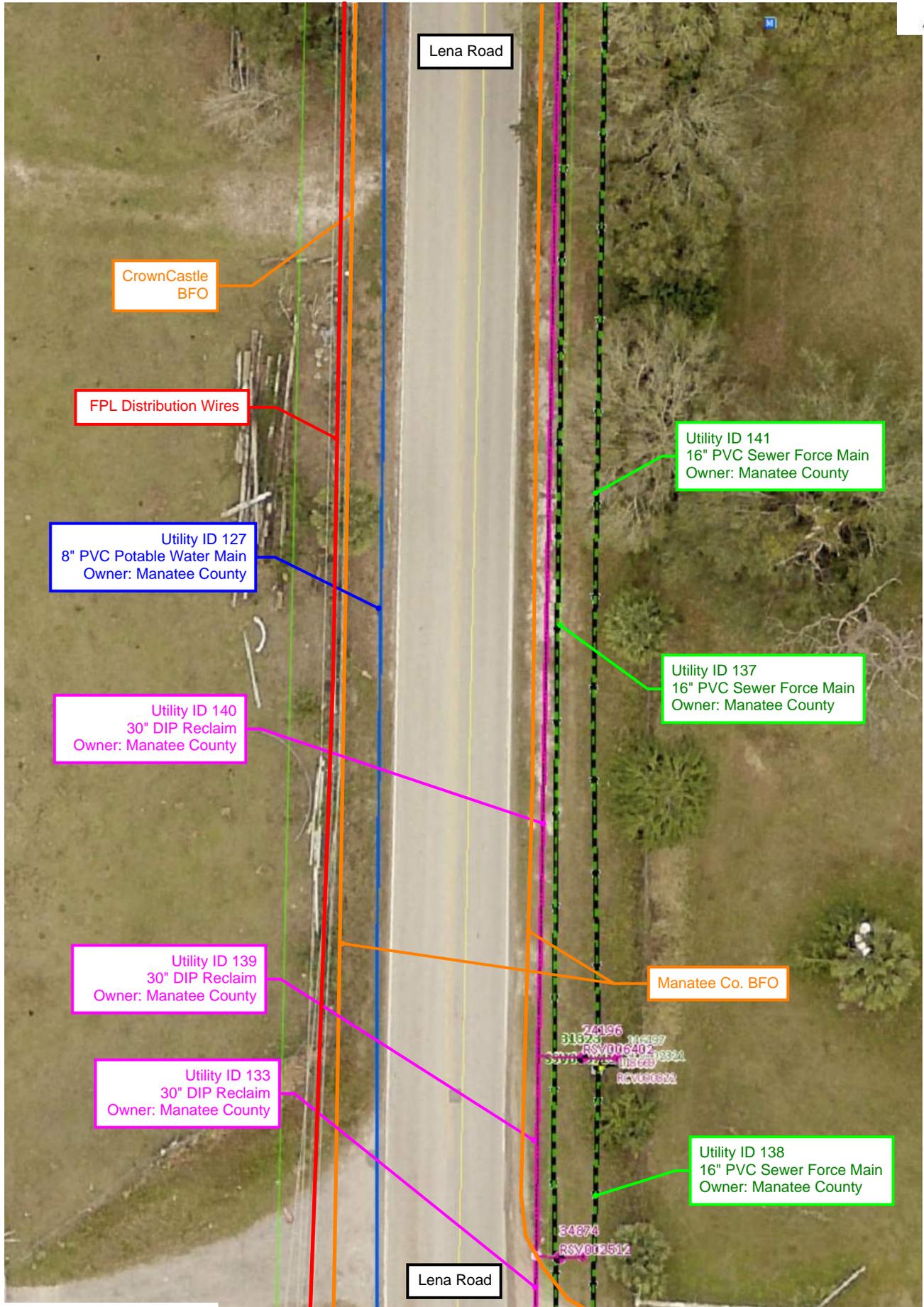
Lena Road

Landfill Road

81st Ct. E.

FPL Distribution Wires





Lena Road

CrownCastle
BFO

FPL Distribution Wires

Utility ID 127
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 140
30" DIP Reclaim
Owner: Manatee County

Utility ID 139
30" DIP Reclaim
Owner: Manatee County

Utility ID 133
30" DIP Reclaim
Owner: Manatee County

Lena Road

Utility ID 141
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 137
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

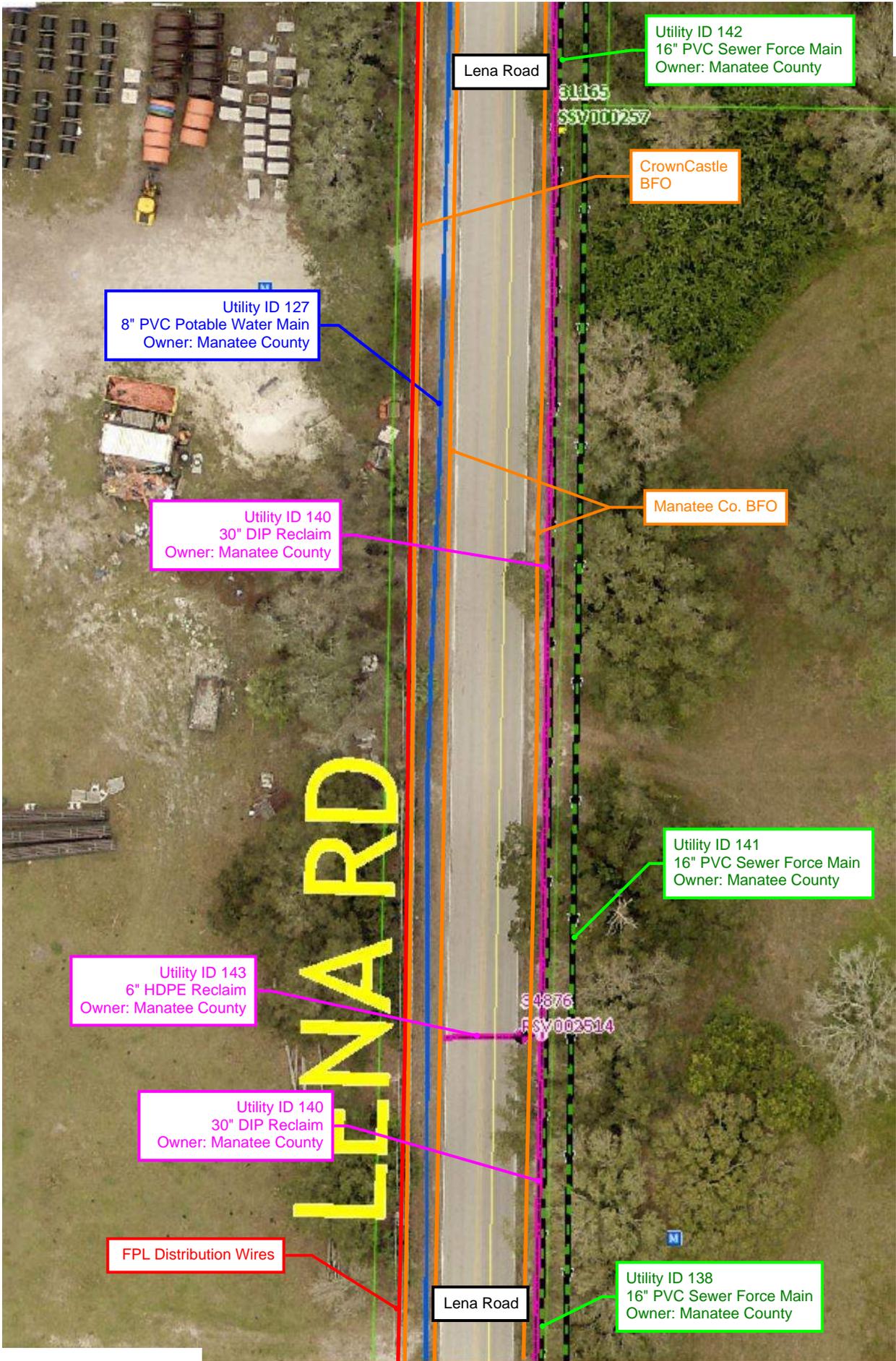
Utility ID 138
16" PVC Sewer Force Main
Owner: Manatee County

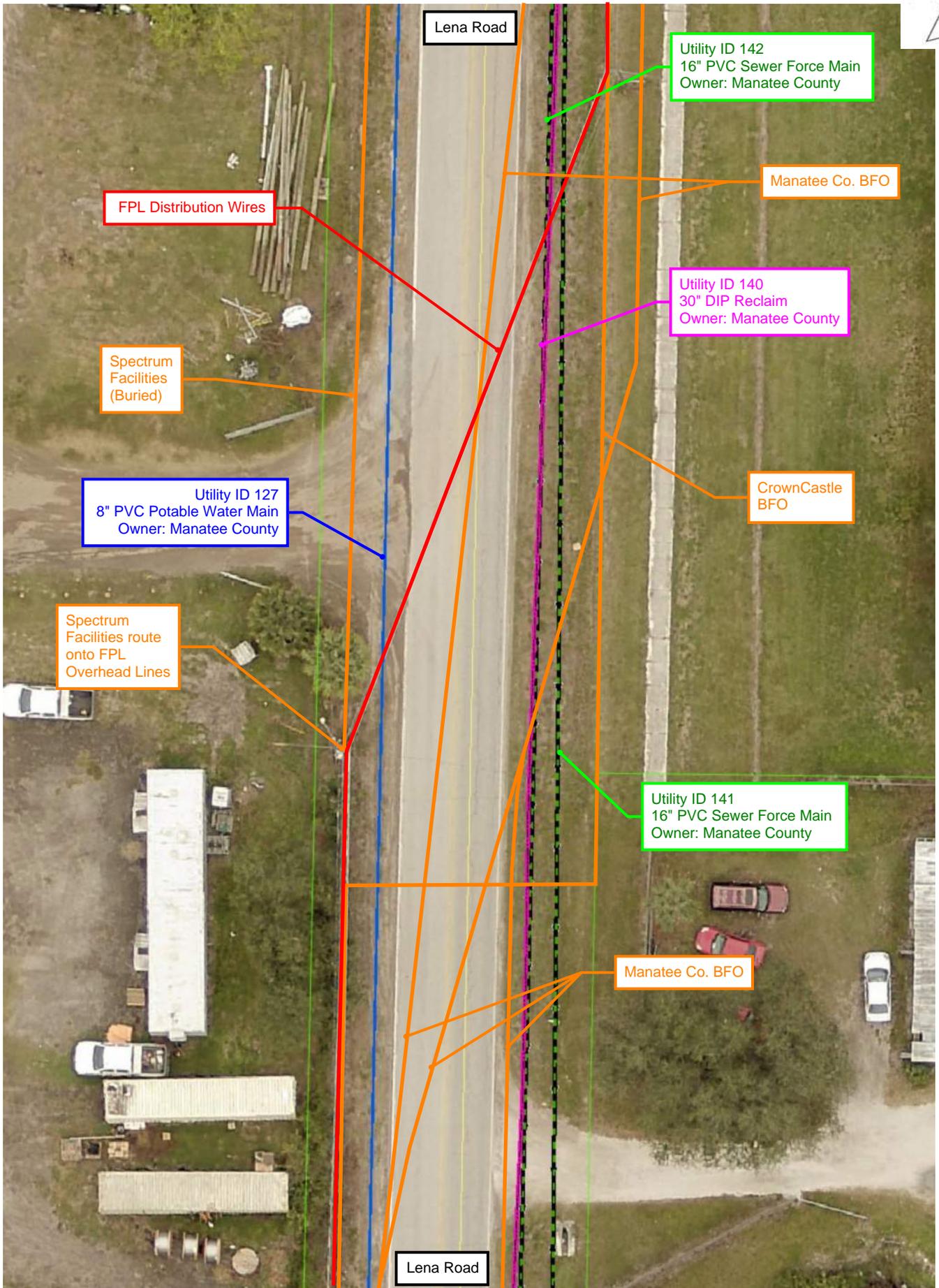
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3570
14167
RSV00640
11368
RCV00602

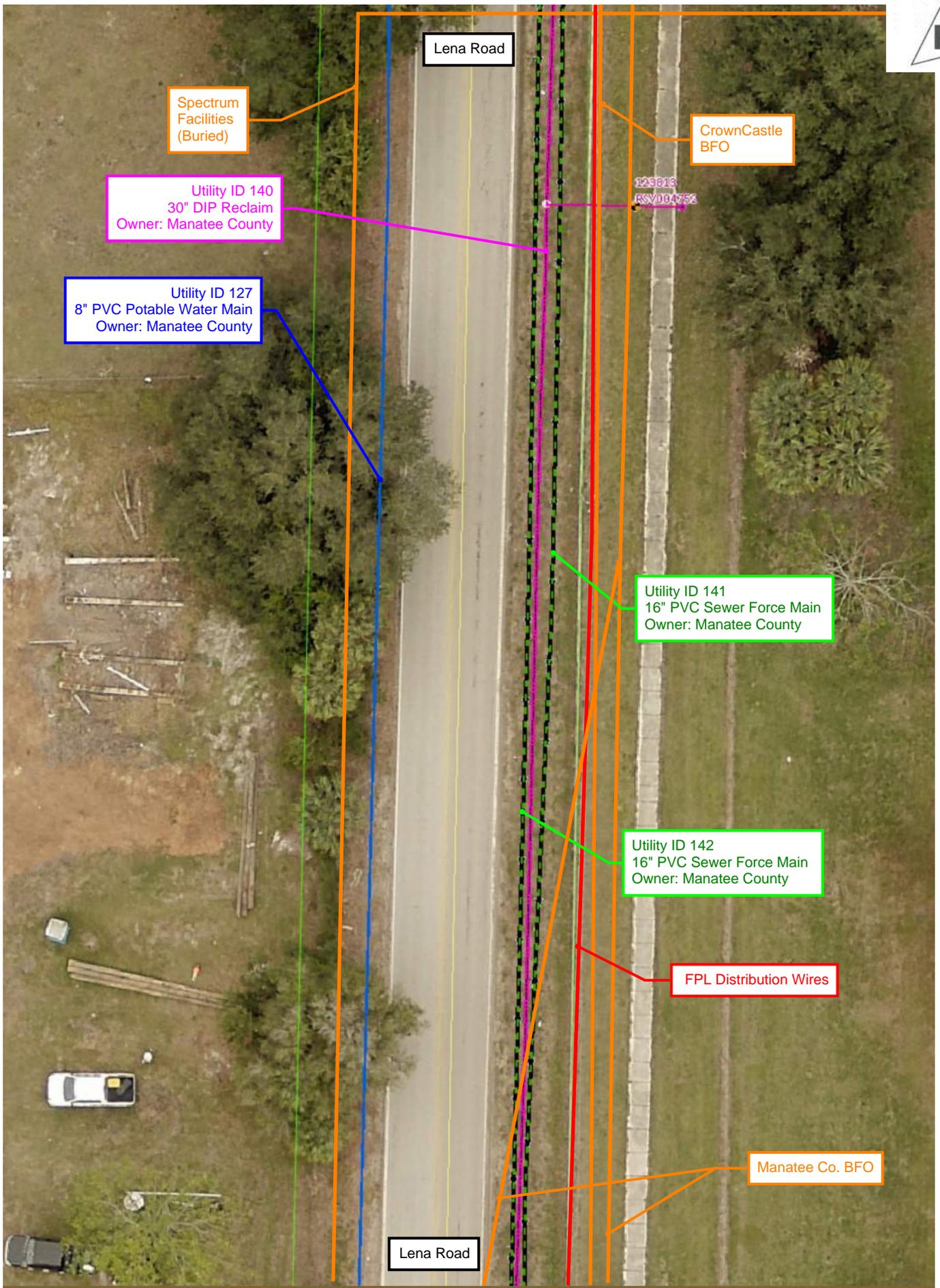
84874
RSV002512



Detail Sheet







Lena Road

Spectrum
Facilities
(Buried)

CrownCastle
BFO

Utility ID 140
30" DIP Reclaim
Owner: Manatee County

Utility ID 127
8" PVC Potable Water Main
Owner: Manatee County

123813
RSV004752

Utility ID 141
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 142
16" PVC Sewer Force Main
Owner: Manatee County

FPL Distribution Wires

Manatee Co. BFO

Lena Road



Lena Road

Utility ID 151
8" PVC Potable Water
Main
Owner: Manatee County

Utility ID 148
16" PVC Sewer Force
Main
Owner: Manatee County

FPL Distribution Wires

Utility ID 150
2" HDPE Water Lateral
Owner: Manatee
County

Utility ID 147
2" HDPE Sewer Force
Main
Owner: Manatee County

Utility ID 149
2" HDPE Water Lateral
Owner: Manatee
County

Utility ID 146
2" HDPE Sewer Force Main
Owner: Manatee County

ZAYO BFO

Utility ID 127
8" PVC Potable Water
Main
Owner: Manatee County

Utility ID 145
30" DIP Reclaim
Owner: Manatee County

Utility ID 144
16" PVC Sewer Force
Main
Owner: Manatee County

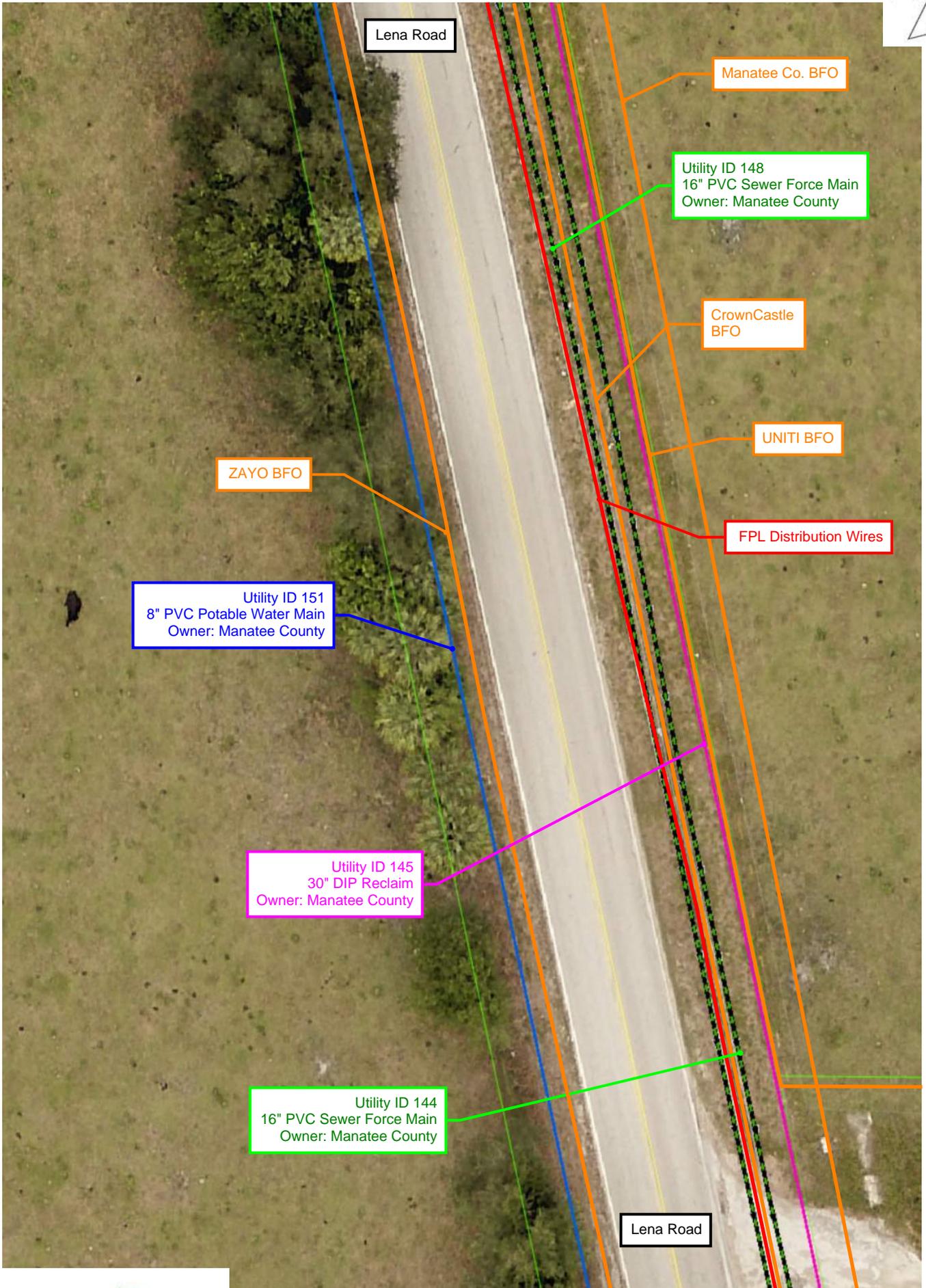
CrownCastle
BFO

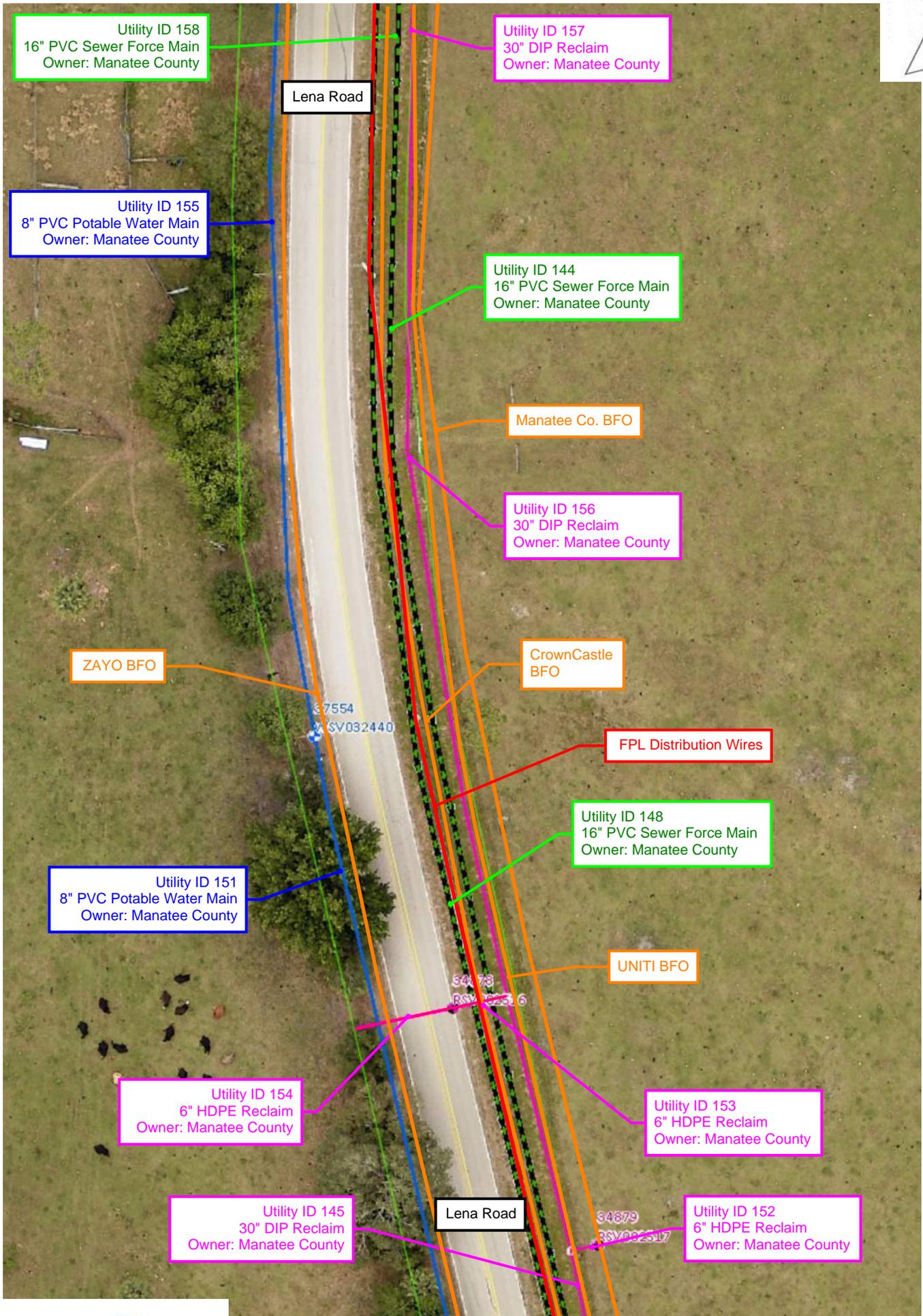
Manatee Co. BFO

Utility ID 142
16" PVC Sewer Force
Main
Owner: Manatee County

Lena Road

24220
3162
RSV06116
35711 0713





Utility ID 158
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 157
30" DIP Reclaim
Owner: Manatee County

Lena Road

Utility ID 155
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 144
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

Utility ID 156
30" DIP Reclaim
Owner: Manatee County

ZAYO BFO

CrownCastle
BFO

FPL Distribution Wires

67554
RSW032440

Utility ID 148
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 151
8" PVC Potable Water Main
Owner: Manatee County

UNITI BFO

6478
RSW032440

Utility ID 154
6" HDPE Reclaim
Owner: Manatee County

Utility ID 153
6" HDPE Reclaim
Owner: Manatee County

Lena Road

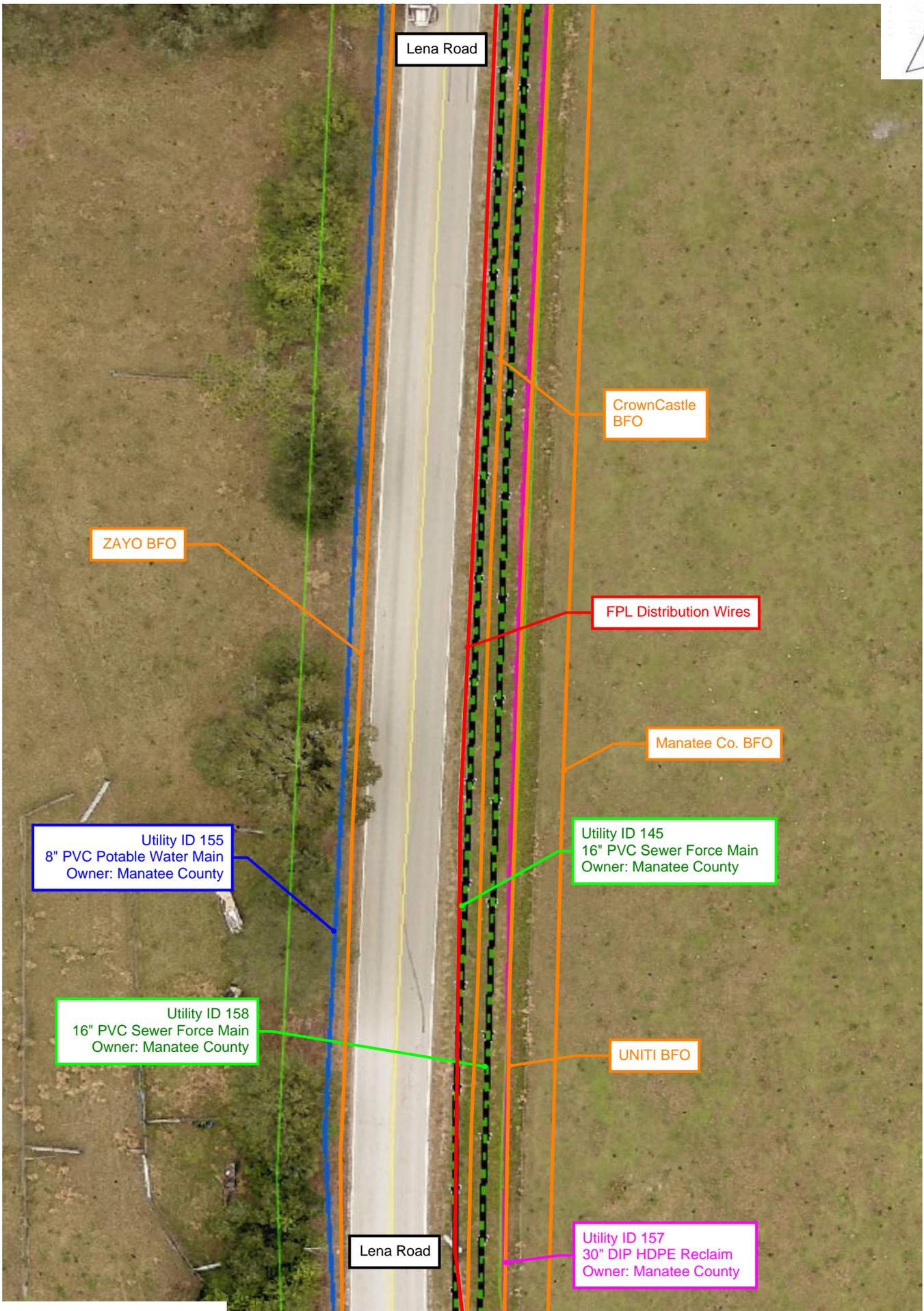
Utility ID 145
30" DIP Reclaim
Owner: Manatee County

