



January, 2021

PARTIN SETTLEMENT ROAD WIDENING EXISTING CONDITIONS REPORT

Submitted to:
Osceola County Transportation and Transit Department





TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	ROADWAY AND PROJECT CORRIDOR CHARACTERISTICS.....	2
III.	DRAINAGE CONDITIONS.....	7
IV.	LAND USE.....	11
V.	SOCIO-ECONOMIC DATA.....	12
VI.	TRANSIT.....	14
VII.	PEDESTRIAN AND BICYCLE CONDITIONS.....	15
VIII.	CONTAMINATION FINDINGS.....	16
IX.	CULTURAL AND ARCHAEOLOGICAL.....	21
X.	GEOTECHNICAL.....	22
XI.	ENVIRONMENTAL AND NATURAL RESOURCES.....	23
XII.	TRAFFIC CONDITIONS.....	32
XIII.	PROJECTS NEAR THE PROJECT CORRIDOR.....	34
XIV.	EXISTING RIGHT-OF-WAY.....	35
XV.	UTILITIES.....	36

APPENDICES

APPENDIX A: EXISTING SIGN INVENTORY

APPENDIX B: EXISTING CONTAMINATION INFORMATION

APPENDIX C: EXISTING SOILS INFORMATION

APPENDIX D: EXISTING TRAFFIC INFORMATION

APPENDIX E: EXISTING RIGHT-OF-WAY AND UTILITY MAPS



TABLE OF FIGURES

FIGURE 1: LOCATION MAP.....	1
FIGURE 2: HIGHWAY NEEDS NETWORK MAP.....	5
FIGURES 3-5: EXISTING DRAINAGE AREA MAPS.....	7-9
FIGURE 6: CULVERT LOCATION MAP.....	10
FIGURE 7: LAND USE MAP.....	11
FIGURE 8: CENSUS TRACT 429 MAP.....	12
FIGURE 9-13: WETLANDS AND SURFACE WATERS.....	24-26
FIGURE 14: EXISTING YEAR 2020 AADT VOLUMES.....	32
FIGURE 15: EXISTING YEAR 2020 AM AND PM PEAK HOUR VOLUMES.....	33

TABLE OF TABLES

TABLE 1: EXISTING SPEED LIMITS.....	2
TABLE 2: DESIGN STORM DISCHARGE RATES.....	10
TABLE 3: GEOTECHNICAL ANALYSIS METHODS.....	22
TABLE 4: WETLAND AND OTHER SURFACE WATER ESTIMATED IMPACTS.....	27
TABLE 5: PROTECTED SPECIES POTENTIAL TO OCCUR WITHIN PROJECT AREA.....	28
TABLE 6: PARTIN SETTLEMENT EXISTING RIGHT-OF-WAY.....	35
TABLE 7: EXISTING UTILITIES.....	36

I. INTRODUCTION

Partin Settlement Road is generally a rural, two-lane roadway with brief sections of a three-lane undivided roadway in several areas. The project limits extend from Neptune Road to Lakeshore Drive, a distance of 2.7 miles.

JMT is under contract with Osceola County to undertake an alternatives study to determine whether there is the need to provide additional roadway capacity for Partin Settlement Road as well as add multi-modal improvements such as bicycle lanes, sidewalks, and multi-use paths. As part of the planning process, JMT has researched existing conditions for the project area, including roadway context, typical section elements, roadway geometrics, land use, funding, and traffic conditions. This document describes the findings of the existing conditions analysis and research.

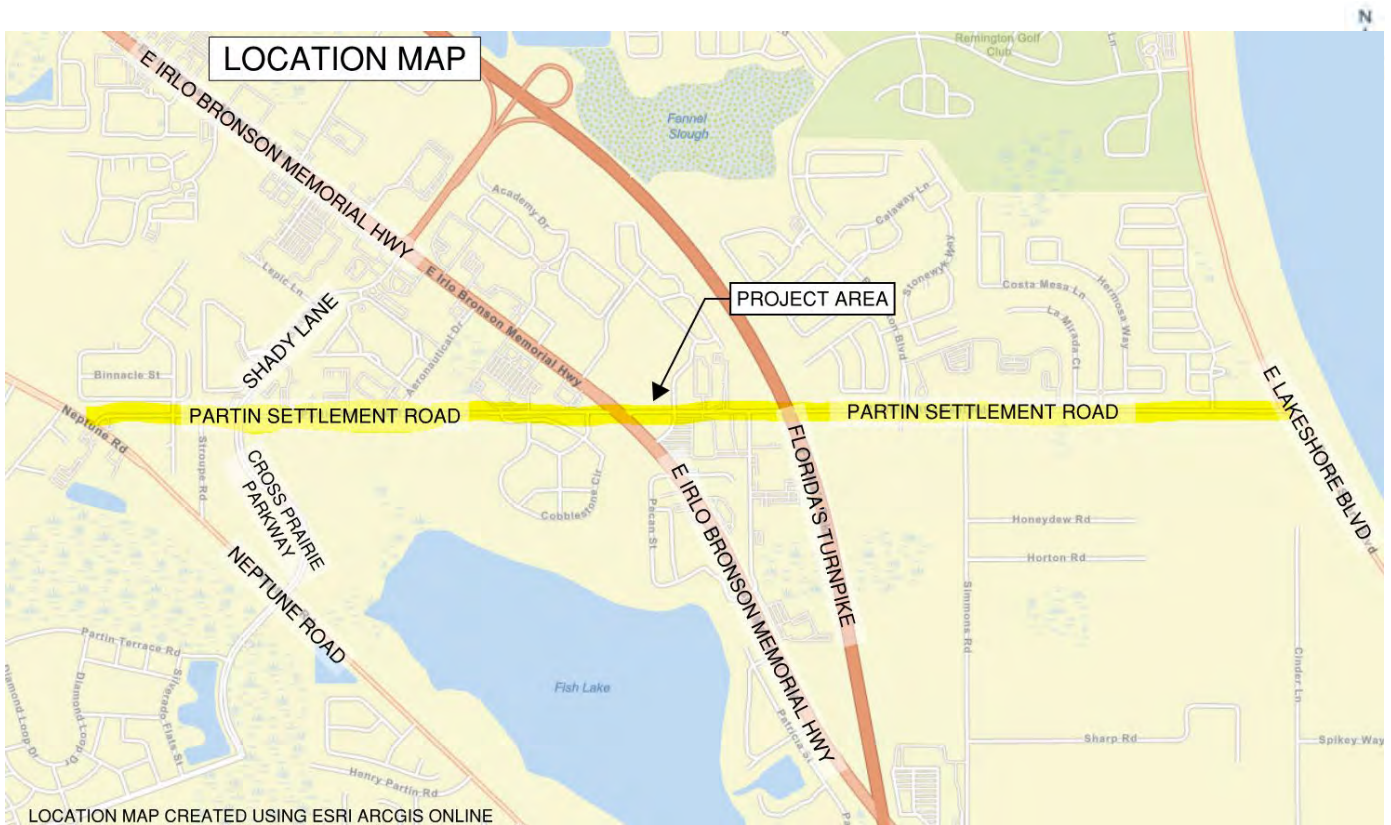


Figure 1: Location Map



II. ROADWAY AND PROJECT CORRIDOR CHARACTERISTICS

Existing Roadway

The existing roadway is predominantly a two-lane rural section, though there are a few three-lane undivided sections in several areas. The existing posted speed limit varies from 35-45 mph throughout the corridor as indicated below. There is also a school zone at Partin Settlement Elementary School in the eastern portion of the corridor in front of Northeast Christian Church where the speed limit is 20 mph when flashing.

Table 1: Existing Speed Limits

Section	Existing Posted Speed (mph)
Neptune Road to Aeronautical Drive	35
Aeronautical Drive to US 192	45
US 192 to Turnpike	40
Turnpike to West of Star Magnolia Drive	40
Star Magnolia Drive to Lakeshore Drive	35

There is an existing sidewalk along the north side of the roadway between Neptune Road and Red Jasper Drive, and between Remington Boulevard and Star Magnolia Drive. There is also guardrail along the project at the dual box culvert carrying Fennel Slough, and also on the approaches for the two-span bridge crossing over Florida's Turnpike (see below for further information).

Existing Roadway Geometrics

The existing horizontal alignment is relatively straight with no horizontal curves except at the beginning of the project where Partin Settlement Road connects at Neptune Road with an approximate 150-foot radius curve. This curve has little to no superelevation and although the FDOT design tables do not cover this particular case, the design speed is estimated to be approximately of 10 mph.

Although these geometrics may be sufficient for eastbound Partin Settlement Road traffic since these movements include only low-speed turning vehicles, it does pose potential safety issues for westbound traffic. There are several remedial measures to consider such as increasing the curve radius or providing advance signing with flashing beacons to warn oncoming traffic. However, the former option may result in greater impacts to the nearby Chevron station and potentially, result in higher right-of-way acquisition costs and increased contamination issues since this site is rated as Medium Risk. The recommended option would be to employ the latter measure.

The vertical geometrics are relatively flat except at the Florida's Turnpike Enterprise (FTE) overpass where the existing grades are +3.25% on the back tangent and -3.25% on the forward tangent with a vertical curve of 600 feet. This curve has a K value of 92 which does not meet FDOT criteria for a 45 mph design speed. The existing vertical clearance over the Turnpike mainline is 16.25 feet which also does not meet FDOT criteria. FTE will be using current design criteria in the reconstruction of the overpass to remedy these



deficiencies, which will also govern the geometrics for the new Partin Settlement Road improvements that is being undertaken by the County.

The existing pavement cross-slope on Partin Settlement Road is relatively flat which will be corrected during the reconstruction of this road.

Structures

There are two major structures along Partin Settlement Road consisting of a 200-foot long, two-lane concrete girder bridge over the Florida's Turnpike, and an existing 38-foot long reinforce concrete box (RCB) culvert where the roadway crosses Fennel Slough. Approximately 29 feet north of Partin Settlement Road, there is also a 66-foot aluminum pedestrian bridge.

The Turnpike bridge consist of a two-span structure with sloped embankments at the abutments. The bridge carries two 12-foot travel lanes with two-foot shoulders on each side of the travel lanes and is protected with guardrail. The concrete barriers on the bridge are no longer standard.

The Florida's Turnpike is in the process of the reconstructing this bridge as part of the Turnpike's mainline widening program. As part of this program, the Turnpike will also build a portion of the permanent Partin Settlement future four-lane improvements with temporary connections to the existing two-lane rural section.

Fennel Slough drains to Fish Lake with flows accommodated by dual 5' x 11' (rise x span) concrete box culverts, separated by 9.4 feet. Additional information regarding this structure is contained in Section III – Drainage Section of this report..

Context Classification

The Florida Department of Transportation (FDOT) has instituted guidelines to describe and categorized various roadways from a context-sensitive system perspective. Accordingly, FDOT has adopted a roadway classification system consisting of eight context classifications for all non-limited access state roadways. The eight context classifications, as defined in the FDOT Context Classification Guide are:

- **C1 Natural** – Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions.
- **C2 Rural** – Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.
- **C2T Rural Town** – Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns.
- **C3R Suburban Residential** – Mostly residential uses within large blocks and a disconnected or sparse roadway network.
- **C3C Suburban Commercial** - Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.
- **C4 Urban General** – Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.
- **C5 Urban Center** – Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.
- **C6 Urban Core** – Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population >1,000,000). Many are regional centers and destinations.



Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network.

After analyzing the existing and future land use characteristics along Partin Settlement Road, the project corridor was divided into three sections, each with their own FDOT Context Classification.

- **Neptune Road to Aeronautical Drive (~0.7 miles) – Suburban Residential (C3R)**
Suburban Residential (C3R) is the proposed classification for this portion of the project based on several factors. The County’s 2040 Land Use Map indicates low density residential land use throughout this area. In addition, Partin Settlement Road has an existing posted speed limit of 35 mph in this section, which is at the low end of the range for C3 classifications (design speeds can range from 35 to 55 mph per the FDOT Design Manual (FDM)). Nearby Neptune Road is also classified as both C3R and C3C, depending on the adjacent land use.

Per FDOT guidelines, a C3R classification is distinguished by mostly residential uses within large blocks and a disconnected or sparse roadway network. Given the prevailing land use, vehicle operating speeds, and classifications of other roadways similar to Partin Settlement Road, a C3R classification is recommended for this section.

- **Aeronautical Drive to Florida Turnpike (~0.9 miles) – Suburban Commercial (C3C)**
This section of roadway has an existing posted speed limit of 45 mph west of US 192 and 40 mph east of US 192. The surrounding land use is mostly commercial, with large blocks between connecting roadways which is consistent with a context classification of a Suburban Commercial (C3C) roadway.
- **Florida Turnpike to Lakeshore Boulevard (~1.1 miles) – Suburban Residential (C3R)**
This section of roadway has an existing posted speed limit of 40 mph for most of this segment, though the speed limit drops to 35 mph near Lakeshore Boulevard. The surrounding land use is mostly residential with large blocks between connecting roadways on the north side of Partin Settlement Road. Along the south side, the land use consists of properties that are either residential on large lots, or undeveloped which is consistent with a C3R classification.

All three sections are considered suburban due to the large blocks and intersection density. The central section is considered Suburban Commercial since most of the land use is composed of non-residential uses with large parking lots, while the other two sections were considered Suburban Residential due to the mostly residential usage.

Signing, Signals and Lighting

There are no overhead or multi-post signing along the project. The sign inventory found most of the signs to be in poor condition and in need of replacement (see Appendix A).

There are five existing signalized intersections at Neptune Road, Shady Lane, E Irlo Bronson Memorial Highway (US 192), Remington Boulevard, and Lakeshore Boulevard. In addition, left and/or right turn lanes are provided at Neptune Pointe Lane, Walden Park Circle, Partin Village Shopping Center, Red Jasper Drive, the Osceola County Government complex, Simmons Road, the Northeast Christian Church access road, Costa Mesa Lane, and Star Magnolia Drive.

Currently, only small areas along Partin Settlement Road are currently lighted. The intersection of CR 525 (Neptune Road) has some existing lighting on the approaches to the intersection. Cross Prairie Parkway/Shady Lane also has existing lighting on the signal mast arm poles. Only the south approach of the US 192 intersection has existing lighting. Remington Boulevard has existing lighting on the signal mast arm poles and the intersection of Lakeshore Boulevard has a single light on the signal mast arm.

Roadway Needs Plans

The Metro Plan Orlando 2040 Long Range Transportation Plan indicates that an increase to two lanes in each direction will be required for Partin Settlement Road.

This improvement is included in both the Highway Needs Network and Cost Feasible Needs Network plans.

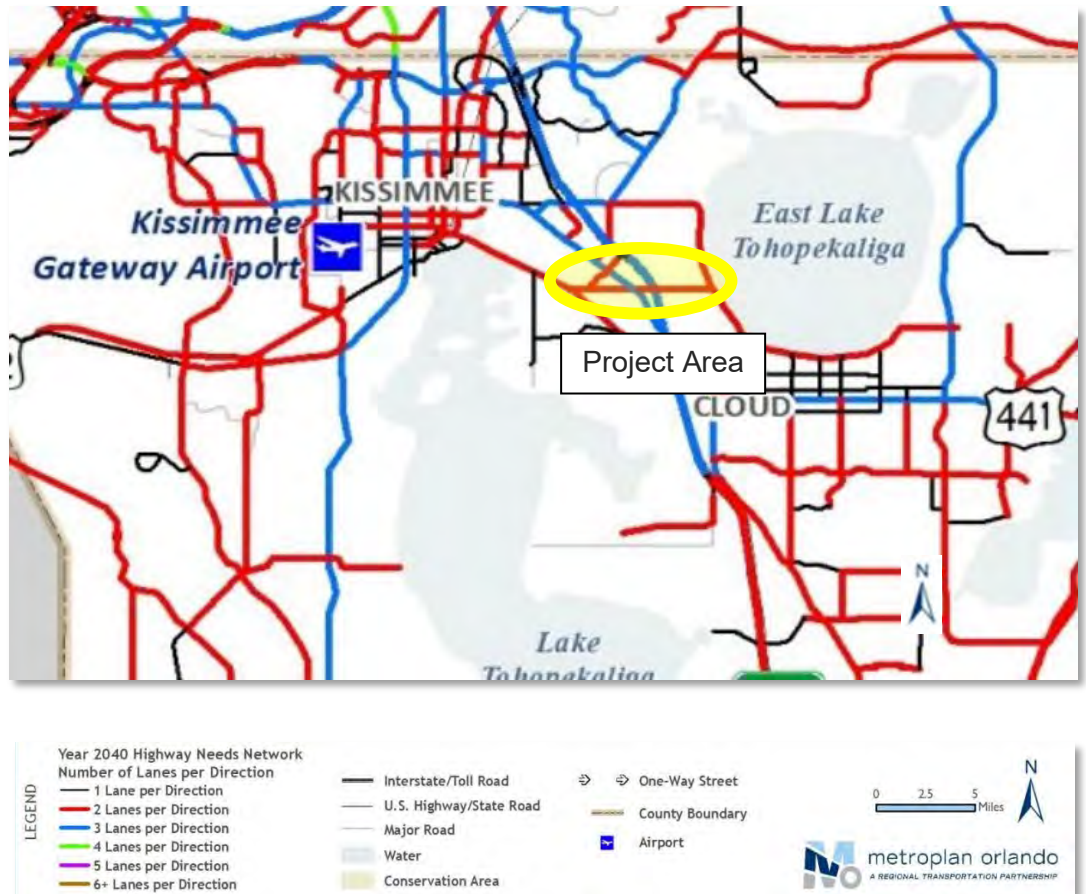


Figure 2: Highway Needs Network Map

Safety

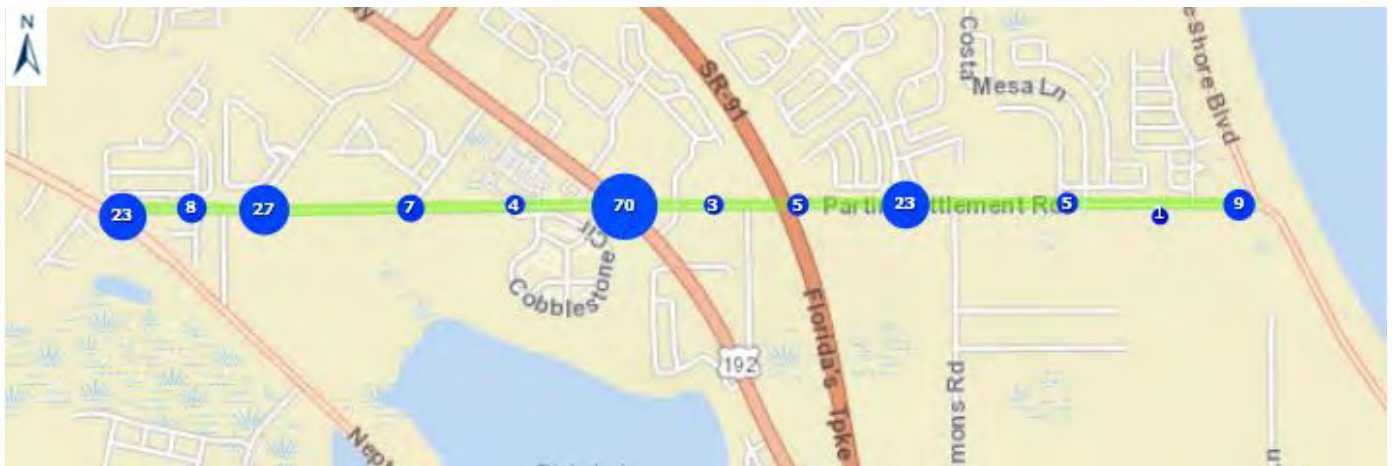
Crash Summary Crash reports for Partin Settlement Road were obtained from the University of Florida's Signal Four Analytics database for the 60-month period extending between January 2015 and January 2020. The crash data is summarized below.

There were 185 crashes reported along Partin Settlement Road from CR 525 (Neptune Road) to Lakeshore Boulevard during the 5-year time period. Seventy collisions were at US 192 (E Irlro Bronson Memorial Hwy), twenty-seven were at Shady Lane, and twenty-three collisions were at both the Neptune Rd and Remington Blvd intersections (see map on next page).

One-hundred and thirteen (61%) were rear end collisions and twenty-nine (16%) of the crashes were left

turn collisions. There was one (1%) pedestrian/bicycle collision. One-hundred and twenty-five (68%) of the crashes resulted in property damage only, sixty (32%) resulted in personal injury, and there were zero (0%) fatalities. Thirty-nine (21%) of the crashes occurred at night and fourteen (8%) of the crashes occurred on wet pavement.

The average crash rate for the segment was calculated based on the number of crashes per million entering vehicles traveled through the 2.7-mile segment and was found to be 3.168 per million vehicle-miles, which is significantly higher than Florida's average statewide crash rate of 0.736 per million vehicle-miles traveled. is above the statewide average of 0.736 crashes/MEV for similar rural 2-3 lane undivided roadway from 2012 to 2016.



Crash Location Map

The corridor has seen above statewide average crashes each year, with 2019 being the highest. There have been no fatalities, although 32% of the crashes were injury related. The majority of crashes along the corridor are rear end collisions (61%), followed by left turns (16%).

Reviewing the crash data for each signalized intersection, trends appeared showing re-occurring crash types. For the Neptune Road intersection, 62% crashes were rear end type. The westbound approach to this intersection has a horizontal curve with a relatively short 150-foot radius that may affect sight distance for westbound motorists.

For the Shady Lane/Cross Prairie Parkway intersection, 42% crashes were left turning vehicles failing to yield. At the US 192 intersection, 81% crashes were rear end or failure to yield crash types. For the Remington Boulevard intersection, 41% crashes were rear end and 35% were left turn fail to yield crash type. Lastly, at the Lakeshore Boulevard intersection, 37% were rear end and 25% were failure to yield left turn.

III. DRAINAGE CONDITIONS

Topographic and Hydrologic Features

The project area is relatively flat with minor elevation relief and is surrounded by a mix of residential and commercial properties along with several vacant tracts. There is one major existing cross drain consisting of a dual-span box culvert within the project limits, which will be discussed in greater detail below.

The Natural Resources Conservation Service (NRCS) Web Soil Survey of Osceola County, Florida identified eight (8) soil types within the project limits. Approximately 50% of the length of the corridor has Hydrologic Soil Group type A/D soils, 30% of the corridor has type B/D soils, and 20% of the corridor has type A soils.

Floodplains

According to the Federal Emergency Management Agency (FEMA), the relevant Flood Insurance Rate Map (FIRM) map number is 12097C0090G for Osceola County, revised June 18, 2013. The project corridor is located mostly within areas determined to have less than a 0.2% annual chance of flooding (also known as a 500-year storm floodplain), shown as Zone X on the FIRM. However, the existing box culvert, ECD-1, is within a Zone A floodplain, indicating that there is a 1% annual chance of flooding (also known as a 100-year storm floodplain). The base elevation of the Zone A floodplain has not been established by the FIRM, however the floodplain will be impacted by the proposed Partin Settlement Road widening.

Existing Drainage Basins



Figure 3: Drainage Basin Map - Basins 1, 2, 3A

The project is located within the Kissimmee River Basin and ultimately outfalls to the Gulf of Mexico via Lake Okeechobee. There are eight (8) drainage basins along the project corridor. Basins 1 through 7 discharge to locations upstream of Lake Tohopekaliga and Basin 8 discharges directly to East Lake Tohopekaliga. Runoff in Basins 1, 2, 4, and 7 are conveyed to existing offsite ponds for treatment, runoff in Basins 3, 5, and 6 discharge offsite without treatment, and runoff in Basin 8 receives some treatment within the onsite roadside ditches before being discharged offsite.