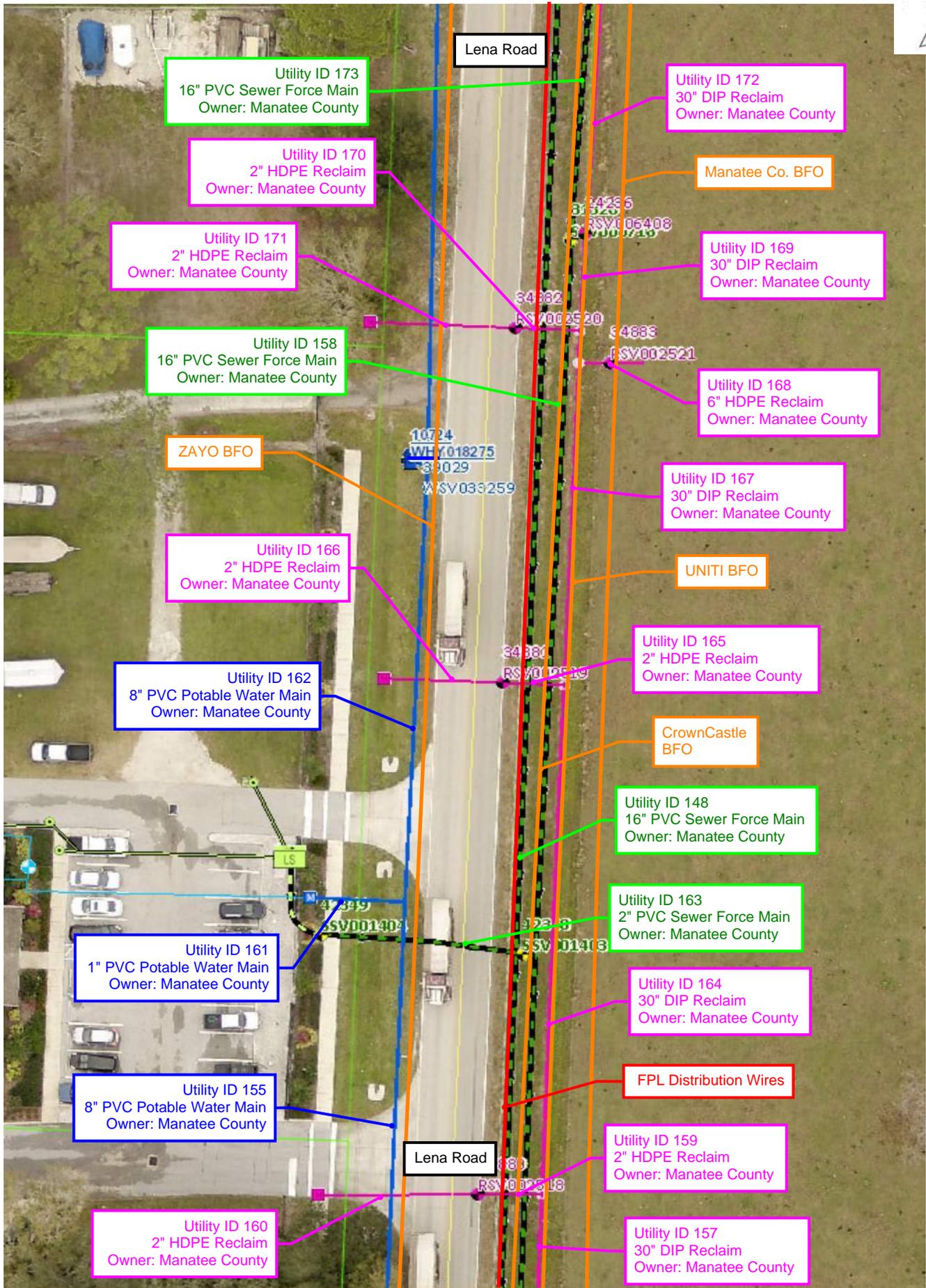
64879
RSW032517

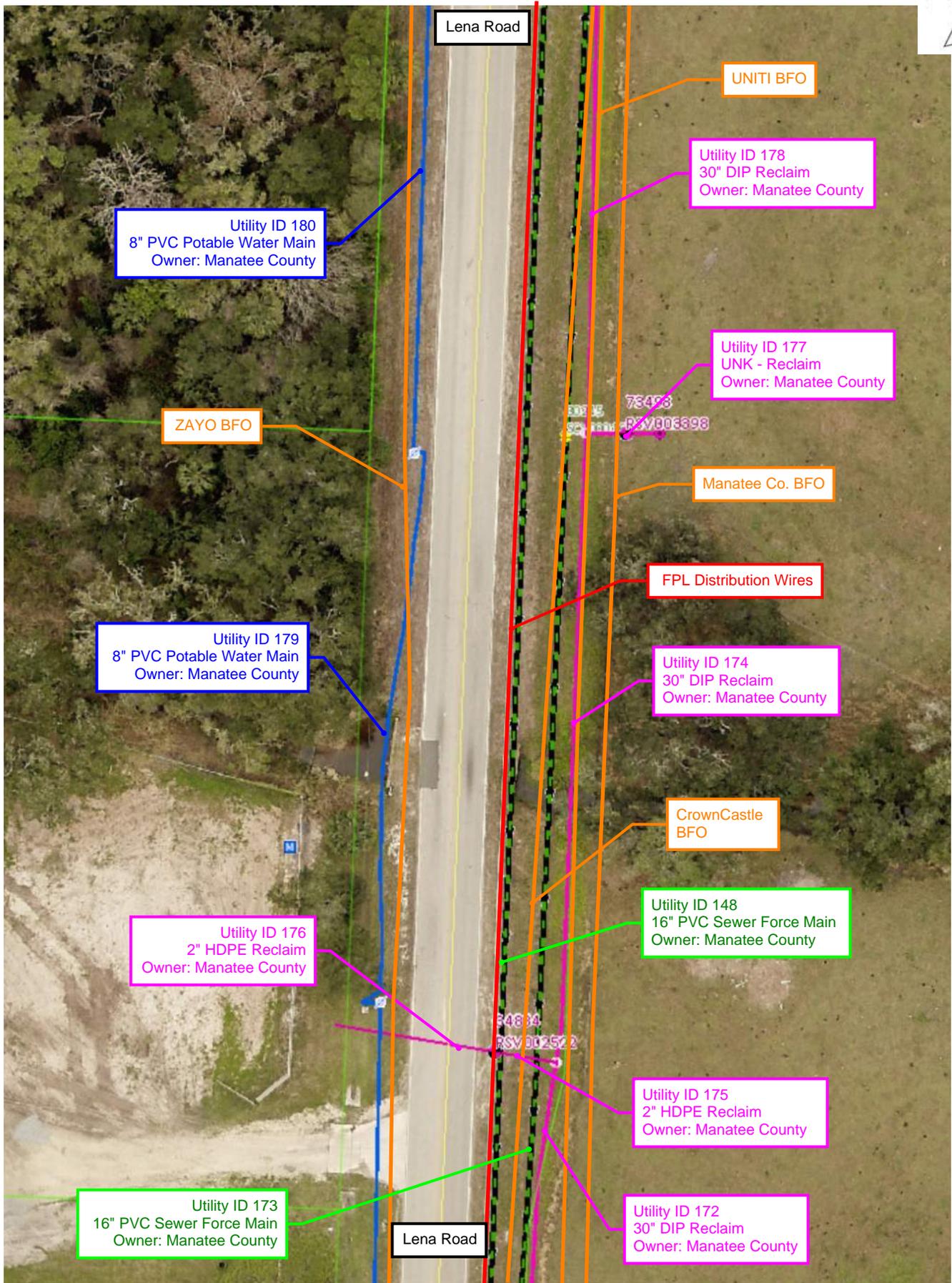
Utility ID 152
6" HDPE Reclaim
Owner: Manatee County

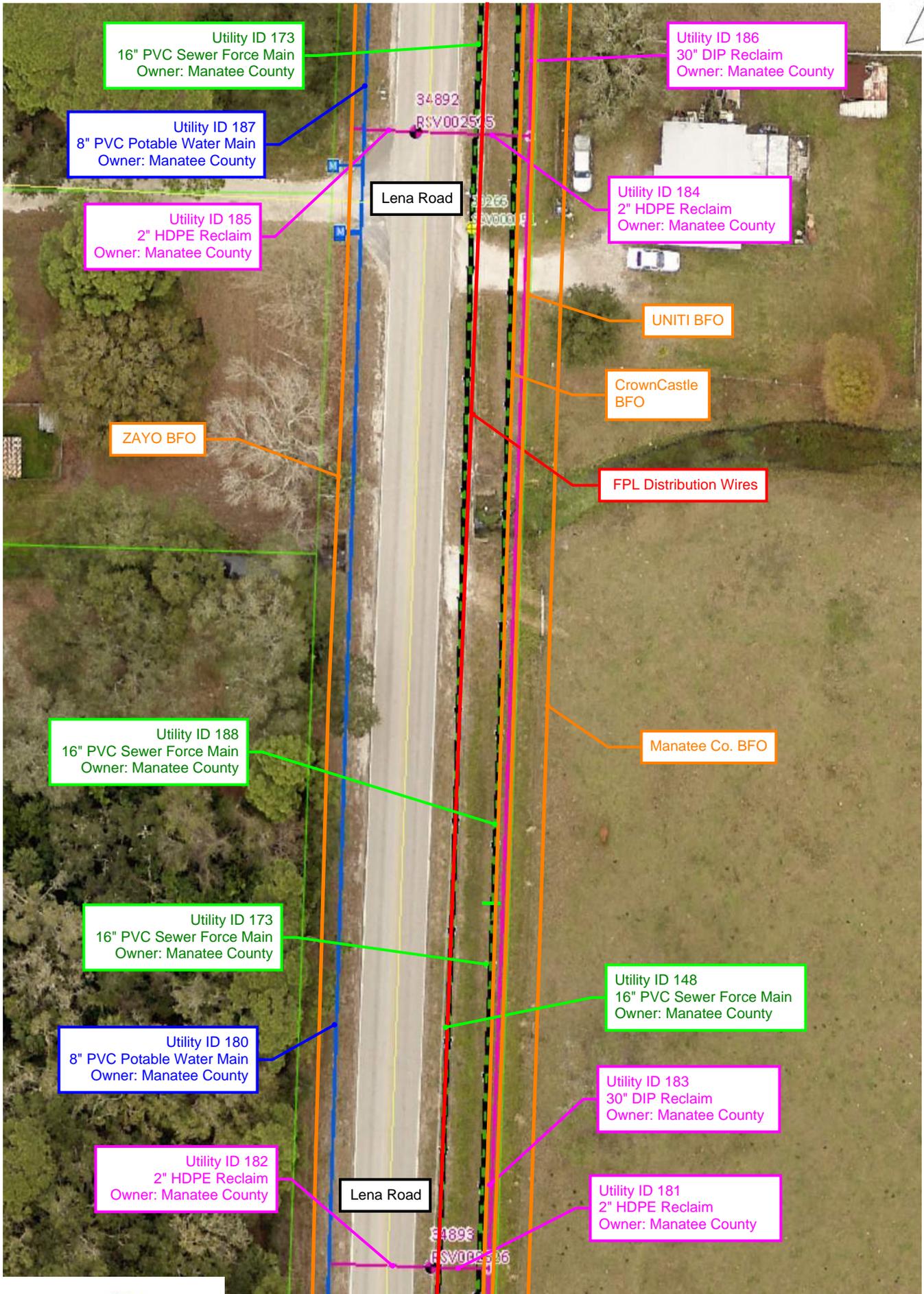


Detail Sheet









Utility ID 173
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 187
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 185
2" HDPE Reclaim
Owner: Manatee County

Utility ID 186
30" DIP Reclaim
Owner: Manatee County

Utility ID 184
2" HDPE Reclaim
Owner: Manatee County

ZAYO BFO

UNITI BFO

CrownCastle
BFO

FPL Distribution Wires

Manatee Co. BFO

Utility ID 188
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 173
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 180
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 182
2" HDPE Reclaim
Owner: Manatee County

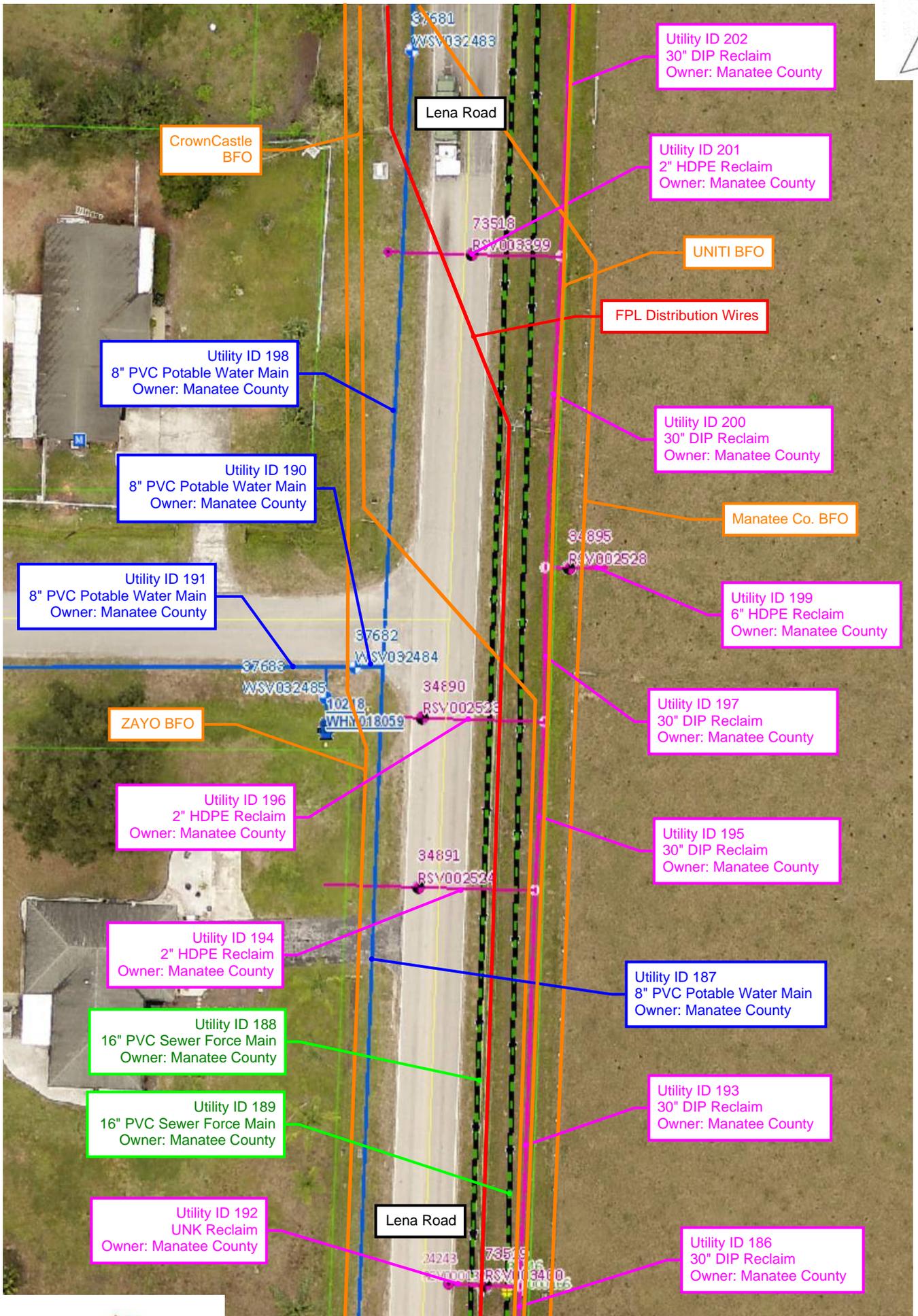
Utility ID 148
16" PVC Sewer Force Main
Owner: Manatee County

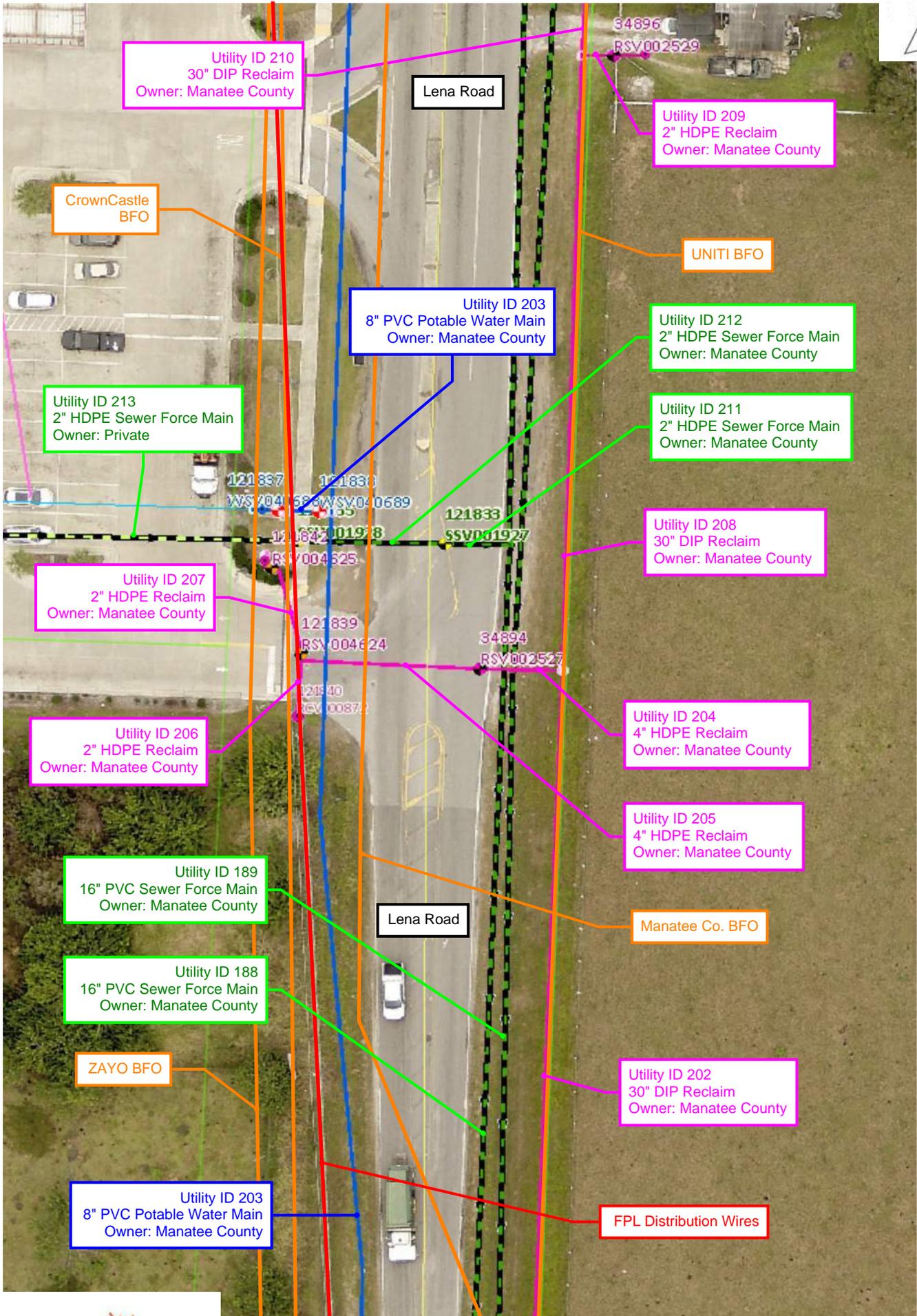
Utility ID 183
30" DIP Reclaim
Owner: Manatee County

Utility ID 181
2" HDPE Reclaim
Owner: Manatee County



Detail Sheet





Utility ID 210
30" DIP Reclaim
Owner: Manatee County

Lena Road

Utility ID 209
2" HDPE Reclaim
Owner: Manatee County

CrownCastle
BFO

UNITI BFO

Utility ID 203
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 212
2" HDPE Sewer Force Main
Owner: Manatee County

Utility ID 213
2" HDPE Sewer Force Main
Owner: Private

Utility ID 211
2" HDPE Sewer Force Main
Owner: Manatee County

Utility ID 208
30" DIP Reclaim
Owner: Manatee County

Utility ID 207
2" HDPE Reclaim
Owner: Manatee County

Utility ID 204
4" HDPE Reclaim
Owner: Manatee County

Utility ID 206
2" HDPE Reclaim
Owner: Manatee County

Utility ID 205
4" HDPE Reclaim
Owner: Manatee County

Utility ID 189
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

Utility ID 188
16" PVC Sewer Force Main
Owner: Manatee County

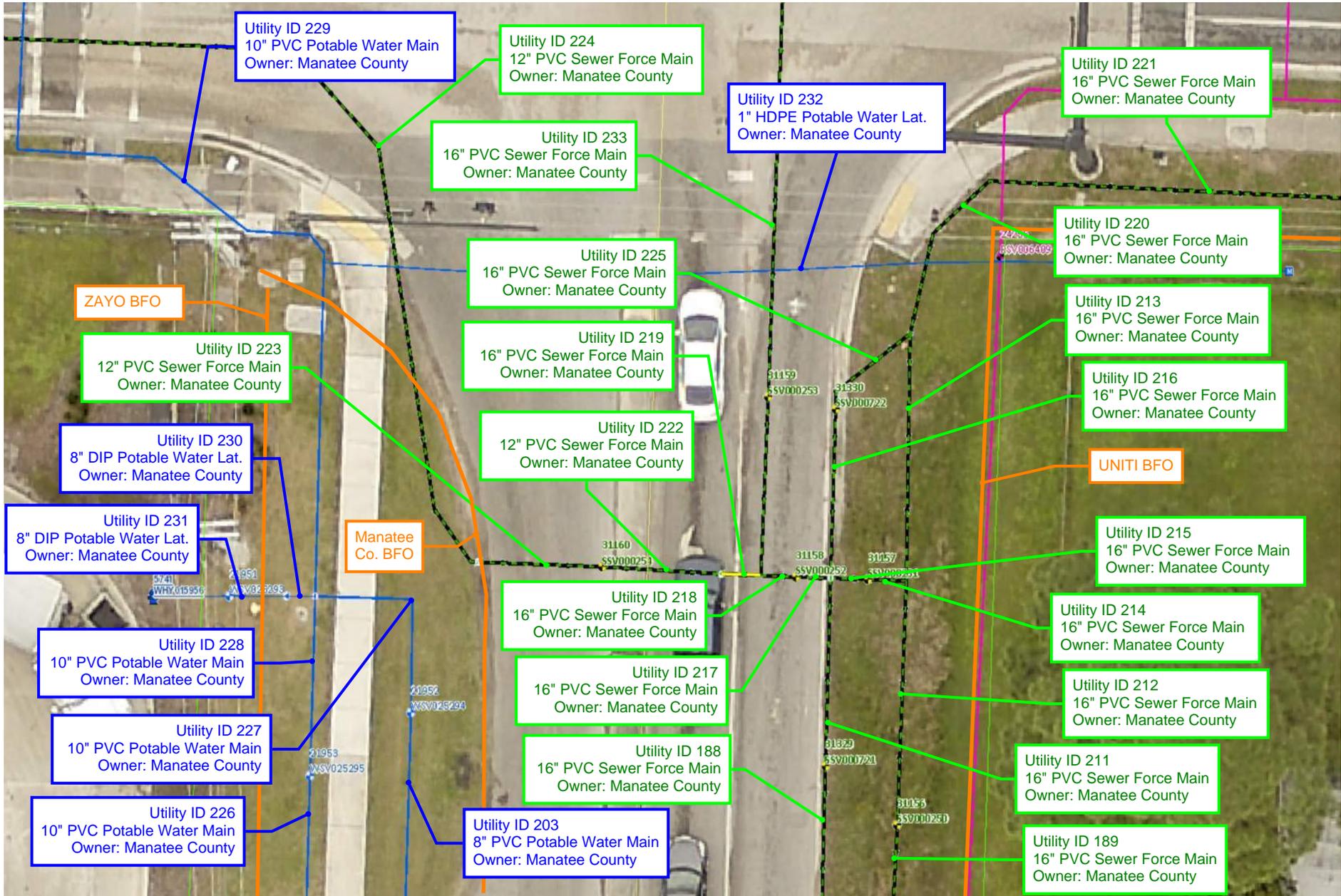
Lena Road

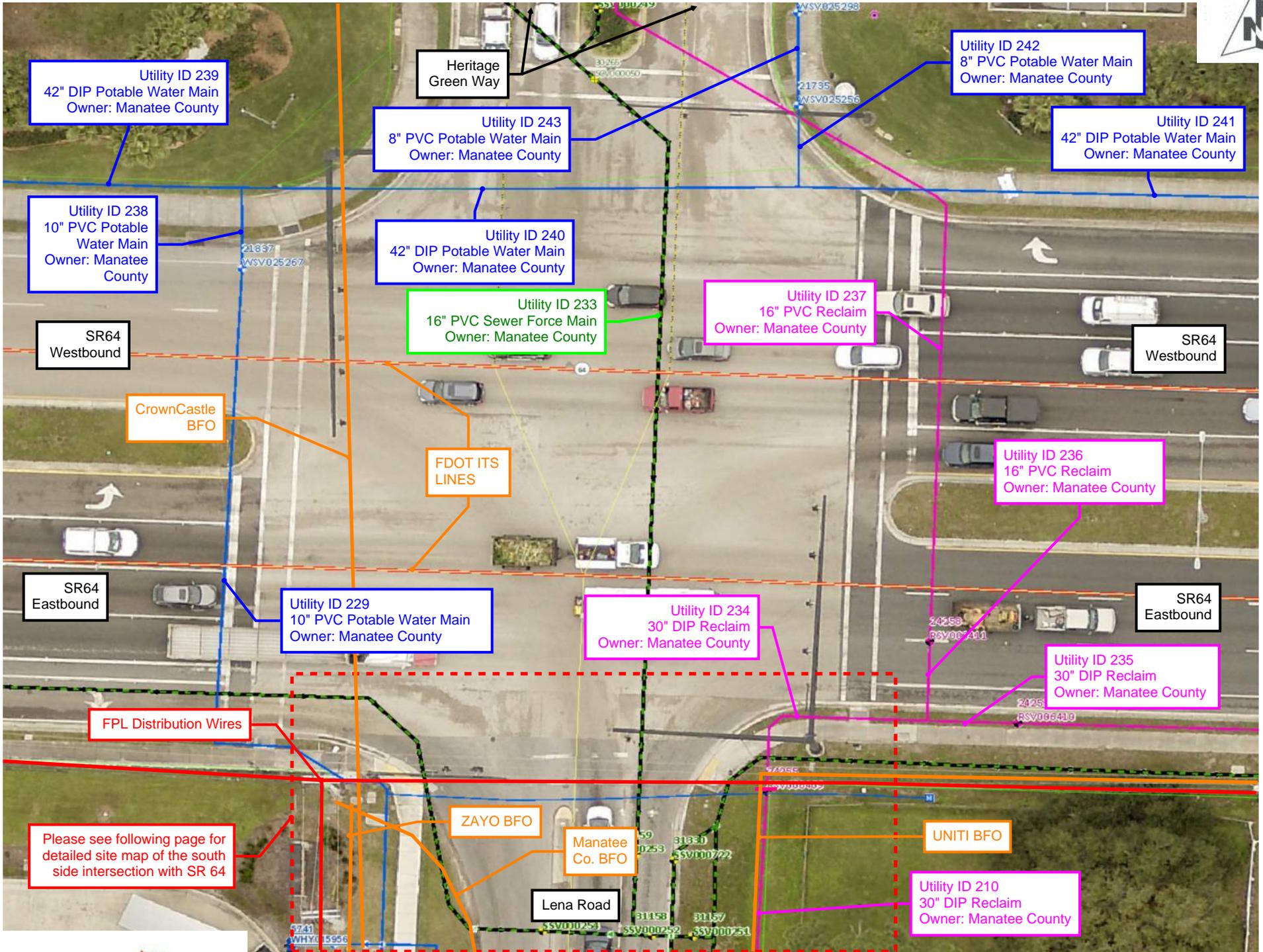
ZAYO BFO

Utility ID 202
30" DIP Reclaim
Owner: Manatee County

Utility ID 203
8" PVC Potable Water Main
Owner: Manatee County

FPL Distribution Wires





Please see following page for detailed site map of the south side intersection with SR 64

Appendix G – Pond Site Matrices

Basin 2

	Alternative 2A (Recommended)	Alternative 2B
Pond Site	Pond 2A, Wet Detention	Pond 2B, Wet Detention
Parcel Count	1	1
Parcel Size (ac.)	8.63	3.74
RW Acquisition (ac.)	1.87	1.62
Conveyance to/ from Pond	Approx. 55 feet of pipe	Existing pipe
Apparent Land Use	Undeveloped, Commercial	Undeveloped, Commercial
Wetland Risk	Low	Low
Contamination Risk	Low	Low
Utilities Risk	Low	Low
Wildlife Risk	Low	Low
Cultural Resources Risk	Low	Low
Floodplain Impacts	Moderate	High
Advantages/ Disadvantages	Moderate floodplain impact	High floodplain impact

Appendix G – Utilities Memo

Utilities

Technical Memorandum

Lena Road

Project Development and Corridor Study Report

September 2021



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1.0 Introduction

Manatee County conducted a Project Development and Corridor Study (Study) to develop alternatives along Lena Road for reducing congestion, improving safety and operational performance, and addressing future transportation needs. This Utilities Technical Memorandum documents the County-owned utility information within the Study area.

1.1 Project Description

Manatee County proposes the extension of Lena Road to State Road (SR) 64. The project limits extend from the cul-de-sac at the north end of existing Lena Road to the intersection with SR 64, providing a new north-south corridor between SR 70 and SR 64 in Bradenton, Manatee County, Florida, as shown in **Figure 1-1**. An overview of the County owned utilities overlayed with the proposed 500-foot roadway buffer zone is presented below in **Figure 1-2**.

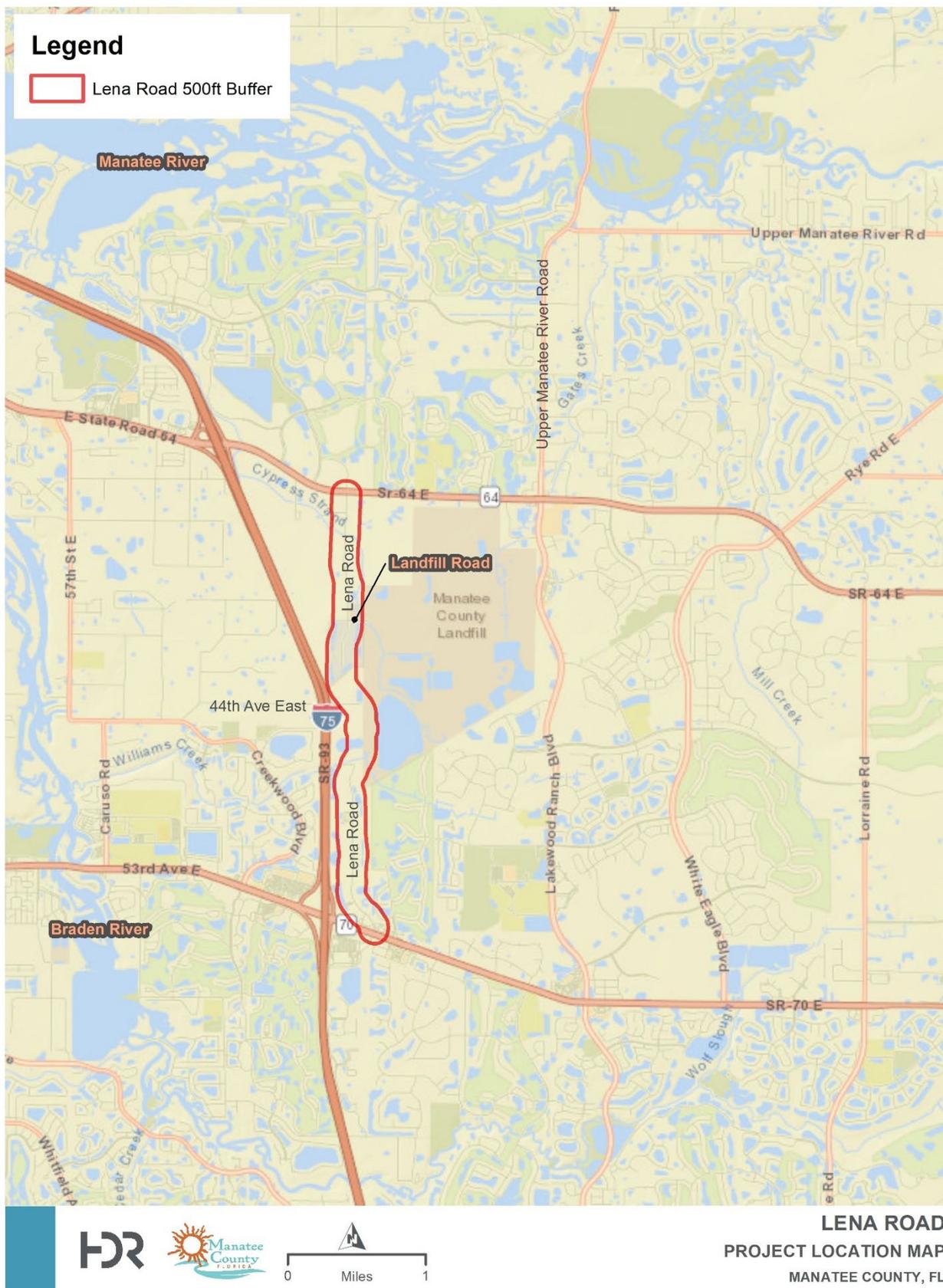


Figure 1-1: Project Location

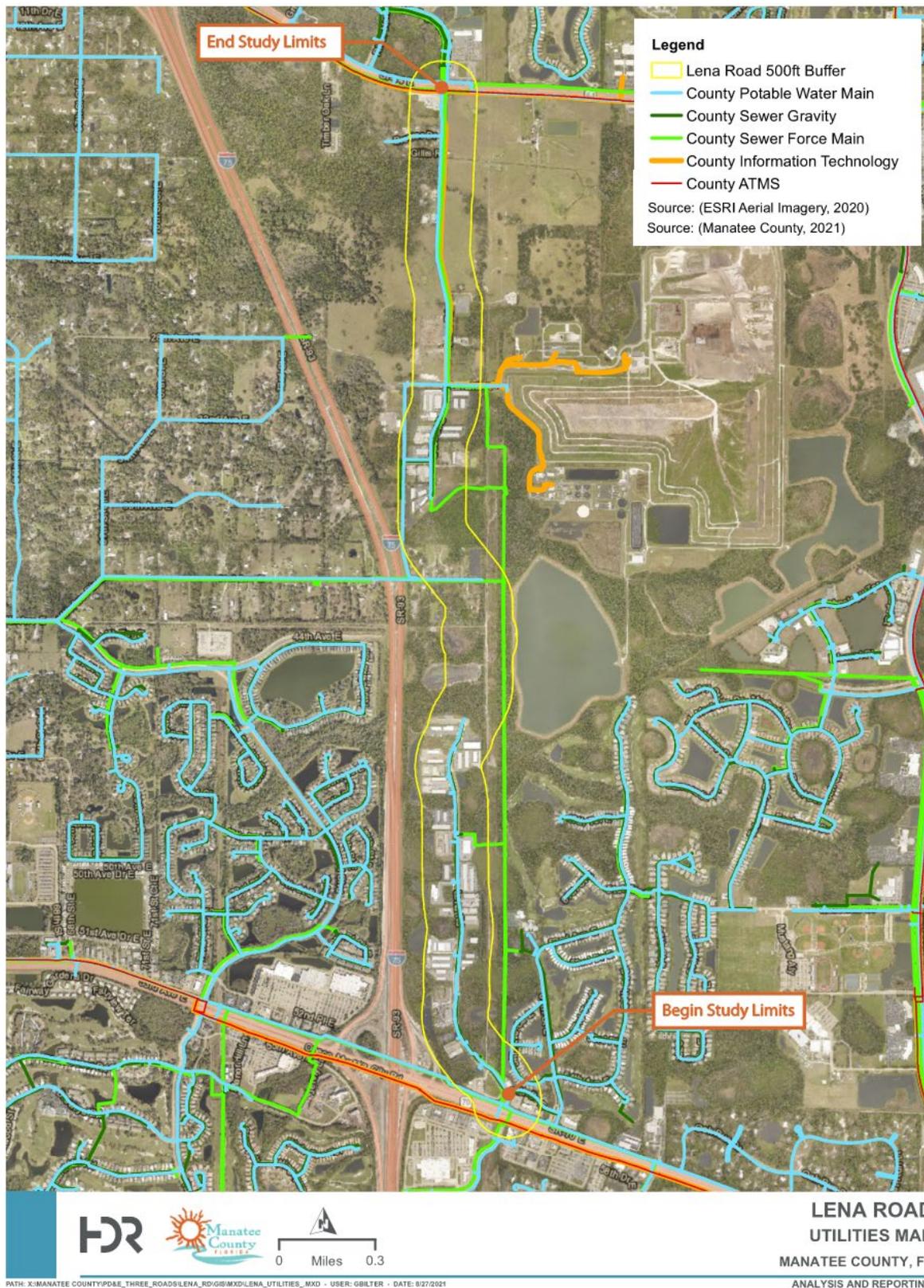


Figure 1-2: Utilities

Appendices

Appendix A – Utility Information Table

Sewer/Sanitary
Potable
Reclaimed

Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)									
--	--	--	--	--	--	--	--	--	--	--

Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 91	County Force Main, Sewer	Manatee County	695	SPM000708	4/19/2001	4	PVC	4" PVC force main exiting Lift Station 615 underneath the pavement of 81st Ct. E and then transitions to being parallel to 81st Ct. E. on the East side	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pagelid=001	687
Utility ID 135	County Force Main, Sewer	Manatee County	695		4/19/2001	16	PVC	16" PVC Sewer force main running perpendicular to 81st Ct. E. headed East along the South side pavement of Landfill Road	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pagelid=001	651
Utility ID 222	County Force Main, Sewer	Manatee County	16	SPM000663	10/18/2002	12	PVC	12" PVC Sewer force main running West-East perpendicular to Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	618
Utility ID 223	County Force Main, Sewer	Manatee County	16	SPM000664	10/18/2002	12	PVC	12" PVC Sewer force main running West-East perpendicular to Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	619
Utility ID 224	County Force Main, Sewer	Manatee County	533	SPM001906	3/28/2005	12	DIP	12" PVC Sewer force main running parallel to Lena Road and is routed West parallel to and underneath the East-bound SR64 roadway pavement	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651191&pagelid=010	1830
Utility ID 233	County Force Main, Sewer	Manatee County	204	SPM000661	10/18/2002	16	PVC	16" Sewer force main running parallel to and along the center of Lena Road and underneath the intersection of Lena Road and SR64	HERITAGE HARBOUR (SR 64 FORCE MAIN CROSSING) - HERITAGE HARBOUR (SR 64 FORCE MAIN CROSSING) - SR 64 FORCE MAIN CROSSING (HERITAGE HARBOUR) (03116) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	616
Utility ID 213	County Force Main, Sewer	Manatee County	28	SPM000657	10/18/2002	16	PVC	16" PVC Sewer force main running North-South parallel to and along the East side of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	612
Utility ID 214	County Force Main, Sewer	Manatee County	5	SPM000655	10/18/2002	16	PVC	16" PVC Sewer force main running West-East perpendicular to Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	610
Utility ID 215	County Force Main, Sewer	Manatee County	5	SPM001893	10/18/2002	16	PVC	16" PVC Sewer force main running West-East perpendicular to Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	1817
Utility ID 216	County Force Main, Sewer	Manatee County	19	SPM001915	10/18/2002	16	PVC	16" PVC Sewer force main running North-South parallel to and along the East side of Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	1839
Utility ID 217	County Force Main, Sewer	Manatee County	5	SPM000662	10/18/2002	16	PVC	16" PVC Sewer force main running West-East perpendicular to Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	617
Utility ID 218	County Force Main, Sewer	Manatee County	5	SPM000653	10/18/2002	16	PVC	16" PVC Sewer force main running West-East perpendicular to Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	608
Utility ID 219	County Force Main, Sewer	Manatee County	5	SPM000654	10/18/2002	16	PVC	16" PVC Sewer force main running West-East perpendicular to Lena Road and underneath the pavement of Lena Road	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650754&pagelid=001	609
Utility ID 220	County Force Main, Sewer	Manatee County	31	SPM004525	4/5/2005	16	PVC	16" PVC Sewer force main running Northeast-Southwest directly underneath the sidewalk ramp curb at the Southeast corner of the SR64 and Lena Road Intersection	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651190&pagelid=015	5967
Utility ID 225	County Force Main, Sewer	Manatee County	14	SPM001917	4/5/2005	16	PVC	16" PVC Sewer force main running Northwest and terminating in a Wye Fitting with Utility ID 213 (16" PVC force main)	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651190&pagelid=015	1841
Utility ID 221	County Force Main, Sewer	Manatee County	565	SPM001919	4/5/2005	16	PVC	16" PVC Sewer force main running East-West along the south side of SR64 and is parallel to SR64	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651190&pagelid=016	1843
Utility ID 11	County Force Main, Sewer	Manatee County	1419	SPM001890	11/13/2006	16	PVC	16" PVC force main running from Northeast to the Southwest along the Southeast side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	1920
Utility ID 64	County Force Main, Sewer	Manatee County	332	SPM001886	11/13/2006	16	PVC	16" PVC force main running parallel to 81st Ct. E. along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	1812
Utility ID 92	County Force Main, Sewer	Manatee County	179	SPM001887	11/13/2006	16	PVC	16" PVC Sewer force main parallel to 81st Ct. E. on the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	1867
Utility ID 94	County Force Main, Sewer	Manatee County	483	SPM001891	11/13/2006	16	PVC	16" PVC Sewer force main parallel to 81st Ct. E. on the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	1869
Utility ID 137	County Force Main, Sewer	Manatee County	483		11/13/2006	16	PVC	16" PVC Sewer force main running parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	1815
Utility ID 138	County Force Main, Sewer	Manatee County	148		11/13/2006	16	PVC	16" PVC Sewer force main running parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=006	3679
Utility ID 141	County Force Main, Sewer	Manatee County	1148		11/13/2006	16	PVC	16" PVC Sewer force main running parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=006	1825
Utility ID 144	County Force Main, Sewer	Manatee County	1056	SPM001903	11/13/2006	16	PVC	16" PVC Sewer force main running parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=007	1827



Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)										
Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 158	County Force Main, Sewer	Manatee County	691	SPM003211	11/13/2006	16	PVC	16" PVC force main running North-South and parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=078	3290
Utility ID 173	County Force Main, Sewer	Manatee County	359	SPM001904	11/13/2006	16	PVC	16" PVC force main running North-South and parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	1828
Utility ID 188	County Force Main, Sewer	Manatee County	310	SPM001892	11/13/2006	16	PVC	16" PVC force main running North-South and parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	1816
Utility ID 189	County Force Main, Sewer	Manatee County	875	SPM001902	11/13/2006	16	PVC	16" PVC force main running North-South and parallel to Lena Road along the East side	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	1826
Utility ID 134	County Force Main, Sewer	Manatee County	334	SPM000671	11/22/1986	16	PVC	16" PVC Sewer force main running perpendicular to 81st Ct. E. headed East along the South side pavement of Landfill Road	SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - MANATEE PALMS II (RTU 313) & PET MILK/SABAL COVE (RTU 470) (01078) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651808&pageid=011	750
Utility ID 136	County Force Main, Sewer	Manatee County	659	SPM000670	11/22/1986	16	PVC	16" PVC Sewer force main running parallel to 81st Ct. E. headed North along the East side pavement of 81st Ct. E.	SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - MANATEE PALMS II (RTU 313) & PET MILK/SABAL COVE (RTU 470) (01078) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651808&pageid=011	749
Utility ID 142	County Force Main, Sewer	Manatee County	593	SPM004599	11/22/1986	16	PVC	16" PVC Sewer force main running parallel to Lena Road along the East side	SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - MANATEE PALMS II (RTU 313) & PET MILK/SABAL COVE (RTU 470) (01078) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651808&pageid=011	5766
Utility ID 148	County Force Main, Sewer	Manatee County	2430	SPM000715	11/22/1986	16	PVC	16" PVC Sewer force main parallel to Lena Road and to the East side of Lena Road	SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT A - MANATEE PALMS II (RTU 313) & PET MILK/SABAL COVE (RTU 470) (01078) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651808&pageid=010	658
Utility ID 6	County Force Main, Sewer	Manatee County	1600	SPM000717	2/18/1987	20	DIP	20" DI Sewer force main on the South side of 41st Ave. E.	LS #7 - MORGAN JOHNSON RD (RTU 472) - LS #7 - MORGAN JOHNSON RD (RTU 472) - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE I - SEGMENT B (01105) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651833&pageid=013	638
Utility ID 3	County Force Main, Sewer	Manatee County	4329	SPM001124	10/12/1988	20	DIP	20" DI Sewer force main running through FPL Easement (East Pipeline)	SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE II - SEGMENT A - SOUTHEAST SUBREG PUMP STATIONS AND FM PHASE II - SEGMENT A - LINGER LODGE 14 (RTU 325), BRADEN RIVER RD 17 (RTU 324), BRADEN WOODS 18 (RTU 326), CHAMPION HOMES 19 (RTU 327), TARA 20 (RTU 323) (0	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10652118&pageid=010	1101
Utility ID 5	County Force Main, Sewer	Manatee County	520	SPM008491	8/3/2018	20	PVC	20" DI Sewer force main running through FPL Easement (East Pipeline)	TARA 20 FORCE MAIN (PARALLEL TO LENA ROAD) - TARA 20 FORCE MAIN (PARALLEL TO LENA ROAD) (06820) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=19949987&pageid=017	6844
Utility ID 4	County Force Main, Sewer	Manatee County	520	SPM008490	8/3/2018	20	PVC	20" PVC Sewer force main running through FPL Easement (West Pipeline)	TARA 20 FORCE MAIN (PARALLEL TO LENA ROAD) - TARA 20 FORCE MAIN (PARALLEL TO LENA ROAD) (06820) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=19949987&pageid=017	6843
Utility ID 2	County Gravity Main, Sewer	Manatee County	260	SGM016847	4/20/2004	8	PVC	8" PVC gravity sewer on west side of Lena road, terminates at manhole within the cul-de-sac on Lena Road	CREEKWOOD EAST CORPORATE PARK - CREEKWOOD EAST CORPORATE PARK (04458) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651390&pageid=002	18875
Utility ID 26	County Gravity Main, Sewer	Manatee County	262	SGM012442	4/19/2001	8	PVC	8" PVC Sewer Main running under the center of 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13518
Utility ID 35	County Gravity Main, Sewer	Manatee County	301	SGM012441	4/19/2001	8	PVC	8" PVC Gravity sewer running down center of 81st Ct. E. (parallel)	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13362
Utility ID 47	County Gravity Main, Sewer	Manatee County	218	SGM019044	4/19/2001	8	PVC	8" PVC Sewer Gravity Main running West down the center of 34th Ave. E. from MH 6332	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=002	17314
Utility ID 48	County Gravity Main, Sewer	Manatee County	247	SGM013034	4/19/2001	8	PVC	8" PVC Sewer Gravity Main running North down the center of 81st Ct. E. from MH 6332	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13631
Utility ID 63	County Gravity Main, Sewer	Manatee County	400	SGM012439	4/19/2001	8	PVC	8" PVC gravity sewer running parallel to 81st Ct. E. / Sewer Main transitions from the center of the roadway to the East side of the roadway	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13360
Utility ID 89	County Gravity Main, Sewer	Manatee County	55	SGM012438	4/19/2001	8	PVC	8" PVC Gravity Sewer Main routed west towards Lift Station 615	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13397
Utility ID 93	County Gravity Main, Sewer	Manatee County	377	SGM013033	4/19/2001	8	PVC	8" PVC Gravity Main parallel to 81st Ct. E. along the center of the roadway headed towards the Northeast	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13726
Utility ID 108	County Gravity Main, Sewer	Manatee County	234	SGM012437	4/19/2001	8	PVC	8" PVC Gravity Main parallel to 81st Ct. E. along the center of the roadway headed towards the North	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13396
Utility ID 123	County Gravity Main, Sewer	Manatee County	40	SGM012436	4/19/2001	8	PVC	8" PVC Sewer Gravity Main Running West underneath 81st Ct. E. and is perpendicular to 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	13357

Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)										
Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 124	County Gravity Main, Sewer	Manatee County	40	SGM012435	4/19/2001	8	PVC	8" PVC Sewer Gravity Main Running East underneath 81st Ct. E. and is perpendicular to 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pagelid=001	13356
Utility ID 125	County Gravity Main, Sewer	Manatee County	234	SGM012437	4/19/2001	8	PVC	8" PVC Sewer Gravity Main Running West underneath 81st Ct. E. and is perpendicular to 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pagelid=001	13357
Utility ID 38	County Main Line, Reclaimed	Manatee County	10	RPM006986	11/13/2006	4	HDPE	4" HDPE reclaimed Lateral running perpendicular to 81st Ct. E. on the East side of the road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	5867
Utility ID 39	County Main Line, Reclaimed	Manatee County	10	RPM006987	11/13/2006	4	HDPE	4" HDPE reclaimed Lateral running perpendicular to 81st Ct. E. on the East side of the road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	5868
Utility ID 42	County Main Line, Reclaimed	Manatee County	10	RPM006984	11/13/2006	4	HDPE	4" HDPE reclaimed Lateral running perpendicular to 81st Ct. E. on the East side of the road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	5865
Utility ID 43	County Main Line, Reclaimed	Manatee County	10	RPM006985	11/13/2006	4	HDPE	4" HDPE reclaimed Lateral running perpendicular to 81st Ct. E. on the East side of the road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	5866
Utility ID 204	County Main Line, Reclaimed	Manatee County	26	RPM006938	11/13/2006	4	HDPE	4" HDPE reclaimed on the east side of Lena Road headed towards the West underneath the pavement of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=009	6217
Utility ID 205	County Main Line, Reclaimed	Manatee County	56	RPM006936	11/13/2006	4	HDPE	4" HDPE reclaimed on the east side of Lena Road headed towards the West underneath the pavement of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=009	6182
Utility ID 143	County Main Line, Reclaimed	Manatee County	6	RPM006958	11/13/2006	6	HDPE	6" HDPE reclaimed Lateral perpendicular to Lena Road and runs west underneath pavement of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=006	6465
Utility ID 152	County Main Line, Reclaimed	Manatee County	10	RPM006949	11/13/2006	6	HDPE	6" HDPE reclaimed Lateral on the East side of Lena Road routed towards the West	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=007	6228
Utility ID 153	County Main Line, Reclaimed	Manatee County	20	RPM006948	11/13/2006	6	HDPE	6" HDPE reclaimed Lateral on the East side of Lena Road routed towards the West	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=007	6227
Utility ID 154	County Main Line, Reclaimed	Manatee County	36	RPM006950	11/13/2006	6	HDPE	6" HDPE reclaimed Lateral on the East side of Lena Road routed towards the West and underneath the pavement of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=007	6229
Utility ID 168	County Main Line, Reclaimed	Manatee County	10	RPM006927	11/13/2006	6	HDPE	6" HDPE reclaimed on the east side of Lena Road headed towards the East	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=008	6173
Utility ID 199	County Main Line, Reclaimed	Manatee County	8	RPM006937	11/13/2006	6	HDPE	6" HDPE reclaimed on the east side of Lena Road headed towards the East	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=009	6216
Utility ID 132	County Main Line, Reclaimed	Manatee County	35	RPM006960	6/15/2007	12	PVC	12" DIP reclaimed running perpendicular to 81st Ct. E. heading towards the West	LENA ROAD LANDFILL - PHASE II - LENA ROAD LANDFILL - PHASE II (04786) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651928&pagelid=010	6467
Utility ID 129	County Main Line, Reclaimed	Manatee County	8	RPM004209	11/13/2006	12	DIP	12" DIP reclaimed Lateral running perpendicular to and unearh the pavement of 81st Ct. E. on the East side headed towards the West	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	2524
Utility ID 130	County Main Line, Reclaimed	Manatee County	5	RPM004210	11/13/2006	12	DIP	12" DIP reclaimed Lateral running perpendicular to and unearh the pavement of 81st Ct. E. on the East side headed towards the West	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=005	2525
Utility ID 236	County Main Line, Reclaimed	Manatee County	20	RPM001999	4/26/2005	16	PVC	16" PVC reclaimed perpendicular to SR64 and bored underneath the south pavement of SR64 heading North	HERITAGE HARBOUR SR 64 IMPROVEMENTS - HERITAGE HARBOUR SR 64 IMPROVEMENTS - M A R S PROJECT (04671) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651713&pagelid=003	1887
Utility ID 237	County Main Line, Reclaimed	Manatee County	208	RPM000544	4/26/2005	16	PVC	16" PVC reclaimed bored underneath SR64 and is parallel to SR64 / Pipeline continues Northwest under sidewalk and Lena Road pavement	HERITAGE HARBOUR SR 64 IMPROVEMENTS - HERITAGE HARBOUR SR 64 IMPROVEMENTS - M A R S PROJECT (04671) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651713&pagelid=003	406
Utility ID 234	County Main Line, Reclaimed	Manatee County	54	RPM006922	4/26/2005	30	DIP	30" DIP reclaimed running parallel to SR64 along the South side of SR64 heading West	HERITAGE HARBOUR SR 64 IMPROVEMENTS - M A R S PROJECT (04671) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651713&pagelid=003	6168
Utility ID 235	County Main Line, Reclaimed	Manatee County	21	RPM001998	4/26/2005	30	DIP	30" DIP reclaimed running parallel to SR64 along the South side of SR64 heading West	HERITAGE HARBOUR SR 64 IMPROVEMENTS - HERITAGE HARBOUR SR 64 IMPROVEMENTS - M A R S PROJECT (04671) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651713&pagelid=003	1886
Utility ID 9	County Main Line, Reclaimed	Manatee County	268	RPM006990	11/13/2006	30	DIP	30" DIP reclaimed running from Northeast to the Southwest along the Southeast side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	6140
Utility ID 10	County Main Line, Reclaimed	Manatee County	31	RPM006998	11/13/2006	30	DIP	30" DIP reclaimed running from Northeast to the Southwest along the South side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	6189
Utility ID 12	County Main Line, Reclaimed	Manatee County	22	RPM006996	11/13/2006	30	DIP	30" DIP reclaimed running from Southwest to the Northeast along the South side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	6146
Utility ID 15	County Main Line, Reclaimed	Manatee County	21	RPM006993	11/13/2006	30	DIP	30" DIP reclaimed running Northwest from the Southern Tee Fitting, terminates in valve. South of Storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	6143
Utility ID 16	County Main Line, Reclaimed	Manatee County	187	RPM006999	11/13/2006	30	DIP	30" DIP reclaimed running North Along East side of 81st Ct. E.	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pagelid=004	5785

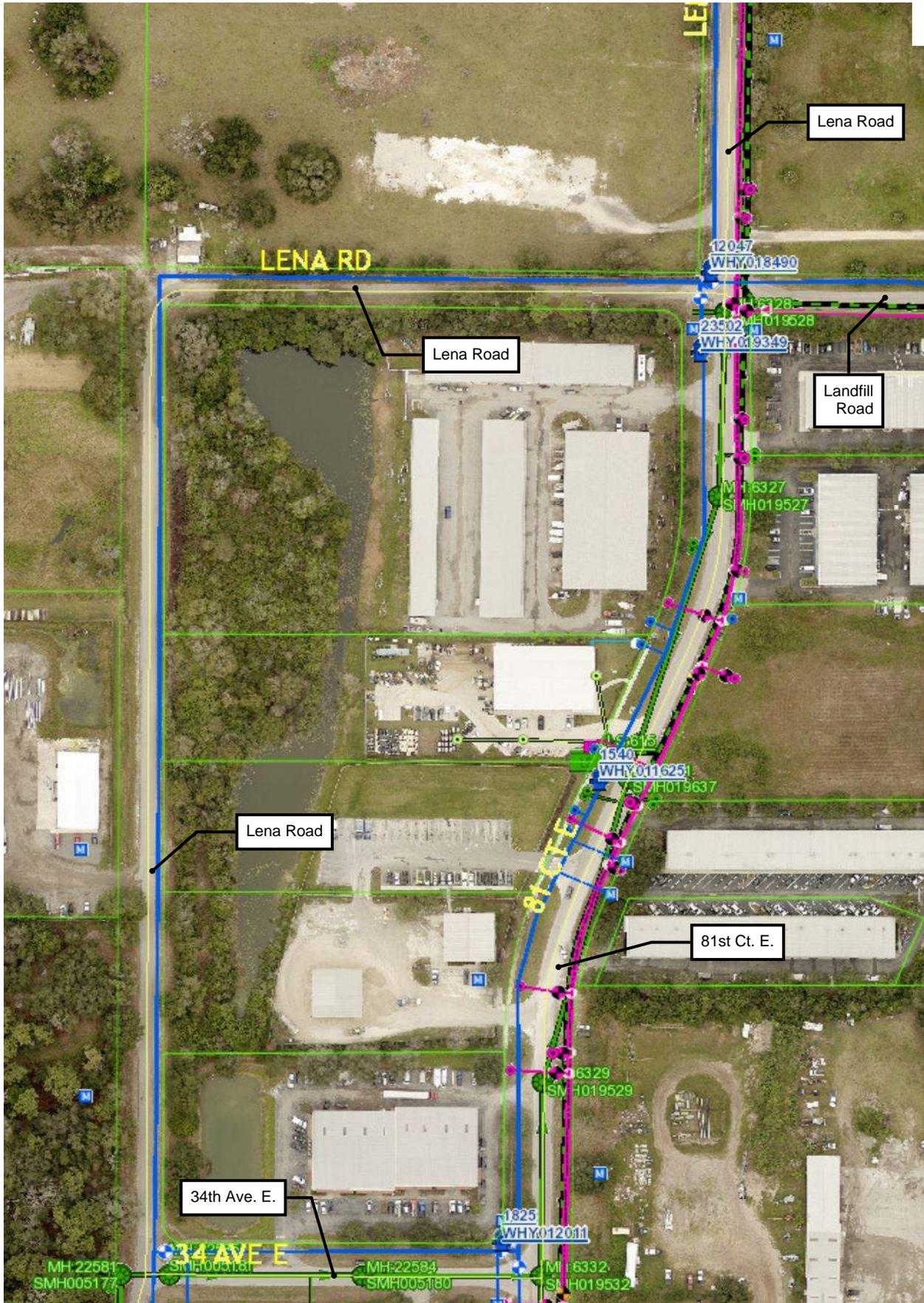
Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)										
Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 167	County Main Line, Reclaimed	Manatee County	107	RPM006923	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6169
Utility ID 169	County Main Line, Reclaimed	Manatee County	32	RPM006924	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6170
Utility ID 172	County Main Line, Reclaimed	Manatee County	155	RPM006928	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6174
Utility ID 174	County Main Line, Reclaimed	Manatee County	203	RPM006920	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=007	6166
Utility ID 178	County Main Line, Reclaimed	Manatee County	142	RPM006932	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6178
Utility ID 183	County Main Line, Reclaimed	Manatee County	109	RPM006941	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6220
Utility ID 186	County Main Line, Reclaimed	Manatee County	68	RPM006931	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=008	6177
Utility ID 193	County Main Line, Reclaimed	Manatee County	128	RPM006929	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6175
Utility ID 195	County Main Line, Reclaimed	Manatee County	54	RPM006930	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6176
Utility ID 197	County Main Line, Reclaimed	Manatee County	50	RPM006935	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6181
Utility ID 200	County Main Line, Reclaimed	Manatee County	100	RPM006934	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6180
Utility ID 202	County Main Line, Reclaimed	Manatee County	303	RPM006919	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6165
Utility ID 208	County Main Line, Reclaimed	Manatee County	202	RPM006933	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6179
Utility ID 210	County Main Line, Reclaimed	Manatee County	101	RPM006940	11/13/2006	30	DIP	30" DIP reclaimed running North-South along East side of Lena Road	MARS PROJECT - MARS PROJECT - MARS PROJECT (NORTH TO SOUTHEAST) (02385) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10654064&pageid=009	6219
Utility ID 13	County Main Line, Reclaimed	Manatee County	58	RPM006992	7/25/2005	30	DIP	30" DIP reclaimed running from Southwest to the Northeast along the South side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT, PHASE III-A (SOUTHEAST TO SOUTHWEST AREA) (04426) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651356&pageid=014	6142
Utility ID 14	County Main Line, Reclaimed	Manatee County	579	RPM006991	7/25/2005	36	DIP	36" DIP reclaimed running from Southwest to the Northeast along the South side of a storm water retention pond	MARS PROJECT - MARS PROJECT - MARS PROJECT, PHASE III-A (SOUTHEAST TO SOUTHWEST AREA) (04426) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651356&pageid=014	6141
Utility ID 86	County Lateral Line, Water	Manatee County	3	WLL071214	4/19/2001	6	DIP	6" DIP Lateral and hydrant perpendicular to 81st Ave. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=002	10759
Utility ID 114	County Lateral Line, Water	Manatee County	3	WLL057294	1/1/1900	6	DIP	6" DIP Lateral and hydrant perpendicular to and on the West side of 81st Ave. E.	Null	No documents available	99904
Utility ID 230	County Lateral Line, Water	Manatee County	4	WLL101532	11/29/2004	8	DIP	8" DIP Water Main running perpendicular to Lena Road heading West	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=016	72815
Utility ID 231	County Lateral Line, Water	Manatee County	8	WLL071216	11/29/2004	8	DIP	8" DIP Water Main running perpendicular to Lena Road heading West	Null	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=016	10909
Utility ID 56	County Lateral Line, Water	Manatee County	10	WLL071212	4/19/2001	6	DIP	6" DIP Lateral and hydrant perpendicular to 81st Ave. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=002	11676
Utility ID 119	County Main Line, Water	Manatee County	735	WPM015125	1/25/1984	6	UNK	6" PVC Water Main running from West-East along the North side of Powell Johnson Road and Landfill Road underneath the pavement of Lena Road/81st Ct. E./Powell Johnson Road/Landfill Road Intersection	Null	No documents available	27441
Utility ID 190	County Main Line, Water	Manatee County	10	WPM053026	12/3/1979	8	UNK	8" PVC Water Main running East-West and perpendicular to Lena Road along the West side	Null	No documents available	38438
Utility ID 191	County Main Line, Water	Manatee County	10	WPM053027	5/6/1980	8	UNK	8" PVC Water Main running East-West and perpendicular to Lena Road along the West side	Null	No documents available	38439
Utility ID 8	County Main Line, Water	Manatee County	1075	WPM019162	11/1/1986	8	PVC	8" PVC Water Main on North side of 41st Ave. E.	BRADEN RIVER RANCHETTES - WATER PROJECT (NOT A RECORD DWG.) - BRADEN RIVER RANCHETTES - WATER PROJECT (NOT A RECORD DWG.) (01028) - UTD - REC - Construction Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651762&pageid=007	2716
Utility ID 227	County Main Line, Water	Manatee County	26	WPM035978	11/29/2004	10	PVC	10" PVC Water Main running North-South and transitions with 90-deg bend to West-East alignment running directly underneath and perpendicular to the Sidewalk on the West side of Lena Road	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	5808