The limits of existing Basin 1 are from the intersection of Partin Settlement Road and Neptune Road (Station 10+00) to approximately 635 feet west of Shady Lane (Station 21+50). Runoff in Basin 1 is conveyed in roadside swales along Partin Settlement Road to the Neptune Road storm sewer system and discharges into Neptune Road Pond 300 (SFWM D Permit No. 49-01518-P).

The limits of existing Basin 2 are from approximately 635 feet west of Shady Lane (Station 21+50) to approximately 510 feet east of Shady Lane (Station 33+00). The Shady Lane Widening Project (SFWMD Permit No. 49-103652-P) added curb and gutter as well as a storm sewer system to collect the runoff along Partin Settlement Road within this section. The runoff from Basin 2 is conveyed via a storm sewer system to Pond 1 in the Shady Lane Widening Project.



Figure 4: Drainage Basin Map - Basins 3A, 3B, 4, 5, 6, 7

The limits of existing Basin 3 are from approximately 510 feet east of Shady Lane (Station 33+00) to just west of the intersection of Partin Settlement Road and US 192 (Station 72+00). Runoff in Basin 3 is conveyed to ECD-1, at station 54+00, where the runoff discharges offsite to the south without treatment.

The limits of existing Basin 4 are from just west of the intersection of Partin Settlement Road and US 192 (Station 72+00) to Red Jasper Drive (Station 80+50). The roadway is curb and gutter throughout existing Basin 4 and runoff is conveyed via the storm sewer along Partin Settlement Road to the US 192 storm sewer system. Runoff in the US 192 storm sewer system discharges into the existing pond at the Osceola Arts Building (STWMD Permit No. 49-102356-P).

The limits of existing Basin 5 are from Red Jasper Drive (Station 80+50) to station 85+00 on the left side of Partin Settlement Road, and to Station 89+50 on the right side of the road. The roadway has curb and gutter along the left side of the road from the beginning of Basin 5 to station 83+50 and has roadside ditches for the remaining drainage area of the Basin. The runoff in Basin 5 is conveyed via those roadside ditches and a storm sewer system to the US 192 bypass ditch. The bypass ditch then conveys the runoff to the US 192 bypass storm sewer system which discharges directly to the Fennel Slough without treatment.

The limits of existing Basin 6 are from Station 85+00 on the left side of the roadway and Station 89+50 on the right side of the roadway to approximately 740 feet east of Florida's Turnpike (Station 102+50). The Partin Settlement Road bridge over Florida's Turnpike is at approximately Station 94+00. The roadway is curb and gutter from Station 90+00 to 96+50 and utilizes roadside ditches for the remaining drainage area of the Basin. Runoff in Basin 6 is conveyed via roadside ditches to the Florida's Turnpike drainage system. Florida's Turnpike has roadside ditches along both sides of the highway, with the Partin Settlement Road bridge serving as the dividing line between two drainage basins for the Turnpike. Runoff on the north side of Partin Settlement Road is conveyed north in the Turnpike ditch system and discharges to the Fennel Slough without treatment. Runoff on the south side of Partin Settlement Road is conveyed south in the Turnpike ditch system and discharges to a tributary of Fish Lake without treatment.



Figure 5: Drainage Basin Map - Basins 7, 8A, 8B

The limits of existing Basin 7 are from approximately 740 feet east of Florida’s Turnpike (Station 101+50) to approximately 405 feet east of Remington Boulevard (Station 112+25). There is no curb and gutter along the roadway in this section, and there are roadside swales along both sides of the road. The roadside swales discharge to the Remington Boulevard storm sewer system which discharges into Remington Pond 25 from SFWMD Permit No. 49-00544-S (Remington Boulevard Extension).

The limits of existing Basin 8 are from approximately 405 feet east of Remington Boulevard (Station 112+25) to the intersection of Partin Settlement Road and Lakeshore Boulevard (Station 153+00). There is curb and gutter on the south side of the roadway from Station 141+00 to 150+00 and it is an open section with drainage ditches for the rest of this drainage area basin. Runoff is conveyed east to the intersection of Lakeshore Boulevard, where the runoff is collected in an offsite pipe system that discharges directly to East Lake Tohopekaliga. There are ditch blocks and control structure located within the roadside ditches that provide some treatment within this section (SFWMD Permit No. 040218-8).

Box Culvert at Fennel Slough

There is an existing 38-foot long Reinforced Concrete Box (RCB) culvert where Partin Settlement Road crosses Fennel Slough (see Figure 6 next page). The structure has dual 5’ x 11’ (rise x span) box culverts, with 9.4 feet of separation between them. The top of each headwall is at 62.2 feet, which is six inches above the roadway crest at 61.7’. The normal flow depth is approximately one foot of water within the culverts and the structures appear to be in good condition.

The channel is a manmade canal upstream of Partin Settlement Road, and the natural streambed of Fennel Slough is downstream of the culverts, eventually draining into Fish Lake. The canal is partially stabilized with concrete at the channel bends. Approximately 29 feet north of the culvert is a 66-foot aluminum pedestrian bridge. The canal embankments are lined with rubble riprap extending approximately 80 feet north of the bridge-culvert. No rubble riprap exists downstream of the culvert, and no scour was observed there. The channel substrate is composed of silty materials.

The culvert was originally modeled in 2003 and updated in 2015. The modeled stages and discharges from the 2015 design are listed in the table on the next page. For more information regarding this structure, refer to the *Partin Settlement Road Box Culvert Hydraulic Study*, dated December 2, 2020.

Simulation	Partin Settlement Road		
	Stage (ft)		Discharge (cfs)
	Upstream	Downstream	
10-year/72-hour	59.051	58.968	292.532
50-year/24hour	59.315	59.179	389.675
100-year/72-hour	59.755	59.616	430.487

Table 2: Design Storm Discharge Rates

The culvert and stream are located within a Zone A 100-year floodplain (Map Number 12097C0090G, Revised June 18, 2013). The floodplain elevation is not published in the FIRM map, although the Fish Lake floodplain connects to the Lake Tohopekaliga floodplain, which as a 100-year flood stage of 57 feet (Map Number 12097C0090G, Revised June 18, 2013). Existing studies have not reported flooding of Fennel Slough in the vicinity of Partin Settlement Road, although the floodplain is expected to be impacted by the proposed widening.

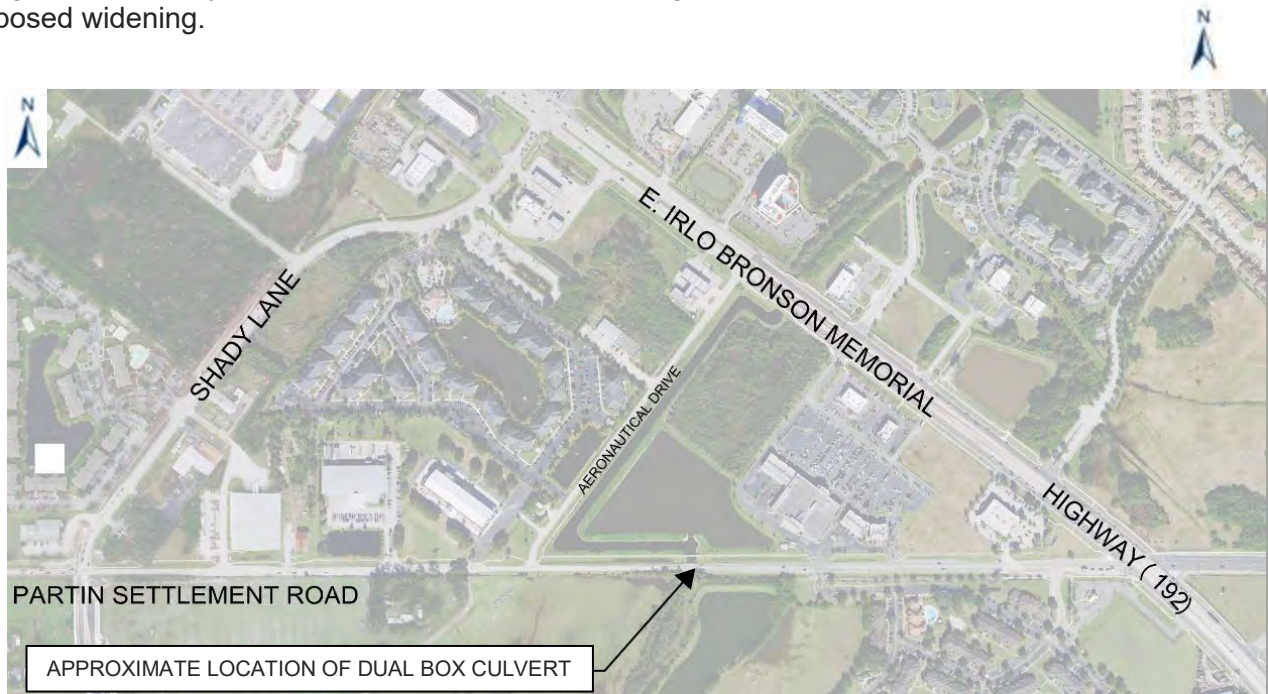


Figure 6: Culvert Location Map

IV. LAND USE

The *Osceola County Future Land Use Map 2040*, developed in 2019, shows that the future proposed land use in the project area is mostly a combination of Commercial, Community Center, Low Density Residential, and Rural Enclave uses. The Rural Enclave is focused in the area south of Partin Settlement Road and east of the Florida Turnpike. The Commercial and Community Center land uses are located between Aeronautical Drive and the Florida Turnpike. The majority of the rest of the project area is Low Density Residential, except for a small section of High Density Residential towards the western portion of the project area and one Tourist Commercial property located at the intersection of Partin Settlement Road and Neptune Road.

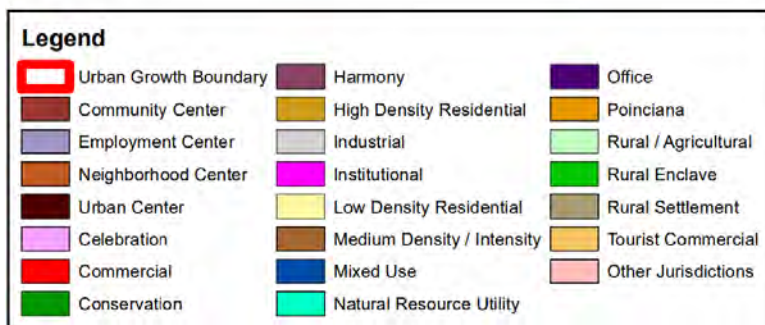
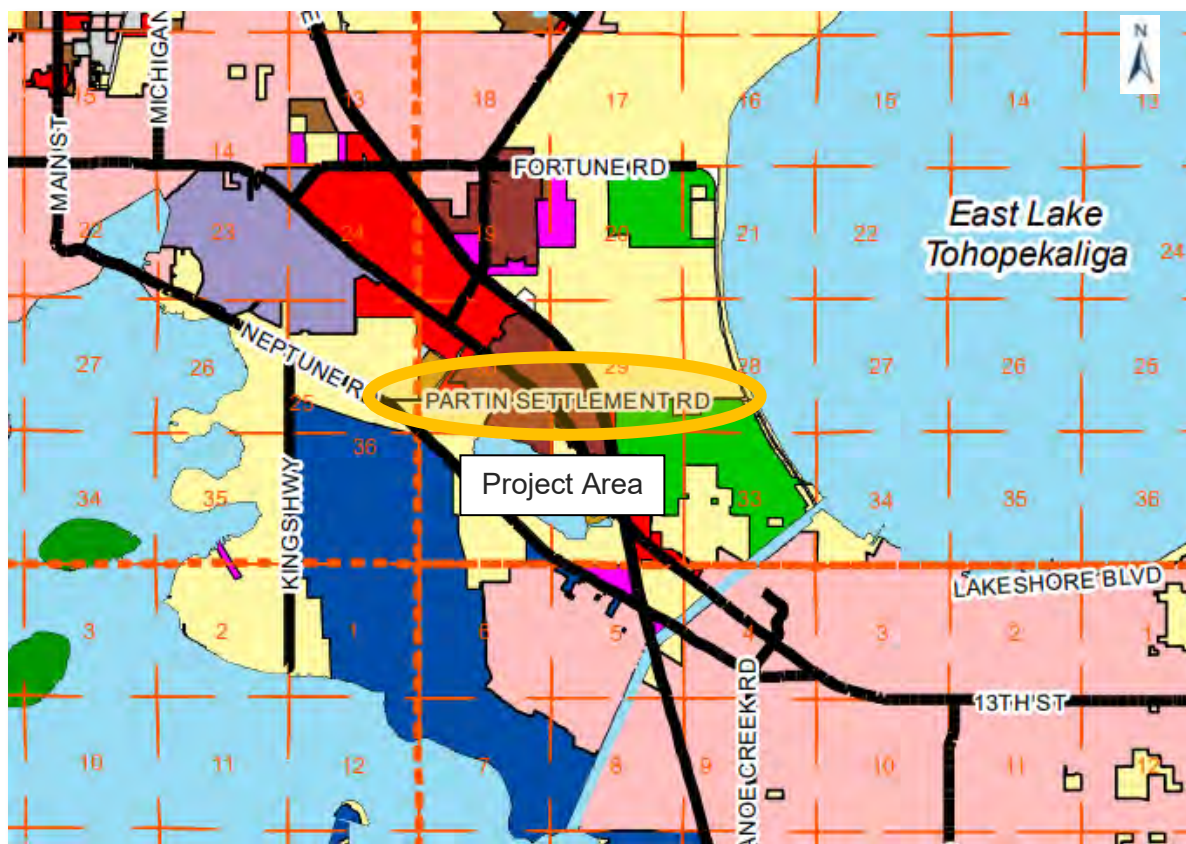


Figure 7: Future Land Use Map

V. SOCIO-ECONOMIC DATA

Socio-economic data for the project area was pulled using Census Tract data. The project lies entirely within Census Tract 429, which is the basis of the data that was gathered. The data that was pulled includes general population data, demographics, environmental justice data, limited English abilities, and access to personal vehicles. Figure 8 shows the location of Census Tract 429.

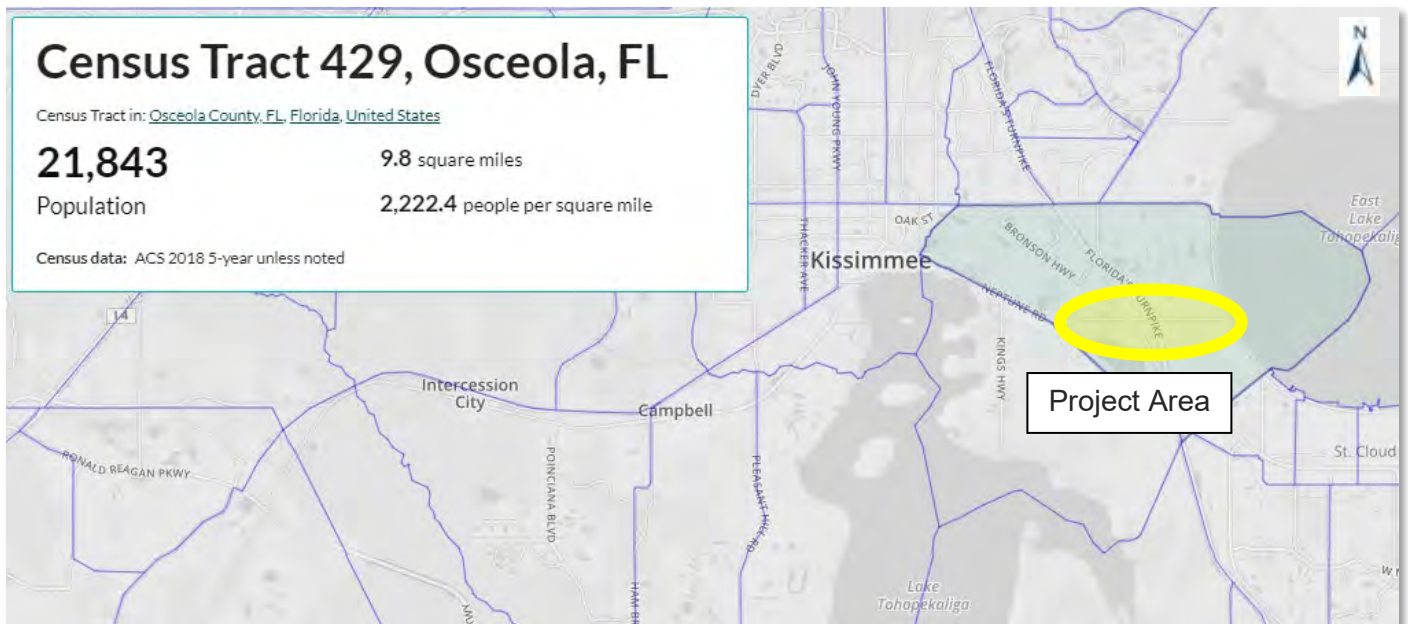


Figure 8: Census Tract 429 from <https://censusreporter.org/profiles/14000US12097042900-census-tract-429-osceola-fl/>

General Population, Economics, and Housing Data

This data was pulled from the American Community Service (ACS) 2018 5-year estimates. The data includes information such as the median age, poverty line, median household income, number of persons per household, housing occupation, and foreign-born population.

- The median age is 32.8 years old
- 12.6% of persons are below the poverty line
- The median household income is \$45,923
- There is an average of 3.5 persons per household.
- 88% of households are occupied
- 20.6% of the population is foreign born

Environmental Justice (EJ) Community Status

This data was pulled from the EPA’s Environmental Justice Screening and Mapping Tool (Version 2019), and includes information such as the percent of the population that are minorities, low income, linguistically isolated, or with less than a high school education.

- 73% of the population in this census tract are minorities
- 48% of the population are low income



- 11% of the population are linguistically isolated
- 9% of the population have less than a high school education.

Limited English Proficiency (LEP)

This data was pulled from the Census Bureau's ACS, last updated December 19, 2019. The data indicates that approximately 18.3% of the population of adults in this Census Tract are considered LEP. 84% of the adults with LEP primarily speak Spanish, while 6.5% primarily speak Asian and Pacific Island languages, the remaining 9.2% primarily speak Other Indo-European languages.

Personal Vehicle Access

Personal Vehicle Access data was pulled from the ACS 5-year Estimates Table S2504. The data shows that 1.8% of households have no access to a personal vehicle, 21.2% of households have access to one vehicle, 46.5% of households have access to two vehicles, and 30.5% of households have access to 3 or more vehicles.

Schools

There are two existing schools located within the project area, Partin Settlement Elementary School and PM Wells Charter Academy. The schools are adjacent to each other on the north side of Partin Settlement Road, east of Remington Boulevard. Primary access for both schools is located off of Remington Boulevard, while Partin Settlement Elementary School has secondary access using the Northeast Christian Church access road.

Churches

There are five churches located within the project area, three are located on the north side of the existing roadway and two are located on the south side. Life Church is located just west of Aeronautical Boulevard and has access off of both Partin Settlement Road and Aeronautical Boulevard. Gateway Baptist Church is located just west of the overpass over Florida's Turnpike and has access off of Partin Settlement Road only. Christian Life Church Worship is located across from Remington Boulevard. The Centro Cristiano Dios de Pactos church is located just east of Christian Life Church. Northeast Christian Church is located just east of Partin Settlement Elementary School on the north side of Partin Settlement Road.



VI. TRANSIT

The team researched the *Lynx Transit Develop Plan 2019*, the *Osceola County Premium Transit Corridors 2040* map, and the *Osceola County Transit System 2040* map to identify whether there are long term or short term plans for transit development along Partin Settlement Road.

Lynx Transit Development Plan 2019

The Lynx Transit Development Plan does not include any short term or long-term transit along Partin Settlement Road. There is one current route, Link 10, that operates within the project areas, as it uses US 192 to link between Kissimmee and St. Cloud. The Plan indicates that this route will be eliminated in 2028 and will be replaced with Service 111 (Core) US 192 – St Cloud / KIS.

Osceola County Premium Transit Corridors 2040

Partin Settlement Road is not a Planned Premium Transit Corridor through 2040. However, two intersecting roadway, US 192, and Shady Lane/Cross Prairie Parkway, are considered Planned Premium Transit Corridors.

Osceola County Transit System 2040

Partin Settlement Road is not anticipated to be included in the Osceola County Transit System through 2040. Two intersecting roadways are included in the 2040 Transit System map. US 192 is anticipated to be part of the High Frequency Premium Transit system, and Shady Lane is anticipated to be part of the Express Premium Transit system.



VII. PEDESTRIAN AND BICYCLE CONDITIONS

The existing Partin Settlement Road has a pedestrian facility in the form of a sidewalk running along the north side of the roadway from Neptune Road to Red Jasper Drive and from Remington Boulevard to Star Magnolia Drive, but there are no existing bicycle facilities. There is an existing pedestrian bridge over Fennel Slough between Aeronautical Drive and the Partin Village Shopping Center. The bridge is approximately 66 feet long.

The team researched the *2018 Trail Prioritization and Feasibility Report*, the *Osceola County Bicycle and Trail Facilities – 2040* and the *Osceola County Bicycle and Trail Facilities – 2080* to identify future plans for bicycle and pedestrian facilities within the project area.

2018 Trail Prioritization and Feasibility Report

The Trail Prioritization and Feasibility Report includes a proposed trail running parallel to Partin Settlement Road between Neptune Road and Lakeshore Drive which would be located on the north side of the road.

Osceola County Bicycle and Trail Facilities 2040

No improvements to Partin Settlement Road are included in the 2040 Bicycle and Trail Facilities map. However, two intersecting roadways, US 192, and Shady Lane, are included on the map. US 192 is a Planned On-Street Multi-Use Route, while Shady Lane is a Planned On-Street Bicycle Route.

Osceola County Bicycle and Trail Facilities 2080

No improvements to Partin Settlement are included in the 2080 Bicycle and Trail Facilities map. No intersecting roadways, beyond the roads previously mentioned on the 2040 map, are shown as having improvements on the map.



VIII. CONTAMINATION

A full Level 1 Contamination Screening Evaluation Report was conducted by the project team and can be found in the *Level 1 Contamination Screening Evaluation Report for Partin Settlement Road Improvements, December 18, 2020 Revised*. A summary of the findings from this report can be found below.

Field reconnaissance of the corridor was conducted on September 17, 2020 to assist in the determination of risks associated with past activities and from potential sources of contamination. An additional field reconnaissance was performed at the additional stormwater pond site (Pond 5(3) on November 24, 2020. A total of nineteen potential risk sites were identified based on site characteristics and/or operations observed during the field reconnaissance and review of available historical data.

Thirteen of the nineteen identified potential sites appear to present Low Risk while four appears to present a range from Low to Medium Risk and two consider as a Medium Risk for contaminant impacts based on potential construction activities. No High Risk were identified within the corridor study area. The roadway improvements that may require special soil or groundwater management are associated with the Medium Risk sites as per Chapter 20 of the PD&E Manual. The remaining sites reviewed within one-quarter mile of the Partin Settlement Road do not appear to present a potential Risk to this project. Based on known information regarding the proposed corridor work plan, pond placement, excavation and dewatering in the vicinity of the Medium sites are the primary concern.

The following provides a summary of Medium Risk sites. Please note that some of the sites may be able to be reduced to a Low Risk contingent upon construction activities and/or proposed stormwater infrastructure characteristic based on final design and proposed construction activities. These ratings are also presented in **Table 1** along with other supporting information and have been included in Appendix B.

■ Low to Medium Risk – Chevron – Neptune – FAC ID # 857424, Risk Site 1 on Exhibit 3A

This facility is an active service station with three existing 10,000-gallon double wall underground storage tank (UST) and a canopy covered dispensing island. On November 23, 1988, a petroleum discharge was reported to FDEP and determined this facility to be eligible for the Early Detection Incentive Program (EDI). A second discharge was reported on June 14, 2001. A number of site soil and groundwater assessment activities were performed on-site from 1990 through 2016 including a limited remedial action plan (LRAP) and RAP Modification, dated 2005 and 2017, respectively.

Additional three quarters of groundwater monitoring activities were conducted since December 2019. The last quarterly report indicated the groundwater impacts have been below the FDEP groundwater cleanup target levels (GCTLs) for two consecutive quarters. The depth to groundwater ranged from approximately 3.3 to 4.6 feet bgs. The next quarterly groundwater monitoring event were scheduled for October 1, 2020.

Soil impacts above the FDEP soil cleanup target levels (SCTLs) were discovered at two sampling locations at 2 and 3 feet bgs north and west of the former UST area during 2001 and 2015, respectively. The soil impacts exhibited benzene concentrations slightly above the FDEP soil cleanup target levels (SCTLs) at that time. The former UST location was west of the existing canopy and abuts the Neptune Road existing western right way boundary.



Groundwater assessment actives are still ongoing at this facility as required to complete a minimum one year of quarterly groundwater monitoring with two consecutive sampling events exhibiting groundwater concentrations below FDEP groundwater GCTLs. Although the site appears to be close to reaching FDEP cleanup criteria, the existing and former USTs abuts the eastern Neptune Road right of way boundary and the site has exhibited a long history of petroleum impacts. If the project proposed excavation and/or dewatering activities along the frontage of this site is planned for construction, confirmation soil and groundwater sampling may be warranted.

Low Risk Scenario: JMT provided two Partin Settlement Road ROW expansion options and preliminary stormwater improvements proposed for the Partin Settlement Road and Neptune Road intersection.

The propose Partin ROW expansion being considered range approximately 10 to 20 feet southward along the Chevron facility northern property line. The latest FDEP site data suggest the soil and groundwater impacts are approximately 25 feet south of both proposed ROW expansion options. In addition, the groundwater flow has historically been towards the west, southwest away from the proposed Partin southern ROW expansion. There are three existing monitoring wells on the Chevron site in close proximity of both ROW options that have not shown recent petroleum groundwater impacts per FDEP available data.

In addition, Terracon recommends installing the stormwater trunk line from structures S-129 and S-132 be position to the north side of the Partin Settlement road to increase the separation from the Chevron site. The dewatering along Partin road should be performed as required to not influence groundwater at the Chevron site canopy structure and southward.

Medium Risk Scenario: If construction or dewatering activities will result in groundwater influence within the Chevron canopy and the UST location on-site.

■ **Low to Medium Risk – Pond 5(1) – Central Florida Power Equipment, Inc., Risk Site 10 on Exhibit 3D**

The facility has an equipment maintenance shop located at the northeast corner of the existing building with a roll-up door fronting the eastern property boundary of Pond 5(1). The maintenance shop had several drums of petroleum related products and parts cleaner observed inside the shop near the roll-up door. In addition, it appears the pavement west of the roll-up door may be used for equipment washdowns onto the pavement that slopes towards the Pond 5(1) parcel. The potential risk associated with petroleum and/or solvents from parts cleaning on-site uses and related impacts from equipment washdown and/or on-site maintenance area.

Low Risk Scenario: If the pond is located at a distance of greater than 25 feet from the equipment maintenance facility is considered a “Low Risk” is considered. I

Medium Risk Scenario: If the pond is position less than 25 feet from the maintenance facility represents a “Medium Risk”.

■ **Low to Medium Risk – Pond 5(2) and Pond 5(3) – Johnston Property – Private Residence and Greenscape Mowing, Inc. - Site 11 on Exhibit 3D**

The Johnston property, encompassing approximately 2.14 acres includes a single family residential building constructed in 1957 and a metal warehouse building constructed in 2010. The residential single-family house



is not currently being occupied by Mr. Johnston. The warehouse building located on the northern portion of the parcel is currently used for Greenscape Mowing, Inc.

The 2,810 square foot (SF) residential building has an attached carport position on the northeast side of the residential building. The carport is occasionally use by Mr. Johnston for minor automotive and mower repairs and oil changes. The carport had various equipment stored on-site including but are not limited to tools, battery charges, part washer (not in use per Mr. Johnston), oil products, and oil changing equipment.

The 6,320 SF metal warehouse building is currently used for storage associated with a non-profit organization inventory and personal car collection. The majority of the warehouse was full of items at the time of the site inspection. According to Mr. Johnston the warehouse bathrooms have never been connected to the septic tank and drain field. In addition, Mr. Johnston indicated there are not any floor drains present within the building. **Exhibit 4** provides an illustration of the approximate location of proposed adjacent pond locations and other on-site features presented below.

Three aboveground storage tanks (AST) are located within the northern portion of the property. One 175-gallon single wall active diesel fuel AST and one 500 gallon used oil single wall AST are located approximately 75 feet west of proposed Pond 5(2) and approximately 85 feet plus north of proposed Pond 5(3). A secondary containment structure used for the used oil AST secondary containment had standing oily water present at the time of our inspection. Minor soil staining was evident in the vicinity of the used oil and the active 175-gallon diesel AST. A third tank 500-gallon single wall diesel AST, adjacent to the Johnston northern parcel boundary is located at approximately 100 feet west of the proposed Pond 5(2) and 240 feet north of the proposed Pond 5(3). No tank registration records were found for this facility.

Two septic tank and drain fields are located on-site, one for the warehouse and a second for the residential building. Mr. Johnston indicated the warehouse was not connected to the septic tank located on the northwest area of the residential building system or the associate drain field located south of the southwest corner of the residential building. The proposed Pond 5(3) encroached into the estimated foot print of the warehouse septic and drain field system. The residential drain field is located east of the residential building. The limits of each septic tank drain field are estimated by others and as presented on **Exhibit 4**.

An old trailer equipped with a polypropylene tank is located along the western property boundary, underneath a large oak tree and south of the residential building. The trailer mounted tank was empty and has not been used for some time. The trailer is position within the proposed Pond 5(3) site western limits.

A company called J&C Electrolysis was listed at this address in 1992 City Directories. The company name was researched on-line and through State of Florida Division of Corporation website Sunbiz.org and no records were found.

A potential site risk is associated with potential on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage and/or fueling operation and potential asbestos containing material associated with the residential home.

Low Risk Scenario: The on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage and/or fueling operation related risks level are considered Low for proposed Pond 5(2) if positioned at more than 75 feet from the storage tanks from the storage tanks.



Medium Risk Scenario:

- 1) The on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage, fueling operation and/or asbestos containing building materials related with the Pond 5(3) is considered Medium Risk
- 2) The on-site petroleum storage and/or fueling operation related risks level is considered Medium for proposed Pond 5(2) if positioned at less 75 feet from the storage tanks.

■ **Low to Medium Risk – Pond 5(2) – Jimmy Hickman Excavating (JHE), Inc. – FAC ID # 857424, Risk Site 12 on Exhibit 3D**

A maintenance shop is located at the eastern portion of this parcel at approximately 30 feet from Pond 5(2) parcel western boundary. Although visibility of the site was limited storage of various materials, truck, and other related material were observed in close proximity of the eastern and northern property boundaries of the JHE parcel. Potential risks are associated with potential petroleum and/or solvents for parts cleaning operations uses on-site related from equipment storage and/or on-site maintenance.

Low Risk Scenario: The risk level is considered low for a pond positioned at more than 25 feet from the subject site eastern property line.

Medium Risk Scenario: A “Medium Risk” is considered for a pond positioned at less than 25 feet from the subject site eastern property boundary.

■ **Medium Risk – Pond 8(A)1 – Past Citrus Land Use, Risk Site 14 on Exhibit 3E**

This area has a long history of agricultural use for cattle and citrus. This area was originally settled by the Partin family in the late 1800’s and early 1900’s. The Partin family were the first cattle rancher to introduce brahma bull cattle to Florida. In addition, some of the Partin lands was converted to citrus groves within this area. Historical aerials indicate citrus grove predominated this parcel from at least 1944 through 1997. The citrus groves were visible through 2007 and 2013 but appear to be unmaintained at that time. Although pesticide and herbicide application are generally applied in accordance with manufacturer recommendation, many past products contain arsenic with some of these products tend to accumulate in the soils creating a potential risk to bind with the soils or potentially infiltrating into the groundwater. Soil chemistry is complex in relation to arsenic accumulation in the soil or if arsenic has a potential to release or leachate to the groundwater from potential past long term use of pesticides, herbicides and related arsenic heavy metal components contained in products. Assumptions on the potential presence of arsenic or its mobility or lack thereof cannot be solely based on the presence of or lack of organic soils.

The proposed stormwater pond construction would require excavated soil generated during the stormwater construction to be place onto an alternate site for potential re-use. The potential for presence or lack of arsenic of impacted soil cannot be based only on soil types present on-site. In accordance with Florida Department of Environmental Protection (FDEP) regulatory constraints, the excavated soil from Pond 8(A)1 would require characterization before removal from the potential source parcel and relocated to a secondary parcel. As a result, the potential risk is considered a “Medium Risk”.

■ **Medium Risk – Pond 8(A)2 – Past Citrus Land Use, Risk Site 17 on Exhibit 3F**

This area has a long history of agricultural use for cattle and citrus as presented above. Historical aerials indicate citrus grove predominated this parcel from at least 1944 through 1997. The citrus groves were visible



through 2007 and 2013 but appear to be unmaintained at that time. The past land use at this alternative pond parcel associated potential impacts from potential past long-term use of pesticides, herbicides and related heavy metal arsenic based components contained in products used during that period.

The soils excavated during stormwater construction will be removed from the specific source parcel and relocated to a secondary site. The potential risk is considered a “Medium Risk” level and should be characterized prior to relocation.



IX. CULTURAL AND ARCHEOLOGICAL

A full Cultural Resource Assessment Report (CRAS) was conducted by the project team and can be found in the *Cultural Resource Assessment Survey Partin Settlement Road Widening and Reconstruction Project*, completed in October 2020. A summary of the findings from the report are below.

The CRAS included an archeological survey and architectural history survey within the project area. The survey area extends approximately 250 feet from the centerline of Partin Settlement Road to include the existing and proposed right-of-way for the project. The survey area was expanded beyond these limits in certain areas where preliminary pond sites have been proposed.

JMT placed a total of 191 shovel tests within the survey area in September 2020, which completed testing of the archaeological survey area. Much of the landscape reflects modification that occurred during the twenty-first century, including recent disturbances associated with new development and utility work.

Three previously recorded archaeological sites (8OS00125, 8OS00126, 8OS01844) located within the survey area were not identified during the current investigation and appear to have been destroyed by development. All have been previously determined as not eligible for listing in the National Register of Historic Places (NRHP).

Two isolated finds, FS-1 and FS-3, were identified in a pasture at the proposed site for Pond 3A(1) in the northwest quadrant of Cross Prairie Parkway and Neptune Road at the western end of the project area. Isolated finds by their definition are limited in their potential research value.

Therefore, they are recommended as not eligible to the NRHP and no further work is recommended. One indeterminate prehistoric archaeological site (8OS03098) was identified at the same pond site. The site is a sparse, low-density lithic scatter and does not contain intact subsurface cultural features or any other primary cultural deposits. This site has no potential to provide further important information beyond what has already been documented. This site is recommended as not eligible for listing on the NRHP under any of the four criteria. No further work is recommended for this site.

No other artifacts were recovered within the survey area, and no additional archaeological sites or occurrences were identified during the survey. The project team recommends that no further archaeological investigation is warranted for the project as it is currently designed.

The architectural history survey identified three properties within the project area that have previously been determined not eligible for listing in the NRHP. There are no previously identified historic properties listed or eligible for listing in the NRHP within the project area.

The proposed project will have no effect on identified historic properties listed or eligible for listing in the NRHP. No further work is recommended. Should the project area extend beyond the currently defined limits, additional archaeological work and/or architectural history survey may be necessary.

X. GEOTECHNICAL

The Soil Survey Report was completed in December, 2020 by the project team. The report is summarized herein with additional field data provided in Appendix C. For more information about the report, please see the *Preliminary Soil Survey Report*. As part of this analysis, a geotechnical investigation was conducted in the field as shown in the following chart.

Table 3: Geotechnical Analysis Methods

Field Exploration	Boring/Core Nos.	Depth (feet)
Roadway Hand Auger Borings	RB-1 through RB-83	3 to 20
Roadway Pavement Cores	C-1 through C-8	Asphalt / Base
Preliminary Pond Hand Auger Borings	PPB-1 through PPB-16	2 to 5

Roadway Borings

The material from Strata 1 and 2 (A-3, A-2-4) can be classified as Select (S) and can be used as embankment material in accordance with Index 120-001 of the Florida Department of Transportation (FDOT) Standards Plans. The material from Strata 2 (A-2-4) may retain excess moisture and may be difficult to dry and compact.

The material from Stratum 3 (A-2-6) should be classified as Plastic (P) and shall be removed in accordance with Standard Plans Index 120-002. This material should be utilized in accordance with guidance for plastic soils per Standard Plans Index 120-001. Removal of any Plastic material (Stratum 3) will be evaluated for the roadway alignment as plans are developed.

If plastic and/or organic material is encountered at the project site during construction, at locations that were not indicated in this report or where soil borings were not performed, these materials should be treated/removed in accordance with Standard Plans Indices 120-001 and 120-002.

Per Osceola County criteria, a minimum separation of 24 inches is required between the estimated seasonal high groundwater level and the bottom of the roadway base. The minimum clearance may be reduced by providing a design pavement and/or base design to allow for the reduction. Base clearance above seasonal high groundwater levels will be evaluated for the roadway alignment as plans are developed.

Preliminary Pond Borings

Soil hand auger borings were performed at most of the potential new pond sites for the project. Based on observations, an average wet season water elevation was estimated for each pond. A groundwater summary for the preliminary pond sites is presented on *Table 4* in the *Preliminary Soil Survey Report*.

Pavement Conditions

Field observations and testing determined that the majority of older pavement areas are considered to be in fair to poor condition, with cracking being responsible for most of the observed distress. Some possible explanations for the observed distresses are inconsistent asphalt pavement sections throughout the corridor and roadway cross-slopes of less than 2%. Most of the areas of older pavement are anticipated to be replaced with a new pavement section as part of this project. The pavement at newer sections in the corridor was observed to be in good condition.



XI. ENVIRONMENTAL AND NATURAL RESOURCES

A Natural Resources Assessment was completed in October 2020 by the project team. The assessment is summarized herein. For more information about the assessment, please see the *Partin Settlement Road PS-20-11504-DG Natural Resources Assessment* document.

Land Use and Cover Types

Land use within the project corridor is approximately half residential and half commercial. The dominant cover types along the corridor are improved pastures (~31% of the project area) and “Medium Density, Fixed Single Family Units” (~15% of the project area).

Soils

Soils within the project corridor were mapped according to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soils data. Over 60% of the soils in the project are hydric, including most of the candidate water treatment pond sites.

Wetlands and Surface Waters

The project area is situated between two of central Florida’s largest lakes, Lake Tohopekaliga (Toho) and East Lake Toho. Nearby Fish Lake drains the western portion of the project area to Lake Toho via a canal located just south of the project area. The majority of soils found along the road corridor and within pond sites are classified as hydric.

Partin Settlement Road crosses a few wetland/surface water systems, one on the east side of the project (minor), one near the center (major), and one toward the west (minor). Figure 2 shows wetlands in the area identified by the National Wetland Inventory. Wetland quality varies from low (previously impacted areas with invasive plant species or existing within wet cattle pasture) to medium (scrub-shrub hydric areas near East Lake Tohopekaliga).

Cumulatively, wetland and surface water impacts related to roadway improvements are estimated to comprise approximately 1.6 ac, while wetland and surface water impacts related to pond creation/expansion (among all ten candidate sites) are estimated to comprise nearly nine ac. Surface waters in the corridor include the Fish Lake Canal running north/south under a Partin-Settlement Road bridge as well as several upland-cut (Photo 1) and wet ditches (side slopes 4:1 or greater) and swales (side slopes 3:1 or less). Some proposed pond sites include expansion of existing stormwater ponds.

Prior to field reconnaissance, potential wetlands and surface waters within the project corridor were identified through review of available site-specific data and a cursory field evaluation. Literature utilized to identify wetlands and surface waters included the following:

- Aerial Photography;
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps;
- United States Geological Survey (USGS) topographical quadrangle maps; 7.5-minute series; and
- USDA, Soil Conservation Service, Osceola County Online Soil Survey, 2020.

Using the information obtained from the above data sources, the project team conducted field reviews in September 2020 to verify approximate wetland and surface water locations and to generally characterize these habitats within the project corridor. The dominant vegetative composition was noted for each wetland/surface water area, as were indicators of hydrology. Jurisdictional wetlands and other surface waters (WOSW) were found both along the primary corridor and at certain candidate sites for installation of water treatment ponds (Figure 3 series). The areas observed to have wetland characteristics are detailed below, and are discussed in geographic order, from west to east (Figures 3.1, 3.2 and 3.3).



Figure 9: Typical upland-cut ditch, adjacent to Pond Site 8A(1)

WOSW 1 is in the right-of-way on the south side of Partin Settlement Road and fronts a residential parcel. The low-quality wetland comprises Brazilian pepper (*Schinus terebinthifolia*), sabal palmetto (*Sabal palmetto*), and laurel oak (*Quercus laurifolia*). The estimated wetland impact is 0.05 ac.

WOSW 2 is a wetland in an improved cattle pasture on Shady Lane (Photo 2). It is identified as a PEM1C Freshwater Emergent Wetland on NWI. Primary vegetation includes hybrid grasses used for grazing (*Bahia* sp.), and also *Carex* sp., *Juncus* sp., and *Spartina* sp. The site appears to drain to the canal that links Fish Lake to Lake Toho. Proposed pond 3A(1) placement in this location may impact approximately one acre.

WOSW 3 is in the right-of-way on the south side of Partin Settlement Road and fronts a residential parcel. It is located slightly west of an unpaved residential driveway. The low-quality wetland comprises Boston fern (*Nephrolepis exalta*), Brazilian pepper, sabal palmetto, and slash pine (*Pinus elliottii*). The estimated wetland impact is 0.07 ac.

WOSW 4 is a wetland-cut roadside ditch located in the southside right-of-way of Partin Settlement Road and just north of proposed Pond 3A(2) site. The impact to this wet ditch would be approximately 0.50 ac.

WOSW 5 is a low-quality wetland comprising wet improved pasture south of Partin Settlement Road (Photo 3). It is identified as a PEM1F Freshwater Emergent Wetland on NWI. The area is the headwaters of a stream system that drains to Fish Lake and is primarily covered by Bahia grass (*Paspalum notatum*), sedges, and *Juncus* (*Juncus* sp.). Installation of Pond 3A(2) in this location would affect approximately 0.60 ac.

WOSW 6 is the portion of Fish Lake Canal that passes underneath Partin-Settlement Road. Any proposed box culvert improvements may disturb some adjacent surface waters and canal bed.

WOSWs 7 and 8 are wetland-cut roadside ditches located just south of Partin Settlement Road and just north of the proposed Pond 3B(2) site. These appear to drain to the Fish Lake Canal. Impacts from road widening may impact up to 0.20 ac of these wet ditches.

WOSWs 9 and 10 are located behind the 15-foot-wide berm along Fish Lake Canal, south of Partin Settlement Road and just east of an existing stormwater pond (Photos 4 and 5, respectively). These low-quality wetlands comprise primarily mowed fields/grazing areas, covered by Bahia grass, spartina, and juncus, and bordered by Brazilian pepper. They are identified as a PEM1F Freshwater Emergent Wetland on NWI. The estimated impact to this wetland would be nearly 1.00 ac if Pond 3B(2) were placed at this site.

WOSW 11 is a medium quality wetland located in the northern portion of the site proposed for Pond 3(B)1 and drains to the Fish Lake Canal (Photo 6). This otherwise isolated system comprises mostly invasive species such as Peruvian willow (*Ludwigia peruviana*), Chinese tallow (*Triadica sebifera*), Brazilian pepper, and Carolina willow (*Salix caroliniana*), but also the opportunistic, native Baccharis (*Baccharis halimifolia*). If the pond were constructed at this site, it would impact approximately 0.75 ac.



Figure 10: WOSW 10, in pasture at Pond 3B(2) Site, south side



Figure 11: WOSW 11, north of existing stormwater pond, west of Publix shopping center

WOSW 12 is a wide ditch in/adjacent to the southern right-of-way of Partin Settlement Road and just west of Florida's Turnpike. The ditch is dominated by Brazilian pepper and various vines, such as Muscadine (*Vitis* sp.) and Greenbrier (*Smilax* sp.). Being on a slope, its primary source of hydrology is roadway runoff. The estimated impact to this wetland due to road expansion is approximately 0.13 ac.

WOSWs 13 and 15 are wet ditches in the southern right-of-way of Partin Settlement Road located just north of the proposed sites for Ponds 8B(1) and 8B(2), respectively.

WOSW 14. This medium-quality wetland is in the site proposed for Pond 8(B)1 and is located in the historic floodplain of East Lake Toho. It comprises primrose willow (*Ludwigia* sp.), Sesbania (*Sesbania* sp.), Brazilian pepper, and grasses/sedges associated with wet meadow habitats, which covers a significant portion of the wetland. Impacts to this wetland to install the pond would range from 2.50 to 3.00 ac.



Figure 12: WOSW 17, a stream/ditch/wetland complex near E. Lakeshore Blvd intersection

WOSW 17 encompasses a tributary, wetland, and ditch (Photo 11). Vegetation comprises cinnamon fern (*Osmundastrum cinnamomeum*), Brazilian pepper, sabal palmetto, laurel oak, and red maple. Expansion of the intersection/roadway would impact approximately 0.15 ac.

WOSW 16. This medium-quality wetland is located in the northern portion of the site proposed for Pond 8(B)2 and is located in the historic floodplain of East Lake Toho. Primary vegetation includes red maple (*Acer rubrum*), Caesar weed (*Urena lobata*), and Brazilian pepper. Impacts to this wetland to install the pond would range from 2.50 to 3.00 ac.



Figure 13: WOSW 14, a wetland at Pond 8B(1) Site

Protected Species

Prior to conducting a field visit to examine project area habitats, an updated literature search was performed to confirm the potential presence of any protected species and/or their critical habitats within or adjacent to the project area. General literature referenced included the following:

- The FWC’s List of Florida’s Endangered Wildlife Species (68A-27.003 FAC) and Species of Special Concern (68A-27.005 FAC)
- FWC’s Florida’s Imperiled Species Management Plan (January 2017)
- Florida Department of Agriculture and Consumer Services (FDACS) List of Florida’s Endangered Plant Species (58-40.0055 FAC) (August 2017)
- USFWS Endangered & Threatened Wildlife and Plants. 50 CFR 17.11 and 17.12. (2017)
- Various USFWS, FWC, and Florida Natural Areas Inventory (FNAI) listed species occurrence GIS data.

A list of protected wildlife species that *could* potentially occur within the project corridor is shown in Table 4. Table 4 also lists the agency with the anticipated regulatory jurisdiction for this project, which will include SFWMD and the Florida Department of Environmental Protection (FDEP). The potential for occurrence of each species was based on the previous assessment, literature review, aerial photography review, and field reconnaissance (September 2020). Listing does not preclude the possibility of other protected species occurring on-site. Findings relative to the proposed project for certain species are discussed below.