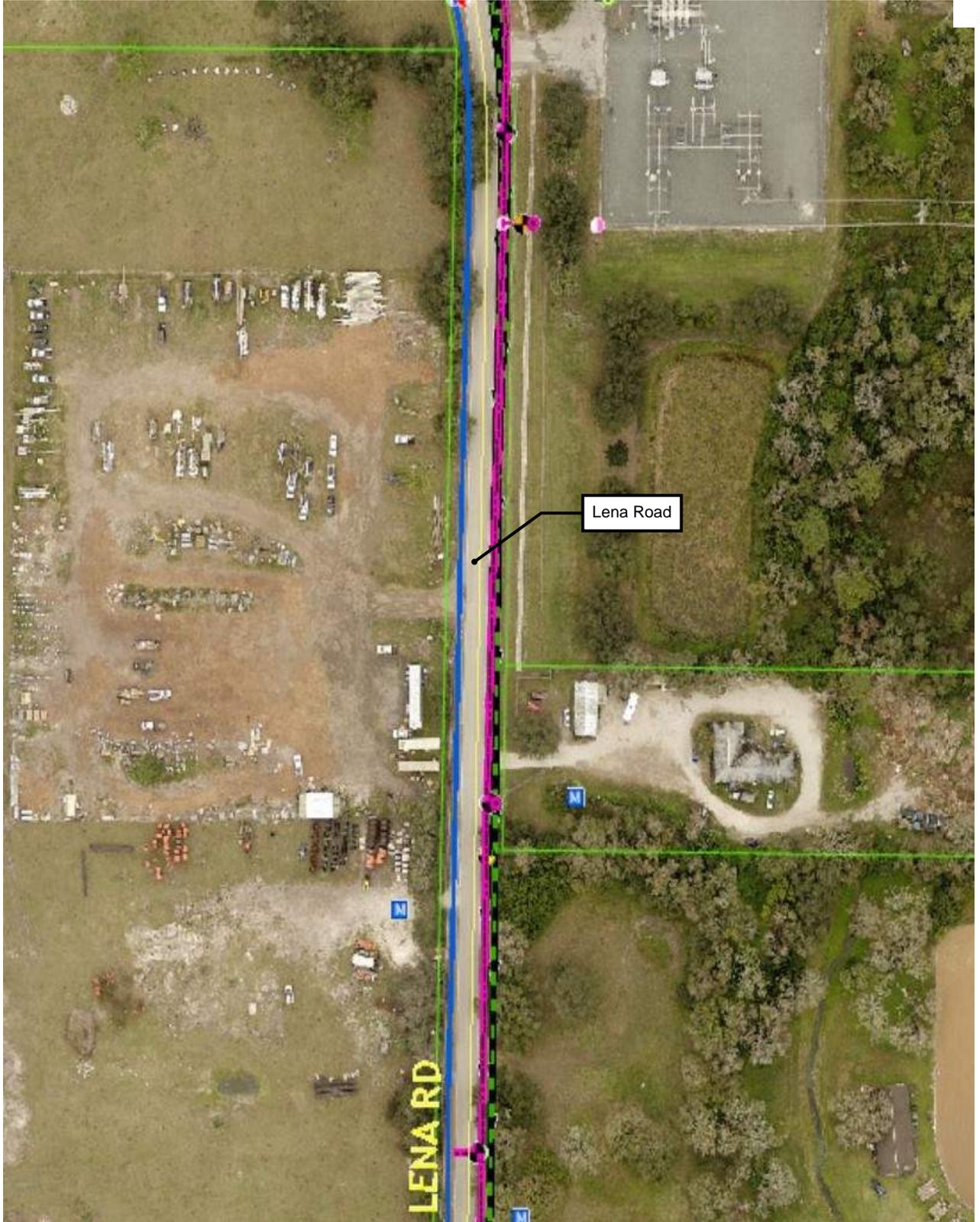
Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)										
Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 242	County Main Line, Water	Manatee County	21	WPM036060	11/29/2004	8	PVC	8" PVC Water Main branched off 42" DIP heading North parallel to Lena Road	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6173
Utility ID 243	County Main Line, Water	Manatee County	24	WPM036056	11/29/2004	8	PVC	8" Water Main routed underneath sidewalk on the east side of Lena Road	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6115
Utility ID 19	County Main Line, Water	Manatee County	150	WPM058450	4/19/2001	8	PVC	8" PVC Water Main on West side of cul-de-sac (81st Ct. E.) underneath pavement	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2771
Utility ID 24	County Main Line, Water	Manatee County	482	WPM035388	4/19/2001	8	PVC	8" PVC Water Main on West side of cul-de-sac (81st Ct. E.) underneath pavement.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2413
Utility ID 53	County Main Line, Water	Manatee County	21	WPM021097	4/19/2001	8	PVC	8" PVC Water Main running perpendicular from 81st Ct. E. along 34th Ave. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	20121
Utility ID 54	County Main Line, Water	Manatee County	21	WPM058188	4/19/2001	8	PVC	8" PVC Water Main running parallel to 81st Ct. E. underneath 34th Ave. E.'s Pavement	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2758
Utility ID 55	County Main Line, Water	Manatee County	13	WPM058380	4/19/2001	8	PVC	8" PVC Water Main running parallel to 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2583
Utility ID 57	County Main Line, Water	Manatee County	608	WPM058097	4/19/2001	8	PVC	8" PVC Water Main running parallel to 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2380
Utility ID 58	County Main Line, Water	Manatee County	409	WPM058382	4/19/2001	8	PVC	8" PVC Water Main running parallel to 34th Ave. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=002	2585
Utility ID 74	County Main Line, Water	Manatee County	640	WPM058446	4/19/2001	8	PVC	8" PVC Water Main running parallel to 81st Ct. E. on the West side / Runs underneath driveways to private businesses and Lift Station 615	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	2819
Utility ID 117	County Main Line, Water	Manatee County	20	WPM037800	4/19/2001	8	PVC	8" PVC Water Main routed underneath roadway pavement of Powell Johnson Road and runs parallel to Lena Road and 81st Ct. E.	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	4598
Utility ID 122	County Main Line, Water	Manatee County	640	WPM058446	4/19/2001	8	PVC	8" PVC Water Main running West of 81st Ct. E. and underneath the pavement of the Lena Road/81st Ct. E./Powell Johnson Road/Landfill Road Intersection	LENA ROAD BUSINESS PARK - LENA ROAD BUSINESS PARK (00289) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10650292&pageid=001	3037
Utility ID 116	County Main Line, Water	Manatee County	797	WPM039672	12/3/1979	8	PVC	8" PVC Water Main running from West-East along the North side of Powell Johnson Road	Null	No documents available	44239
Utility ID 118	County Main Line, Water	Manatee County	10	WPM059379	12/3/1979	8	PVC	8" PVC Water Main running from West-East along the North side of Powell Johnson Road	Null	No documents available	40111
Utility ID 120	County Main Line, Water	Manatee County	3	WPM058126	12/3/1979	8	PVC	8" PVC Water Main running North of Powell Johnson Road and underneath the pavement of the Lena Road/81st Ct. E./Powell Johnson Road/Landfill Road Intersection	Null	No documents available	5268
Utility ID 121	County Main Line, Water	Manatee County	3	WPM058126	12/3/1979	8	PVC	8" PVC Water Main running parallel to Powell Johnson Road and underneath the pavement of the Lena Road/81st Ct. E./Powell Johnson Road/Landfill Road Intersection	Null	No documents available	2800
Utility ID 126	County Main Line, Water	Manatee County	19	WPM059402	12/3/1979	8	PVC	8" PVC Water Main running North of Powell Johnson Road, parallel to Lena Road and underneath the pavement of the Lena Road/81st Ct. E./Powell Johnson Road/Landfill Road Intersection	Null	No documents available	40193
Utility ID 127	County Main Line, Water	Manatee County	1366	WPM036893	12/3/1979	8	PVC	8" PVC Water Main running North and parallel to Lena Road	Null	No documents available	
Utility ID 151	County Main Line, Water	Manatee County	679	WPM052971	12/3/1979	8	PVC	8" PVC Water Main running North-South and is parallel to Lena Road and is to the East Side of Lena Road	Null	No documents available	38163
Utility ID 155	County Main Line, Water	Manatee County	728	WPM053770	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	37091
Utility ID 162	County Main Line, Water	Manatee County	147	WPM059705	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	39319
Utility ID 179	County Main Line, Water	Manatee County	191	WPM035236	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	51657
Utility ID 180	County Main Line, Water	Manatee County	494	WPM015537	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	27948
Utility ID 187	County Main Line, Water	Manatee County	272	WPM012191	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	26059
Utility ID 198	County Main Line, Water	Manatee County	199	WPM053025	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	38437
Utility ID 203	County Main Line, Water	Manatee County	488	WPM012193	12/3/1979	8	PVC	8" PVC Water Main running North-South and parallel to Lena Road along the West side	Null	No documents available	26119
Utility ID 1	County Main Line, Water	Manatee County	509	WPM014257	4/20/2004	10	PVC	10" PVC Water Main parallel to Lena Road on west side. Terminates at cul-de-sac on Lena Road	CREEKWOOD EAST CORPORATE PARK - CREEKWOOD EAST CORPORATE PARK (04458) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=10651390&pageid=002	23907
Utility ID 226	County Main Line, Water	Manatee County	19	WPM035958	11/29/2004	10	PVC	10" PVC Water Main parallel to Lena Road on the west side of Lena Road / directly adjacent to the west of the sidewalk	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=016	6839
Utility ID 228	County Main Line, Water	Manatee County	20	WPM057347	11/29/2004	10	PVC	10" PVC Water Main parallel to Lena Road on the west side of Lena Road / directly adjacent to the west of the sidewalk	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=016	4092
Utility ID 229	County Main Line, Water	Manatee County	204	WPM035950	11/29/2004	10	PVC	10" PVC Water Main running West-East underneath the sidewalk on the south side of SR64	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6831

Utility ID # - Corresponds to Lena Road Utility Identification Sheets	Lena Road Utilities (From S. to N.)										
Utility ID	Description	Owner	Length (LF)	Asset_ID	Install Date	Diameter (in.)	Material	Location: Parallel/Crossing	Record Drawing Name	Record Drawing OnBase Link	Object ID
Utility ID 238	County Main Line, Water	Manatee County	20	WPM036376	11/29/2004	10	PVC	10" PVC Water Main bored underneath sidewalk on the North side of SR64 / Water Main is parallel to Lena Road	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6202
Utility ID 239	County Main Line, Water	Manatee County	736	WPM036375	11/29/2004	42	DIP	42" DIP Water Main on North side of SR64 and directly to the north side of the adjacent sidewalk pavement / parallel to SR64	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6201
Utility ID 240	County Main Line, Water	Manatee County	130	WPM035949	11/29/2004	42	DIP	42" DIP Water Main bored underneath crosswalk perpendicular to Lena Road	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=013	6830
Utility ID 241	County Main Line, Water	Manatee County	384	WPM036197	11/29/2004	42	DIP	42" DIP Water Main routed underneath sidewalk on the North side of SR64	HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) - HERITAGE HARBOUR - SR 64 IMPROVEMENTS (WATER) (04296) - UTD - REC - Record Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=11581220&pageid=014	6702
Utility ID 147	Private Force Main, Sewer	Private	95	SPM006760	7/22/2005	2	HDPE	2" HDPE Lateral running East from Lena Road and is perpendicular to Lena Road	FP&L - RYE SUBSTATION - FP&L - RYE SUBSTATION (06046) - UTD - REC - Construction Drawing	https://www.mymanatee.org/onbasegisutil/docpop/docpop.aspx?clienttype=html&docid=12889987&pageid=002	7661
Utility ID 7	Private Force Main, Sewer	Private	1119	SPM007231	Null	12	PVC	Unk. Diameter Sewer force main on North side of 41st Ave. E.	No documents available	Polyline	
	BFO	Manatee County	3,400	Several IDs	--	2	HDPE Conduit	BFO running throughout Lena Road Corridor. Main BFO occurs on the West side of Lena Road (North side of corridor). BFO heads due West at the 81st Ct. E. & Lena Road intersection towards the WWTP and Landfill.	NA	NA	NA
	BFO	UNITI Fiber	UNK	NA	UNK	2-1.25	HDPE Conduit	UNITI has BFO running along the East side of the North section of Lena Road and diverts to Cell tower on East side of Lena Road.	NA	NA	NA
	Buried and Overhead Fiber Optic Cable	Charter-Spectrum	UNK	NA	UNK	UNK	UNK	From SR64 heading South on Lena Road, Spectrum has BFO on the West side of Lena Road that eventually are routed onto FPL power poles and continues route on FPL Lines for duration of Lena Road Corridor.	NA	NA	NA
	BFO	CrownCastle	UNK	NA	UNK	UNK	UNK	BFO running throughout Lena Road Corridor. Main BFO occurs on the west and east side of Lena Road (North side of corridor) and the west side of 81st Ct. E.	NA	NA	NA
	BFO	AT&T	UNK	NA	UNK	UNK	UNK	Location is unknown at this time.	NA	NA	NA
	BFO	Frontier	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA
	BFO	MCI	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA
	Gas	FGT	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA
	Gas	TECO	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA
	High-Voltage Transmission and Distribution Wires (Overhead)	FPL	UNK	NA	UNK	UNK	UNK	FPL has high-voltage transmission wires running through their Easement. In addition, FPL has Distribution Wires running on the East and West side of the Lena Road Corridor varying positions throughout the corridor. All FPL utilities are overhead. FPL has no buried power lines anywhere in Lena Road corridor from their provided markups.	NA	NA	NA
	Overhead Power	Black and Veatch	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA
	Overhead Power	PRECO	UNK	NA	UNK	UNK	UNK	UNK	NA	NA	NA

Appendix B – Detailed Location Map







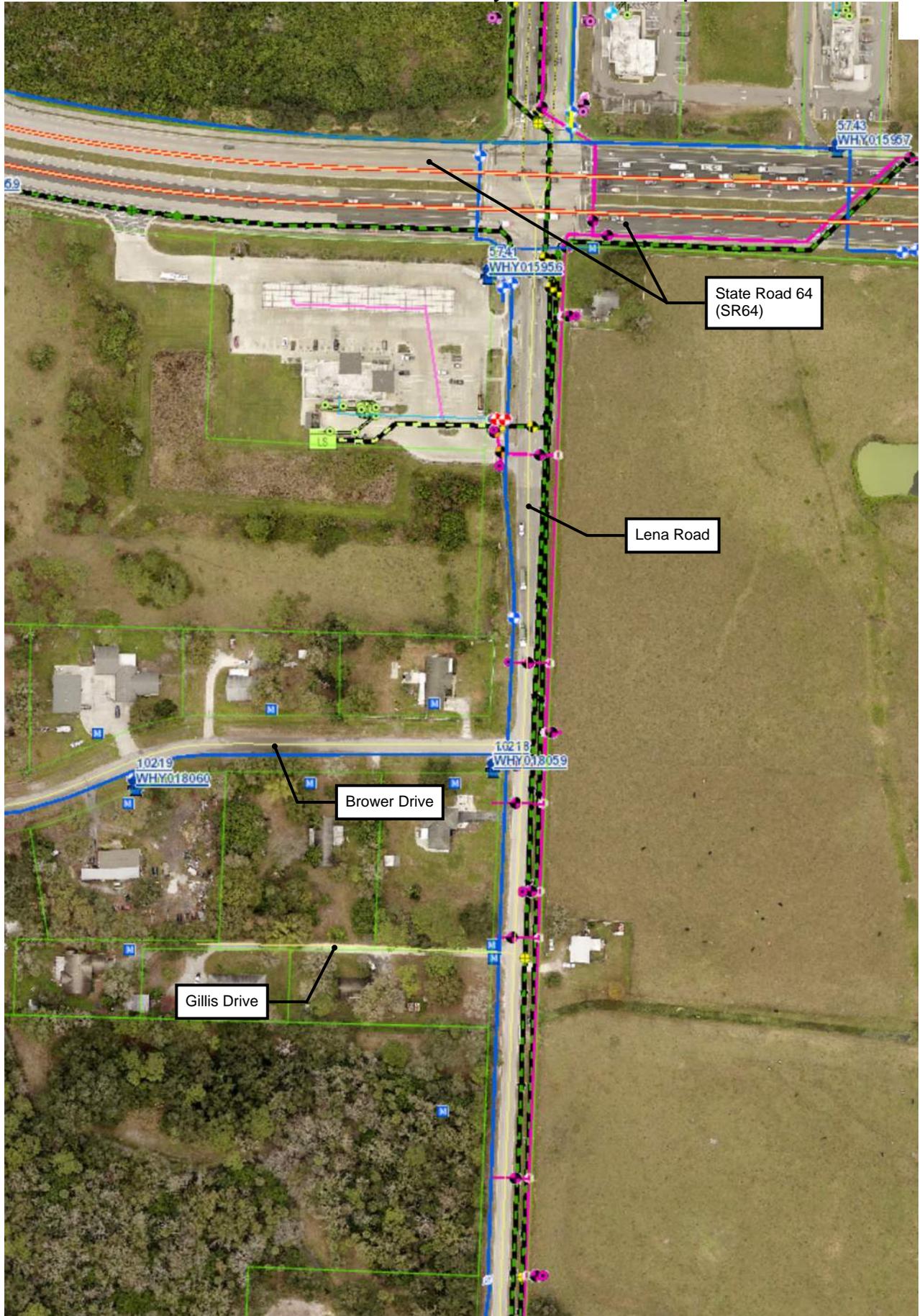


Lena Road

10724
WHY 18275

LS

Lena Road Utility Location Map

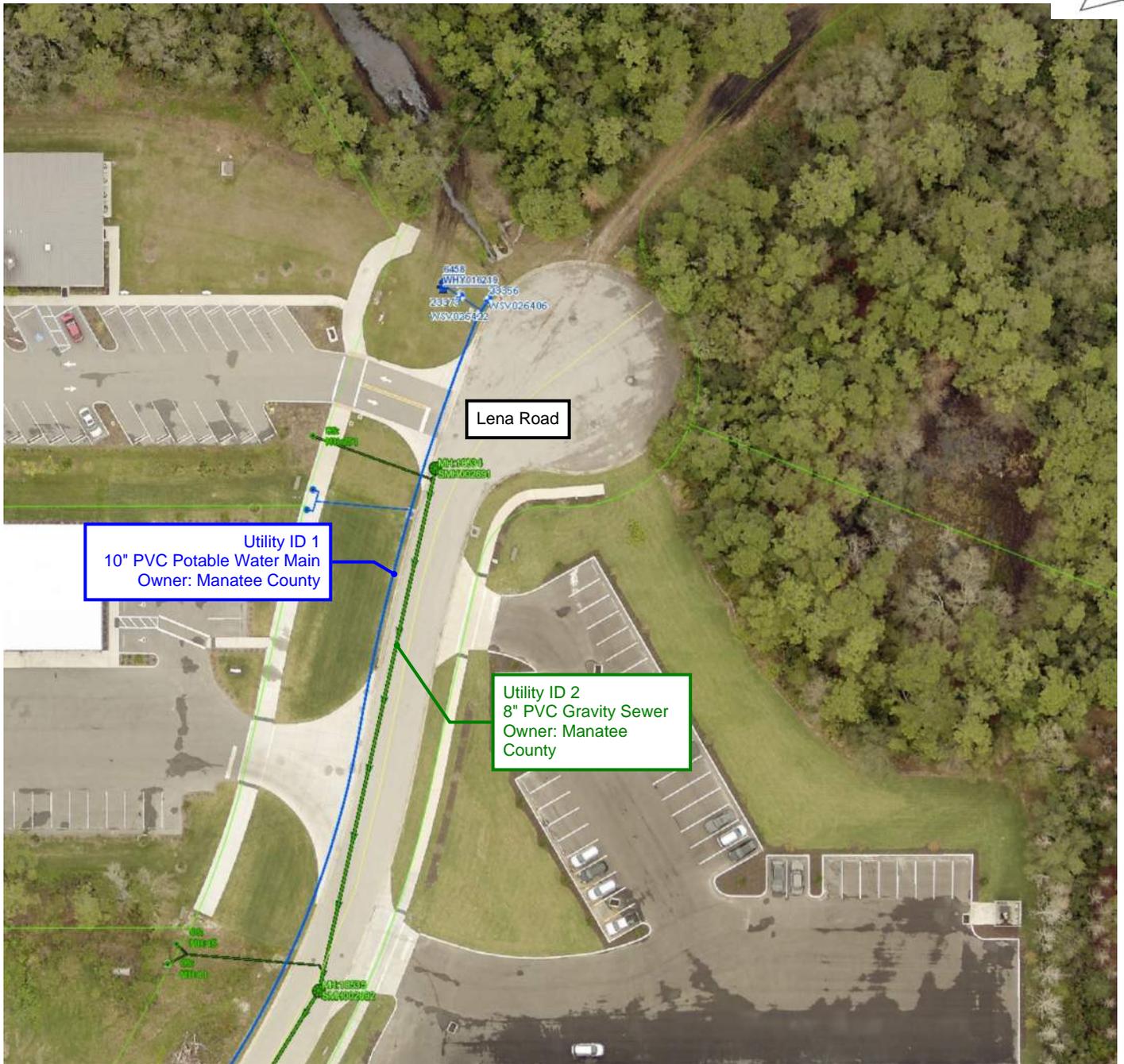


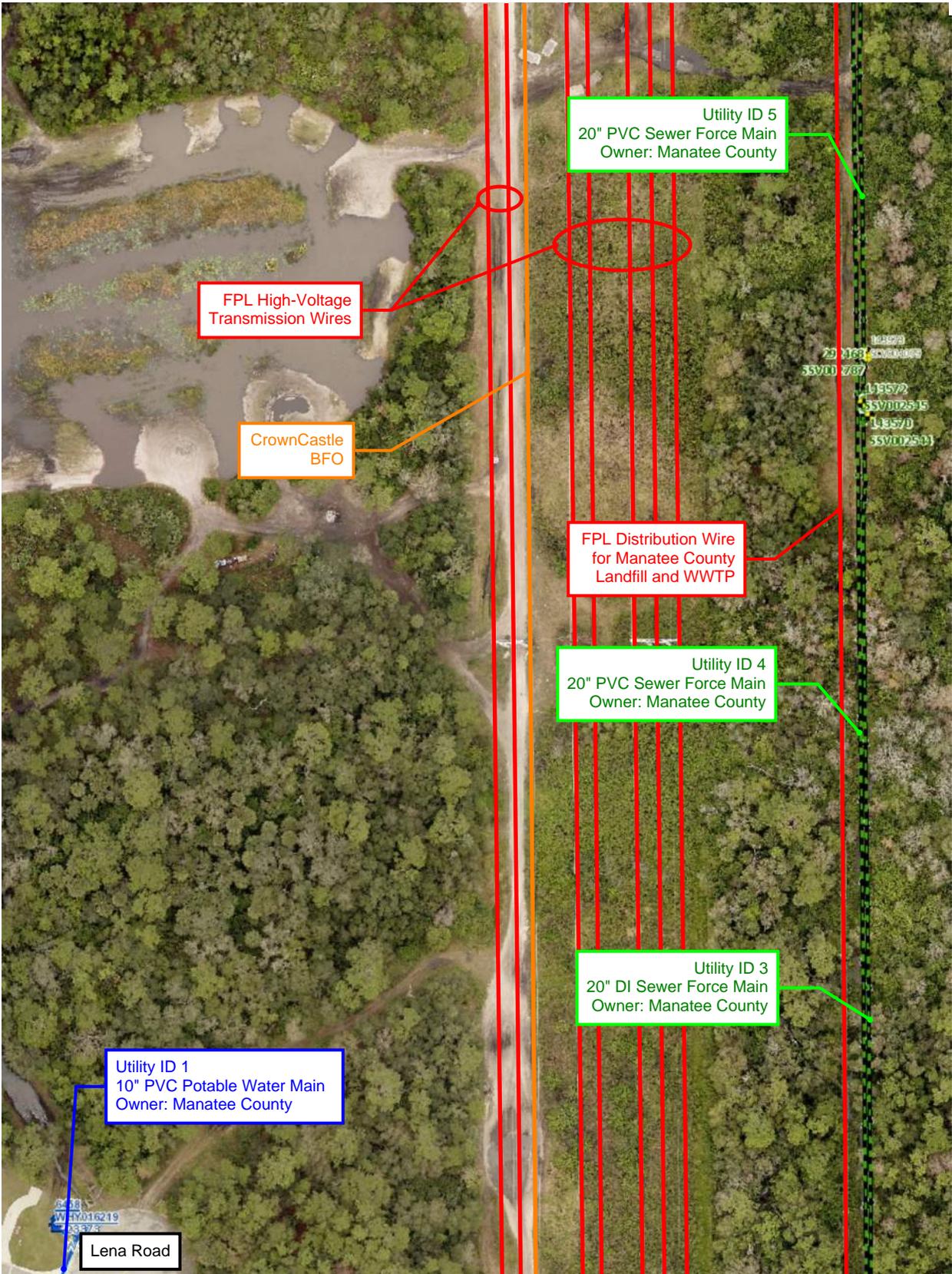
State Road 64 (SR64)

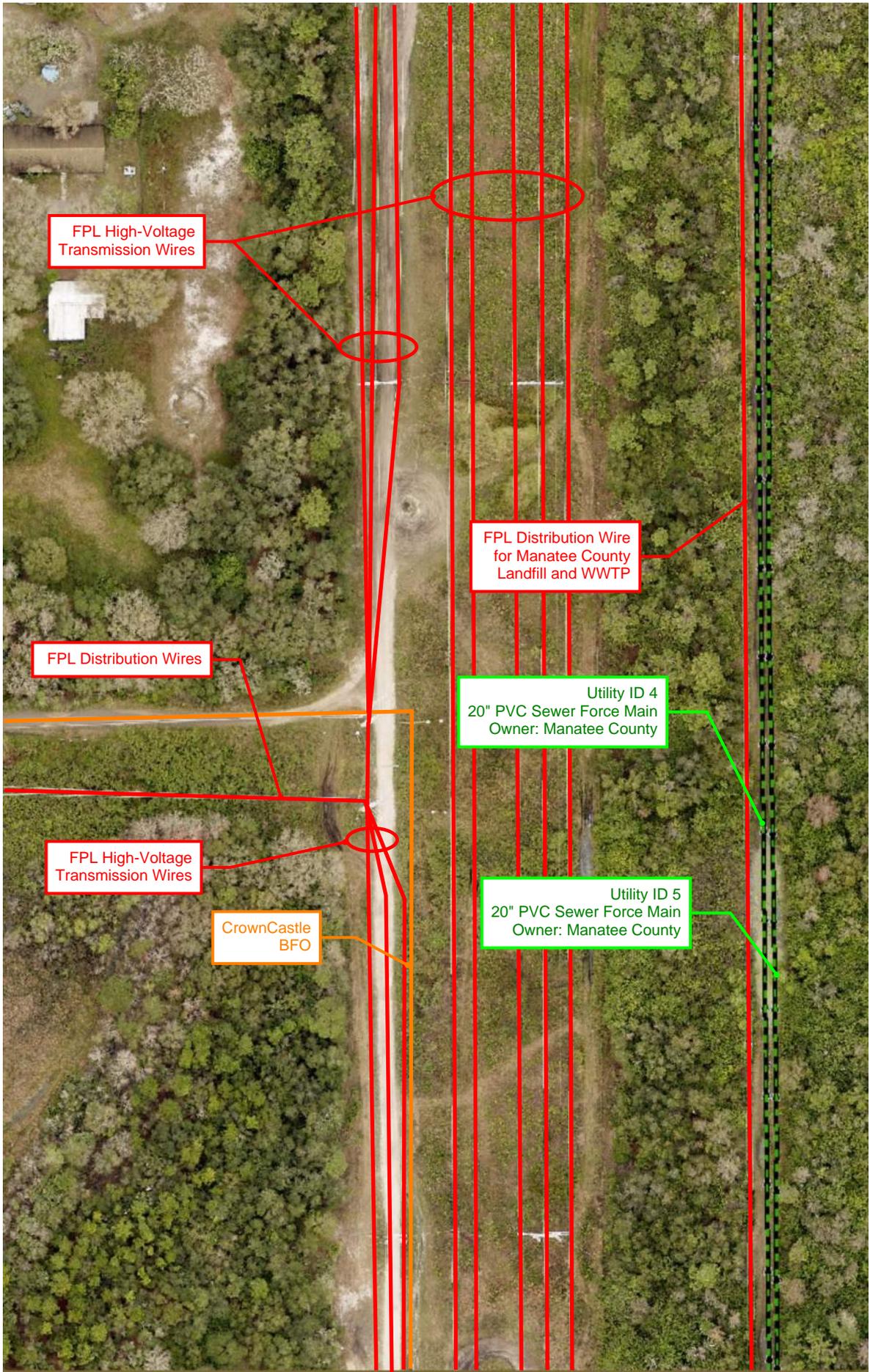
Lena Road

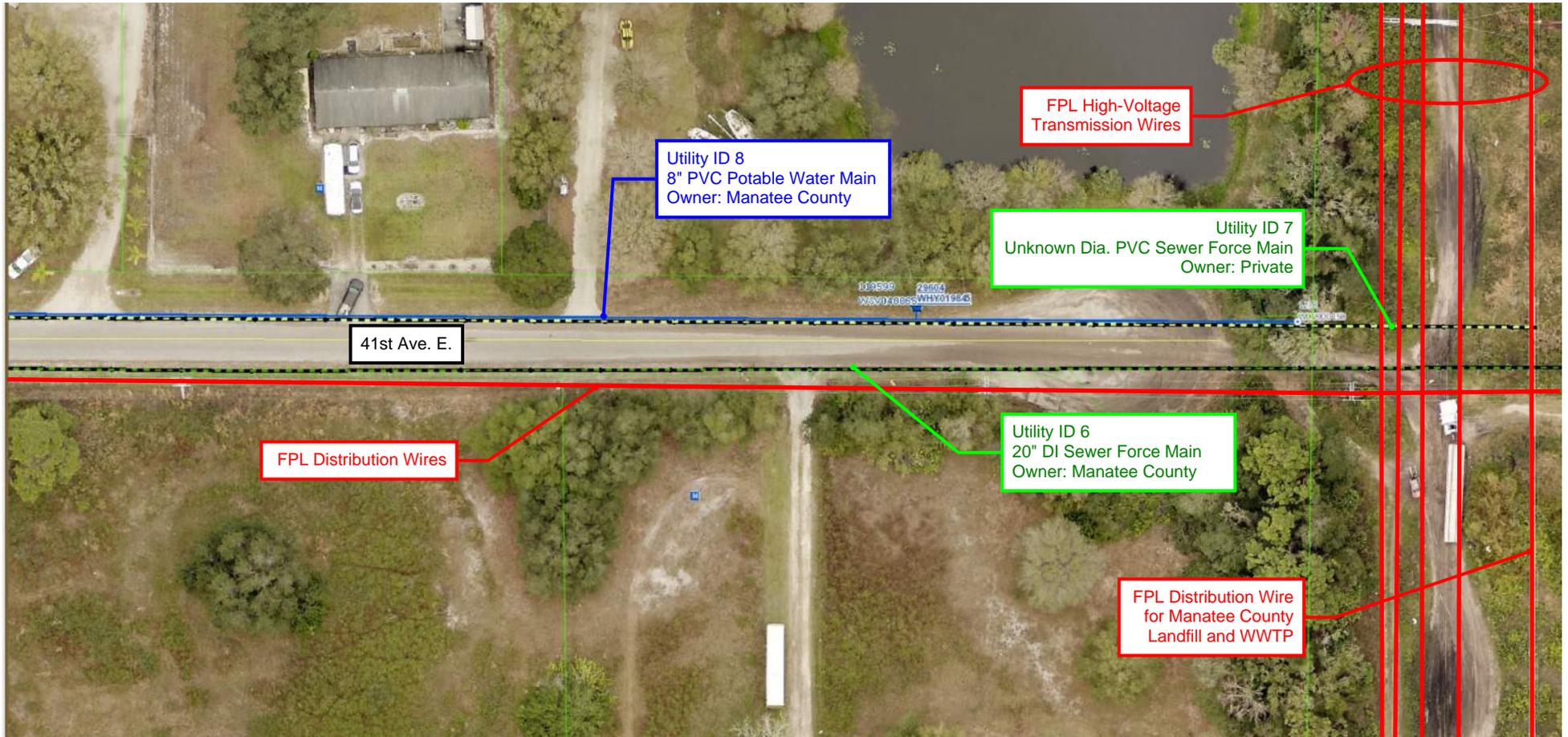
Brower Drive

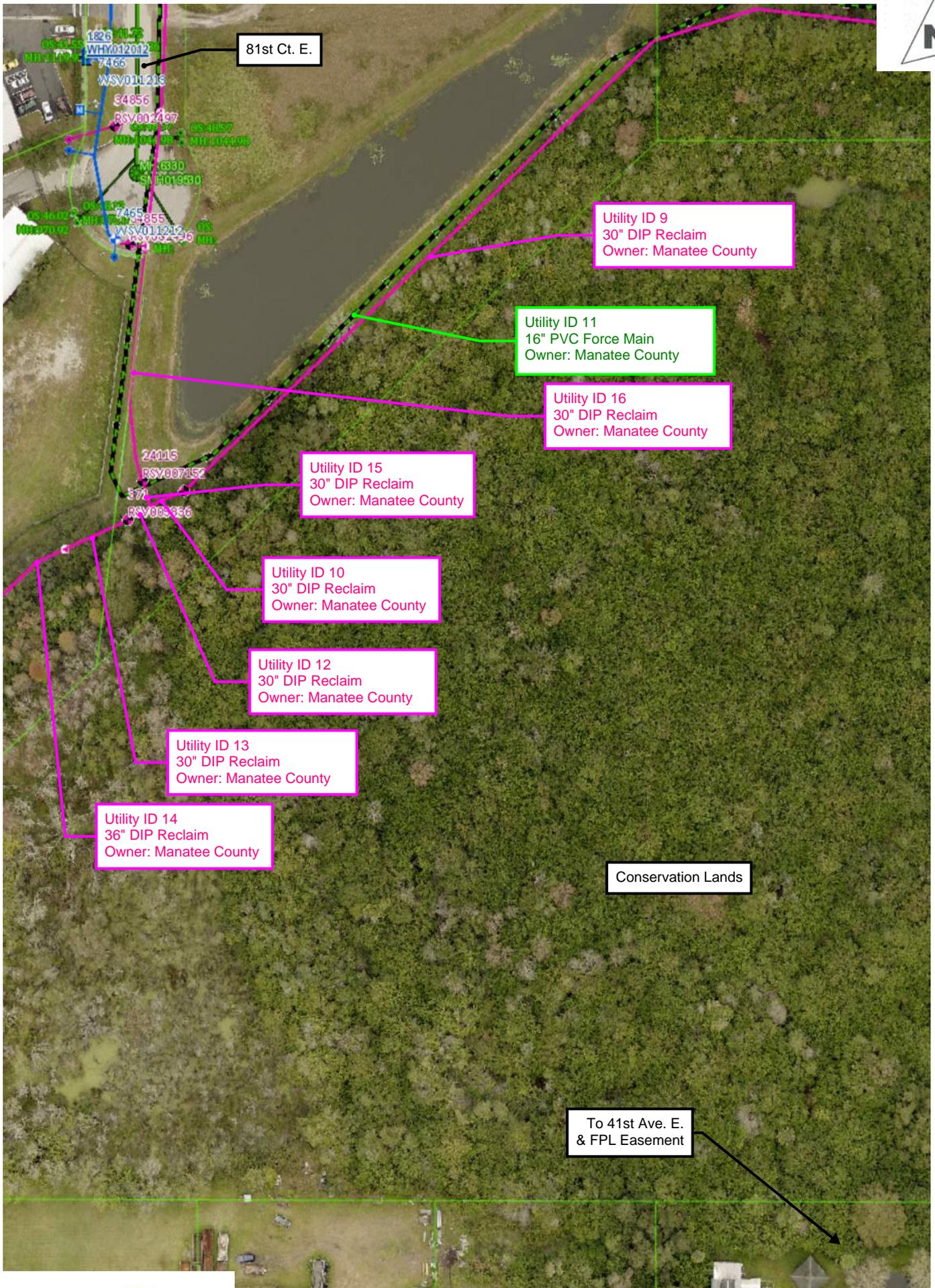
Gillis Drive











81st Ct. E.