Table 4: Wetland and Other Surface Water Estimated Impacts

WOSW ID	Type	Project Site	Impact Estimate	Regulatory Jurisdiction
1	Ditch	Right-of-Way	0.05	SFWMD
2	Wetland	Pond	1.04	SFWMD/FDEP
3	Ditch	Right-of-Way	0.07	SFWMD/FDEP
4	Wet ditch	Right-of-Way	0.52	SFWMD/FDEP
5	Wetland	Pond	0.61	SFWMD/FDEP
6	Canal	Right-of-Way /Bridge	0.19	SFWMD/FDEP
7	Wet ditch	Right-of-Way	0.15	SFWMD/FDEP
8	Wet ditch	Right-of-Way	0.04	SFWMD/FDEP
9	Wetland	Pond	0.46	SFWMD/FDEP
10	Wetland	Pond	0.41	SFWMD/FDEP
11	Wetland	Pond	0.75	SFWMD/FDEP
12	Wetland/ditch	Right-of-Way	0.13	SFWMD
13	Wet ditch	Right-of-Way	0.12	SFWMD
14	Wetland	Pond	2.80	SFWMD
15	Wet ditch	Right-of-Way	0.16	SFWMD
16	Wetland	Pond	2.83	SFWMD
17	Stream/wet ditch	Right-of-Way	0.15	SFWMD

Table 5: Protected Species Potential to Occur Within the Project Corridor

Species		Federal Status	State Status	Likelihood of Occurrence
Specific Name	Common Name			
Plants and Lichens				
<i>Bonamia grandiflora</i>	Florida Bonamia	T	E	Possible
<i>Centrosema arenicola</i>	Sand Butterfly Pea	NL	E	Possible
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	NL	E	Possible
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat	T	E	Possible
<i>Illicium parviflorum</i>	Star Anise	NL	E	Possible
<i>Lupinus aridorum</i>	Scrub Lupine	E	E	Possible
<i>Matelea floridana</i>	Florida Spiny-pod	NL	E	Possible
<i>Nemastylis floridana</i>	Celestial Lily	NL	E	Possible
<i>Nolina brittoniana</i>	Britton's Beargrass	E	E	Possible
<i>Panicum abscissum</i>	Cutthroat Grass	NL	E	Possible
<i>Paronychia chartacea</i> ssp. <i>Chartacea</i>	Paper-like Nailwort	T	E	Possible
<i>Platanthera integra</i>	Yellow Fringeless Orchid	NL	E	Possible
<i>Polygala lewtonii</i>	Lewton's polygala	E	E	Possible
<i>Polygonella myriophylla</i>	Small's Jointweed	E	E	Possible
<i>Salix floridana</i>	Florida Willow	NL	E	Possible
<i>Schizachyrium niveum</i>	Scrub Bluestem	NL	E	Possible
<i>Warea carteri</i>	Carter's Warea	E	E	Possible
Reptiles				
<i>Drymarchon couperi</i>	Eastern Indigo Snake	T	T	Possible
<i>Gopherus polyphemus</i>	Gopher Tortoise	C	T	Possible
Birds				
<i>Mycteria americana</i>	Wood Stork	T	T	Likely
<i>Haliaeetus leucocephalus</i> *	Bald Eagle	NL	NL	Possible
<i>Polyborus plancus</i>	Crested Caracara	T	T	Possible
<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	T	T	Possible
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	NL	T	Possible
<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	E	Possible
<i>Rostrhamus sociabilis</i>	Snail Kite	E	NL	Possible
Mammals				
<i>Puma concolor coryi</i>	Florida Panther	E	E	Possible

Table Notes: Abbreviations: E = Endangered, T =Threatened, T(S/A) = Similarity of appearance .NL = Not Listed, C = Candidate for Listing

*Protected under The Bald and Golden Eagle Protection Act (16 U.S.C. § 668 et seq)

Gopher Tortoise

Gopher tortoises are designated as a threatened species by the FWC, and a candidate for threatened status by USFWS. The gopher tortoise prefers habitat with loose, well-drained, sandy soils for burrowing and an abundance of low growing herbaceous vegetation for food. The project corridor and certain pond sites contain potential upland habitat for gopher tortoise. However, no tortoise burrows were observed during habitat reconnaissance in September 2020. Regardless of which pond sites are selected, the project is anticipated to impact less than 25 ac of xeric habitat and less than 25 gopher tortoise burrows. A survey covering 15%



of tortoise habitat in the project footprint and extending to 25 feet outside of the footprint limits will be conducted in the next project phase, in accordance with FWC guidelines.

Eastern Indigo Snake

The eastern indigo snake is listed as Threatened by both the USFWS and the FFWCC. This species is found in a broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps, often wintering in gopher tortoise burrows but foraging in more hydric habitats (the species is considered a commensal to the gopher tortoise). Land in and adjacent to the project corridor and pond sites may be used as foraging habitat by the eastern indigo snake. Although no indigo snakes were observed during the field review, there are upland habitats within the project limits that could be used for tortoise burrows. As noted above, the project will impact less than 25 ac of xeric habitat and less than 25 gopher tortoise burrows. Standard protection measures following USFWS approved protocol will be employed throughout the project area during construction to assure no adverse effects to the species during construction. Per the updated eastern indigo snake Effect Determination Key, this project should receive a "may affect, not likely to adversely affect" determination.

Wood Stork

The Wood Stork is classified as Threatened by the FFWCC and the USFWS. Habitats utilized most frequently by this species include cypress and mixed hardwood swamps, sloughs, and mangroves and shallow surface waters such as roadside swales and ditches. USFWS (2019) wood stork data indicates that the core foraging area (CFA) includes the project area (Figure 2). However, little or no Suitable Foraging Habitat (SFH) with relatively calm, open water with depths between 5 and 15 inches, was identified within the project corridor. There could be a few ditches which, after storm events, may have the above characteristics. Ditches will be present in the post-development scenario and additional SFH may be created on site should the creation of a new stormwater ponds be deemed appropriate.

Caracara

USFWS listed the Audubon's Crested Caracara as threatened under the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) on July 6, 1987, (52 FR 25229). The species is listed by both the State of Florida and USFWS as threatened. Critical habitat has not been designated for the caracara. However, the project area is within the northernmost portion of the consultation area for USFWS. The primary breeding season is November through April. Nest initiation and egg-laying peak from December through February. Caracaras construct new nests each nesting season, often in the same tree as the previous year. Nests are well concealed and most often 4 to 18 meters above the ground in cabbage palms (Morrison and Humphrey 2001), although nests have been found in live oaks (*Quercus virginiana*), cypress (*Taxodium distichum*) (first record, Morrison et al. 1997), Australian pine (*Casuarina* spp.), saw palmetto (*Serenoa repens*), and black gum (*Nyssa sylvatica*). No nests or Caracara were observed during habitat reconnaissance, but several cabbage palms of appropriate height for nesting line the road corridor. According to USFWS email correspondence dated May 4, 2020, the nearest known nests are over a half-mile from the project area. Prior to construction, suitable trees in the project area should be reviewed for nests (prior to February 2021).

Florida Sandhill Crane

The Sandhill Crane is listed as Threatened by the FFWCC and is not listed by the USFWS. Sandhill cranes prefer wet prairie and open marsh habitat, low-lying pastureland, and shallow flooded open areas for foraging and nesting. They typically nest in open marshes that contain pickerelweed (*Pontederia cordata*), maidencane (*Panicum hemitomon*) and duck potato (*Sagittaria latifolia*). During the field reviews, no sandhill



cranes were observed. Habitat for this species occurs within grassy roadside areas as well as some of the candidate pond site. The project will not impact suitable nesting habitat. Foraging habitat within the roadway right-of-way will be present in the post-development scenario, as well as in the riparian zone of new water treatment ponds.

Other Listed Wading Birds

It would be expected for wading bird species to regularly use surface waters within the project corridor and pond sites for foraging purposes. GIS database sources reveal that there are no wading bird rookeries located within the project corridor that would be affected by the project. Habitat in the form of surface waters, and ditches adjacent to the roadway will be present in the post-development scenario.

Bald Eagle

While the Bald Eagle is no longer federally or state-listed as threatened or endangered, it is still afforded protection by the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and state and federal management plans. These management plans dictate that activities beyond 660 feet from an eagle nest should not disturb the nest. The FFWCC Bald Eagle Nest Locator database (2017) was queried to review locations of documented eagle nests within proximity to the project (Figure 4; circle around legend character represents 660-foot buffer). No bald eagle nest sites are located within the vicinity of the project corridor or pond sites.

Florida Scrub-Jay

USFWS listed the Florida Scrub-Jay as threatened under the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) on June 3, 1987 (52 FR 20715 20719). Territory size averages 22 to 25 ac (Woolfenden and Fitzpatrick 1990; Fitzpatrick et al. 1991), with a minimum size of about 12 ac (Woolfenden and Fitzpatrick 1984; Fitzpatrick et al. 1991). The availability of territories is a limiting factor for scrub-jay populations (Woolfenden and Fitzpatrick 1984). Nests are typically constructed in shrubby oaks, at a height of 1.6 to 8.2 feet (Woolfenden 1974). Sand live oak (*Quercus geminata*) and scrub oak (*Q. inopina*) are the preferred shrubs on the Lake Wales Ridge (Woolfenden and Fitzpatrick 1996b), and myrtle oak (*Q. myrtifolia*) is favored on the Atlantic Coastal Ridge (Toland 1991) and southern Gulf coast (Thaxton 1998). In suburban areas, scrub-jays nest in the same evergreen oak species, as well as in introduced or exotic trees. However, they build their nests in a significantly higher position in these oaks than when in natural scrub habitat (Bowman et al. 1996). The project corridor is located within the northernmost portion of the Scrub Jay Service Area and Consultation Area. Preferred scrub oak habitat for scrub jays does not exist within the project corridor or candidate pond sites. However, there are oak trees within the project area. No scrub jay individuals were observed within the project corridor or pond sites during habitat reconnaissance. It is anticipated that this project will not adversely affect the scrub jay.

Florida Panther

The Florida Panther has been listed as an endangered species since 1967. In recent years, its range has expanded, primarily for foraging males, outside of South Florida. Their published range (on fws.gov) now includes from south Florida to north of Kissimmee, and individuals are known to have migrated as far north as Duval County (pers com, Dave Onorato, FWC, Feb 13, 2019). No designated critical habitat currently exists for the species. Panthers require large, contiguous areas of suitable habitat, and habitat selection is related to prey availability, which means they select habitats that make prey vulnerable to stalking and capturing. For example, dense understory vegetation provides some of the most important feeding, resting, and denning cover for panthers. Telemetry monitoring and ground tracking indicate that panthers select



forested habitats, marsh shrub swamps, and prairie grasslands with agricultural lands and other habitat types used in proportion to their availability. The only portion of the project area that conforms to these requirements is some of the pastures which are pond candidate sites. However, the project footprint, including ponds, are in an increasingly developed landscape which would be unappealing for the species. If any individuals were to access the project area, they would likely approach from the south, i.e., from corridors associated with Fish Lake and the other lakes and swamps associated with the Kissimmee Chain of Lakes.

Listed Plants

While other protected plant species could be present within the project corridor, the plants listed in Table 2 are considered the most likely to occur based on habitat types present. No state or federally protected plant species were observed during the field reviews.

Permitting and Mitigation

Wetlands and Surface Waters. Permits for wetland impacts likely to be required include an environmental resource permit (ERP) from the SFWMD and, due to the influence of, and connectivity of parts of the project to Fish Lake, it may be possible that a federal dredge and fill permit (Clean Water Act Section 404) from FDEP may be necessary (Table 4 shows which wetlands/surface waters could be affected). Mitigation may be required by either or both agencies, and calculation of the mitigation required will be based on a functional loss analysis.

Protected and Managed Species. At this time, no species-oriented permitting is anticipated.

XII. TRAFFIC CONDITIONS

Background and Assumptions

An analysis of the existing traffic along Partin Settlement Road was conducted by the project team and is summarized in Appendix D. The traffic analysis was based on traffic counts that were conducted in September 2020. The traffic counts were broken up by 72-hour vehicle classification counts, 72-hour bi-directional counts at five signalized intersection approaches, and 8-hour turning movement counts (TMCs) at the same five signalized intersections.

The 72-hour vehicle classification counts were conducted at the following four locations:

- Partin Settlement Road – Between Neptune Road and Cross Prairie Parkway
- Partin Settlement Road – Between Cross Prairie Parkway and US 192
- Partin Settlement Road – Between US 192 and Remington Boulevard
- Partin Settlement Road – Between Remington Boulevard and Lakeshore Boulevard.

The 72-hour bi-directional and 8-hour turning movement counts were conducted at the following signalized intersections. Results of the traffic counts are shown on the following figures.

- Partin Settlement Road / Neptune Road
- Partin Settlement Road / Cross Prairie Parkway
- Partin Settlement Road / US 192
- Partin Settlement Road / Remington Boulevard
- Partin Settlement Road / Lakeshore Boulevard



Figure 14: Existing Year 2020 Annual Average Daily Traffic (AADT) Volumes

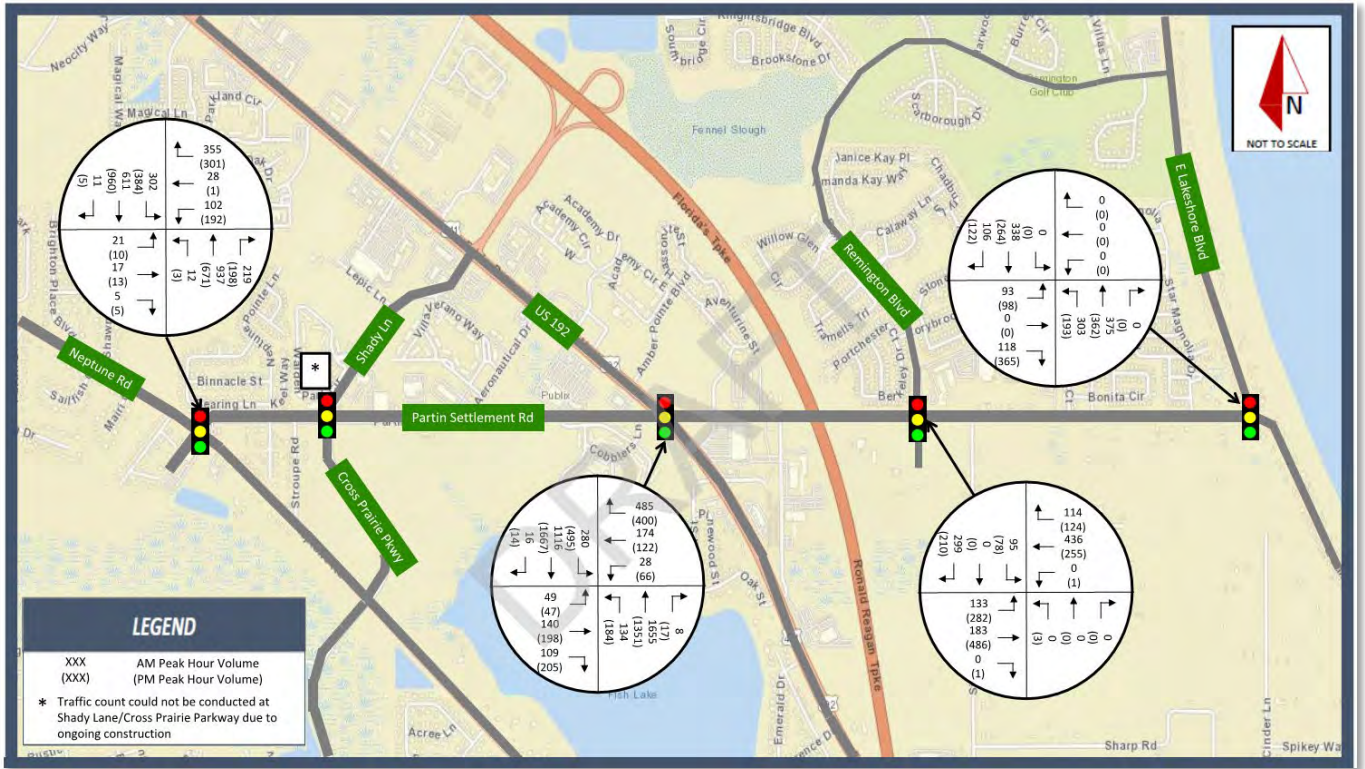


Figure 15: Existing Year 2020 AM and PM Peak Hour Volumes



XIII. PROJECTS PLANNED NEAR THE PROJECT CORRIDOR

The team identified nearby projects that are seeking or have already received either statewide (Florida DOT STIP) or local (Orlando Urban Area Transportation Improvement Project) allocated funding.

Florida DOT STIP

The 2019 Florida DOT STIP identified one nearby project to receive state funding. \$2 Million was allocated for landscaping work on E Bronson Hwy (SR 192) from Denn John Lane to Partin Settlement Road for 2020.

Orlando Urban Area Transportation Improvement Project

The 2019 Orlando Urban Area TIP identified five nearby projects:

- **Florida's Turnpike** – Adding two variable Toll Express Lanes in each direction from US 192 to Osceola Parkway. This project is funded through 2022/2023 for a total of approximately \$279 Million.
- **Neptune Road** – Widen to four lanes from Partin Settlement Road to US 192. This project is on the Prioritized Project List but is still seeking approximately \$59 Million in funding.
- **Neptune Road Phase II** – Widen to four lanes from Partin Settlement Road to Neptune Middle School Eastern Driveway. This project is funded through 2022/2023 for a total of approximately \$45 Million.

XIV. EXISTING RIGHT-OF-WAY

The existing right-of-way was identified based on FDOT Right-of-Way mapping. The western portion of the project was mapped using Plat Book 16, pages 15-16, Plat Book 12, pages 151-152, and Plat Book 22, pages 23-24. The central and eastern portion of the project was mapped using the FDOT Right-of-Way Map for State Road 500, and the FDOT Right-of-Way Map for State Road 91. Existing right-of-way maps have been included in Appendix E.

The narrowest right-of-way is at the beginning of the project corridor from Neptune Road to Shady Lane where the existing right-of-way varies from 66-87 feet wide with only 66 feet available from Stroup Avenue to Shady Lane. Through the remainder of the project, the existing right-of-way is generally 95-110 feet wide, though there are several segments where the existing right-of-way is only 88 feet wide. The table located below shows the right-of-way width throughout the corridor, as broken down into twelve sections.

During the development of typical section options as described later in this memorandum, various sections will be explored which can utilize the available right-of-way to the maximum extent possible.

Table 6: Partin Settlement Existing Right-of-Way

Begin	End	Segment Length (LF)	Typical Width (FT)	Max ROW (FT)	Min ROW (FT)
Neptune Road	Stroup Avenue	1,330	Varies	87	82
Stroup Avenue	Shady Lane	450	66		
Shady Lane	Aeronautical Blvd	1,920	88	105	88
Aeronautical Blvd	US 192	2,700	110	110	88
US 192	Red Jasper Drive	640	110	110	88
Red Jasper Drive	Turnpike	1,370	Varies	170	88
Turnpike	Remington Blvd	1,400	Varies	210	85
Remington Blvd	Simmons Road	750	105		
Simmons Road	La Miranda Ct	1,320	95	117	95
La Miranda Ct	Costa Mesa Ln	320	110		
Costa Mesa Ln	Star Magnolia Dr	1,350	110		
Star Magnolia Dr	Lakeshore Drive	850	109	109	100
Total Project Length		2.7 Mi			

XV. UTILITIES

The project team reached out to fourteen local utility companies to provide approximate mapping and information about existing underground utilities along the roadway which are shown on the existing right-of-way maps in Appendix E.

All existing utilities are located within the project right-of-way, although Florida Gas Transmission has a line which crosses Partin Settlement Road east of US 192 that has a private easement outside the roadway right-of-way. The proposed widening is anticipated to encroach into this easement and FGT will require a construction permit for this encroachment. FGT also has specific criteria which will govern the design of the improvements in the area, and especially the storm sewer system profiles and vertical clearances.

The table below has a listing of the utility company contacted and the type of utility. Preliminary utility information is shown on the existing right-of-way maps in Appendix E.

Table 7: Existing Utilities

Utility Company	Type of Utility
Osceola County Traffic	Fiber Optic (ITS)
FTE	Fiber Optic (ITS)
AT&T	High Capacity Fiber Optic
AT&T Distribution	Telephone
St. Cloud Water / WW	Water / Wastewater
Century Link	Fiber Optic / Telephone
Centurylink	Fiber Optic
TECO Peoples Gas - Orlando	Gas
TOHO Water Authority	Reclaimed Water / Sewer / Water
Zayo Group	Fiber Optic
Charter Communications	CATV, Telephone, Fiber Optic
Florida Gas Transmission – Davenport	Gas
Kissimmee Utility Authority	Electric
Orlando Utility Commission	Electric



APPENDIX A: EXISTING SIGN INVENTORY

Inventory Date: 09/23/20 thru 09/24/20
 Location: Partin Settlement Rd
 Project:

Inventoried By: Larry/Steve
 Checked By: Sergio

Existing Signs Summary									
Latitude	Longitude	L1/R1 Media	Sign	Message	No. of Posts	Additional Information	Age	Condition	Recommendations
28.2788	-81.361737	RT	Regulatory	SPEED LIMIT ??	1	Sign Covered	02/12/20	Good	Remove
28.278853	-81.361535	RT	Regulatory	SPEED LIMIT 35	1		06/??/15	Fair	Replace
28.27857	-81.359957	RT	Regulatory	STOP	1		07/30/20	Good	Replace
28.279049	-81.358151	RT	Warning	DEAD END	1		04/23/19	Good	To Remain
28.279202	-81.358315	RT	Regulatory	STOP	1		09/13/17	Good	Replace
28.280295	-81.351317	RT	Regulatory	SPEED LIMIT 45	1		06/??/??	Fair	Replace
28.279347	-81.346637	RT	Regulatory	STOP	1	Driveway	N/A	Poor	Replace
28.278902	81.343910	RT	Regulatory	STOP, Right Only	1		10/??/19, 10/??/19	Fair	To Remain
28.278648	-81.342780	LT	Warning	Ped Crossing	1		08/??/19	Good	To Remain
28.27867	-81.342862	LT	Regulatory	YIELD	1		10/??/19	Fair	To Remain
28.278712	-81.342961	RT	Regulatory	SPEED LIMIT 40	1		08/??/19	Good	To Remain
28.278535	-81.342353	RT	Regulatory	Right Lane Must Turn Right	1		01/03/20	Good	Replace, If Still Applicable
28.278757	-81.342631	RT	Informational	TOW-AWAY Zone	1		N/A	Good	To Remain
28.27859	-81.342447	RT	Regulatory	STOP	1	Driveway	N/A	Fair	Replace
28.278551	81.342308	RT	Regulatory	Right Lane Must Turn Right	1		01/10/12	Fair	Replace, If Still Applicable
28.27889	-81.339671	RT	Regulatory	STOP SIGN	1	Driveway	N/A	Fair	Replace
28.278549	-81.340393	RT	Informational	TOW-AWAY Zone	1	Driveway	N/A	Fair	To Remain
28.278727	-81.340696	RT	Regulatory	STOP	1	Driveway	N/A	Fair	Replace
28.278706	-81.340116	RT	Regulatory	STOP	1	Driveway	N/A	Fair	Replace
28.278447	-81.342030	RT	Regulatory	Official Use Only	1	Driveway	N/A	Good	To Remain
28.278578	81.341461	RT	Regulatory	STOP	1	Driveway	N/A	Good	Replace
28.278715	-81.340564	RT	Warning	Signal Ahead	1		06/??/18	Fair	To Remain
28.278824	-81.337157	RT	Warning	Object Warning	1		07/02/??	Fair	Replace
28.279578	-81.336051	RT	Warning	Object Warning	1		07/02/??	Fair	Replace
28.279162	-81.334157	RT	Regulatory	STOP	1	Driveway	N/A	Fair	Replace