Utility ID 9
30" DIP Reclaim
Owner: Manatee County

Utility ID 11
16" PVC Force Main
Owner: Manatee County

Utility ID 16
30" DIP Reclaim
Owner: Manatee County

Utility ID 15
30" DIP Reclaim
Owner: Manatee County

Utility ID 10
30" DIP Reclaim
Owner: Manatee County

Utility ID 12
30" DIP Reclaim
Owner: Manatee County

Utility ID 13
30" DIP Reclaim
Owner: Manatee County

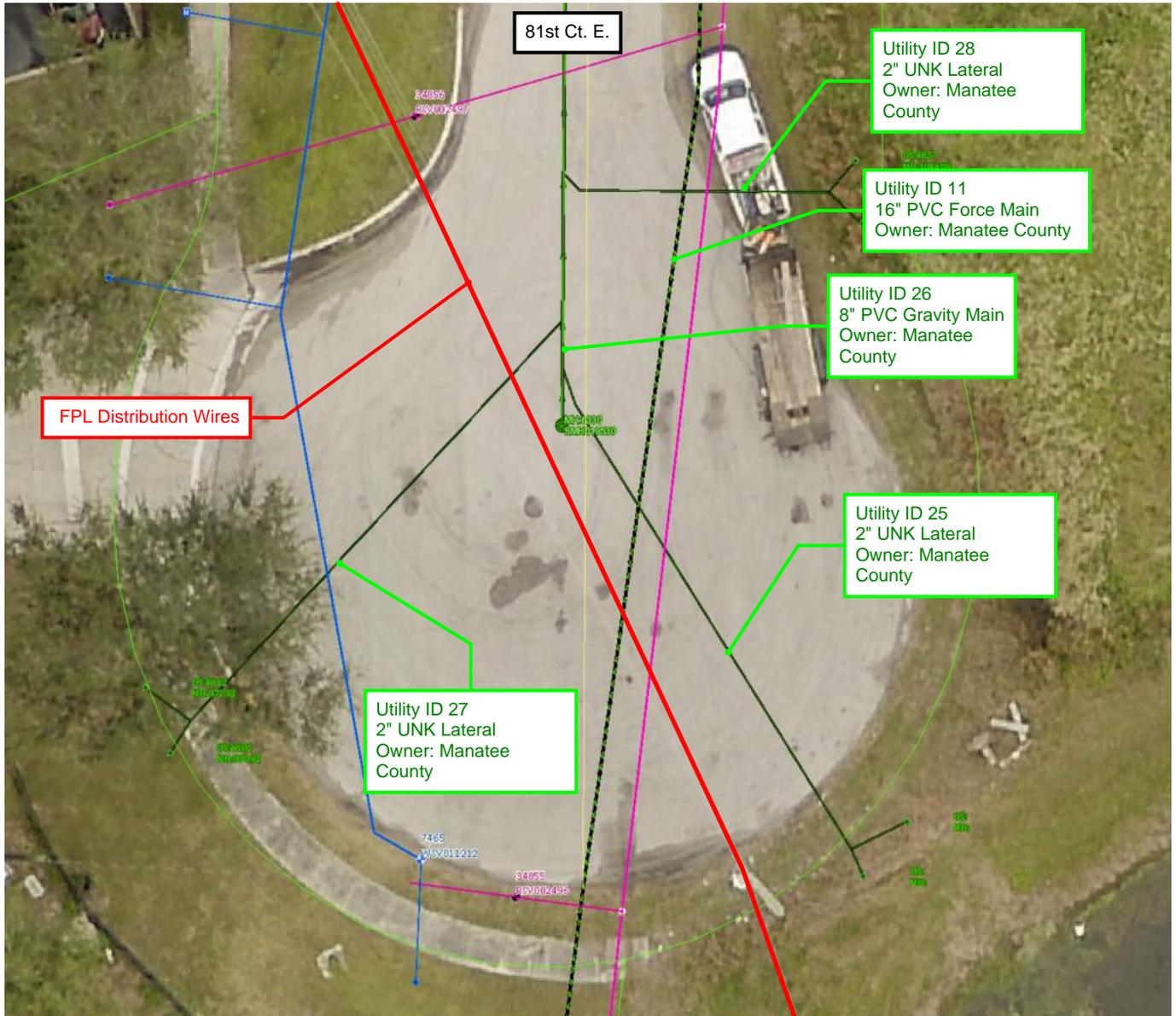
Utility ID 14
36" DIP Reclaim
Owner: Manatee County

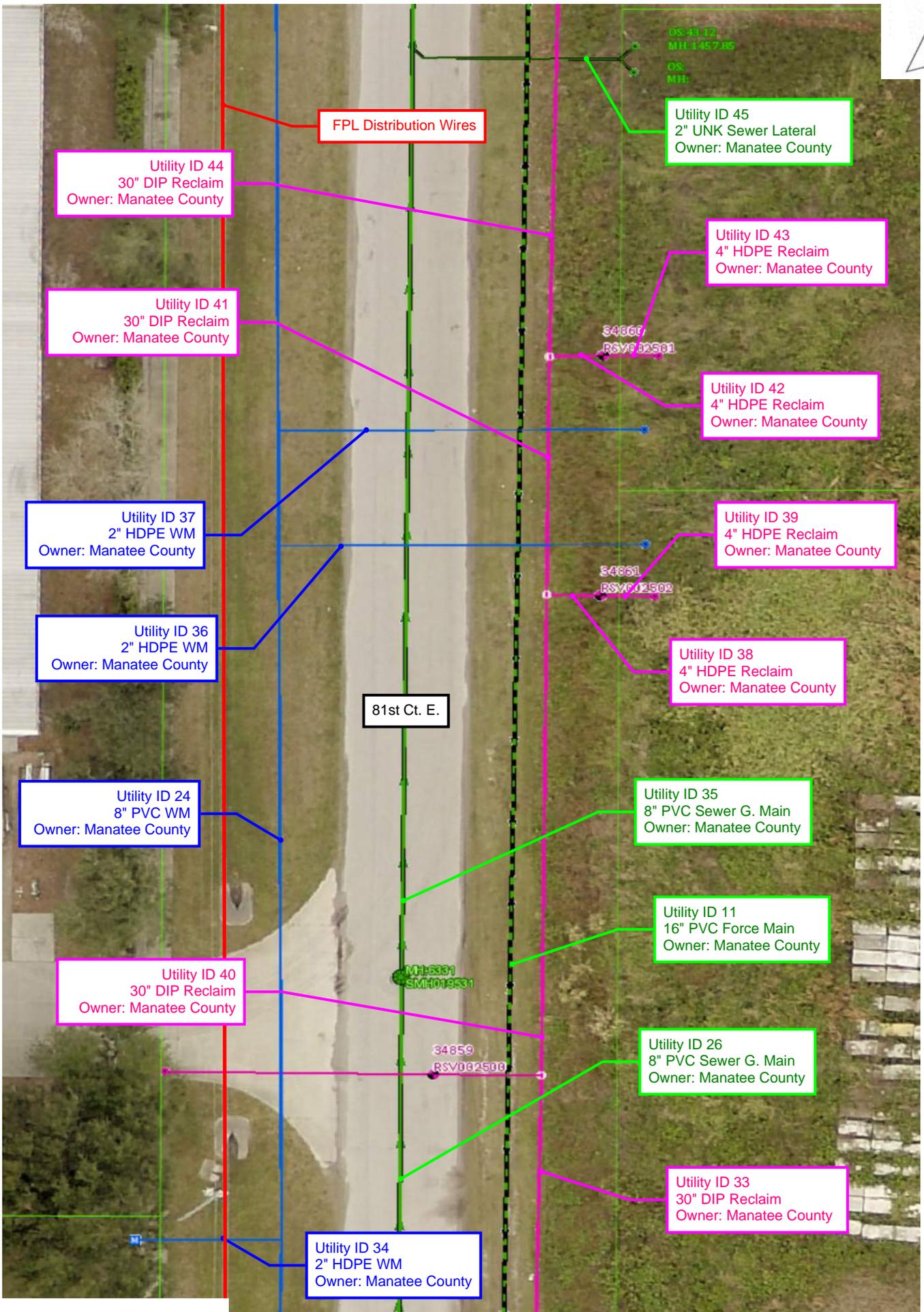
Conservation Lands

To 41st Ave. E.
& FPL Easement



81st Ct. E. Cul-De-Sac Enlarged Utility Location Map with Sewer Utility Identification Call-outs





FPL Distribution Wires

Utility ID 44
30" DIP Reclaim
Owner: Manatee County

Utility ID 45
2" UNK Sewer Lateral
Owner: Manatee County

Utility ID 43
4" HDPE Reclaim
Owner: Manatee County

Utility ID 41
30" DIP Reclaim
Owner: Manatee County

Utility ID 42
4" HDPE Reclaim
Owner: Manatee County

Utility ID 37
2" HDPE WM
Owner: Manatee County

Utility ID 39
4" HDPE Reclaim
Owner: Manatee County

Utility ID 36
2" HDPE WM
Owner: Manatee County

Utility ID 38
4" HDPE Reclaim
Owner: Manatee County

81st Ct. E.

Utility ID 24
8" PVC WM
Owner: Manatee County

Utility ID 35
8" PVC Sewer G. Main
Owner: Manatee County

Utility ID 40
30" DIP Reclaim
Owner: Manatee County

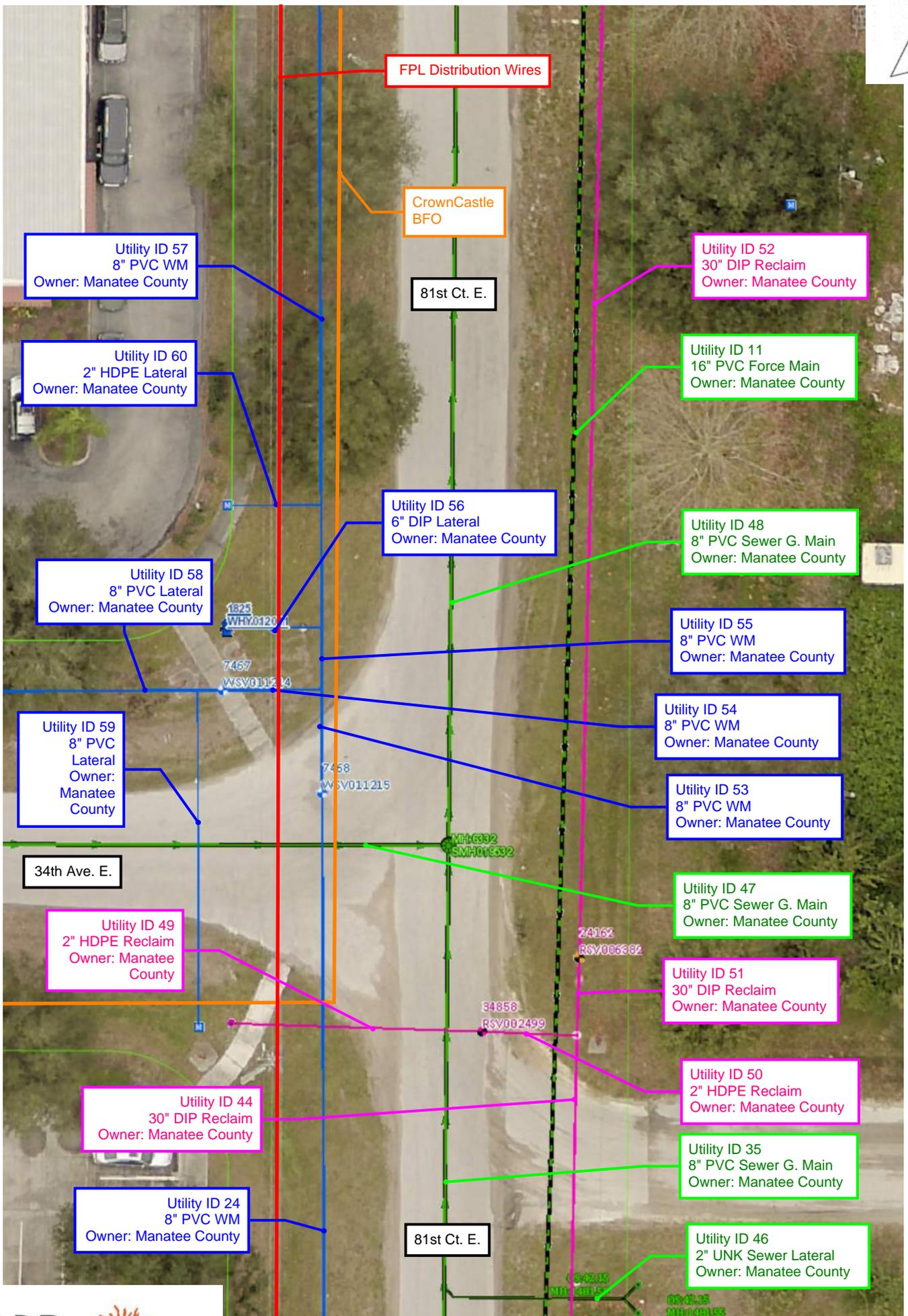
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16" PVC Force Main
Owner: Manatee County

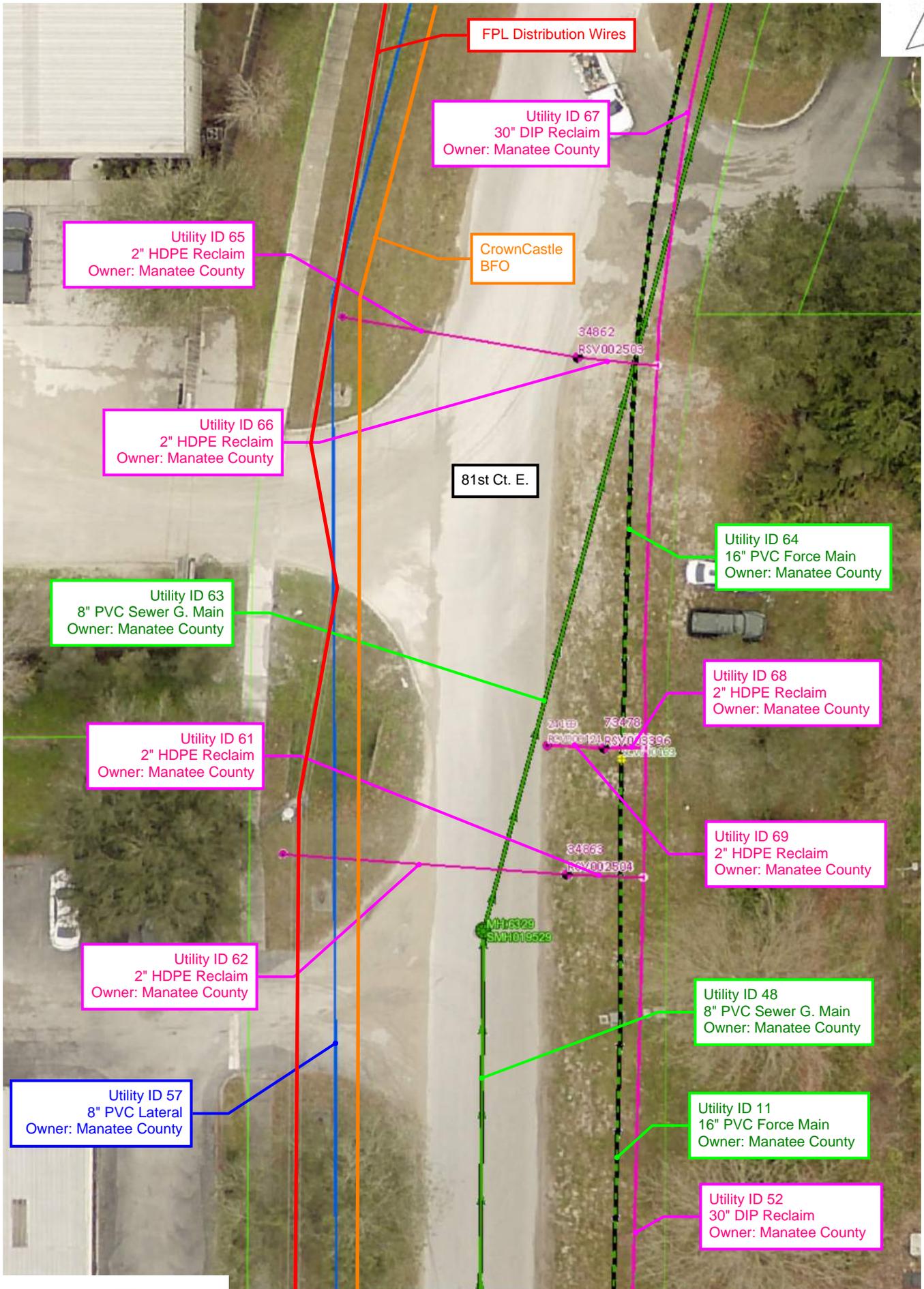
Utility ID 26
8" PVC Sewer G. Main
Owner: Manatee County

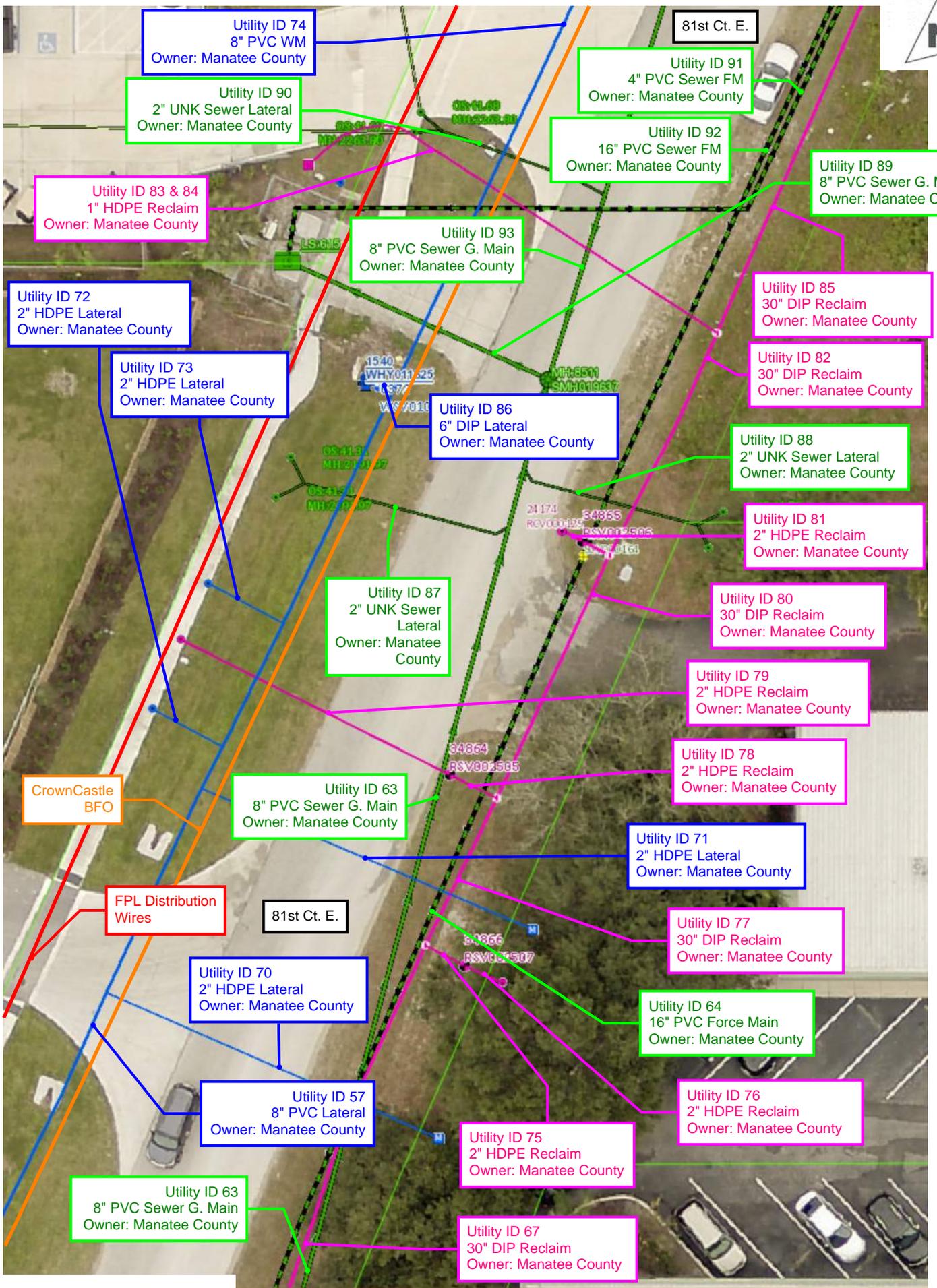
Utility ID 34
2" HDPE WM
Owner: Manatee County

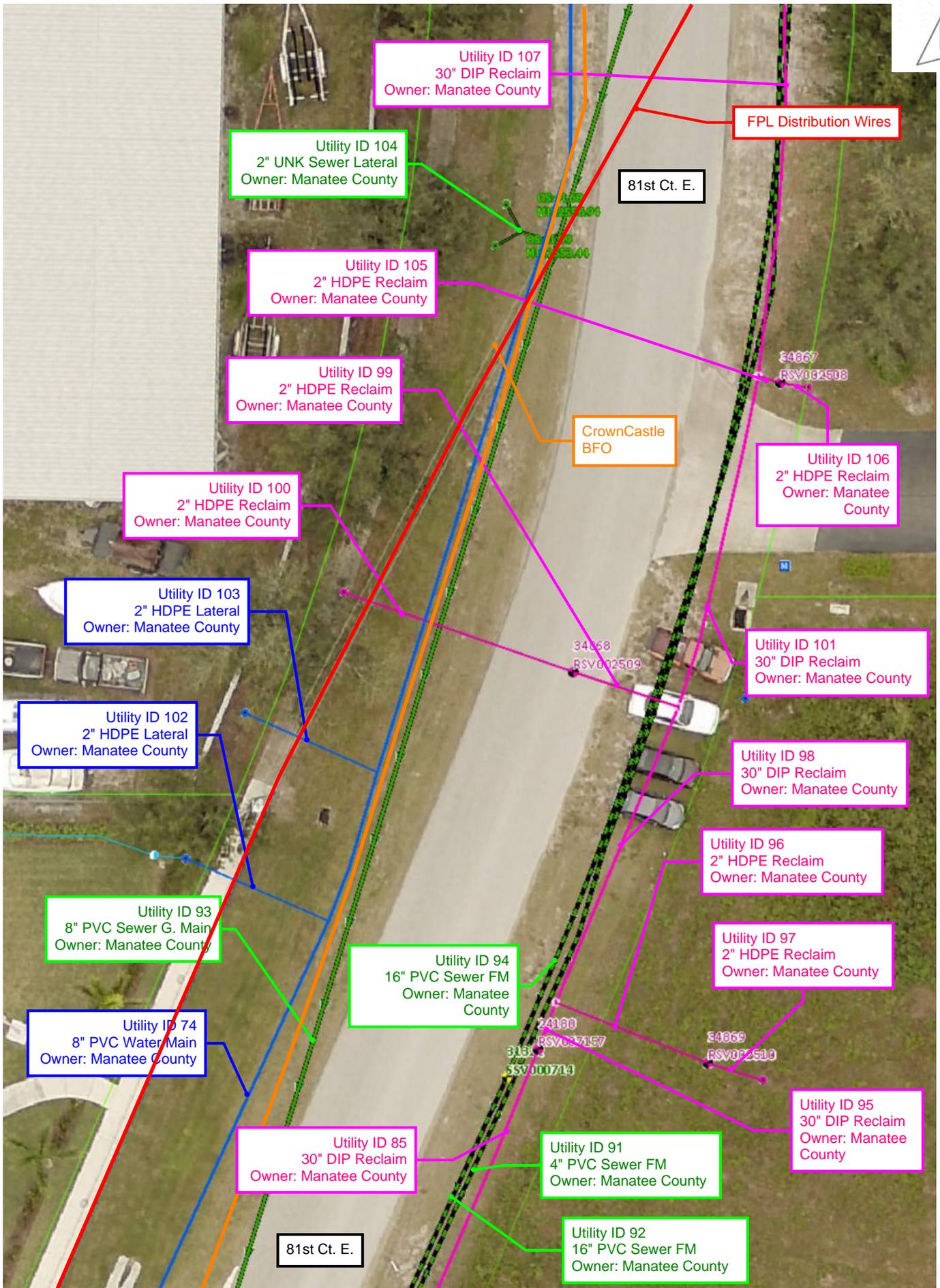
Utility ID 33
30" DIP Reclaim
Owner: Manatee County

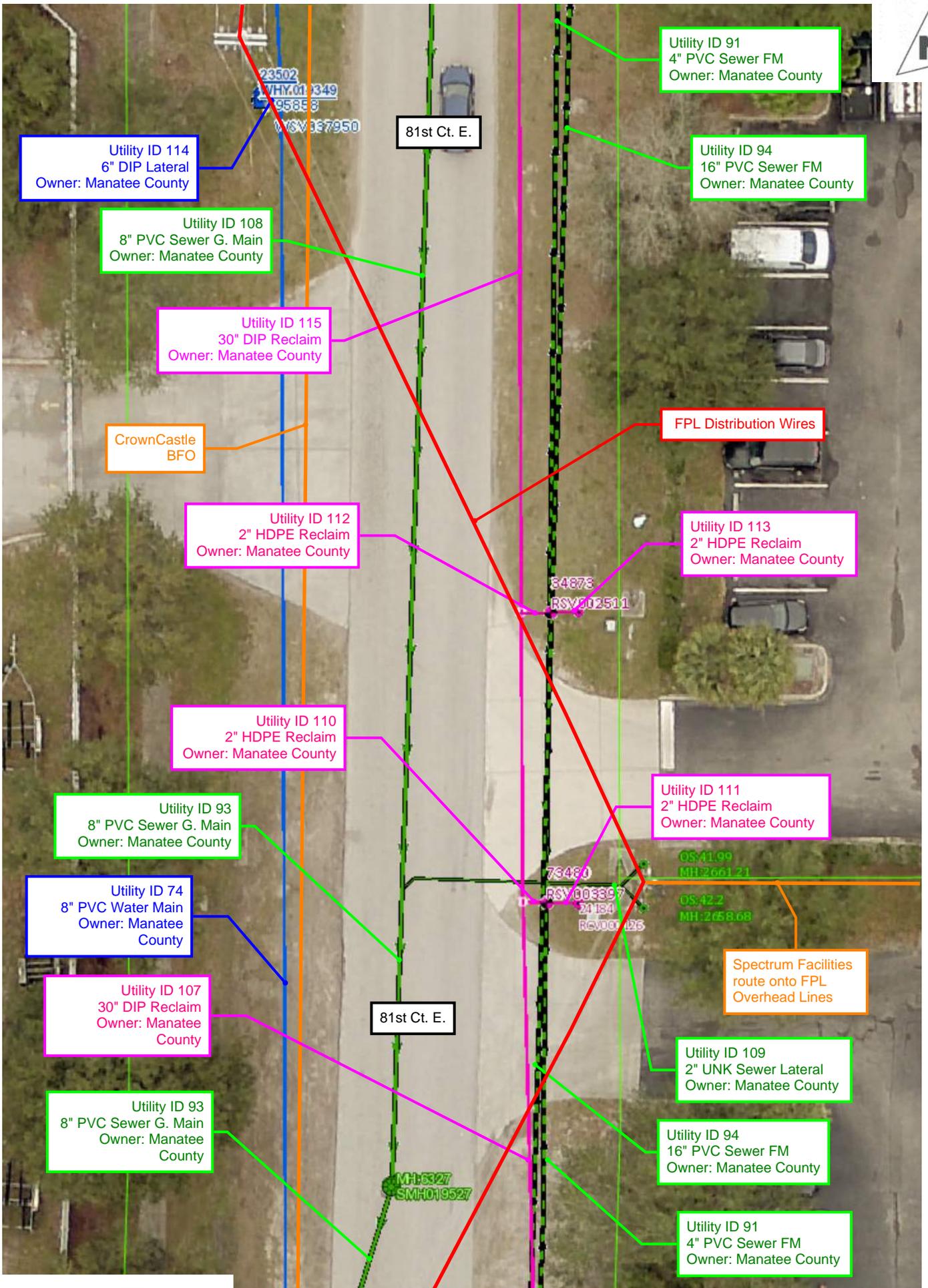




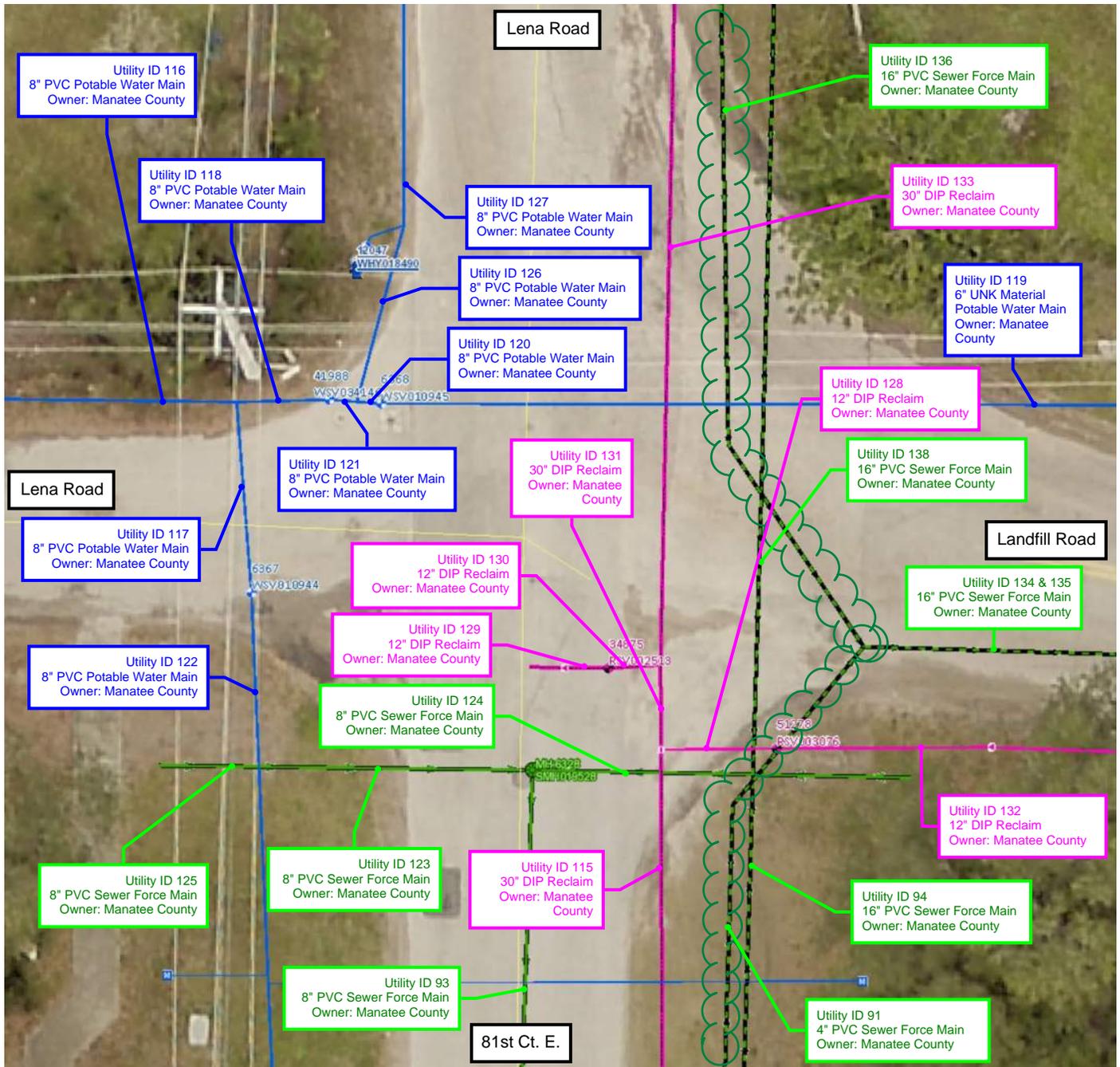




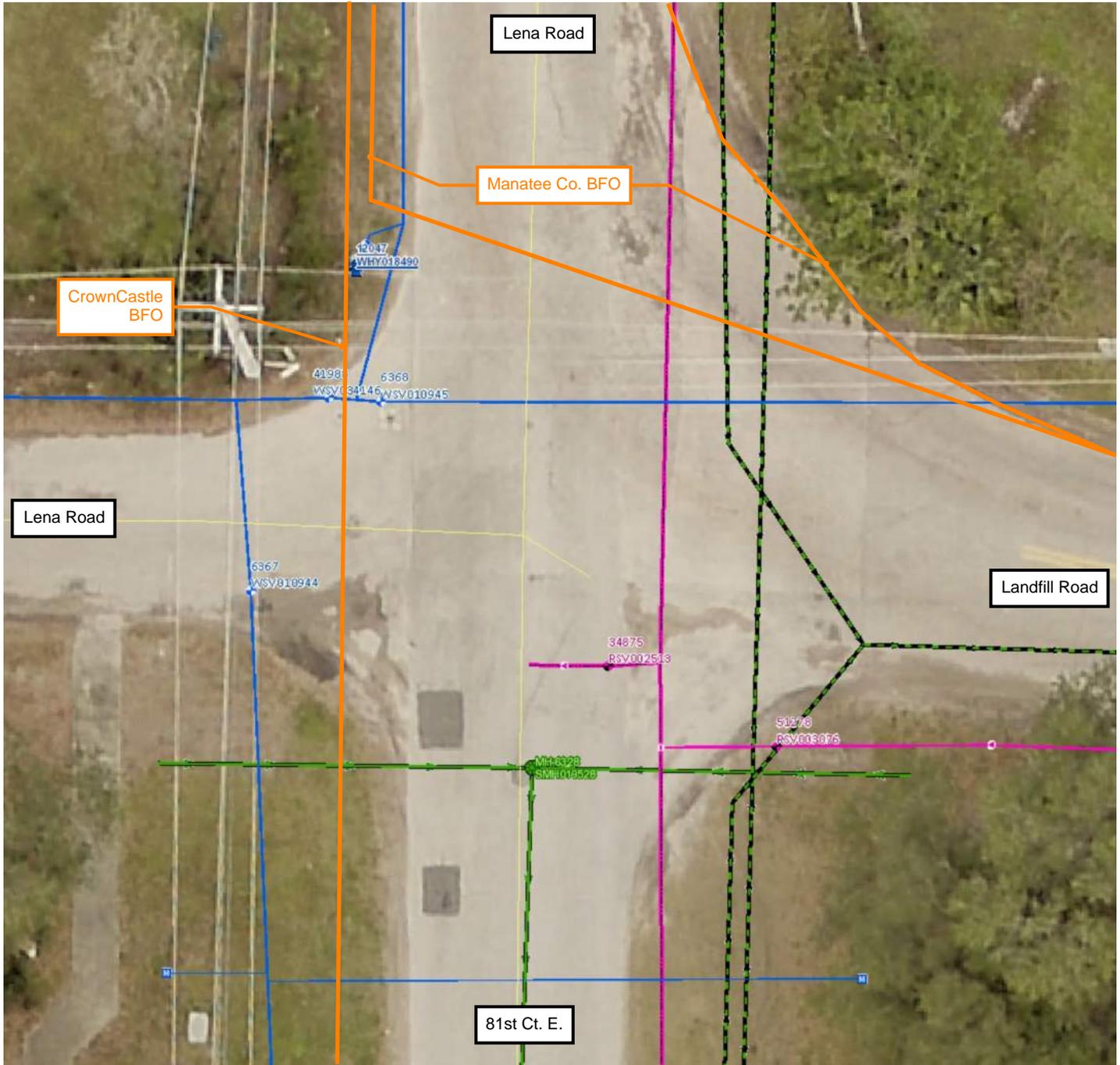


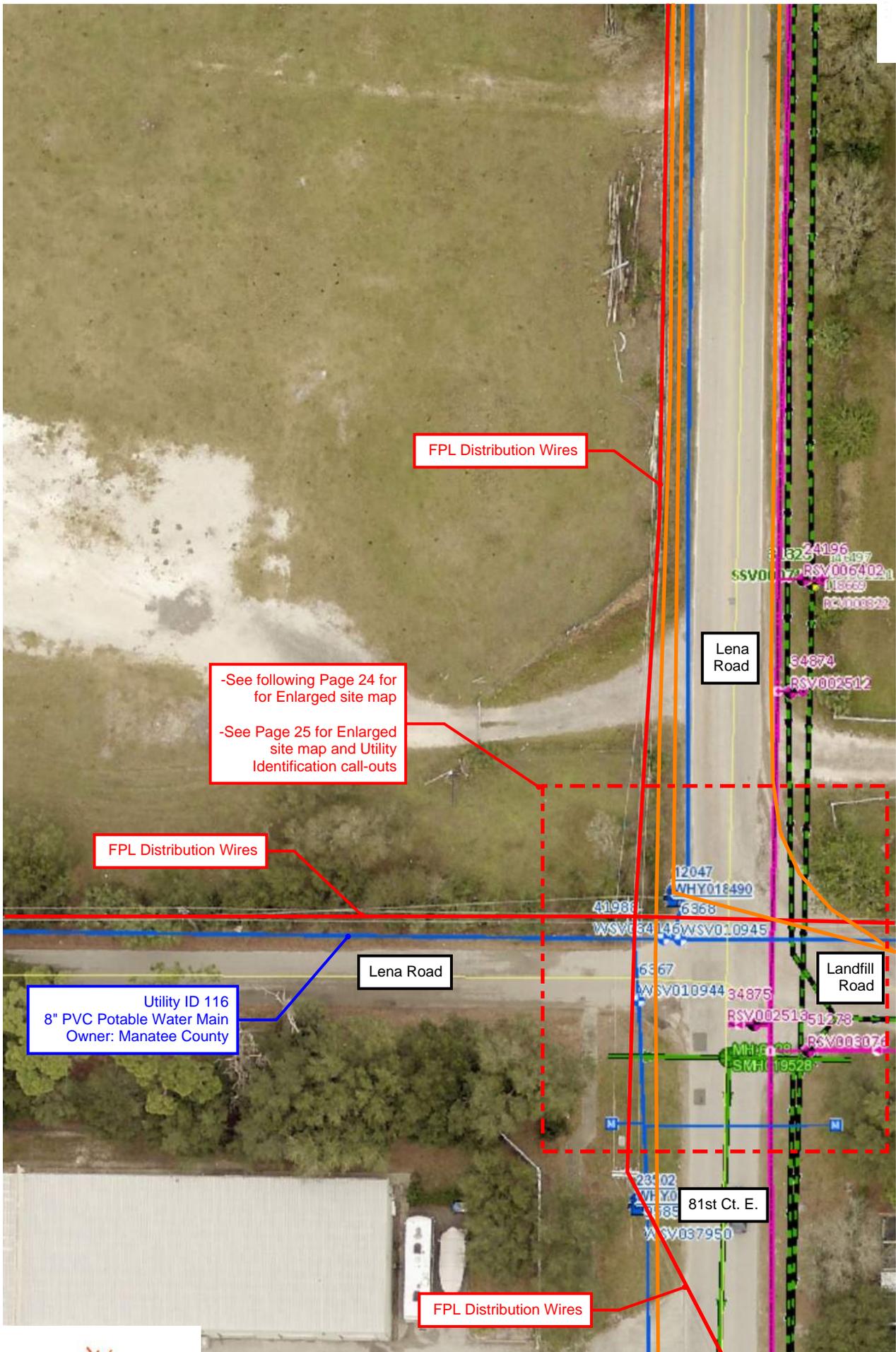


Lena Road, 81st Ct. E., & Landfill Road Intersection Enlarged Utility Location Map with Water and Sewer Utility Identification Call-outs



Lena Road, 81st Ct. E., & Landfill Road Intersection Enlarged Utility Location Map





FPL Distribution Wires

-See following Page 24 for Enlarged site map
-See Page 25 for Enlarged site map and Utility Identification call-outs

FPL Distribution Wires

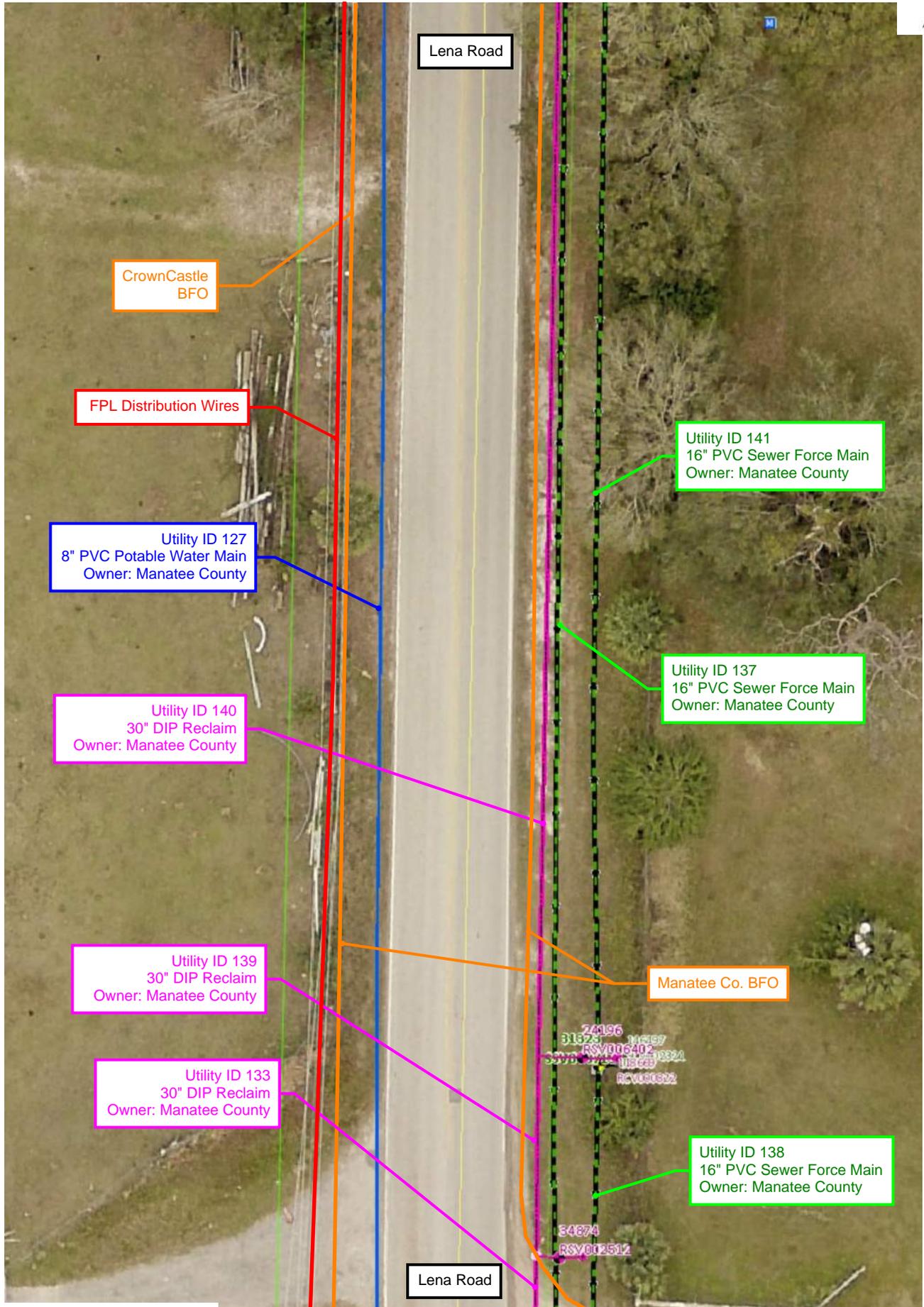
Utility ID 116
8" PVC Potable Water Main
Owner: Manatee County

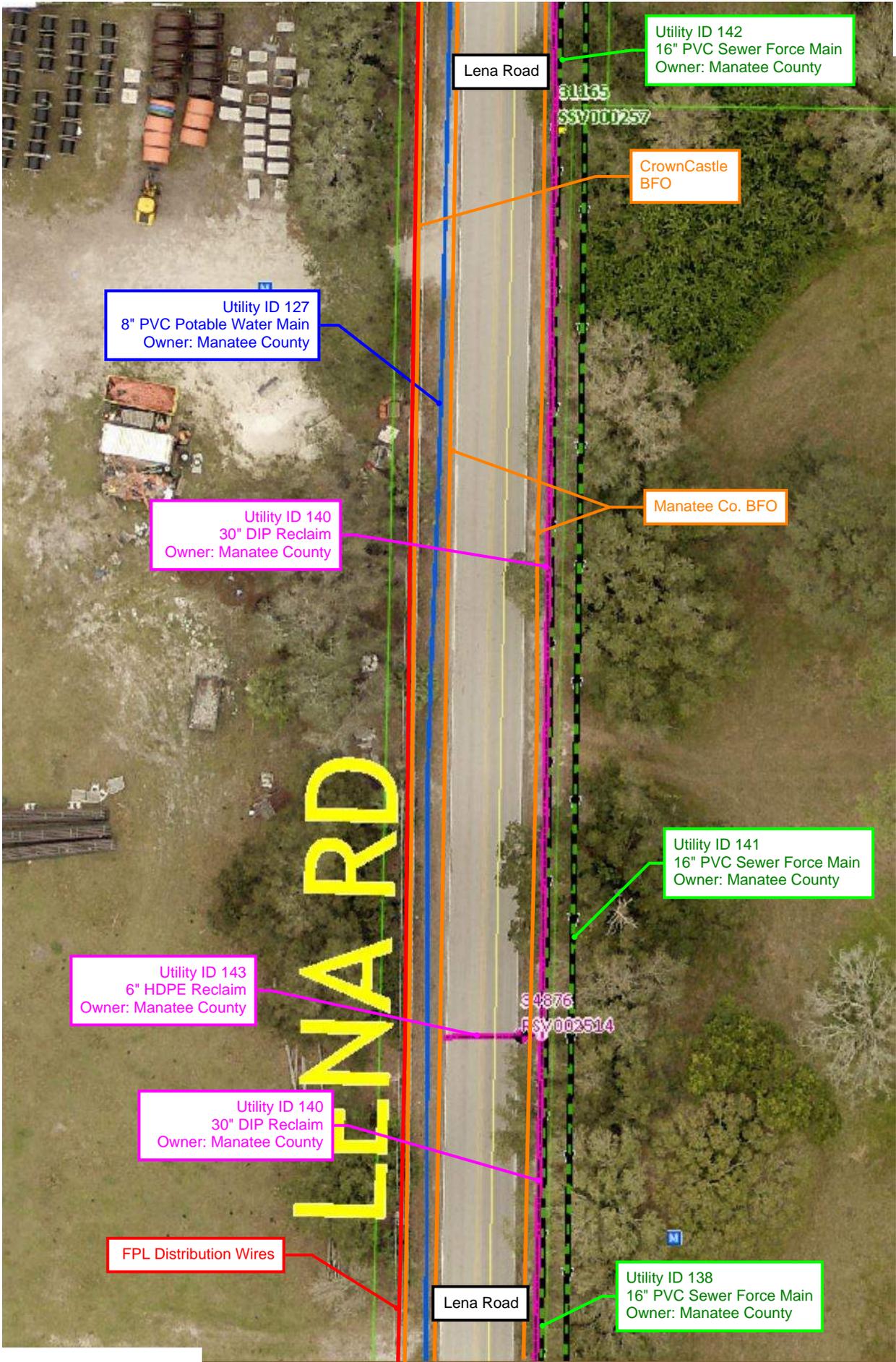
Lena Road

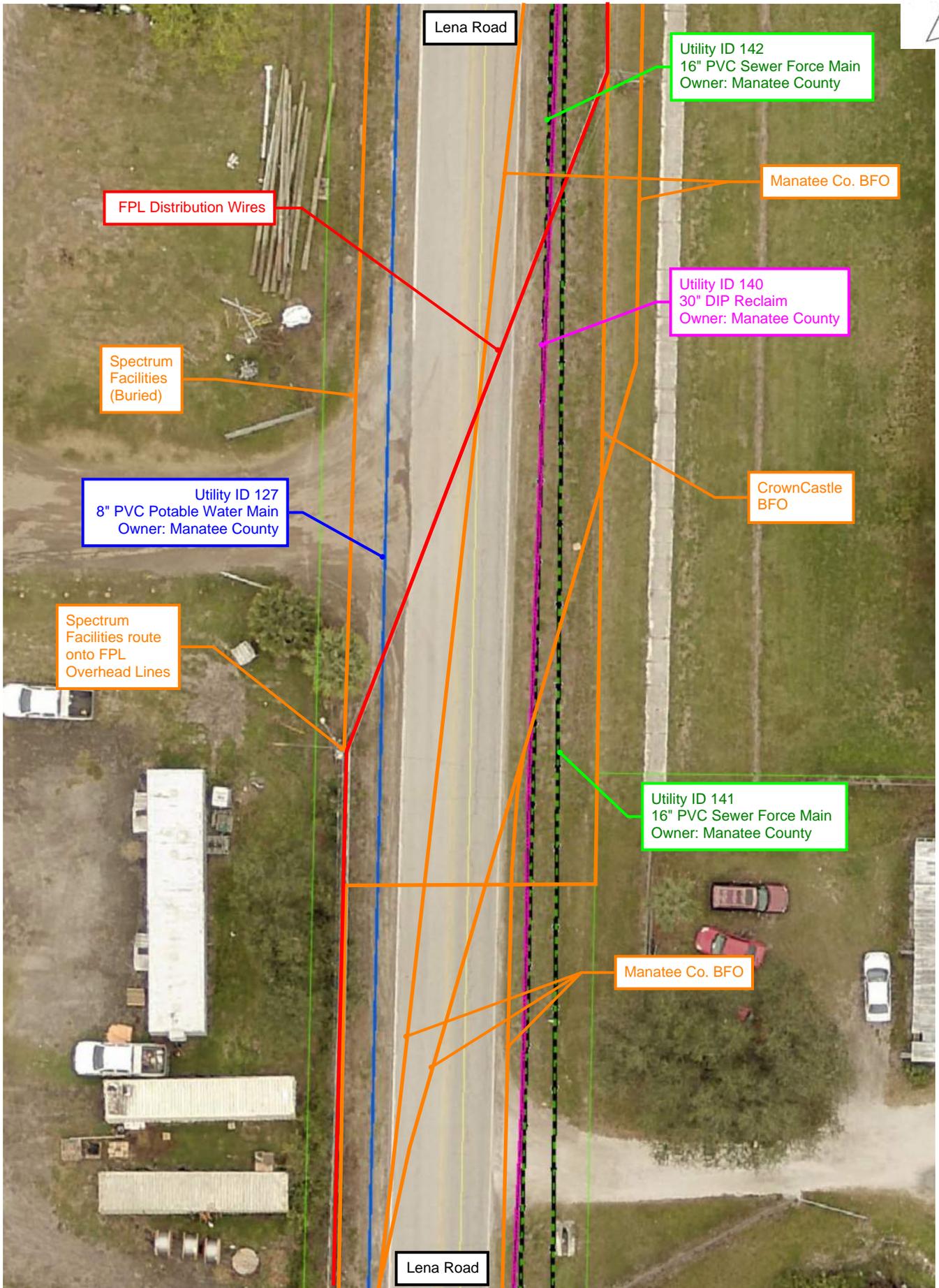
Landfill Road

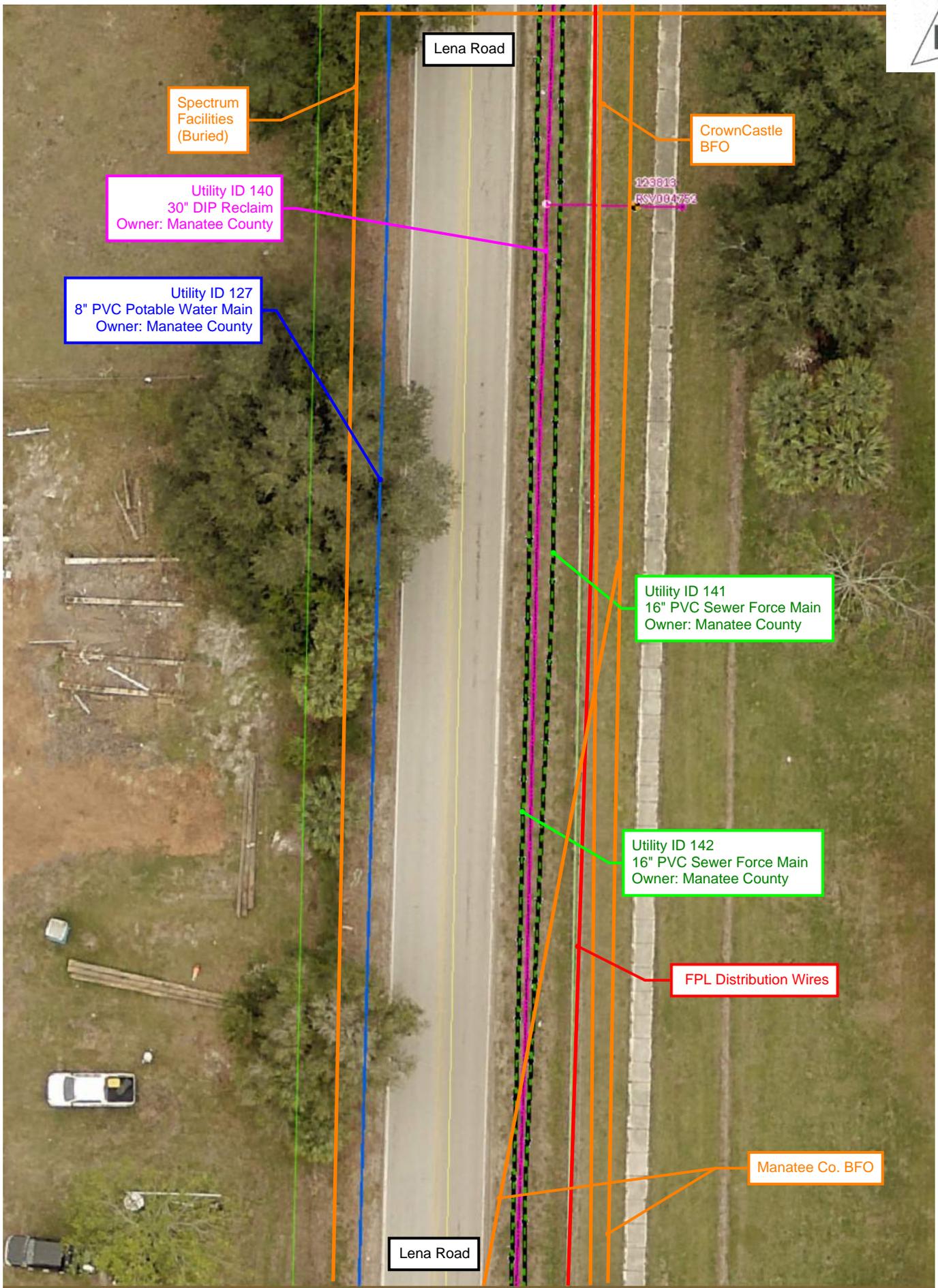
81st Ct. E.