Photo Num	Field Photos
27	Photos Inventory\DSC_0027 SPEED LIMIT (Covered).JPG
29	Photos Inventory\DSC_0029 SPEED LIMIT 35.JPG
36	Photos Inventory\DSC_0036 STOP, DEAD END, Street Names .JPG
39	Photos Inventory\DSC_0039 DEAD END.JPG
41	Photos Inventory\DSC_0041 STOP, Street Names.JPG
50	Photos Inventory\DSC_0050 SPEED LIMIT 45.JPG
52	Photos Inventory\DSC_0052 STOP.JPG
55	Photos Inventory\DSC_0055 STOP, Right Turn ONLY, Street Names.JPG
68	Photos Inventory\DSC_0068 Pedestrian Crossing, W16-7P.JPG
70	Photos Inventory\DSC_0070 YIELD.JPG
72	Photos Inventory\DSC_0072 SPEED LIMIT 40.JPG
74	Photos Inventory\DSC_0074 RIGHT LANE MUST TURN RIGHT.JPG
76	Photos Inventory\DSC_0076 TOW-AWAY ZONE.JPG
78	Photos Inventory\DSC_0078 STOP.JPG
80	Photos Inventory\DSC_0080 RIGHT LANE MUST TURN RIGHT.JPG
82	Photos Inventory\DSC_0082 STOP.JPG
84	Photos Inventory\DSC_0084 TOW-AWAY ZONE.JPG
86	Photos Inventory\DSC_0086 STOP.JPG
88	Photos Inventory\DSC_0088 STOP.JPG
90	Photos Inventory\DSC_0090 OFFICIAL USE ONLY.JPG
92	Photos Inventory\DSC_0092 STOP.JPG
94	Photos Inventory\DSC_0094 Signal, AHEAD.JPG
96	Photos Inventory\DSC_0096 Type 3 OM3 (Right).JPG
98	Photos Inventory\DSC_0098 Type 3 OM3 (Left).JPG
100	Photos Inventory\DSC_0100 STOP.JPG

Latitude	Longitude	LT/RT Media	Sign	Message	No. of Posts	Additional Information	Age	Condition	Recommendations
28.278961	-81.332757	RT	Street Sign	Private	1	Anspach (church entrance)	N/A	Poor	To Remain
28.278416	-81.329857	RT	Regulatory	No Parking	1		08/08/19	Good	To Remain
28.278729	-81.330176	RT	Regulatory	No Parking	1		08/08/19	Good	To Remain
28.278507	-81.329638	RT	Regulatory	STOP	1		12/04/19	Good	Replace
28.278846	-81.229380	RT	Regulatory	Speed Limit	1		01/30/20	Good	Replace
28.278756	-81.328337	RT	School	School Crossing Ahead	1		10/??/19	Good	Replace
28.27923	-81.326971	RT	School	SCHOOL, SPEED LIMIT 20, WHEN FLASHING, SPEEDING FINES DOUBLED	1		08/??/19	Good	To Remain, Remove Speeding Fines Doubled Sign
28.279289	-81.326724	RT	Regulatory	School Crossing	1		08/??/19	Good	Replace
28.279009	-81.325550	RT	Regulatory	SPEED LIMIT 40, END SCHOOL ZONE	1		08/13/19	Good	Replace
28.279041	-81.322772	RT	Warning	Wildlife Crossing	1		05/07/19	Fair	Replace
28.279057	-81.321107	RT	Warning	Curve Right	1		01/18/05	Poor	Replace
28.279134	-81.320704	RT	Regulatory	SPEED LIMIT 35	1		01/30/20	Good	Replace
28.278794	-81.319483	RT	Warning	Hidden Driveway	1		10/29/08	Fair	Replace
28.273394	-81.321168	LT	Regulatory	Keep Right, Reclaimed water	1		N/A	Good	To Remain
28.279455	-81.321099	LT	Regulatory	SPEED LIMIT 30	1		12/??/04	Fair	To Remain
28.279434	-81.321104	LT	Informational	No Parking, Standing Anytime	1		N/A	Good	To Remain
28.279257	-81.321359	LT	Regulatory	STOP	1		N/A	Good	Replace
28.279133	-81.321572	LT	Regulatory	SPEED LIMIT 40	1		04/04/13	Good	Replace
28.279157	-81.324944	LT	Regulatory	No Parking	1		N/A	Good	To Remain
28.27921	-81.324850	LT	Warning/Regulatory	Roundabout/SPEED LIMIT 15	1		N/A	Good	To Remain
28.279561	-81.325343	LT	Warning	Ped Crossing	1		07/??/06	Good	To Remain
28.279368	-81.325382	LT	Informational	No Street Parking	1		N/A	Fair	To Remain
28.279000	-81.325250	LT	Regulatory	STOP	1		N/A	Poor	Replace

Photo Numb

Field Photos

- 103 [Photos Inventory\DSC_0103 Marker.JPG](#)
- 106 [Photos Inventory\DSC_0106 No Parking ANY TIME.JPG](#)
- 108 [Photos Inventory\DSC_0108 No Parking ANY TIME.JPG](#)
- 110 [Photos Inventory\DSC_0110 STOP, Street Names.JPG](#)
- 112 [Photos Inventory\DSC_0120 SPEED LIMIT 40, END SCHOOL ZONE.JPG](#)
- 114 [Photos Inventory\DSC_0114 School Crossing, AHEAD.JPG](#)
- 116 [Photos Inventory\DSC_0016 Keep Right, Type 1 OM1-3.JPG](#)
- 118 [Photos Inventory\DSC_0018 STOP, Right Turn ONLY.JPG](#)
- 120 [Photos Inventory\DSC_0120 SPEED LIMIT 40, END SCHOOL ZONE.JPG](#)
- 122 [Photos Inventory\DSC_0122 CAUTION WILDLIFE CROSSING.JPG](#)
- 124 [Photos Inventory\DSC_0124 Curve Right.JPG](#)
- 126 [Photos Inventory\DSC_0126 SPEED LIMIT 35.JPG](#)
- 128 [Photos Inventory\DSC_0128 HIDDEN DRIVEWAY.JPG](#)
- 143 [Photos Inventory\DSC_0143 Keep Right, RECLAIMED WATER USED FOR IRRIGATION.JPG](#)
- 145 [Photos Inventory\DSC_0145 SPEED LIMIT 30.JPG](#)
- 147 [Photos Inventory\DSC_0147 ABSOLUTELY NO PARKING/STANDING STOPPING AT ANYTIME.JPG](#)
- 149 [Photos Inventory\DSC_0149 STOP.JPG](#)
- 151 [Photos Inventory\DSC_0151 SPEED LIMIT 40.JPG](#)
- 154 [Photos Inventory\DSC_0154 NO PARKING ANYTIME.JPG](#)
- 156 [Photos Inventory\DSC_0156 Circular Intersection, SPEED LIMIT 15, NO SOLICITING.JPG](#)
- 158 [Photos Inventory\DSC_0158 Pedestrian Crossing, W16-7P, RECLAIMED WATER USED FOR IRRIGATION.JPG](#)
- 160 [Photos Inventory\DSC_0160 NO STREET PARKING ANYTIME.JPG](#)
- 162 [Photos Inventory\DSC_0162 STOP, Street Names.JPG](#)

Latitude	Longitude	LT/RT Media	Sign	Message	No. of Posts	Additional Information	Age	Condition	Recommendations
28.278972	-81.325786	LT	Warning	School Crossing Ahead	1		12/21/15	Good	Replace
28.279077	-81.326154	LT	Informational	Emergency Vehicles Only	1		N/A	Fair	Replace
28.279265	-81.326085	LT	Informational	Emergency Vehicles Only	1		N/A	Fair	Replace
28.279075	-81.326301	LT	Warning	SCHOOL, SPEED LIMIT 20, WHEN FLASHING, SPEEDING FINES DOUBLED	1		02/23/17	Good	To Remain, Remove Speeding Fines Doubled Sign
28.279300	-81.326824	LT	Warning	Ped Crossing	1		09/25/12	Fair	Replace
28.279372	-81.327738	LT	Regulatory	SPEED LIMIT 40, End School Zone	1		03/13/15	Good	Replace
28.279118	-81.332963	LT	Regulatory	Keep Right, Reflector	1		06/22/18	Fair	To Remain
28.27916	-81.332648	LT	Informational	TOW-AWAY Zone	1		N/A	Poor	To Remain
28.278995	-81.332744	LT	Informational	Street Name	1		N/A	Poor	To Remain
28.279116	-81.333782	LT	Regulatory	SPEED LIMIT 40	1		01/30/20	Good	Replace
28.279931	-81.335405	LT	Warning	Object Warning	1		07/??/02	Fair	Replace
28.279363	-81.335472	LT	Warning	Object Warning	1		07/??/02	Fair	Replace
28.27889	-81.337794	LT	Regulatory	No Left Turn	1		N/A	Fair	Remove
28.27894	-81.33907	LT	Regulatory	STOP	1	Driveway	N/A	Poor	Replace
28.27893	-81.34126	LT	Regulatory	STOP	1		N/A	Fair	Replace
28.27888	-81.34134	LT	Informational	Bike Lane	1	Begin	08/??/19	Good	To Remain
28.27896	-81.34385	LT	Warning	Ped Crossing	1		08/??/19	Good	To Remain
28.27891	-81.34385	LT	Regulatory	YIELD	1		08/??/19	Good	To Remain
28.27887	-81.34460	LT	Informational	BIKE LANE ENDS	1		08/??/19	Good	To Remain, If Still Applicable
28.27885	-81.34476	LT	Regulatory	SPEEDLIMIT 45	1		08/??/19	Good	To Remain

Photo Numb	Field Photos
164	Photos Inventory\DSC_0164 School Crossing, AHEAD.JPG
166	Photos Inventory\DSC_0166 EMERGENCY VEHICLES ONLY.JPG
168	Photos Inventory\DSC_0168 EMERGENCY VEHICLES ONLY.JPG
170	Photos Inventory\DSC_0170 SCHOOL, SPEED LIMIT 20 WHEN FLASHING, SPEEDED FINES
172	Photos Inventory\DSC_0172 School Crossing, W16-7P.JPG
174	Photos Inventory\DSC_0174 SPEED LIMIT 40, END SCHOOL ZONE.JPG
177	Photos Inventory\DSC_0177 Keep Right, Type 1 OM1-1.JPG
179	Photos Inventory\DSC_0179 TOW AWAY ZONE.JPG
183	Photos Inventory\DSC_0183 Street Names.JPG
185	Photos Inventory\DSC_0185 SPEED LIMIT 40.JPG
187	Photos Inventory\DSC_0187 Type 3 OM3 (Right).JPG
189	Photos Inventory\DSC_0189 Type 3 OM3 (Left).JPG
191	Photos Inventory\DSC_0191 NO LEFT TURN.JPG
193	Photos Inventory\DSC_0193 STOP.JPG
196	Photos Inventory\DSC_0196 STOP, Street Names.JPG
198	Photos Inventory\DSC_0198 BIKE LANE, BEGIN.JPG
209	Photos Inventory\DSC_0209 Pedestrian Crossing, W16-7P.JPG
211	Photos Inventory\DSC_0211 YIELD.JPG
213	Photos Inventory\DSC_0213 BIKE LANE ENDS.JPG
215	Photos Inventory\DSC_0215 SPEED LIMIT 45.JPG

Latitude	Longitude	LT/RT Media	Sign	Message	No. of Posts	Additional Information	Age	Condition	Recommendations
28.2789	-81.34518	LT	Regulatory, Warning	STOP, Ped Crossing	1	Driveway	N/A	Fair	Replace
28.27894	-81.34653	LT	Informational	TOW-AWAY Zone	1	Driveway	N/A	Poor	To Remain
28.27888	-81.34669	LT	Regulatory	STOP	1		N/A	Fair	Replace
28.27893	-81.34752	LT	Informational	TOW-AWAY Zone	1	Driveway	N/A	Poor	To Remain
28.27887	-81.34775	LT	Regulatory	STOP	1		N/A	Fair	Replace
28.27884	-81.35156	LT	Regulatory	STOP	1		03/17/11	Fair	Replace
28.27878	-81.35176	LT	Informational	School Drive	1		01/06/09	Poor	Remove
28.27885	-81.35340	LT	Regulatory	Keep Right	1	Driveway	N/A	Poor	To Remain
28.27875	-81.35917	LT	Regulatory	SPEED LIMIT 35	1		03/??/19	Poor	Replace
28.2788	-81.35481	LT	Regulatory	STOP	1	Driveway	N/A	Poor	Replace
28.27882	-81.3550	LT	Regulatory	STOP	1		N/A	Fair	Replace
28.27881	-81.35760	LT	Regulatory	STOP	1		10/??/11	Poor	Remove
28.27881	-81.35886	LT	Regulatory	Stop Sign	1	Driveway	N/A	Fair	Replace
28.27881	-81.36004	LT	Regulatory	STOP	1		N/A	Fair	Replace
28.27871	-81.36155	LT	Warning	Signal Ahead	1		08/09/11	Good	Replace
28.2787	-81.36195	LT	Regulatory	Lane Configuration	1	Left/Through - Right Only	03/26/19	Fair	Replace, if Still Applicable
28.27847	-81.36288	LT	Warning	Ped Crossing	1		05/22/19	Good	Replace

Photo Numb

Field Photos

- 217 [Photos Inventory\DSC_0217 STOP, Pedestrian Crossing.JPG](#)
- 221 [Photos Inventory\DSC_0221 TOW AWAY ZONE.JPG](#)
- 223 [Photos Inventory\DSC_0223 STOP.JPG](#)
- 229 [Photos Inventory\DSC_0229 TOW AWAY ZONE.JPG](#)
- 231 [Photos Inventory\DSC_0231 STOP.JPG](#)
- 238 [Photos Inventory\DSC_0238 STOP, Street Names.JPG](#)
- 242 [Photos Inventory\DSC_0242 SCHOOL DRIVE.JPG](#)
- 246 [Photos Inventory\DSC_0246 Keep Right.JPG](#)
- 250 [Photos Inventory\DSC_0250 SPEED LIMIT 35.JPG](#)
- 252 [Photos Inventory\DSC_0252 STOP.JPG](#)
- 256 [Photos Inventory\DSC_0256 STOP.JPG](#)
- 269 [Photos Inventory\DSC_0269 STOP, Street Names.JPG](#)
- 278 [Photos Inventory\DSC_0278 STOP.JPG](#)
- 287 [Photos Inventory\DSC_0287 STOP.JPG](#)
- 291 [Photos Inventory\DSC_0291 Signal Ahead.JPG](#)
- 293 [Photos Inventory\DSC_0293 Optioan Movement Left, Right Turn ONLY.JPG](#)
- 295 [Photos Inventory\DSC_0295 Pedestrian Crossing, W16-7P.JPG](#)



APPENDIX B: EXISTING CONTAMINATION INFORMATION

TABLES

TABLE 1
SUMMARY OF LABORATORY TESTING RESULTS
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117

Stratum Number	Boring Number	Station	Offset (feet)	Approximate Sample Depth (feet)	Passing Sieve Number (%)					Moisture Content (%)	Organic Content (%)	Atterberg Limits		AASHTO Soil Classification
					10	40	60	100	200			LL	PI	
1	RB-10	19+00	48 LT	0.5	83	72	69	53	8	16	--	--	--	A-3
	RB-16	25+00	46 LT	2.5	100	99	96	73	8	24	--	--	--	A-3
	RB-40	49+00	12 RT	2.0	100	100	97	73	7	24	--	--	--	A-3
	RB-56	65+00	24 RT	1.0	100	100	97	74	9	21	--	--	--	A-3
	RB-74	85+00	36 LT	1.0	100	100	97	70	7	20	--	--	--	A-3
	RB-80	110+00	24 RT	0.5	100	99	97	71	4	6	--	--	--	A-3
2	RB-1	10+00	10 RT	1.5	92	88	85	68	11	13	--	--	--	A-2-4
	RB-2	11+00	10 LT	0.5	95	91	87	68	12	11	--	--	--	A-2-4
	RB-20	29+00	52 LT	2.0	86	81	76	58	12	19	--	--	--	A-2-4
	RB-35	44+00	48 LT	7.0	100	100	98	76	17	22	--	--	--	A-2-4
	RB-45	54+30	54 LT	3.0	100	99	96	73	19	31	5	--	--	A-2-4
	RB-54	63+00	24 RT	0.5	100	99	96	67	14	28	--	--	--	A-2-4
	RB-71	82+00	36 RT	0.5	99	97	92	67	11	15	--	--	--	A-2-4
3	RB-9	18+00	48 LT	3.0	100	100	99	84	30	18	--	30	16	A-2-6
	RB-10	19+00	48 LT	6.0	100	100	98	82	29	21	--	--	--	A-2-4

TABLE 2
CORROSION SERIES TEST RESULTS
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117

Boring Number	Station	Offset	Sample Depth (feet)	pH	Minimum Resistivity (ohm-cm)	Chlorides (ppm)	Sulfates (ppm)	Substructural Environmental Classification	
								Concrete	Steel
RB-5	14+00	10 RT	0-3	7.0	16,000	BD	BD	Slightly Aggressive	Moderately Aggressive
RB-8	17+00	12 RT	0-2	7.7	7,600	BD	BD	Slightly Aggressive	Slightly Aggressive
RB-49	58+00	40 LT	0-2	8.1	7,500	BD	BD	Slightly Aggressive	Slightly Aggressive
RB-76	106+00	24 RT	0-2	7.7	29,000	BD	BD	Slightly Aggressive	Slightly Aggressive

BD: below detection

TABLE 3
LIMEROCK BEARING RATIO (LBR) TESTING RESULTS
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117

Stratum Number	Location		Sample Depth (feet)	AASHTO Classification	Maximum LBR Value	-2% of Optimum	+2% of Optimum	Number of Values Equal To or Greater Than	% of Values Equal To or Greater Than
	Station	Offset (feet)							
1	14+00	10 RT	1.0 - 2.0	A-3	64	44	48	1	20
1	34+00	20 RT	1.0 - 2.0	A-3	62	42	52	2	40
2	54+30	44 LT	1.0 - 2.0	A-2-4	35	30	26	4	80
1	75+00	60 LT	1.0 - 2.0	A-3	59	8	37	3	60
1	108+30	30 RT	1.0 - 2.0	A-3	26	18	19	5	100

Sub-Average

28.4 36.4

Average

32.4

LBR Design Mean Value

32

LBR Design 90% Method

30

**TABLE 4
GROUNDWATER SUMMARY FOR PRELIMINARY POND SITES
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

Pond Number	Boring Number	Station	Offset (ft)	Ground Surface Elevation (ft)*	Encountered Groundwater Depth (ft)	Encountered Groundwater Elevation (ft)	Estimated Seasonal High Groundwater Depth (ft)	Estimated Seasonal High Groundwater Elevation (ft)	Estimated Seasonal Low Groundwater Depth (ft)	Estimated Seasonal Low Groundwater Elevation (ft)	Average Wet Season Water Elevation (ft)
3A(2)	PPB-1	48+00	150 RT	+57.1	0.8	+56.3	0.0	+57.1	2.0	+55.1	+56.5
	PPB-2	51+00	150 RT	+58.1	1.7	+56.4	1.0	+57.1	3.0	+55.1	
	PPB-2a	50+00	300 RT	+57.9	2.9	+55.0	1.0	+56.9	3.0	+54.9	
5(1)	PPB-3	81+75	150 LT	+69.9	2.3	+67.6	1.0	+68.9	6.0	+63.9	+67.0
	PPB-4	82+00	400 LT	+69.7	3.5	+66.2	1.0	+68.7	6.0	+63.7	
5(3)	PPB-15	85+00	120 LT	+70.6	3.5	+67.1	1.5	+69.1	6.0	+64.6	+67.5
	PPB-16	86+00	260 LT	+71.6	4.5	+67.1	2.5	+69.1	7.0	+64.6	
5(2)	PPB-5	87+50	645 LT	+71.1	GNE @ 5	GNE @ +66.1	2.5	+68.6	7.0	+64.1	+67.5
	PPB-6	88+00	450 LT	+71.8	GNE @ 5	GNE @ +66.8	3.0	+68.8	7.0	+64.8	
8A(1)	PPB-7	123+00	120 RT	+73.8	3.2	+70.6	2.5	+71.3	7.0	+66.8	+70.5
	PPB-8	123+00	350 RT	+74.3	3.2	+71.1	2.5	+71.8	7.0	+67.3	
8A(2)	PPB-9	129+50	150 RT	+73.0	4.0	+69.0	2.5	+70.5	7.0	+66.0	+69.5
	PPB-10	129+50	500 RT	+72.8	4.0	+68.8	2.5	+70.3	7.0	+65.8	
8B(1)	PPB-11	146+00	190 RT	+65.8	3.0	+62.8	1.0	+64.8	5.0	+60.8	+63.0
	PPB-12	147+50	500 RT	+64.4	3.0	+61.4	1.0	+63.4	5.0	+59.4	
8B(2)	PPB-13	151+00	260 RT	+62.1	3.0	+59.1	1.0	+61.1	5.0	+57.1	+60.5
	PPB-14	151+40	365 RT	+62.9	3.0	+59.9	1.0	+61.9	5.0	+57.9	

* based on survey provided by Southeastern Surveying
GNE: groundwater not encountered

TABLE 5
SUMMARY OF GROUNDWATER LEVELS
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO LAKESHORE BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117

Boring Number	Station	Offset (feet)	Date of Boring	Encountered Groundwater Depth (feet)	Estimated Normal Seasonal High Groundwater Depth (feet)
RB-1	10+00	10	8/20/2020	4.5	4.0
RB-2	11+00	-10	8/20/2020	4.5	4.2
RB-3	12+00	-45	8/20/2020	4.0	3.5
RB-4	13+00	8	8/21/2020	2.5	2.5
RB-5	14+00	10	8/25/2020	4.2	2.5
RB-6	15+00	12	8/21/2020	3.0	2.5
RB-7	16+00	-48	8/20/2020	3.6	2.5
RB-8	17+00	12	8/21/2020	1.5	1.5
RB-9	18+00	-48	8/20/2020	GNE	2.5
RB-10	19+00	-48	8/25/2020	4.1	3.0
RB-11	20+00	12	8/21/2020	2.0	2.0
RB-12	21+00	-54	8/20/2020	4.3	2.5
RB-13	22+00	12	8/21/2020	3.5	3.0
RB-14	23+00	-46	8/25/2020	4.0	3.5
RB-15	24+00	16	8/21/2020	0.2	0.0
RB-16	25+00	-46	8/20/2020	4.0	3.5
RB-17	26+00	20	8/24/2020	4.0	3.5
RB-18	27+00	-52	8/20/2020	GNE	4.0
RB-19	28+25	30	8/25/2020	4.1	3.5
RB-20	29+00	-52	8/20/2020	4.0	3.5
RB-21	30+00	20	8/21/2020	3.1	3.0
RB-22	31+00	-46	8/20/2020	4.5	3.8
RB-23	32+00	30	8/21/2020	4.0	3.5
RB-24	33+00	-42	8/20/2020	3.8	3.5
RB-25	34+00	20	8/21/2020	2.8	2.3
RB-26	35+00	-42	8/25/2020	4.0	3.5
RB-27	36+00	30	8/21/2020	2.8	2.5
RB-28	37+00	-36	8/20/2020	4.0	3.5
RB-29	38+00	20	8/21/2020	3.0	2.5
RB-30	39+00	-36	8/25/2020	4.3	3.8
RB-31	40+00	30	8/21/2020	2.8	2.5
RB-32	41+00	20	8/24/2020	3.7	3.2
RB-33	42+00	-48	8/19/2020	4.0	3.5
RB-34	43+00	30	8/21/2020	3.0	3.0
RB-35	44+00	-48	8/25/2020	4.5	3.8
RB-36	45+00	12	8/21/2020	3.8	2.5
RB-37	46+00	-36	8/19/2020	3.6	3.1
RB-38	47+00	20	8/21/2020	0.8	0.5
RB-39	48+00	-36	8/19/2020	3.6	3.1
RB-40	49+00	12	8/24/2020	3.8	3.5
RB-41	50+00	-36	8/19/2020	3.6	3.1
RB-42	51+00	12	8/21/2020	2.9	2.4
RB-43	52+00	-36	8/19/2020	4.0	3.5

TABLE 5
SUMMARY OF GROUNDWATER LEVELS
PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO LAKESHORE BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117

Boring Number	Station	Offset (feet)	Date of Boring	Encountered Groundwater Depth (feet)	Estimated Normal Seasonal High Groundwater Depth (feet)
RB-44	53+00	12	8/21/2020	4.4	3.9
RB-45	54+30	-44	9/18/2020	5.0	4.0
RB-46	55+00	12	8/21/2020	3.0	2.5
RB-47	56+00	-40	9/19/2020	4.0	3.5
RB-48	57+00	18	8/21/2020	3.7	3.2
RB-49	58+00	-40	8/19/2020	4.0	3.5
RB-50	59+00	20	9/18/2020	3.5	3.0
RB-51	60+20	-48	8/21/2020	4.2	3.7
RB-52	61+00	24	8/21/2020	3.7	2.0
RB-53	62+00	-40	8/19/2020	2.5	2.5
RB-54	63+00	24	8/21/2020	3.0	2.5
RB-55	64+00	-68	9/18/2020	4.5	3.5
RB-56	65+00	24	8/24/2020	4.0	3.0
RB-57	66+00	-42	8/19/2020	4.0	4.0
RB-58	67+00	30	8/24/2020	4.0	3.5
RB-59	68+00	-40	8/24/2020	4.0	4.0
RB-60	69+00	36	9/18/2020	5.0	4.5
RB-61	70+00	-48	8/19/2020	4.2	4.0
RB-62	71+00	40	8/24/2020	5.2	4.0
RB-63	72+00	40	8/24/2020	4.0	3.5
RB-64	75+00	-60	9/18/2020	5.0	4.5
RB-65	76+00	30	9/18/2020	3.5	3.0
RB-66	77+00	-60	8/18/2020	4.4	3.9
RB-67	78+00	36	8/18/2020	3.6	3.1
RB-68	79+00	-54	9/18/2020	5.0	4.5
RB-69	80+00	36	8/18/2020	3.0	2.5
RB-70	81+00	-40	8/18/2020	4.2	3.7
RB-71	82+00	36	8/18/2020	4.0	3.5
RB-72	83+00	-36	8/18/2020	4.0	2.5
RB-73	85+00	40	9/18/2020	4.0	3.5
RB-74	85+00	-36	8/18/2020	4.0	3.5
RB-75	105+00	-36	8/18/2020	4.0	3.5
RB-76	106+00	24	8/19/2020	4.0	3.5
RB-77	107+00	-36	8/18/2020	4.6	4.1
RB-78	108+30	30	9/18/2020	4.0	3.5
RB-79	109+00	-48	8/18/2020	4.0	3.5
RB-80	110+00	24	8/19/2020	4.0	3.5
RB-81	111+00	-40	8/18/2020	4.0	3.5
RB-82	112+00	60	9/18/2020	4.0	3.5
RB-83	113+00	-30	8/18/2020	4.0	3.5

GNE = Groundwater not encountered to boring termination depth.

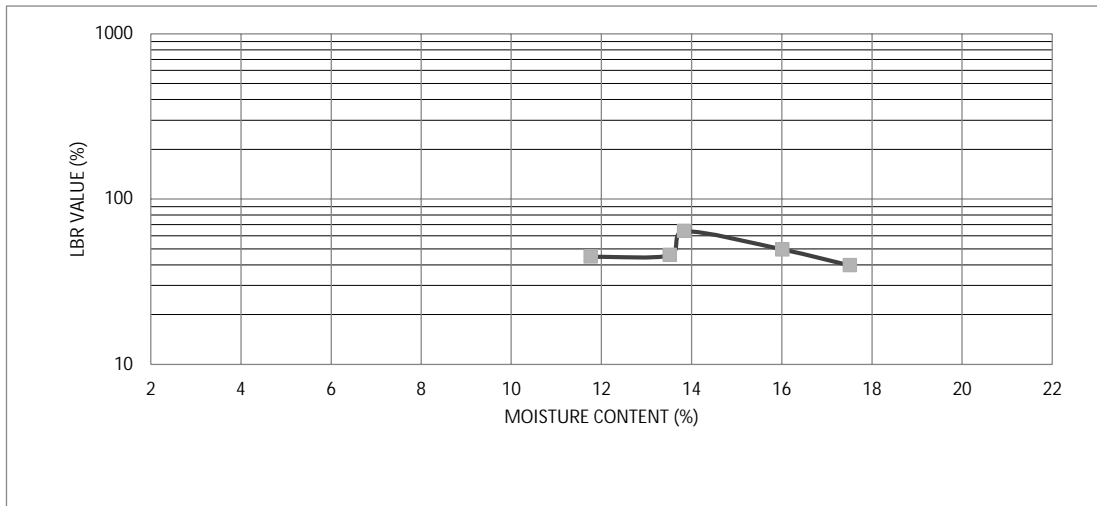
LBR CURVES

**LIMEROCK BEARING RATIO TEST RESULTS
(FM5-515)**

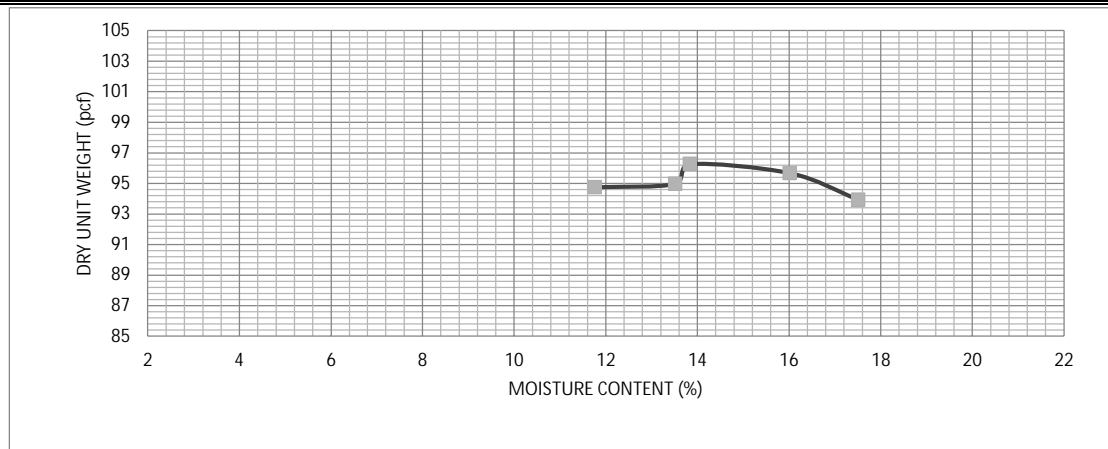
LAB ID: L-13428
 SAMPLE NO.: N/A
 TESTED BY: D. Lazzatti
 DATE TESTED: September 9, 2020

PROJECT: Partin Settlement Rd.
 PROJECT NO: H1205117
 %<#4: 100.0%
 WASH 200: 4.2%

SAMPLE LOCATION: RB-5.
 SOIL DESCRIPTION: Gray Fine Sand



PROJECT LBR REQUIREMENT: **N/A** LBR VALUE: **64**



OPT MOISTURE: **13.8**

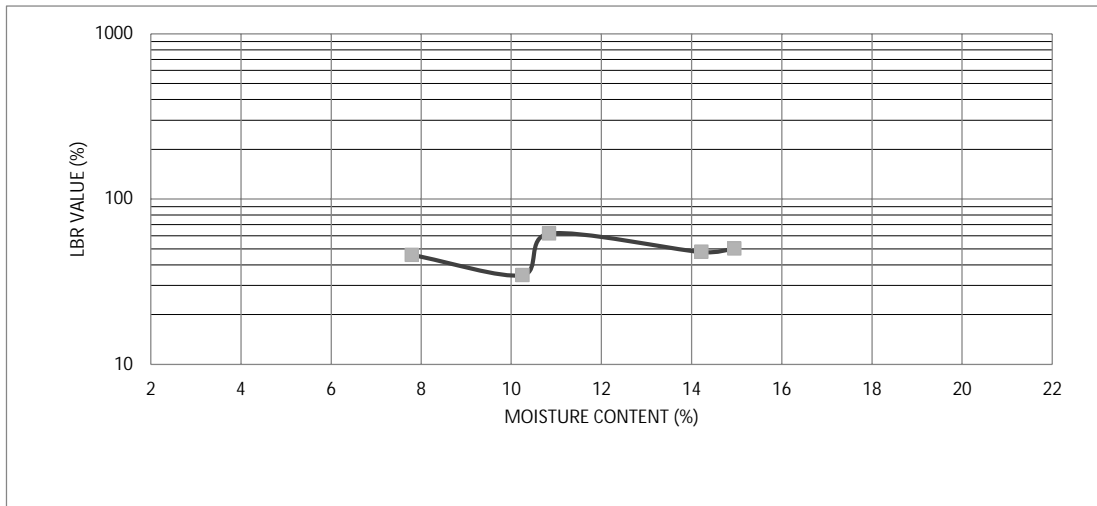
MAX DENSITY: **96.3**

**LIMEROCK BEARING RATIO TEST RESULTS
(FM5-515)**

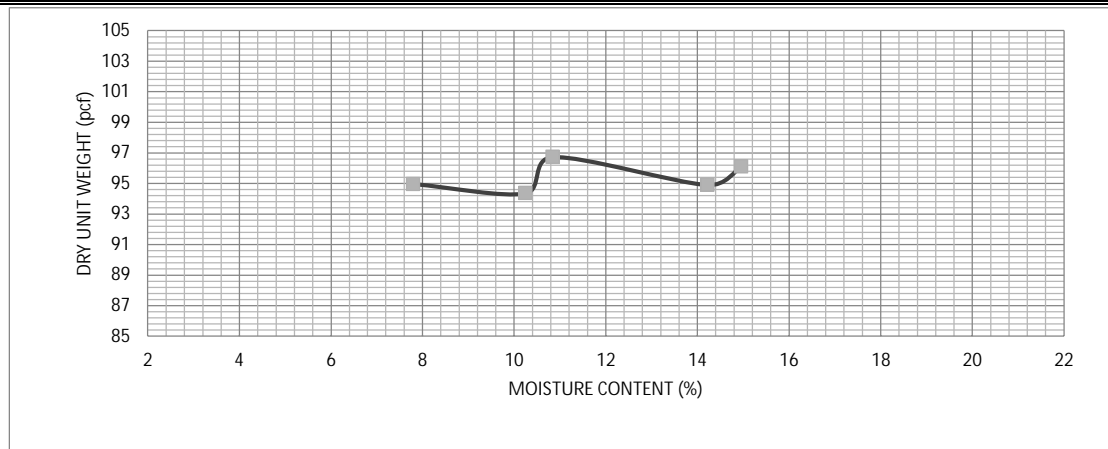
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 SAMPLE NO.: N/A
 TESTED BY: D. Lazzatti
 DATE TESTED: September 9, 2020

PROJECT: Partin Settlement Rd.
 PROJECT NO: H1205117
 %<#4: 100.0%
 WASH 200: 4.2%

SAMPLE LOCATION: RB-25.
 SOIL DESCRIPTION: Gray Fine Sand



PROJECT LBR REQUIREMENT: **N/A** LBR VALUE: **62**



OPT MOISTURE: **10.8**

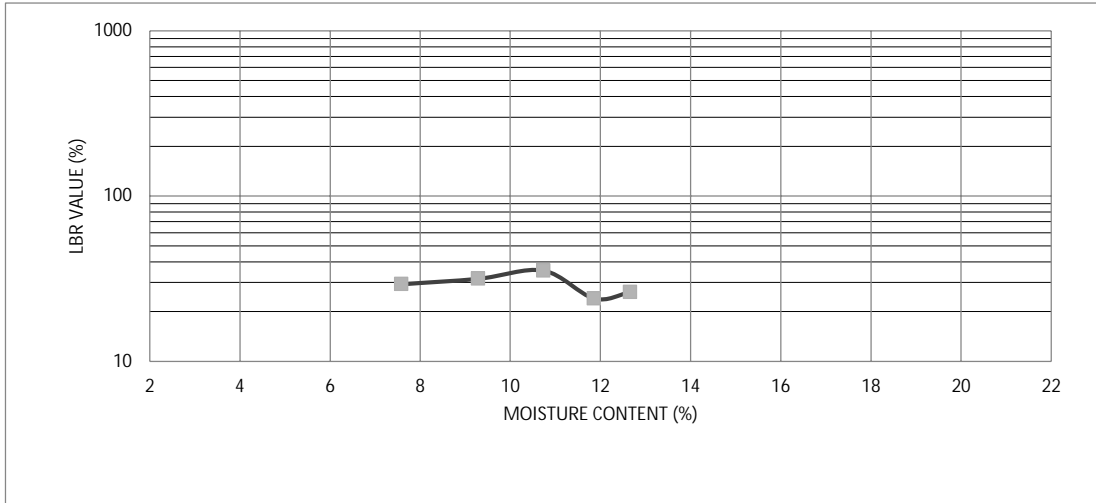
MAX DENSITY: **96.7**

**LIMEROCK BEARING RATIO TEST RESULTS
(FM5-515)**

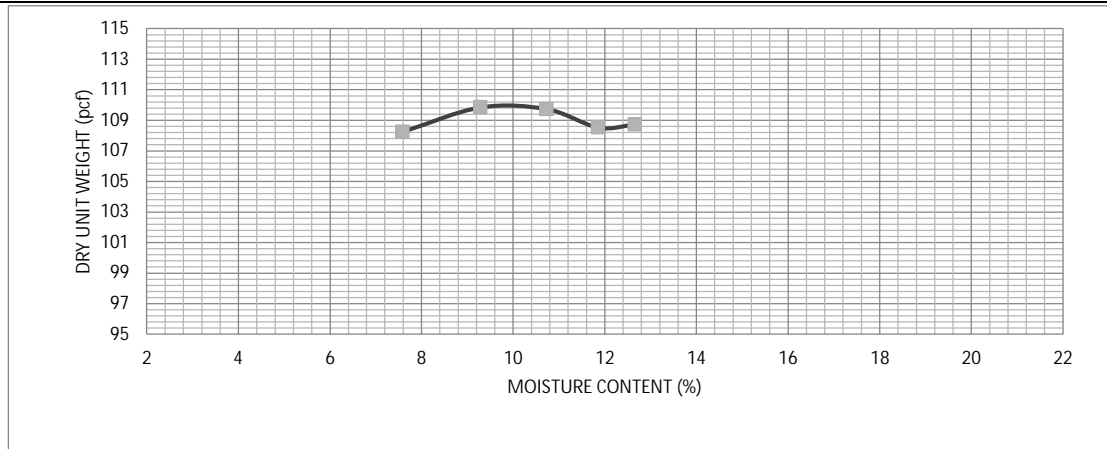
LAB ID: L-13430
 SAMPLE NO.: N/A
 TESTED BY: D. Lazzatti
 DATE TESTED: September 9, 2020

PROJECT: Partin Settlement Rd.
 PROJECT NO: H1205117
 %<#4: 96.3%
 WASH 200: 11.4%

SAMPLE LOCATION: RB-45.
 SOIL DESCRIPTION: Brown Fine Sand with Silt and Trace Rock



PROJECT LBR REQUIREMENT: **N/A** LBR VALUE: **35**



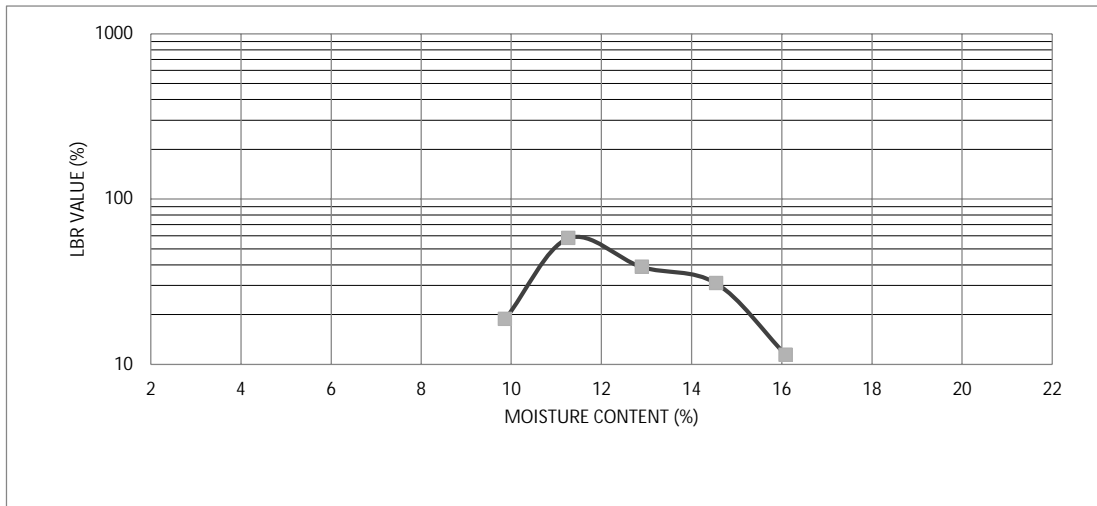
OPT MOISTURE: **9.9** MAX DENSITY: **110.0**

**LIMEROCK BEARING RATIO TEST RESULTS
(FM5-515)**

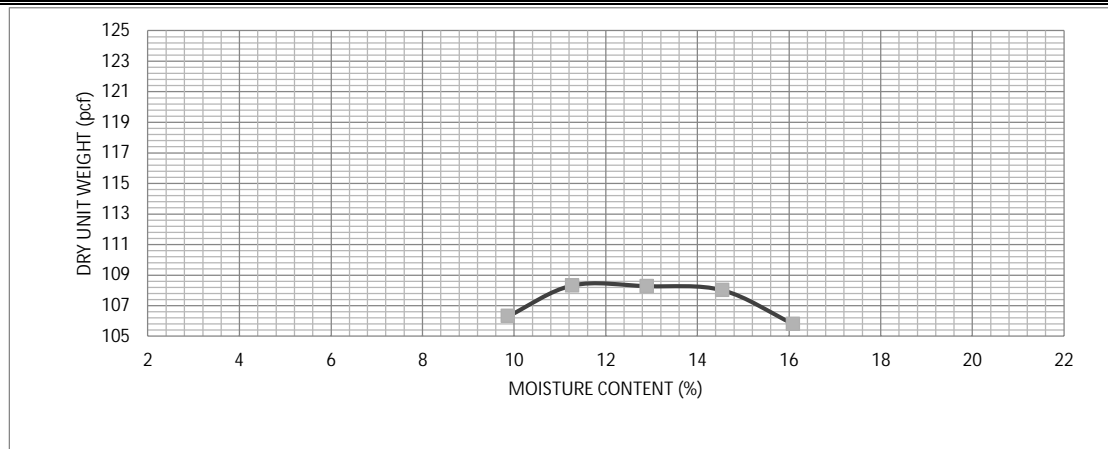
LAB ID: L-13431
 SAMPLE NO.: N/A
 TESTED BY: D. Lazzatti
 DATE TESTED: September 11, 2020

PROJECT: Partin Settlement Rd.
 PROJECT NO: H1205117
 %<#4: 92.4%
 WASH 200: 8.7%

SAMPLE LOCATION: RB-64.
 SOIL DESCRIPTION: Brown Fine Sand with Silt and Rock



PROJECT LBR REQUIREMENT: **N/A** LBR VALUE: **59**



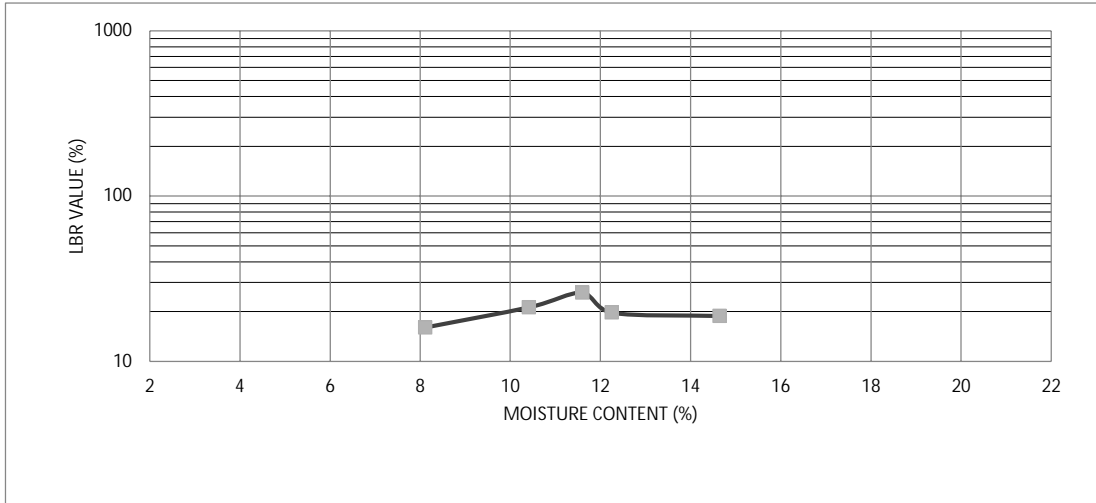
OPT MOISTURE: **11.9** MAX DENSITY: **108.5**

**LIMEROCK BEARING RATIO TEST RESULTS
(FM5-515)**

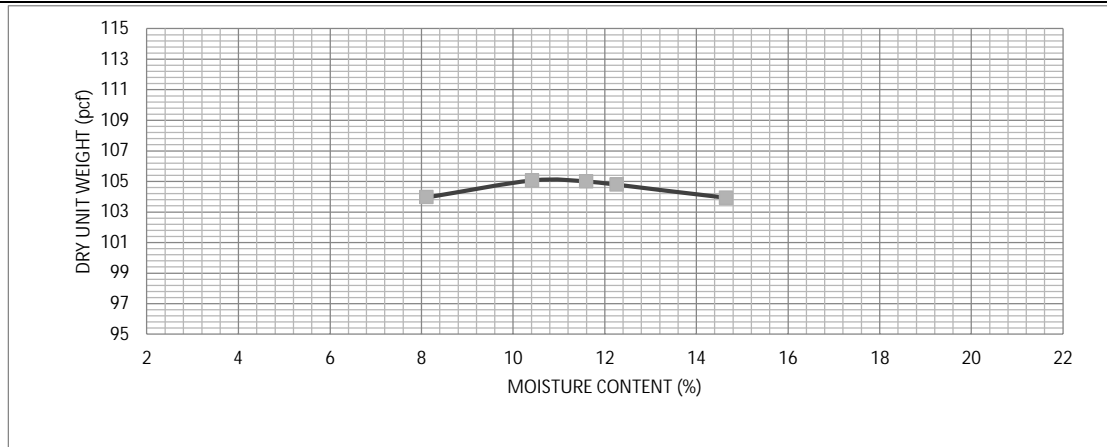
LAB ID: L-13432
 SAMPLE NO.: N/A
 TESTED BY: D. Lazzatti
 DATE TESTED: September 11, 2020

PROJECT: Partin Settlement Rd.
 PROJECT NO: H1205117
 %<#4: 100.0%
 WASH 200: 7.5%