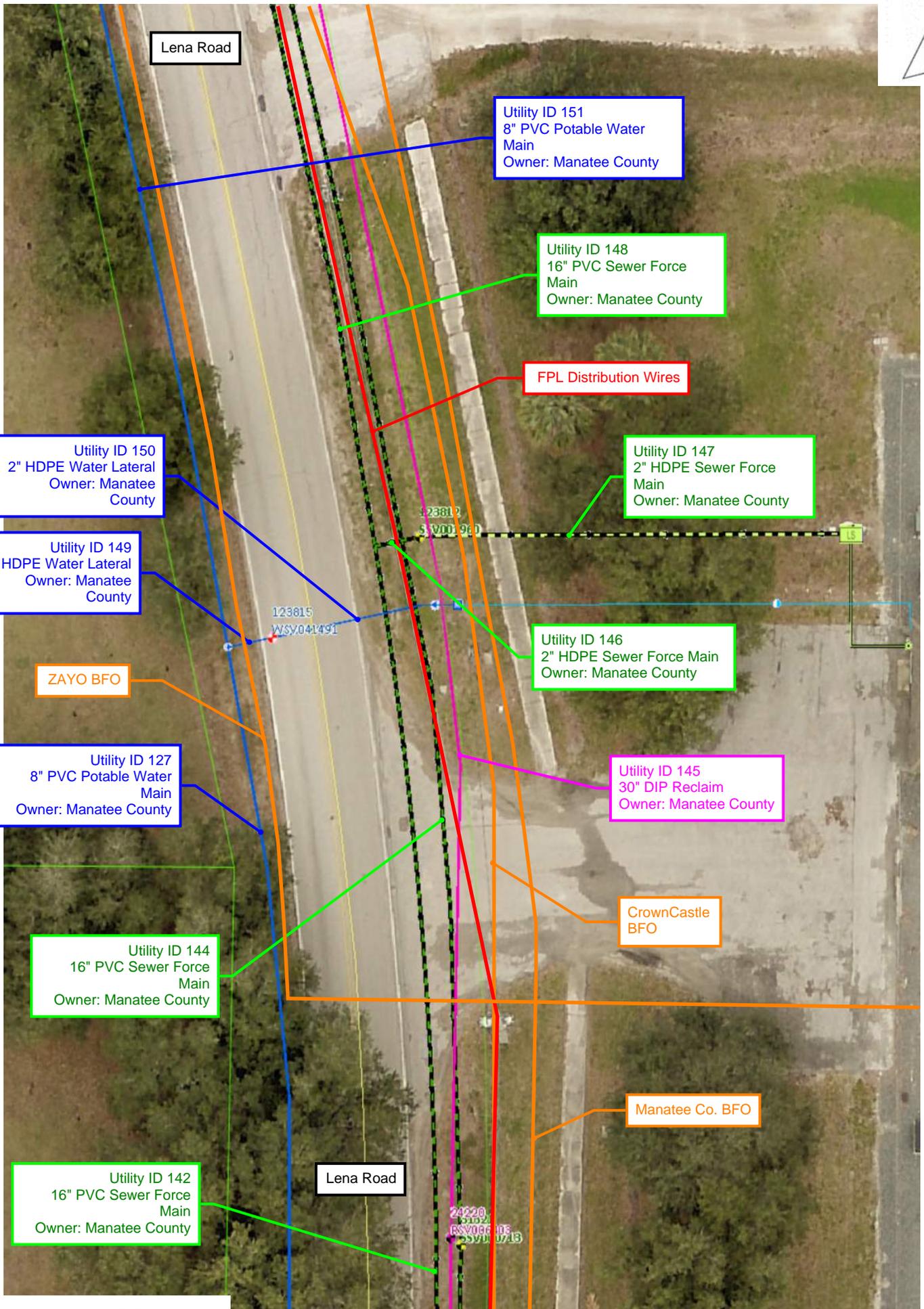
FPL Distribution Wires

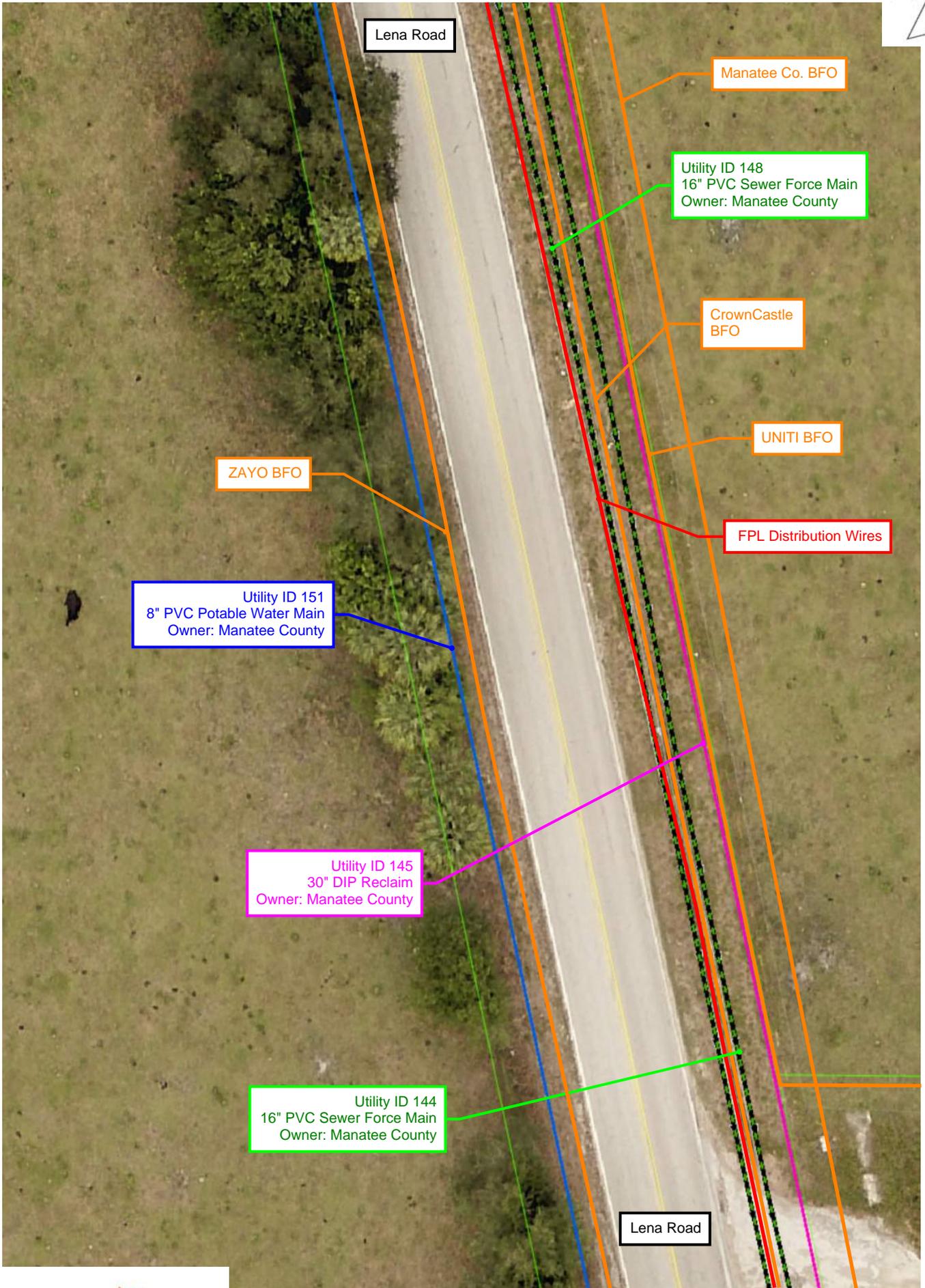


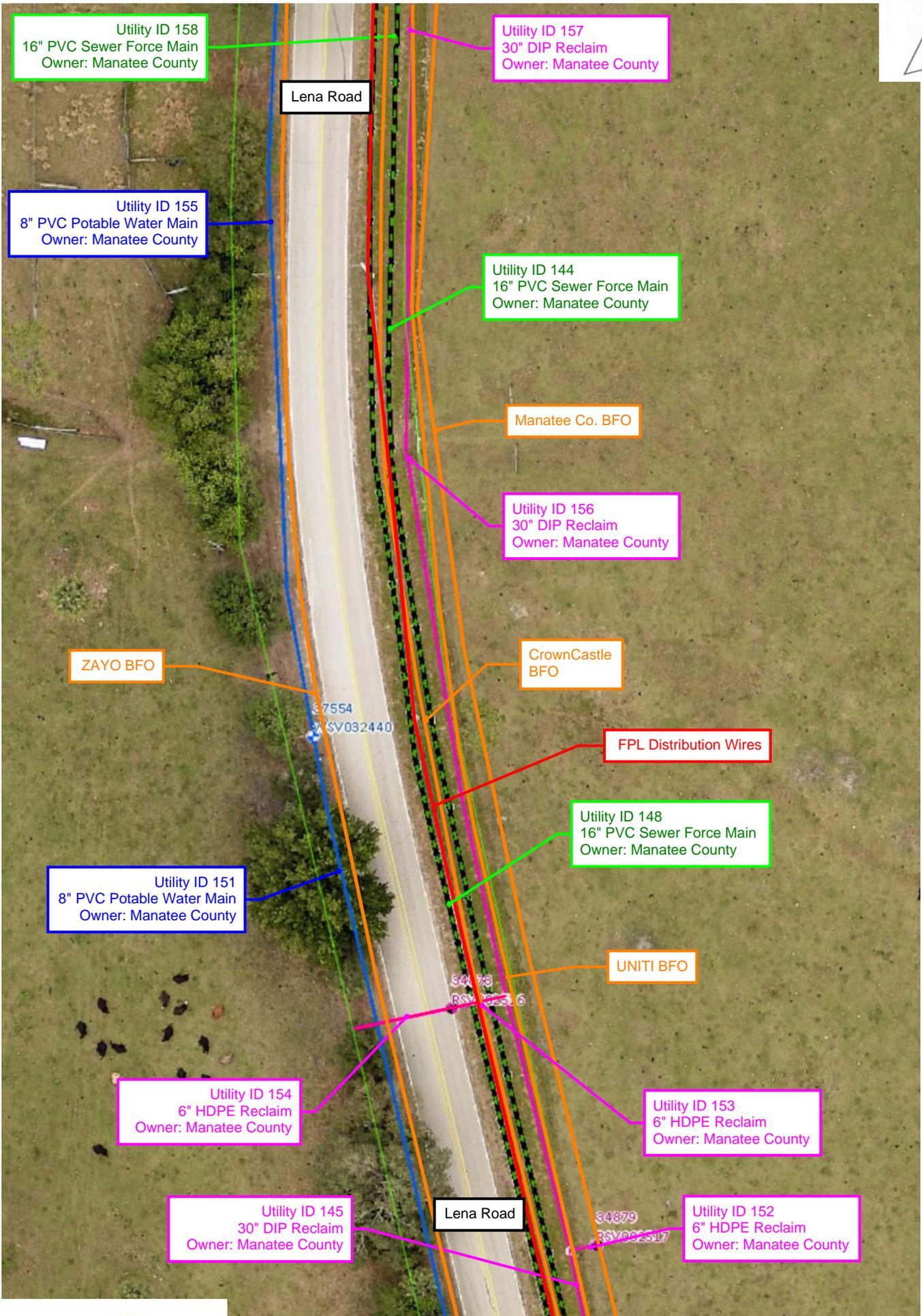












Utility ID 158
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 157
30" DIP Reclaim
Owner: Manatee County

Lena Road

Utility ID 155
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 144
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

Utility ID 156
30" DIP Reclaim
Owner: Manatee County

ZAYO BFO

CrownCastle
BFO

FPL Distribution Wires

67554
RSW032440

Utility ID 148
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 151
8" PVC Potable Water Main
Owner: Manatee County

UNITI BFO

6478
RSW03266

Utility ID 154
6" HDPE Reclaim
Owner: Manatee County

Utility ID 153
6" HDPE Reclaim
Owner: Manatee County

Lena Road

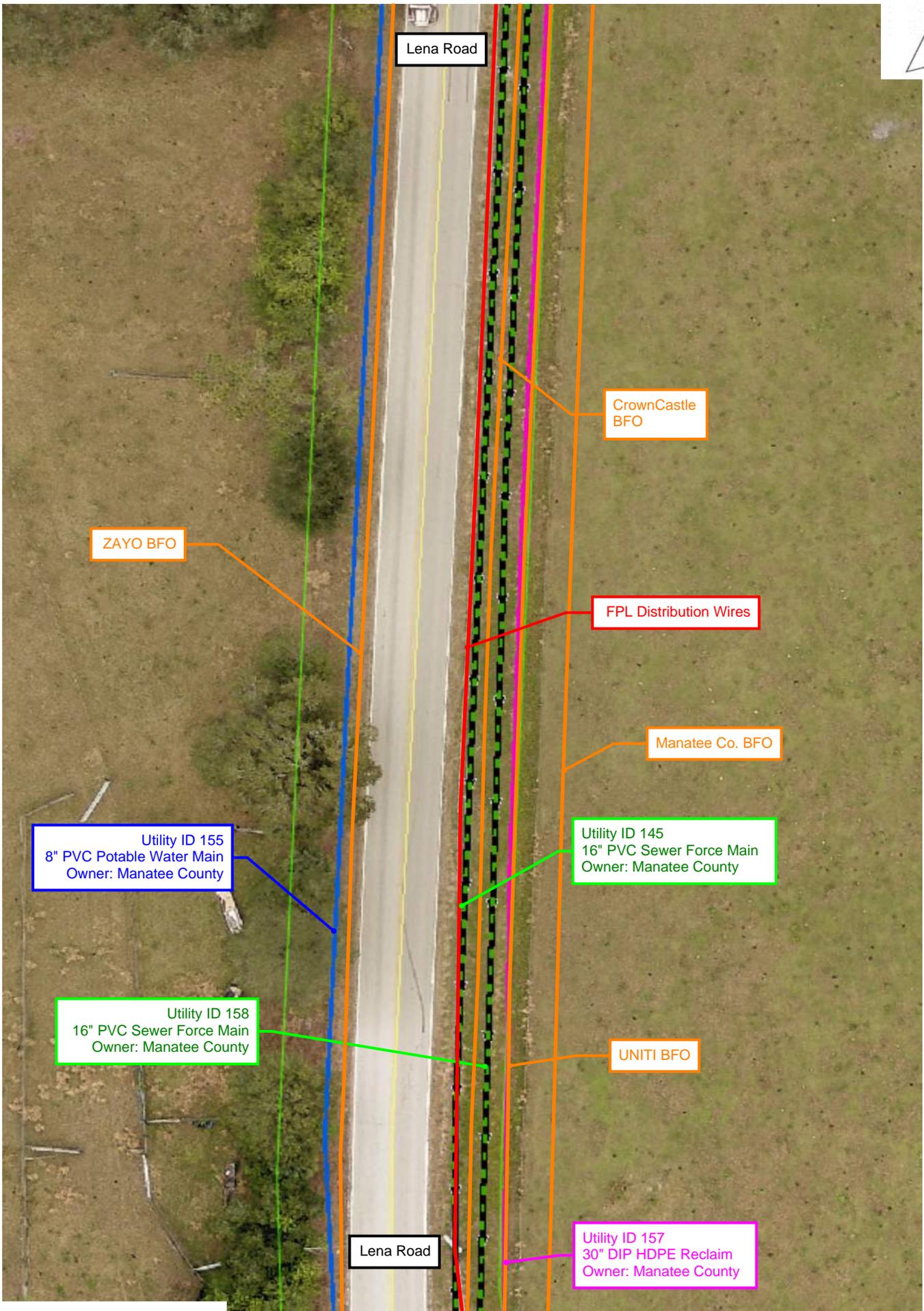
Utility ID 145
30" DIP Reclaim
Owner: Manatee County

64879
RSW032517

Utility ID 152
6" HDPE Reclaim
Owner: Manatee County



Detail Sheet



Lena Road

CrownCastle
BFO

ZAYO BFO

FPL Distribution Wires

Manatee Co. BFO

Utility ID 155
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 145
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 158
16" PVC Sewer Force Main
Owner: Manatee County

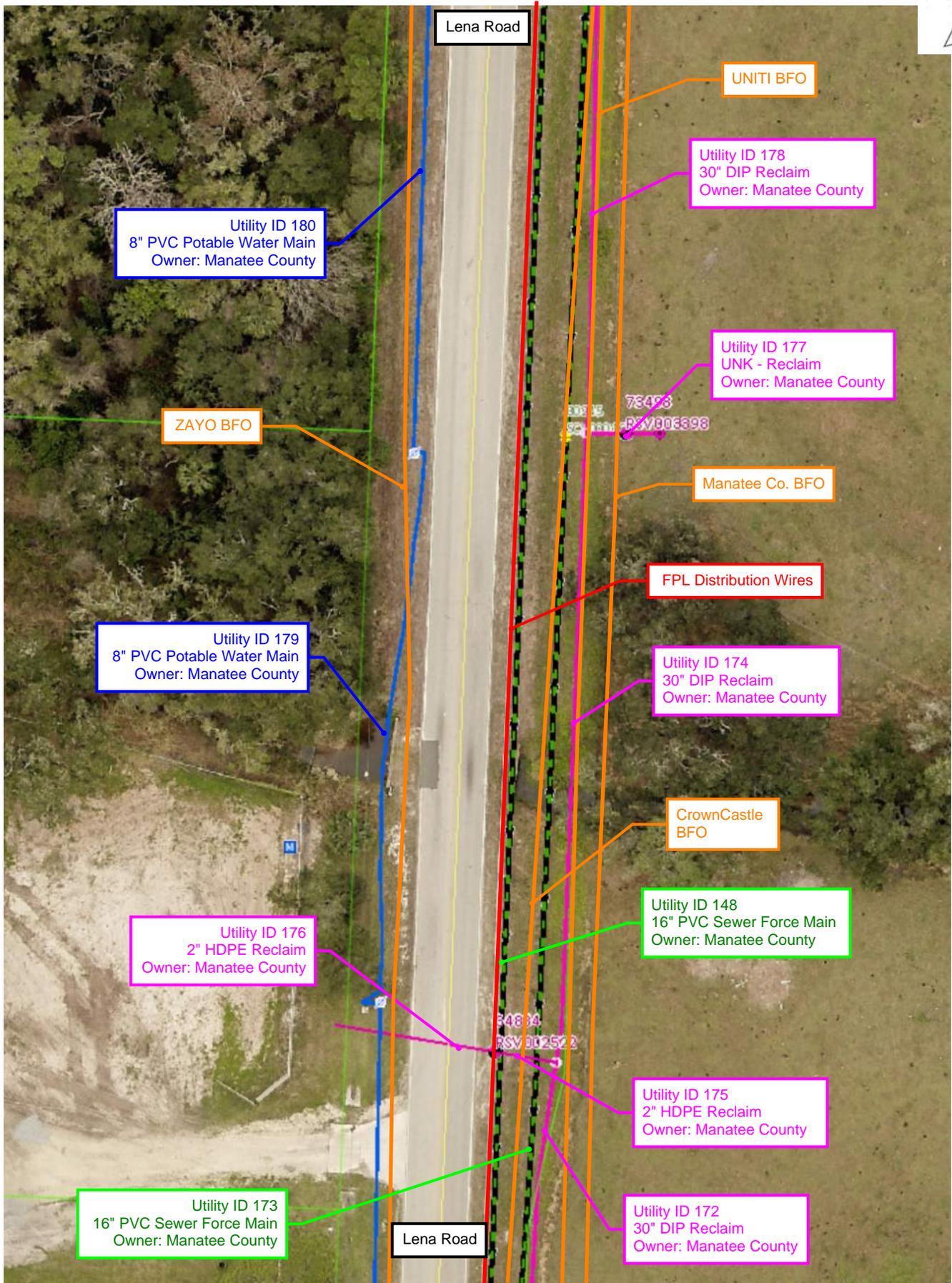
UNITI BFO

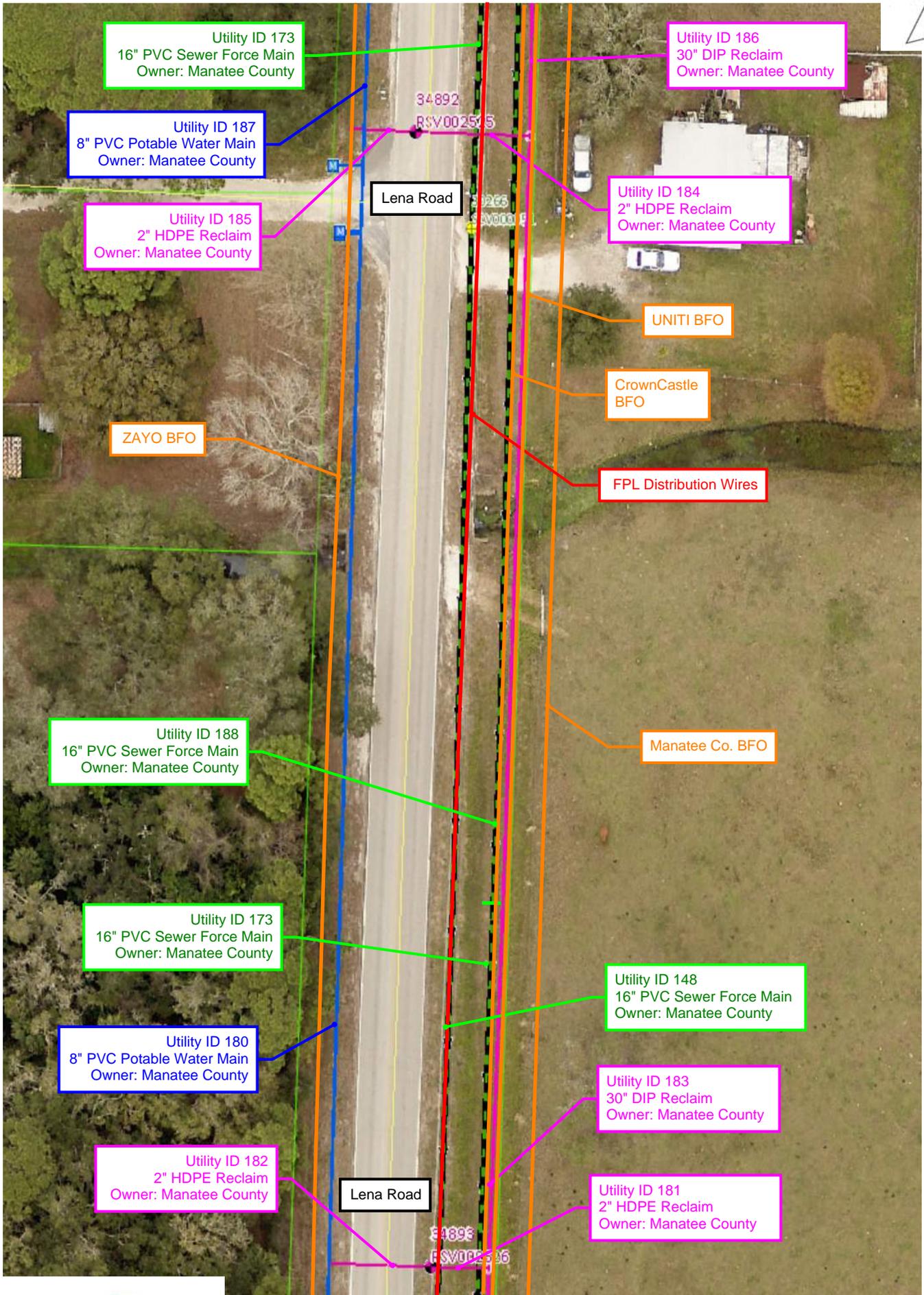
Lena Road

Utility ID 157
30" DIP HDPE Reclaim
Owner: Manatee County



Detail Sheet





Utility ID 173
16" PVC Sewer Force Main
Owner: Manatee County

Utility ID 187
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 185
2" HDPE Reclaim
Owner: Manatee County

Utility ID 186
30" DIP Reclaim
Owner: Manatee County

Utility ID 184
2" HDPE Reclaim
Owner: Manatee County

ZAYO BFO

UNITI BFO

CrownCastle
BFO

FPL Distribution Wires

Utility ID 188
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

Utility ID 173
16" PVC Sewer Force Main
Owner: Manatee County

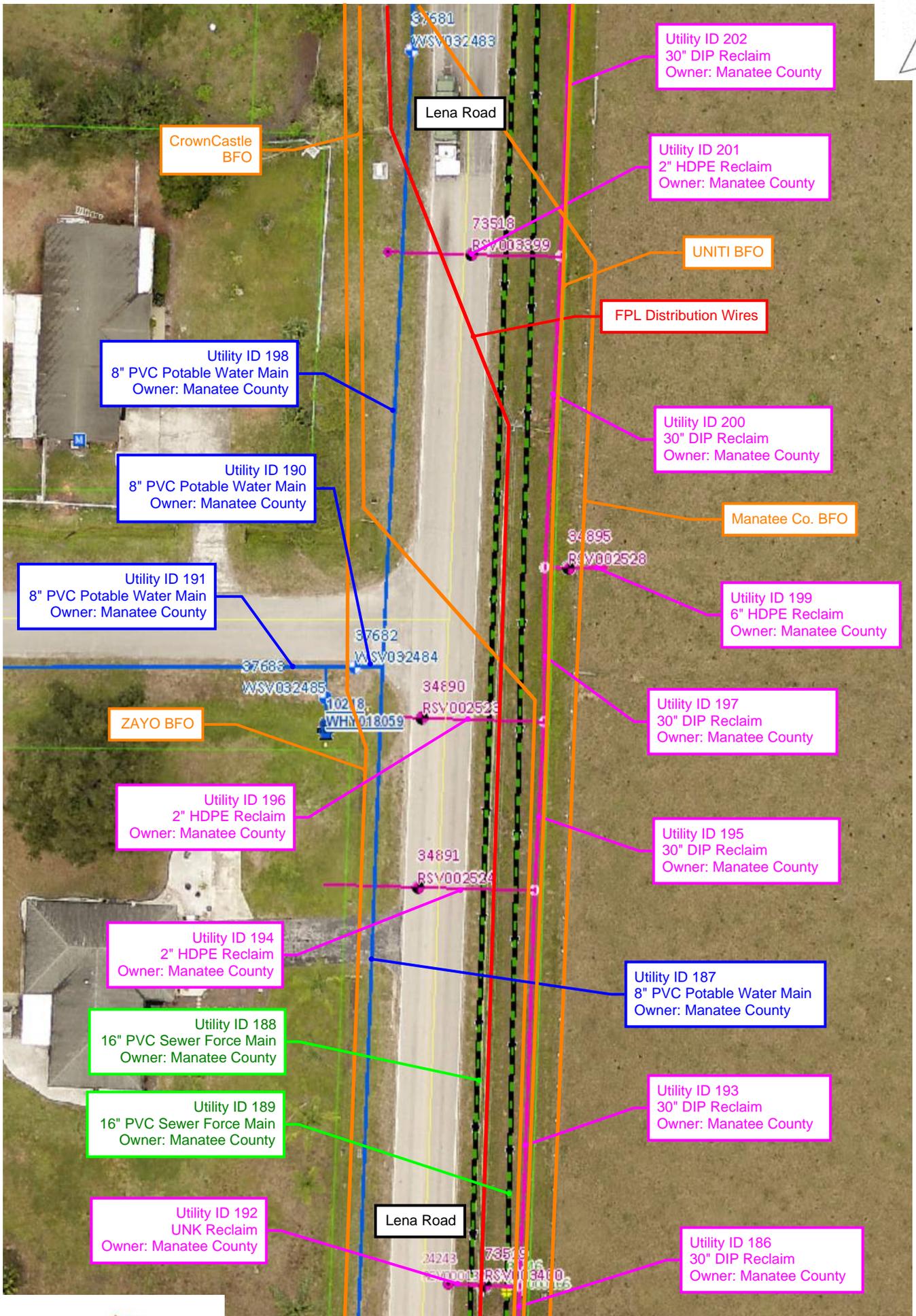
Utility ID 148
16" PVC Sewer Force Main
Owner: Manatee County

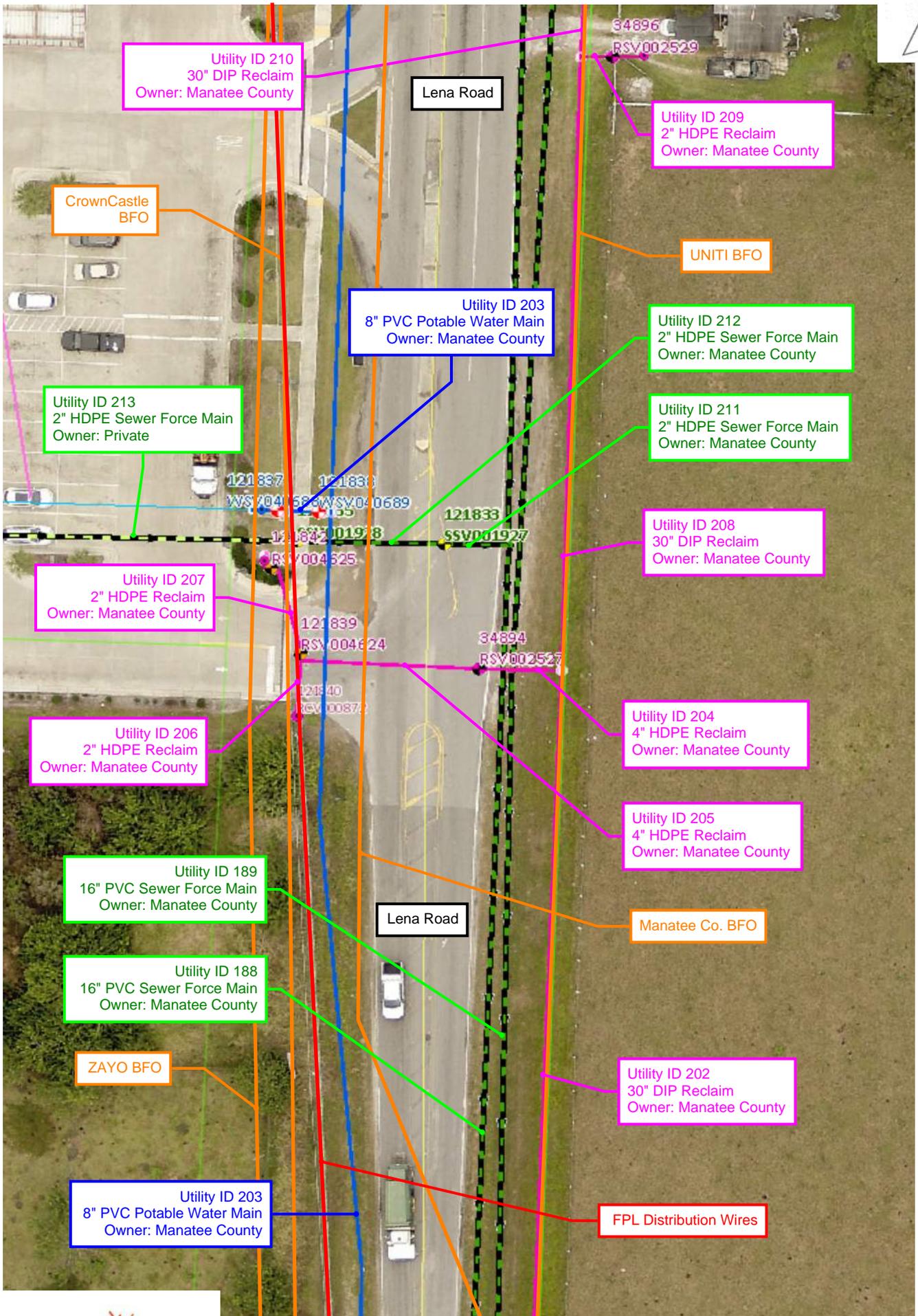
Utility ID 180
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 183
30" DIP Reclaim
Owner: Manatee County