SAMPLE LOCATION: RB-78.
 SOIL DESCRIPTION: Gray Fine Sand with Silt

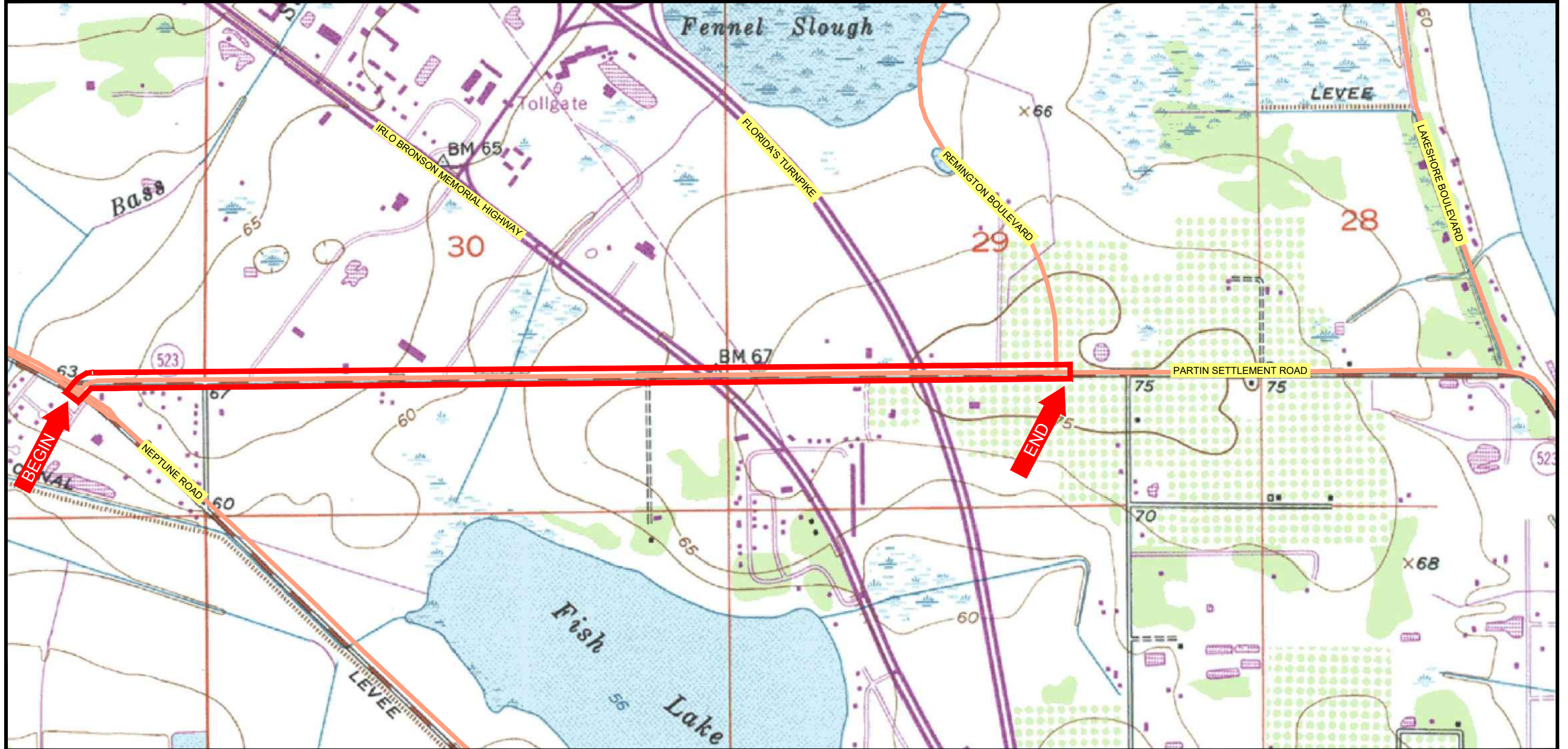


PROJECT LBR REQUIREMENT: **N/A** LBR VALUE: **26**

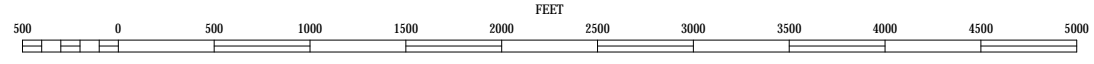


OPT MOISTURE: **10.9** MAX DENSITY: **105.2**

EXHIBITS



SCALE 1"=1000'



ST CLOUD NORTH, FLORIDA
 ISSUED: 1987
 7.5 MINUTE SERIES (QUADRANGLE)



Project Mngr:	ENJ	Project No.:	H1205117
Drawn By:	AS	Scale:	AS SHOWN
Checked By:	ENJ	File No.:	H1205117
Approved By:	ENJ	Date:	9-8-20

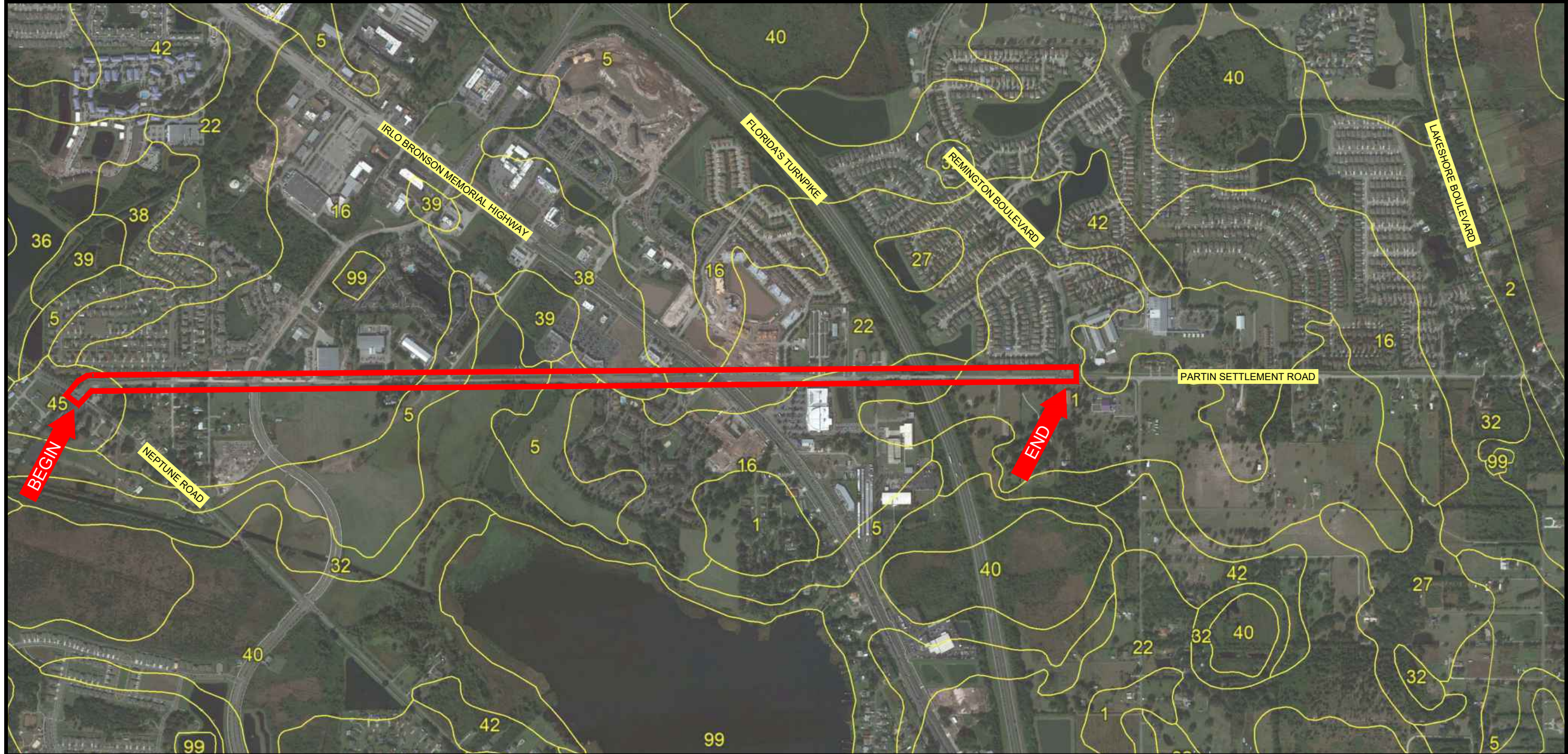
Terracon
 Consulting Engineers and Scientists
 1675 LEE ROAD WINTER PARK, FLORIDA 32789
 PH. (407) 740-6110 FAX. (407) 740-6112

TOPOGRAPHIC VICINITY MAP
 GEOTECHNICAL ENGINEERING REPORT
 PARTIN SETTLEMENT ROAD
 FROM NEPTUNE ROAD TO REMINGTON BOULEVARD
 KISSIMMEE, OSCEOLA COUNTY, FLORIDA

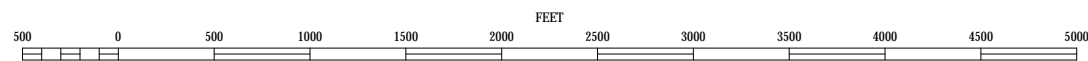
EXHIBIT

Sep09_2020-8:51am N:\Projects\2020\H1205117\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cod\H1205117_Quad_Map.dwg

Oct08, 2020-3:42pm N:\Projects\2020\H1205117\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cad\Roadway-Ponds\H1205117_Soil_Map.dwg



SCALE 1"=1000'



U.S.D.A. SOIL SURVEY FOR OSCEOLA COUNTY, FLORIDA



SOIL LEGEND	
1	ADAMSVILLE SAND, 0 TO 2 PERCENT SLOPES
5	BASINGER FINE SAND, 0 TO 2 PERCENT SLOPES
16	IMMOKALEE FINE SAND, 0 TO 2 PERCENT SLOPES
22	MYAKKA FINE SAND, 0 TO 2 PERCENT SLOPES
32	PLACID FINE SAND, FREQUENTLY PONDED, 0 TO 1 PERCENT SLOPES
38	RIVIERA FINE SAND, 0 TO 2 PERCENT SLOPES
45	WABASSO FINE SAND, 0 TO 2 PERCENT SLOPES

Project Mngr:	ENJ	Project No.	H1205117
Drawn By:	AS	Scale:	AS SHOWN
Checked By:	ENJ	File No.	H1205117
Approved By:	ENJ	Date:	9-8-20

Terracon
 Consulting Engineers and Scientists
 1675 LEE ROAD WINTER PARK, FLORIDA 32789
 PH. (407) 740-6110 FAX. (407) 740-6112

U.S.D.A SOILS MAP
GEOTECHNICAL ENGINEERING REPORT
PARTIN SETTLEMENT ROAD
 FROM NEPTUNE ROAD TO REMINGTON BOULEVARD
 KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH

DATE OF SURVEY: AUGUST, SEPTEMBER 2020
SURVEY MADE BY: TERRACON CONSULTANTS, INC.
SUBMITTED BY: ELIAS N. JAMMAL, P.E.

FINANCIAL PROJECT NO.: -

DISTRICT: -
ROAD NO.: PARTIN SETTLEMENT
COUNTY: OSCEOLA

CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

SURVEY BEGINS STA.: 10+00 SURVEY ENDS STA.: 150+00

REFERENCE: PARTIN SETTLEMENT RD

STRATUM NO.	ORGANIC CONTENT		MOISTURE CONTENT		SIEVE ANALYSIS RESULTS % PASS					ATTERBERG LIMITS (%)			MATERIAL DESCRIPTION	CORROSION TEST RESULTS					
	NO. OF TESTS	% ORGANIC	NO. OF TESTS	MOISTURE CONTENT	NO. OF TESTS	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT		PLASTIC INDEX	AASHTO GROUP	NO. OF TESTS	RESISTIVITY ohm-cm	CHLORIDES ppm	SULFATES ppm
1	-	-	6	6-24	6	83-100	72-100	69-97	53-74	4-9	-	-	-	A-3	2	16000-29000	BD	BD	7.0-7.7
2	1	5	7	11-31	7	86-100	81-100	76-98	58-76	11-19	-	-	-	A-2-4	2	7500-7600	BD	BD	7.7-8.1
3	-	-	2	18-21	2	100	100	98-99	82-84	29-30	1	30	16	A-2-6	-	-	-	-	-


EMBANKMENT AND SUBGRADE MATERIAL

STRATA BOUNDARIES ARE APPROXIMATE MAKE FINAL CHECK AFTER GRADING

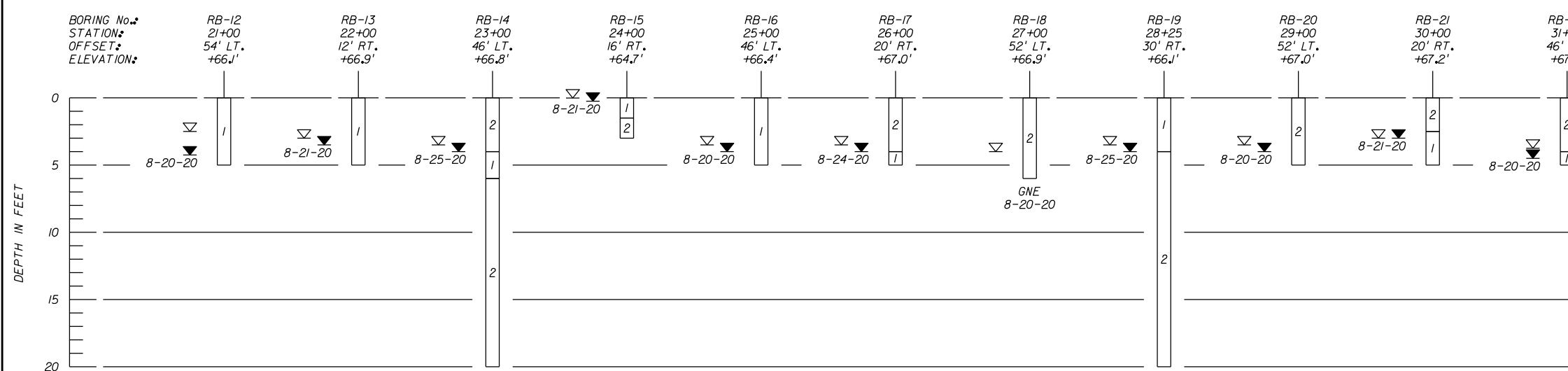
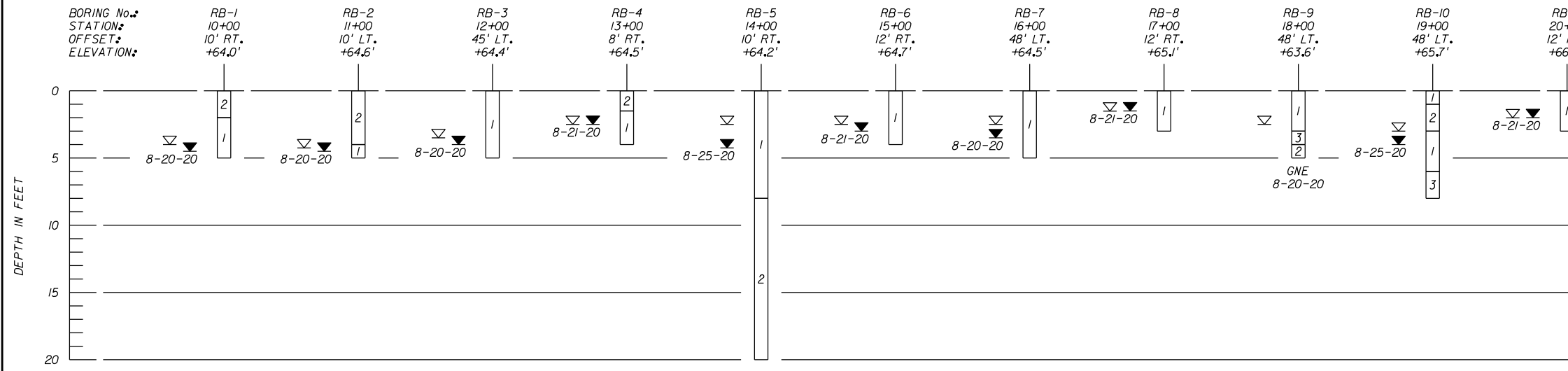
▼ = WATER TABLE ENCOUNTERED
Σ = SEASONAL HIGH WATER TABLE
GNE = GROUNDWATER NOT ENCOUNTERED

NOTES:

- 1) SOIL BOUNDARIES ARE APPROXIMATE AND REPRESENT SOIL STRATA AT EACH BORING LOCATION ONLY.
- 2) SOIL ANALYSIS INCLUDES DATA FROM ROADWAY AND STORMWATER RETENTION AREAS ONLY.
- 3) THE SYMBOL "-" REPRESENTS AN UNMEASURED PARAMETER.
- 4) THE MATERIAL FROM STRATUM NUMBER 1 IS SELECT MATERIAL AND APPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH STANDARD PLANS INDEX 120-001.
- 5) THE MATERIAL FROM STRATUM NUMBER 2 IS SELECT MATERIAL AND APPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH STANDARD PLANS INDEX 120-001. HOWEVER, THIS MATERIAL IS LIKELY TO RETAIN EXCESS MOISTURE AND BE DIFFICULT TO DRY AND COMPACT. IT SHOULD BE USED IN THE EMBANKMENT ABOVE THE WATER LEVEL EXISTING AT THE TIME OF CONSTRUCTION.
- 6) THE MATERIAL FROM STRATUM NUMBER 3 IS PLASTIC MATERIAL AND SHALL BE REMOVED IN ACCORDANCE WITH STANDARD PLANS INDEX 120-002. IT MAY BE PLACED ABOVE THE EXISTING WATER LEVEL (AT THE TIME OF CONSTRUCTION) TO WITHIN 4 FEET OF THE PROPOSED BASE. IT SHOULD BE PLACED UNIFORMLY IN THE LOWER PORTION OF THE EMBANKMENT FOR SOME DISTANCE ALONG THE PROJECT RATHER THAN FULL DEPTH FOR SHORTER DISTANCES.

REVISIONS				ELIAS N. JAMMAL, P.E. P.E. LICENSE NUMBER 60126 TERRACON 1675 LEE ROAD WINTER PARK, FLORIDA 32789 CERTIFICATE OF AUTHORIZATION No. 8830	PARTIN SETTLEMENT ROAD		ROADWAY SOIL SURVEY	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION					

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



LEGEND

- 1 LIGHT GRAY TO DARK BROWN FINE SAND TO FINE SAND WITH SILT (A-3)
- 2 GRAY TO DARK BROWN SILTY FINE SAND WITH OCCASIONAL TRACE ORGANICS (A-2-4)
- 3 BROWN CLAYEY FINE SAND (A-2-6)
- (A-3) A.A.S.H.T.O. SOIL CLASSIFICATION GROUP SYMBOL AS DETERMINED BY VISUAL EXAMINATION
- ▼ ENCOUNTERED GROUNDWATER LEVEL WITH DATE OF READING
- ▽ ESTIMATED NORMAL SEASONAL HIGH GROUNDWATER TABLE
- GNE GROUNDWATER NOT ENCOUNTERED TO THE DEPTH OF BORING

NOTES:

1. STATION AND OFFSETS REFERENCE THE CENTERLINE OF PARTIN SETTLEMENT ROAD.
2. GROUND SURFACE ELEVATION AT BORING LOCATIONS ARE BASED ON SURVEY PROVIDED BY SOUTHEASTERN SURVEYING.

REVISIONS

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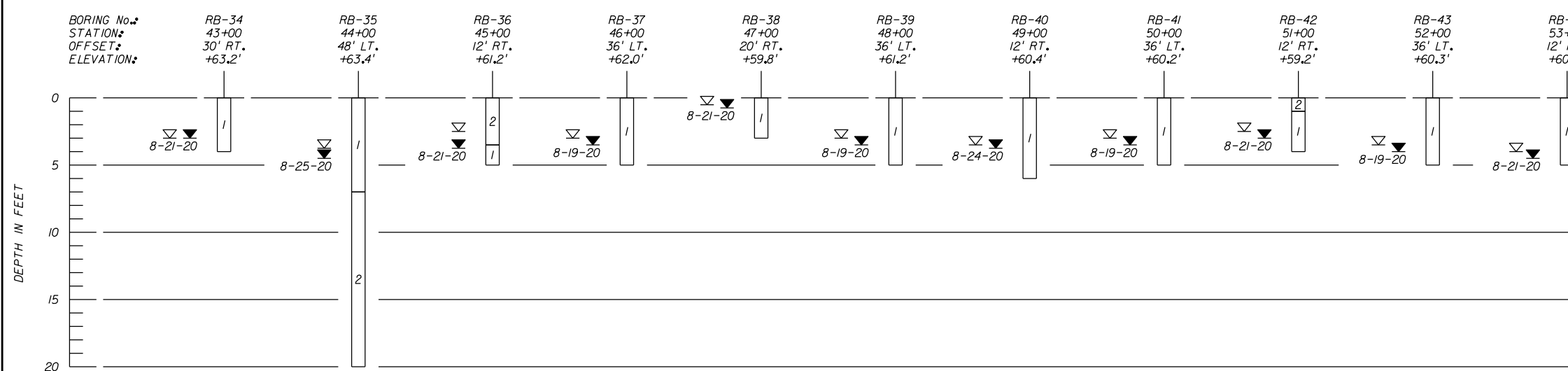
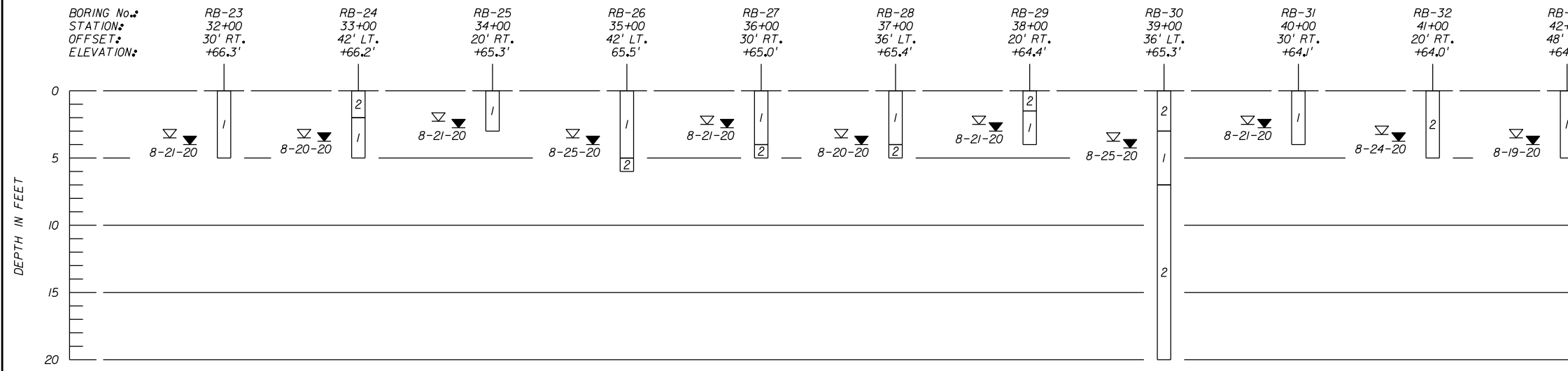
PARTIN SETTLEMENT ROAD