Utility ID 182
2" HDPE Reclaim
Owner: Manatee County

Utility ID 181
2" HDPE Reclaim
Owner: Manatee County





Utility ID 210
30" DIP Reclaim
Owner: Manatee County

Lena Road

Utility ID 209
2" HDPE Reclaim
Owner: Manatee County

CrownCastle
BFO

UNITI BFO

Utility ID 203
8" PVC Potable Water Main
Owner: Manatee County

Utility ID 212
2" HDPE Sewer Force Main
Owner: Manatee County

Utility ID 213
2" HDPE Sewer Force Main
Owner: Private

Utility ID 211
2" HDPE Sewer Force Main
Owner: Manatee County

Utility ID 208
30" DIP Reclaim
Owner: Manatee County

Utility ID 207
2" HDPE Reclaim
Owner: Manatee County

Utility ID 204
4" HDPE Reclaim
Owner: Manatee County

Utility ID 206
2" HDPE Reclaim
Owner: Manatee County

Utility ID 205
4" HDPE Reclaim
Owner: Manatee County

Utility ID 189
16" PVC Sewer Force Main
Owner: Manatee County

Manatee Co. BFO

Lena Road

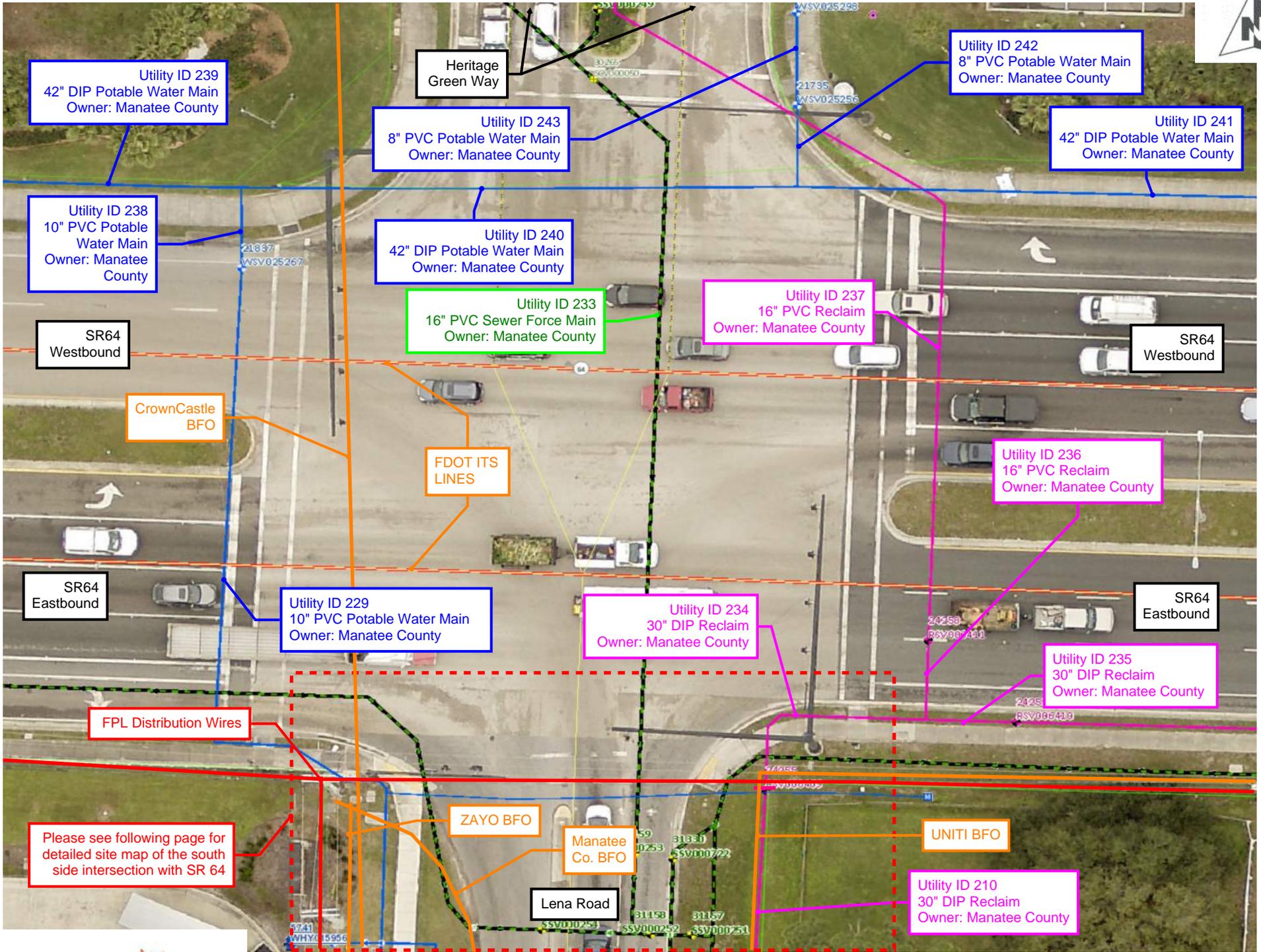
Utility ID 188
16" PVC Sewer Force Main
Owner: Manatee County

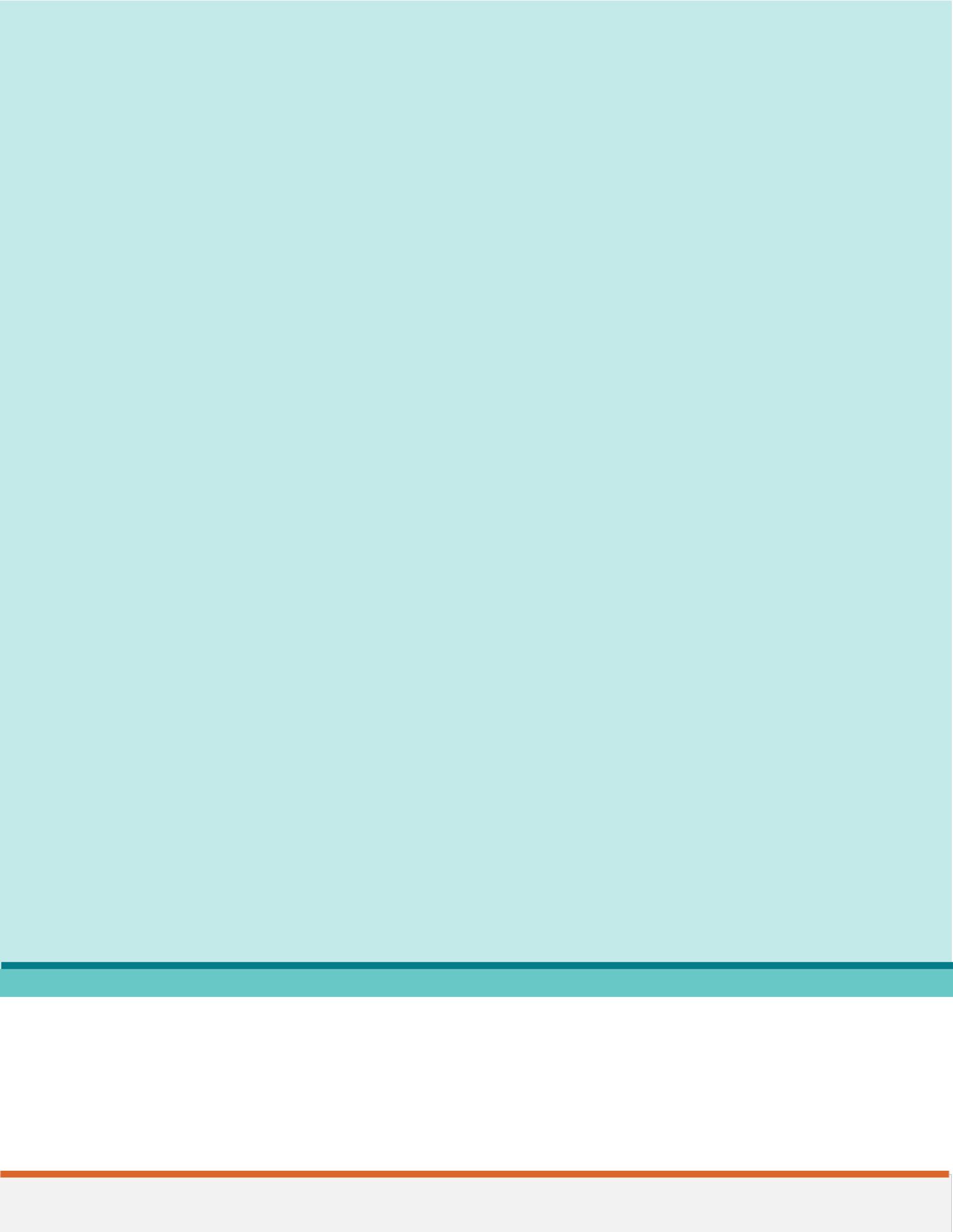
ZAYO BFO

Utility ID 202
30" DIP Reclaim
Owner: Manatee County

Utility ID 203
8" PVC Potable Water Main
Owner: Manatee County

FPL Distribution Wires





Appendix H – Agency Coordination Minutes

Lena Road

SWFWMD Pre-Application Minutes

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
RESOURCE REGULATION DIVISION
PRE-APPLICATION MEETING NOTES**

**FILE
NUMBER:
PA 408903**

Date:	10/7/2021		
Time:	1:00		
Project Name:	Manatee County/Lena Road		
District Engineer:	Monte Ritter		
District ES:	Jeff Glas		
Attendees:	Jason Starr Jason.Starr@hdrinc.com , Paul Herman, Scott Ennis, Barry Lenz, Eric Shroyer, Darin Rice		
County:	Manatee	Sec/Twp/Rge:	1,12/35/18;36/34/18
Total Land Acreage:		Project Acreage:	acres

Prior On-Site/Off-Site Permit Activity:

- ERP 5641.020 (Creekwood East Corporate Park); ERP 3143.004 (Lena Road Business Park); ERP 24001.000 (MANATEE CO-RECLAIMED WATER MAIN N-SE)

Project Overview:

- Proposed 4-lane roadway from Lena Road north to 81st St Ct E, and road widening from two to four lanes from 81st St Ct E and along Lena Road to SR 64. Six basins/stormwater ponds are proposed. Proposed activity will qualify for a new Individual SWERP.

Environmental Discussion: (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Drawdown Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

- Wetlands present, impacts proposed.
- Provide the limits of jurisdictional wetlands and surface waters. Roadside ditches or other water conveyances, including permitted and constructed water conveyance features, can be claimed as surface waters per Chapter 62-340 F.A.C. if they do not meet the definition of a swale as stated under Rule 403.803 (14) F.S.
- Provide appropriate mitigation using UMAM for impacts, if applicable.
- The site is located in the Manatee River ERP Basin. Mitigation Banks that serve this area include the Mangrove Point, Manatee Mitigation, and Braden River, Tampa Bay. For an interactive map of permitted mitigation banks and their service areas, use this [LINK](#).
- If the wetland mitigation is appropriate and the applicant is proposing to utilize mitigation bank credit as wetland mitigation, the following applies: Provide letter or credit availability or, if applicable, a letter of reservation from the wetland mitigation bank. The wetland mitigation bank current credit ledgers can be found out the following link: <https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit>, Go to "ERP Mitigation Bank Wetland Credit Ledgers"
- Demonstrate elimination and reduction of wetland impacts.
- Maintain minimum 15 foot, average 25 foot wetland conservation area setback or address secondary impacts.
- Please demonstrate that adverse impacts to the wetland hydro-periods will not occur by providing hydrographs of the 2.33 year mean annual storm. The graph should start and end at the pop-off elevation with Existing Condition and Proposed Condition hydrographs superimposed for comparison. Please provide a supporting narrative for the hydrographs explaining any variations that are shown. The invert of the agricultural ditches may be the existing 'pop-off' elevation, or SHWL of the wetland and may need to be considered when designing the storm water management system.
- Determine SHWL's at pond locations, wetlands, and OSWs.
- Determine normal pool elevations of wetlands.
- Determine 'pop-off' locations and elevations of wetlands.
- Please note, the Florida Department of Environmental Protection (FDEP) has assumed the Federal dredge and fill permitting program under section 404 of the Federal Clean Water Act within certain waters. State 404 Program streamlining intentions direct Agency staff to coordinate joint site visits for overall consistency

between the two State programs. As such, District staff and the FDEP will need to conduct a joint site visit for evaluation of the wetland/surface water systems proposed for impact. District staff will coordinate with FDEP staff on determining dates/times of joint Agency availability. Upon determination of joint availability, staff will provide the applicant's representative with site visit scheduling options.

- Bald eagle nest (MN032) located within close proximity to project area, coordination with USFWS (Ulgonda Kirkpatrick) may be required

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- Watersheds – No District watershed study available. 100-year floodplain associated with wetlands and surface waters within and adjacent to project must be established.
- WBIDs – Williams Creek (WBID 1901) and Cypress Strand (WBID 1875). WBID 1901 is currently listed for nutrient related impairments. Net improvement will be required for discharges to this WBID. WBIDs need to be independently verified by the consultant
- Document/justify SHWE's at pond locations, wetlands, and OSWs.
- Provide documentation to support tailwater conditions for quality and quantity design
- Contamination issues need to be resolved with the FDEP. Check FDEP MapDirect layer for possible contamination points within/adjacent to the project area. [FDEP Map Direct](#)

- Solid Waste Facility No. **93193** located within or adjacent to site.

Please verify with FDEP if it has current contamination issues after the application is submitted.

For known contamination within the site or within 500' beyond the proposed stormwater management system:

- After the application is submitted, please contact FDEP staff listed below and provide them with the ERP Application ID # along with a mounding analysis (groundwater elevation versus distance) of the proposed stormwater management system that shows the proposed groundwater mound will not adversely impact the contaminated area. FDEP will review the plans submitted to the District and mounding analysis to determine any adverse impacts. Provide documentation from FDEP that the proposed construction will not result in adverse impacts. This is required prior to the ERP Application being deemed complete.

For known offsite contamination between 1500' and 500' beyond the site: - FDEP may also require a mounding analysis (groundwater elevation versus distance) for the proposed stormwater systems.

SWFWMD will issue the permit when contamination sites are located outside the 500 ft radius prior to concurrence from DEP, however, it is the Permittee's responsibility to resolve contaminated site assessment concerns with the FDEP prior to beginning any construction activities. A permit condition will be used to reiterate this. You are advised to contact DEP as soon as possible, preferably during permit application period.

- FDEP Contacts:

- For projects located within Citrus, Hernando, Pasco, Hillsborough, Pinellas, Manatee, Polk and Hardee Counties: Yanisa Angulo Yanisa.angulo@floridadep.gov

- Any wells on site should be identified and their future use/abandonment must be designated.
- Stormwater retention and detention systems are classified as moderate sanitary hazards with respect to public and private drinking water wells. Stormwater treatment facilities shall not be constructed within 100 feet of an existing public water supply well and shall not be constructed within 75 feet of an existing private drinking water well. Subsection 4.2, A.H.V.II.

Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Demonstrate that post development peak discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).
- Provide equivalent compensating storage for all 100-year, 24-hour floodplain impacts if applicable. Providing cup-for-cup storage in dedicated areas of excavation is the preferred method of compensation, if no impacts to flood conveyance are proposed and storage impacts and compensation occur within the same basin. In this case, tabulations should be provided at 0.5-foot increments to demonstrate encroachment and compensation occur at the same levels. Otherwise, storage modeling will be required to demonstrate no increase in flood stages will occur on off-site properties, using the mean annual, 10-year, 25-year, and 100-year storm events for the pre- and post-development conditions.

Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Presumptive Water Quality Treatment for Alterations to Existing Public Roadway Projects:

- Refer to Section 4.5 A.H.V.II for Alterations to Existing Public Roadway Projects.
- Refer to Sections 4.8, 4.8.1 and 4.8.2 A.H.V.II for Compensating Stormwater Treatment, Overtreatment, and Offsite Compensation.
- All co-mingled existing & new impervious that is proposed to be connected to a treatment pond will require treatment for an area equal to the co-mingled existing & new impervious (times ½” for dry treatment or 1” for wet treatment). This applies whether or not equivalent treatment concepts are used.
- However, if equivalent treatment concepts are used it is possible to strategically locate the pond(s) so that the minimum treatment requirement may be for an area equivalent to the new impervious area only. That is, co-mingled existing & new impervious that is not connected to a treatment pond may bypass treatment (as per Section 4.5(2), A.H.V.II); if the ‘total impervious area’ that is connected to the treatment pond(s) is at least equivalent to the area of new impervious only. The ‘total impervious area’ that is connected to the pond(s) may be composed of co-mingled existing & new impervious.
- Offsite impervious not required to be treated; but may be useful to be treated when using equivalent treatment concepts.
- Existing treatment capacity displaced by any road project will require additional compensating volume. Refer to Subsection 4.5(c), A.H.V.II.

- **Net improvement**

- Refer to rule 62-330.301(2), F.A.C.
- Please verify accuracy of WBID boundaries and status of impairment.
- The application must demonstrate a net improvement for nutrients for discharges to WBID 1901. Applicant may demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use. Refer to ERP Applicant's Handbook Vol. II Subsection 4.1(g).
- Effluent filtration is known to be ineffective for treating nutrient related impairments, unless special nutrient adsorption media provided. However, please note special nutrient adsorption media has extremely low conductivity values compared to typical sand type effluent filtration filter media. Note: if treatment volume required for net improvement is less than the treatment volume required for 'presumptive' treatment, then use of effluent filtration is ok.

Sovereign Lands Discussion: (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

- The project may be located within state owned sovereign submerged lands (SSSL). Be advised that a title determination will be required from FDEP to verify the presence and/or location of SSSL.
- If use of SSSL is proposed, authorization will be required. Refer to Chapter 18-21, F.A.C. and Chapter 18-20, F.A.C. for guidance on projects that impact SSSL and Aquatic Preserves.
- Include discussion on the potential type of SSSL authorization that may be required. Refer to Chapter 18-21.005, F.A.C.
- Title request process provided to Barry Lenz via email.

Operation and Maintenance/Legal Information: (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to entity that owns or controls the property. Manatee County will be permittee.
- Provide evidence of ownership or control by deed, easement, contract for purchase, etc.

Application Type and Fee Required:

- SWERP Individual – Sections A, C, and E of the ERP Application. Fee will be based on project area and amount of w/sw impacts.
- Consult the [fee schedule](#) for different thresholds.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

- An application for an individual permit to construct or alter a dam, impoundment, reservoir, or appurtenant work, requires that a notice of receipt of the application must be published in a newspaper within the affected area. Provide documentation that such noticing has been accomplished. Note that the published notices of receipt for an ERP can be in accordance with the language provided in Rule 40D-1.603(10), F.A.C.
- The plans and drainage report submitted electronically must include the appropriate information required under Rules 61G15-23.005 and 61G15-23.004 (Digital), F.A.C. The following text is required by the Florida Board of Professional Engineers (FBPE) to meet this requirement when a digitally created seal is not used and must appear where the signature would normally appear:

ELECTRONIC (Manifest): *[NAME] State of Florida, Professional Engineer, License No. [NUMBER]*
This item has been electronically signed and sealed by [NAME] on the date indicated here using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies

DIGITAL: *[NAME] State of Florida, Professional Engineer, License No. [NUMBER]; This item has been digitally signed and sealed by [NAME] on the date indicated here; Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.*

- Provide soil erosion and sediment control measures for use during construction. Refer to ERP Applicant's Handbook Vol. 1 Part IV Erosion and Sediment Control.
- Demonstrate that excavation of any stormwater ponds does not breach an aquitard (see Subsection 2.1.1, A.H.V.II) such that it would allow for lesser quality water to pass, either way, between the two systems. In those geographical areas of the District where there is not an aquitard present, the depth of the pond(s) shall not be excavated to within two (2) feet of the underlying limestone which is part of a drinking water aquifer. [Refer to Subsection 5.4.1(b), A.H.V.II]
- If lowering of SHWE is proposed, then burden is on Applicant to demonstrate no adverse onsite or offsite impacts as per Subsection 3.6, A.H.V.II. Groundwater drawdown 'radius of influence' computations may be required to demonstrate no adverse onsite or offsite impacts. Please note that new roadside swales or deepening of existing roadside swales may result in lowering of SHWE. Proposed ponds with control elevation less than SHWE may result in adverse lowering of onsite or offsite groundwater.
- On December 17, 2020, the Environmental Protection Agency (EPA) formally transferred permitting authority under CWA Section 404 from the U.S. Army Corps of Engineers (Corps) to the State of Florida for a broad range of water resources within the State. The primary State 404 Program rules are adopted by the Florida Department of Environmental Protection (FDEP) as Chapter 62-331 of the Florida Administrative Code (F.A.C.). While the State 404 Program is a separate permitting program from the Environmental Resource Permitting program (ERP) under Chapter 62-330, F.A.C., and agency action for State 404 Program verifications, notices, or permits shall be taken independently from ERP agency action, the FDEP and the Southwest Florida Water Management District (SWFWMD) will be participating in a Joint application Process. Upon submittal of an ERP application that proposes dredge/fill activities in wetlands or surface waters within state assumed waters, the SWFWMD will forward a copy of your application to the FDEP for activities under State 404 jurisdiction. The applicant may choose to have the State 404 Program and ERP agency actions issued concurrently to help ensure consistency and reduce the need for project modifications that may occur when the agency actions are issued at different times. Additional information on the FDEP's 404 delegation can be found at: <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/state-404-program>
- Additionally, for those projects located in areas where the Corps retains jurisdiction, the applicant is advised that the District will not send a copy of an application that does not qualify for a State Programmatic General Permit (SPGP) to the U.S. Army Corps of Engineers. If a project does not qualify for a SPGP, you will need to apply separately to the Corps using the appropriate federal application form for activities under federal jurisdiction. Please see the Corps' Jacksonville District Regulatory Division Sourcebook for more information about federal permitting. Please call your local Corps office if you have questions about federal permitting. Link: <http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/>

Disclaimer: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

Appendix I – Cost Estimate

LENA ROAD

RECOMMENDED ALTERNATIVE CONSTRUCTION COST ESTIMATE November 11, 2021

Description	Unit	Quantity	Unit Price	Item Price
CLEARING & GRUBBING	LS/AC	32.943	\$15,000.00	\$494,145.00
EARTHWORK (ROADWAY EXCAVATION/EMBANKMENT)	CY	226,848	\$8.37	\$1,898,717.76
EARTHWORK (ROADWAY, EMBANKMENT TO FILL EXISTING POND)	CY	19,251	\$8.37	\$161,130.87
EARTHWORK (POND EXCAVATION/EMBANKMENT)	CY	12,356	\$8.37	\$103,419.72
TYPE B STABILIZATION	SY	50,718	\$5.40	\$273,877.20
OPTIONAL BASE, BASE GROUP 09	SY	36,295	\$18.34	\$665,650.30
MILLING EXISTING ASPHALT PAVEMENT, 1.5" AVG DEPTH	SY	486	\$1.98	\$962.28
SUPERPAVE ASPHALTIC CONC, TRAFFIC C, PG 76-22	TN	5,988.7	\$107.28	\$642,467.74
ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	TN	3,034.4	\$117.23	\$355,722.71
CONCRETE CLASS NS, GRAVITY WALL	CY	430	\$764.52	\$328,743.60
INLETS, CURB,TYPE P-4, <10'	EA	33	\$8,444.17	\$278,657.61
INLETS, CURB,TYPE J-4, <10'	EA	33	\$9,195.40	\$303,448.20
INLETS, DITCH BOTTOM, TYPE C MODIFIED - BACK OF SIDEWALK, < 10'	EA	33	\$3,226.54	\$106,475.82
INLETS, DITCH BOTTOM, TYPE D, <10'	EA	1	\$8,672.88	\$8,672.88
INLETS, DITCH BOTTOM, TYPE E,<10'	EA	1	\$8,034.33	\$8,034.33
PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" SD	LF	3,036	\$92.47	\$280,738.92
PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24" SD	LF	50	\$109.90	\$5,495.00
PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 30" SD	LF	720	\$138.37	\$99,626.40
PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 36" SD	LF	9,774	\$139.00	\$1,358,586.00
PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 36" S/CD	LF	160	\$170.30	\$27,248.00
STRAIGHT CONCRETE ENDWALLS, 36", SINGLE, ROUND	EA	4	\$5,909.08	\$23,636.32
MITERED END SECTION, OPTIONAL ROUND, 24" CD	EA	1	\$2,013.47	\$2,013.47
MITERED END SECTION, OPTIONAL ROUND, 30" CD	EA	1	\$3,049.43	\$3,049.43
PIPE HANDRAIL - GUIDERAIL, ALUMINUM	LF	1,000	\$49.47	\$49,470.00
CONCRETE CURB & GUTTER, TYPE AB	LF	13,938	\$25.33	\$353,056.13
CONCRETE CURB & GUTTER, TYPE F	LF	20,397	\$25.33	\$516,662.85
TRAFFIC SEPARATOR CONCRETE, TYPE IV, 4' WIDE	LF	221	\$49.83	\$11,019.41
CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	17,045	\$43.44	\$740,439.14
CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3,657	\$58.18	\$212,764.26
PERFORMANCE TURF, SOD	SY	168,868	\$2.69	\$454,254.92
ROADWAY SUBTOTAL				\$9,768,186.27
RAISE PAVEMENT MARKER, TYPE B	EA	439	\$3.33	\$1,461.87
PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1	\$10,424.19	\$10,424.19
THERMOPLASTIC STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	1,100	\$2.50	\$2,750.00
THERMOPLASTIC STANDARD, WHITE, SOLID, 18" FOR DIAGONALS AND CHEVRONS	LF	32	\$3.51	\$112.32
THERMOPLASTIC STANDARD, WHITE, SOLID, 24" FOR STOP LINES AND CROSSWALK	LF	154	\$4.83	\$743.82
THERMOPLASTIC STANDARD, WHITE,2-4 DOTTED GUIDELINE/6-10 GAP EXTENSION, 6"	GM	0.063	\$2,125.86	\$133.93
THERMOPLASTIC STANDARD, WHITE, MESSAGE OR SYMBOL	EA	6	\$122.03	\$732.18
THERMOPLASTIC STANDARD, WHITE, ARROW	EA	42	\$63.19	\$2,653.98
THERMOPLASTIC STANDARD, YELLOW, SOLID, 18" FOR DIAGONALS AND CHEVRONS	LF	422	\$3.56	\$1,502.32
THERMOPLASTIC STANDARD, YELLOW,2-4 DOTTED GUIDELINE/6-10 DOTTED EXTENSION LINE, 6"	GM	0.091	\$2,239.59	\$203.80
THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	1,120	\$14.58	\$16,329.60
THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	0.363	\$4,099.38	\$1,488.07
THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 8"	GM	0.065	\$5,160.56	\$335.44
THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, 6", 10-30 SKIP OR 3-9 LANE DROP	GM	0.209	\$1,564.27	\$326.93
THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	4.005	\$4,138.26	\$16,573.73
THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SKIP, 6"	GM	0.584	\$1,642.00	\$958.93

LENA ROAD

RECOMMENDED ALTERNATIVE CONSTRUCTION COST ESTIMATE

November 11, 2021

<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Item Price</i>
SIGNING AND PAVEMENT MARKING SUBTOTAL				\$56,731.11
TRAFFIC SIGNAL MODIFICATION, SR 64	LS	1	\$500,000.00	\$500,000.00
SIGNALIZATION SUBTOTAL				\$500,000.00
CONDUIT, OPEN TRENCH	LF	14,661	\$10.50	\$153,940.50
CONDUIT, DIRECTIONAL BORE	LF	4,887	\$21.96	\$107,318.52
PULL & SPLICE BOX, 13" X 24" COVER SIZE	EA	98	\$765.09	\$74,978.82
LIGHTING CONDUCTOR, F&I, INSULATED, No. 8-6	LF	19,548	\$1.93	\$37,727.64
LIGHT POLE COMPLETE, F&I, STANDARD POLE/FOUNDATION, 40' MOUNTING HEIGHT	EA	74	\$5,642.38	\$417,536.12
LIGHT POLE COMPLETE, F&I, STD POLE, SPECIAL FOUNDATION, 40' MOUNTING HEIGHT	EA	24	\$10,592.09	\$254,210.16
LOAD CENTER, F&I, SECONDARY VOLTAGE	EA	3	\$15,057.66	\$45,172.98
LIGHTING SUBTOTAL				\$1,090,884.74
PROJECT SUBTOTAL				\$11,415,802.12
MOBILIZATION		10%		\$1,141,580.21
TRAFFIC CONTROL		15%		\$1,712,370.32
SUBTOTAL				\$14,269,752.65
CONTINGENCY (PROJECT UNKNOWNNS, ITEMS NOT ESTIMATED)		25%		\$3,567,438.16
PROJECT TOTAL				\$17,837,190.81

Lena Road - Right of Way Parcel Identification

PARTIAL

Roadway							
	Parcel ID	Owner Name	Primary Address	Take Size (SF)	Full Take, Partial Take, or Easement?	Residential Rear Yard Take?	Residential Side Yard Take?
Parcel Impact 1	1730851659	CREEKWOOD EAST CORPORATE PARK LLC	LENA RD, BRADENTON FL 34211	44,000	Partial	No	No
Parcel Impact 3	1468122059	LENA ROAD OWNERS ASSOCIATION INC	LENA RD, BRADENTON FL 34211	59,000	Partial	No	No
Parcel Impact 4	1468121409	CEMEX CONSTRUCTION MATERIALS LP; FKA RMC SOUTH FLORIDA INC	3507 81ST CT E, BRADENTON FL 34211-8418	18,100	Partial	No	No
Parcel Impact 5	1468122109	CAHILL CARPENTER LLC	3614 81ST CT E, BRADENTON FL 34211	1,300	Partial	No	No
Parcel Impact 6	1468121259	3331 81ST CT EAST LLC	3331 81ST CT E, BRADENTON FL 34211-8414	800	Partial	No	No
Parcel Impact 7	1468130009	LENA ROAD COMMERCIAL CONDOMINIUM	3231 81ST CT E, BRADENTON FL 34211-8412	1,200	Partial	No	No
Parcel Impact 8	1468121909	AMERICAN PRIDE GOLF CART SERVICES LLC	3208 81ST CT E, BRADENTON FL 34211-8411	200	Partial	No	No
Parcel Impact 9	1468122159	4 STAR STORAGE LLC	3106 81ST CT E, BRADENTON FL 34211-8409	2,100	Partial	No	No
Parcel Impact 10	1468123009	LENA BUSINESS CENTER A CONDO	3103 81ST CT E, BRADENTON FL 34211-8401	500	Partial	No	No
Parcel Impact 11	1464800000	MANATEE CO SHERIFFS MOUNTED POSSE	2921 LENA RD, BRADENTON FL 34211	8,000	Partial	No	No
Parcel Impact 12	1465200059	LENA RANCH LLC	2950 LENA RD, BRADENTON FL 34211-9701	28,200	Partial	No	No
Parcel Impact 13	1465800009	BLOOMINGS LANDSCAPE & LAWN MAINTENANCE INC	2405 LENA RD, BRADENTON FL 34211-9446	900	Partial	No	No
Parcel Impact 14	1465200109	FLORIDA POWER & LIGHT COMPANY	LENA RD, BRADENTON FL 34211	3,600	Partial	No	No
Parcel Impact 15	1462800309	MUSGRAVE REAL ESTATE HOLDINGS	1507 LENA RD, BRADENTON FL 34212	16,300	Partial	No	No
Parcel Impact 16	1462800359	MANATEE COUNTY	1707 LENA RD, BRADENTON FL 34211	48,200	Partial	No	No
Parcel Impact 17	1463210060	FORBES, BRIAN C	1704 LENA RD, BRADENTON FL 34211-9516	2,300	Partial	No	No
Parcel Impact 18	1463200103	TRAN, JULIA P	8305 BROWER DR, BRADENTON FL 34211-9315	1,200	Partial	No	Yes
Parcel Impact 19	1463700209	CORE SUNCOAST LLC	8000 SR 64 E, BRADENTON FL 34212	1,100	Partial	No	No
Parcel Impact 20	1463700109	RACETRAC PETROLEUM INC	8100 SR 64 E, BRADENTON FL 34212-9504	1,800	Partial	No	No

Pond

	Parcel ID	Owner Name	Primary Address	Take Size (SF)	Full Take, Partial Take, or Easement?	Residential Rear Yard Take?	Residential Side Yard Take?
Parcel Impact 6	1468121259	3331 81ST CT EAST LLC	3331 81ST CT E, BRADENTON FL 34211-8414	88,200	Partial	No	No
Parcel Impact 16	1462800359	MANATEE COUNTY	1707 LENA RD, BRADENTON FL 34211	51,800	Partial	No	No

FULL

Total Takes (Roadway and Pond)							
	Parcel ID	Owner Name	Primary Address	Take Size (SF)	Full Take, Partial Take, or Easement?	Residential Rear Yard Take?	Residential Side Yard Take?
Parcel Impact 2	1471100055	BOLLES, BRIAN OLIVER	8011 41ST AVE E, BRADENTON FL 34211-9439	226,512	Full	-	-



Eric S. Shroyer, PE

Project Manager
Manatee County Public Works