REPORT OF AUGER BORINGS FOR ROADWAY AND PONDS

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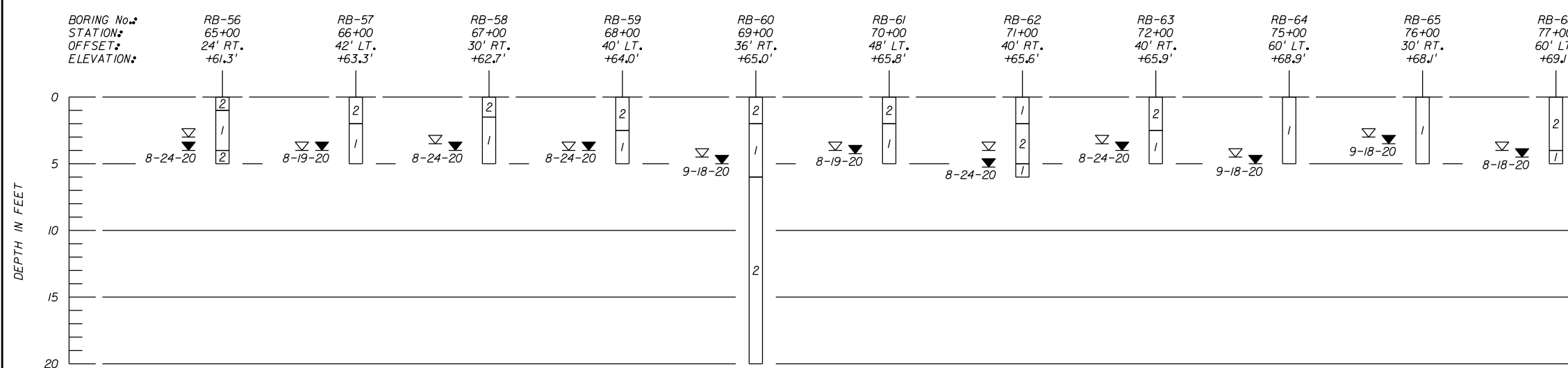
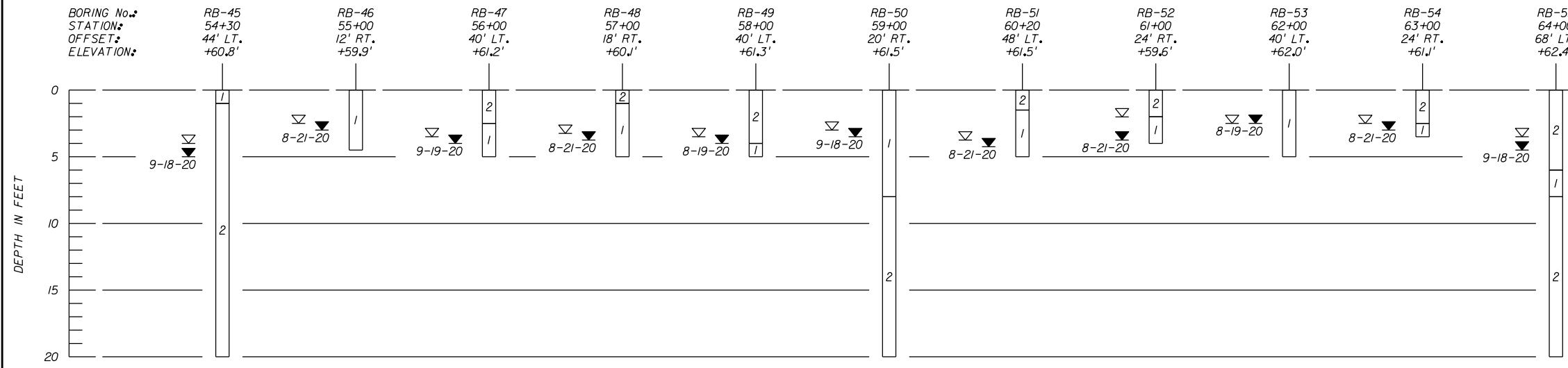
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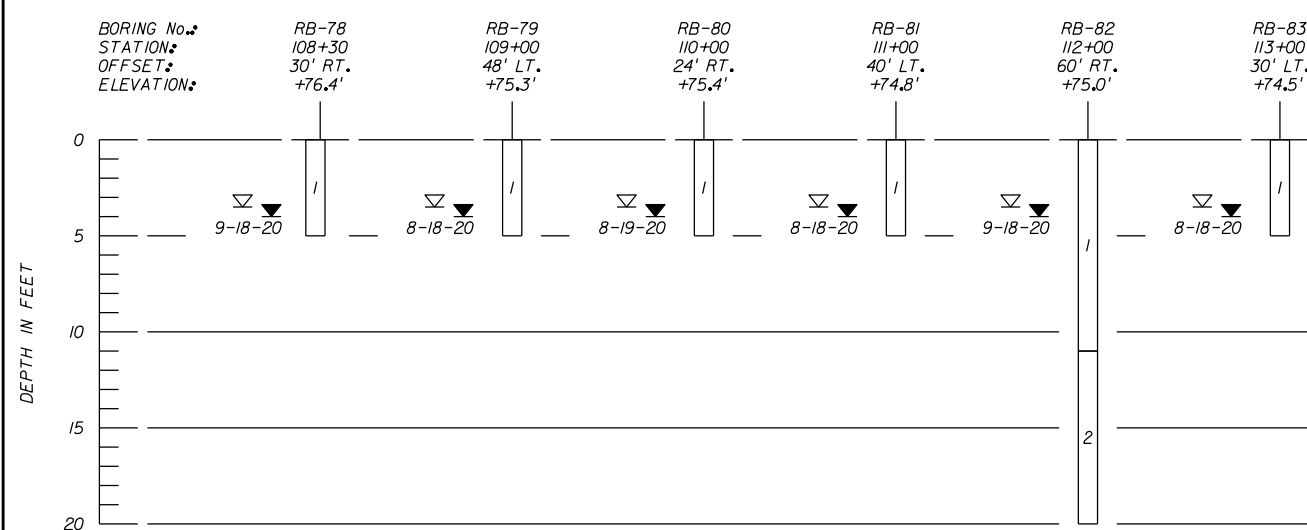
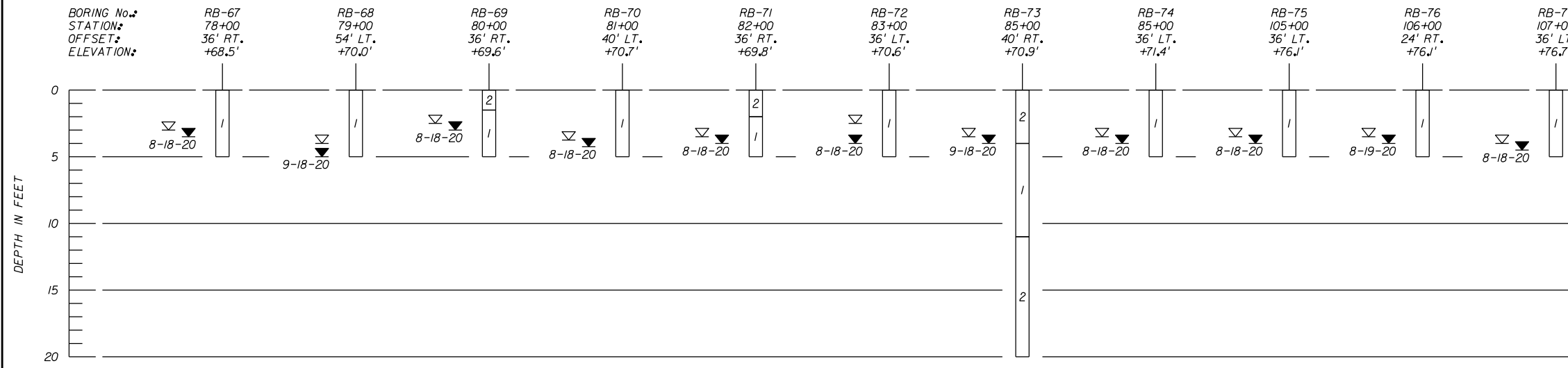
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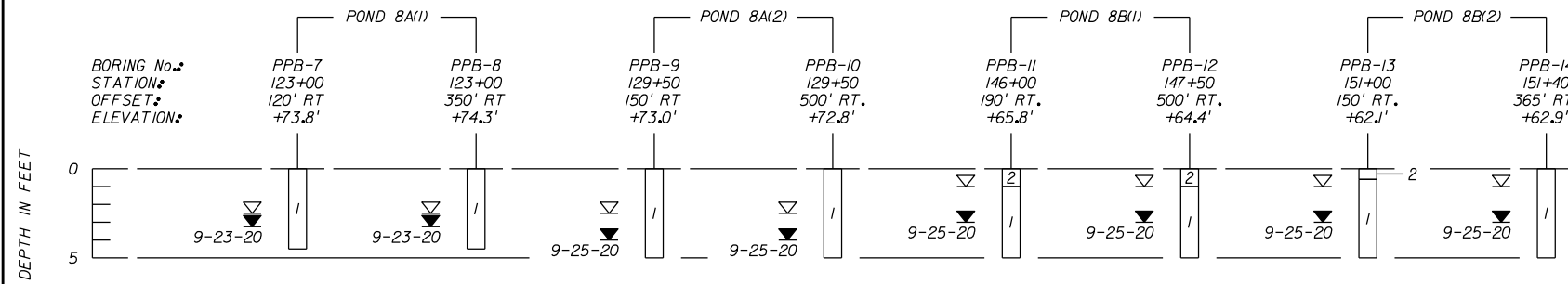
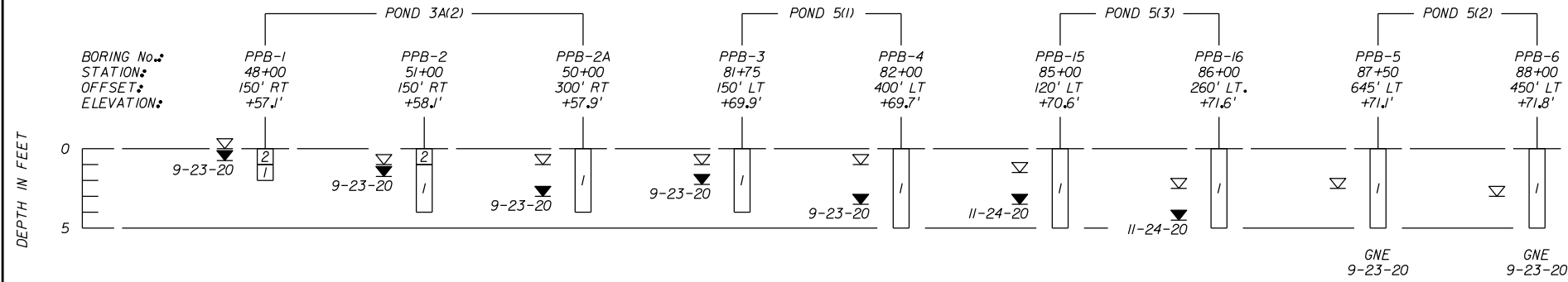
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**PAVEMENT EVALUATION AND CONDITION DATA SHEET
(PECD)**

PAVEMENT EVALUATION AND CONDITION DATA (PECD) SHEET

**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NO. H1205117**

Core No.	Approx. Station	Approx. Latitude	Approx. Longitude	Distance from left edge of lane (ft.)	Lane	Wheel Path	Pavement Layer Thickness (in.)	Base		Crack		Observed Pavement Condition	Rut Depth (in.)	Cross Slope (%)	Comments
								Type	Thick-ness (in.)	Depth (in.)	Type				
1	21+00	28.2787	-81.3596	2.8	WB	Left	1.9	LR	9.8	0.0	--	Good	0.0	0.7	No cracking observed
2	33+00	28.2786	-81.3558	5.9	EB	Right	2.0	LR	11.2	0.0	--	Good	0.0	0.7	No cracking observed
3	44+00	28.2787	-81.3524	8.7	WB	Right	6.7	LR	3.7	6.7	Longitudinal	Poor	0.1	1.6	Full depth crack, Delaminated 4.4 inches from the top/Limerock in core
4	55+00	28.2787	-81.3490	8.3	EB	Right	4.2	LR	7.4	0.0	--	Fair	0.2	1.5	No cracking observed
5	68+00	28.2788	-81.3450	8.3	WB	Right	4.1	LR	8.0	0.0	--	Good	0.0	0.7	No cracking observed
6	79+00	28.2788	-81.3416	5.1	EB	Left	4.3	LR	7.8	0.0	--	Good	0.0	0.4	No cracking observed
7	105+00	28.2789	-81.3335	7.2	WB	Center	4.5	LR	5.1	4.5	Branch	Poor	0.1	1.3	Full depth crack
8	142+00	28.2788	-81.3220	9.0	EB	Right	6.5	LR	4.0	6.5	Branch	Poor	0.2	0.9	Full depth crack

LR = Limerock

PAVEMENT CORING PHOTOGRAPHS

**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 1



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 2



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 3



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 4



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 5



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 6



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 7



**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO REMINGTON BOULEVARD
OSCEOLA COUNTY, FLORIDA
TERRACON PROJECT NUMBER: H1205117**

PAVEMENT CORE 8





APPENDIX C: EXISTING SOILS CONDITIONS

LEVEL 1 CONTAMINATION SCREENING EVALUATION REPORT

**PARTIN SETTLEMENT ROAD IMPROVEMENTS
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA**

PS-20-11504-DG

December 18, 2020 Revision

Terracon Project No. H1207434



**Prepared for:
Johnson, Mirmiran & Thompson, Inc.
Lake Mary, Florida**

**Prepared by:
Terracon Consultants, Inc.
Winter Park, Florida**

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

**Table 1 – Contamination Risk Potential Summary
Amelia Avenue Street Improvements**

Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
1	Chevron – Neptune 2575 Partin Settlement Road (fka: Star Enterprise, and, E-Z Chevron)	FDEP: 8517424	Abutting – <50 feet off ROW, Southeast corner of Partin Settlement Road and Neptune Road	Petroleum – UST's, RCRA -SQG, & EDR – Historical Auto	Low to Medium	<ul style="list-style-type: none"> ■ <u>Site reconnaissance:</u> The Fueling Station & Convenience Store has numerous monitoring wells were observed along the western portion of the property surrounding the fuel facility storage tank and fuel dispenser island areas. The facility has three double walled USTs and two dispensers located beneath a canopy. ■ <u>Three (3) USTs registered:</u> FDEP Storage Tank Registration Form indicates three 10,000 gallon registered double walled (DW) USTs containing unleaded were installed in the early 1990's. The UST system includes DW product piping, DW Fill containment buckets, new dispenser and new UST piping sump. ■ <u>Discharge Date:</u> 11/23/1988, The site was enrolled into the FDEP Early Detection Incentive (EDI) Program and issued a Site Rehabilitation Completion Order I (SRCO) in June 1994. <p>Subsequently another discharge was reported on 6/14/2001. Site Assessment activities were performed from 2001 to 2003 resulting in a No Further Action (NFA) being issued on April 28, 2003.</p> <p>A third discharge was reported on June 14, 2001. Site Assessment activities were performed at the site from August 2001 through September 2006. The site assessment indicated petroleum impacts in the vicinity of the existing dispenser island and canopy area. A Limited Remedial Action Plan (LRAP) was prepared in 2005 recommending implementation of a soil vapor extraction to remediate soil impacts within the vadose zone. Additional SA activities were performed in 2015 and 2016 and recommended the site enter a Natural Attenuation Monitoring (NAM) activities and continued until May 2016. The NAM activities were discontinued based on elevated petroleum constituents detected in the ground water. A Remedial Action Plan (RAP) was prepared in December 2017. Subsequently, elevated petroleum impacts were detected within and</p>

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
						<p>encompassing the UST area. Additional groundwater samples were collected from December 2019 and June 30, 2020 as part of NAM activities. All petroleum constituent's parameter tested were found to be below FDEP groundwater cleanup target levels (GCTLs). MDM Environmental, Inc. report dated July 15, 2020, recommended to collect confirmation soil samples for analysis at two locations west of the dispenser island area. MDM recommended approval of an NFA and SRCO pending the soil sampling and analytical results being below FDEP soil cleanup target levels (SCTLs)</p> <p>The proposed Partin Settlement ROW expansion is limited to approximately 20 feet or less to the south. The ROW adjustment of 20 feet or less and dewatering operations do not influence the groundwater conditions at the Chevron canopy or UST location then would result in a "Low" risk based on recent and historical FDEP environmental site assessment data available. If dewatering operation would result in groundwater influence within the Chevron canopy or UST area then the site would pose a "Medium" risk.</p>
2	Valencia College 1099 Shady Lane	FLR0002 30631	~ 300 feet north	RCRA-VSQG	Low	Advanced manufacturing training facility, no violations noted.
3	UFP Technologies 2175 Partin Settlement Road	FLR0000 86231	Abutting north side of Partin Settlement Road (ROW)	FINDS and ECHO	Low	<u>Site reconnaissance:</u> The facility did not have any visible evidence of waste or other storage material. On-line information indicates the facility is a medical designer and manufacturer of custom devices, sub-assemblies, component and packaging using specialized foam, films, plastics and cellulose materials. The facility is classified as a RCRA Small Quantity Generator (SQG) listed as a generator of ignitable waste and use methylene chloride associated with packaging molding, laminating, cutting and related activities with no violations reported.
4	The Ice Factory of Central Florida,	Not Listed	Abutting north of ROW	Petroleum - AST	Low	<u>Site reconnaissance:</u> A ice skating ring has an AST located on the north side of the facility building located approximately 425 feet north of the

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
	2221 Settlement Road					northern ROW boundary. The AST appears to be in-active. A oil fired boiler is position next to the tank and it does not appear to be in service and is not connected to the AST or the building.
5	Publix Super-Market 2338 E Irlo Bronson Memorial Highway	9813055	Abutting north - ~ 300 feet north of ROW	Petroleum - AST	Low	<u>Site reconnaissance:</u> A emergency generator unit equipped with an aboveground 1,000 gallon diesel double wall storage belly tank is located at the southeast corner of the county building. The system was installed in March 2012.
6	CVS Pharmacy 2454 E Irlo Bronson Memorial Highway	Not Listed	Abutting north side of Partin Settlement Road	RCRA - SQG	Low	<u>Site reconnaissance:</u> A SQG of material waste associated with on-site photography processing operations, no violation reported.
7	ADVENT Health Partin Settlement Emergency Room, 250 E Irlo Bronson Memorial Highway	77748	~480 feet south of ROW,	Petroleum - AST	Low	<u>Site reconnaissance:</u> A emergency generator unit equipped with an aboveground 2,639 gallon diesel double wall storage belly tank is located at the southwest corner of the facility. The system was installed in March 2020.
8	Osceola County Government Center 2501 E Irlo Bronson Memorial Highway	9809482	~460 feet south of ROW	Petroleum - AST	Low	<u>Site reconnaissance:</u> A emergency generator unit equipped with an aboveground 2,000 gallon diesel double wall storage belly tank is located at the southeast corner of the county building. The system was installed in November 2006.
9	Osceola County Communication – Emergency Mgm't. 2586 Partin Settlement Road E	9811203	~350 feet south of ROW	Petroleum - AST	Low	<u>Site reconnaissance:</u> A emergency generator unit equipped with an aboveground 8,000 gallon diesel double wall storage belly tank is located at the north of the operation building approximately 350 feet south of Partin Settlement Road.
10	Central Florida Power Equipment, Inc., 2547 Partin Settlement Road	Not Listed	Abutting eastern boundary of Pond 5(1)	Petroleum, Equipment Washdown, Waste Tires	Low to Medium	<u>Site reconnaissance:</u> A lawn mower maintenance and repair shop with stored drums of petroleum and other products (not accessible to record) with roll-up bay access to the west and evidence of washdown area on paved and non-paved areas along the parcel western boundary and

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
						adjacent to Pond 5(1). "Low Risk" for ponds constructed greater than 25 feet from the facility and "Medium Risk" for ponds constructed at a distance less than 25 feet from the facility.
11	Johnston Private Residence and Greenscape Mowing, Inc., 2575 Partin Settlement Road	Not Listed	Abutting to the north, AST ~ 320 feet from Partin Settlement and ~50 feet Pond 5(2)	Petroleum AST's	Low to Medium	<p><u>Site reconnaissance:</u> Three aboveground storage tanks (AST) are located on-site. The 175 gallon diesel AST and the 500-gallon used oil AST are located on-site at approximate 75 feet west of the proposed Pond 5(2) church parcel and approximately 85 feet plus north of the proposed Pond 5(3). No tank registration records were found for this facility.</p> <p>In addition, two septic tanks and associated drain fields are located east and south of the residential building. The estimated limits of the associated warehouse drain fields encroach into the proposed Pond 5(3) boundary.</p> <p>.. A potential site risk is associated with potential on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage and/or fueling operation and potential asbestos containing material associated with the residential home. The on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage and/or fueling operation related risks level are considered to pose a "Low Risk" for proposed Ponds 5(2) and 5(3) positioned at more than 75 feet from these on-site operations.</p> <p>The on-site septic tanks/drain field use, repair/maintenance activities, petroleum storage, fueling operation and/or asbestos containing building materials related with the Pond 5(3) is considered Medium Risk</p> <p>The potential risk associate with the Pond 5(2) is considered "Medium Risk" if the pond is positions within 75 feet of the petroleum related storage and fueling operations based on visual soil staining.</p>
12	Jimmy Hickman Excavating, LLC 2571 Settlement Road	Not Listed	Abutting to the north, AST ~ 650	Petroleum A	Low to Medium	<u>Site reconnaissance:</u> A maintenance shop is located at the eastern portion of this parcel at approximately 30 feet from Pond 5(2) parcel western boundary. Although visibility of the site was limited storage of

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
			feet from Partin Settlement and ~30 feet Pond 5(2)			various materials, truck, and other related material were observed in close proximity of the eastern and northern property boundaries of the JHE parcel. "Low Risk" for ponds constructed greater than 25 feet from the facility property boundary and "Medium Risk" for ponds constructed at a distance greater than 25 feet from the facility property boundary.
13	Minks Electronics 2700 Partin Settlement Road (fka: Fire Rescue Support Service Center - closed)	FLR0000 14985 (fka: 8520959)	~ 300 feet south of Partin Settlement Road	RCRA-SQG (Petroleum – UST)	Low	<u>Site reconnaissance:</u> Facility building, and former storage tank facility are no longer visibly present.
14	Pond 8A(1), Parting Settlement Road	A)	Abutting to the south	Pesticides, Herbicides, Arsenic	Low to Medium	<u>Site reconnaissance:</u> No visible environmental concerns were detected. <ul style="list-style-type: none"> ■ <u>Historical Ariel Review:</u> Historical land use of the potential pond site locations included citrus grove operations from 1944 through 1997. The citrus groves were visible through 2007 but appear to be unmaintained at that time. Potential for impacts from potential past long term use of pesticides, herbicides and related heavy metal arsenic based components contained in products used during that period. The past land use at this pond parcel presents a "Medium Risk" if excavated soils are managed off-site.
15	Orlando Cellular Telephone Co. 2800 Partin Settlement Road	8734350	~900 feet north of Partin Settlement Rd	Petroleum - UST	Low	<u>Site reconnaissance:</u> Facility was fenced with no trespassing signage. <ul style="list-style-type: none"> ■ <u>Regulatory Data:</u> No discharge or regulatory compliance issues have been reported. The former underground storage tanks were removed in 1993.
16	Preston Wells & Sons 2689 Partin Settlement Road	8839806	Abutting to the north	Petroleum	Low	<u>Site reconnaissance:</u> The site is now a residential housing development. <ul style="list-style-type: none"> ■ <u>Regulatory Review:</u> No regulatory files were available, the company last corporate filing per State of Florida Sunbiz.org was on 4/19/1988. The site reportedly had one 500 gallon diesel AST and two 500 gallon UST's

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

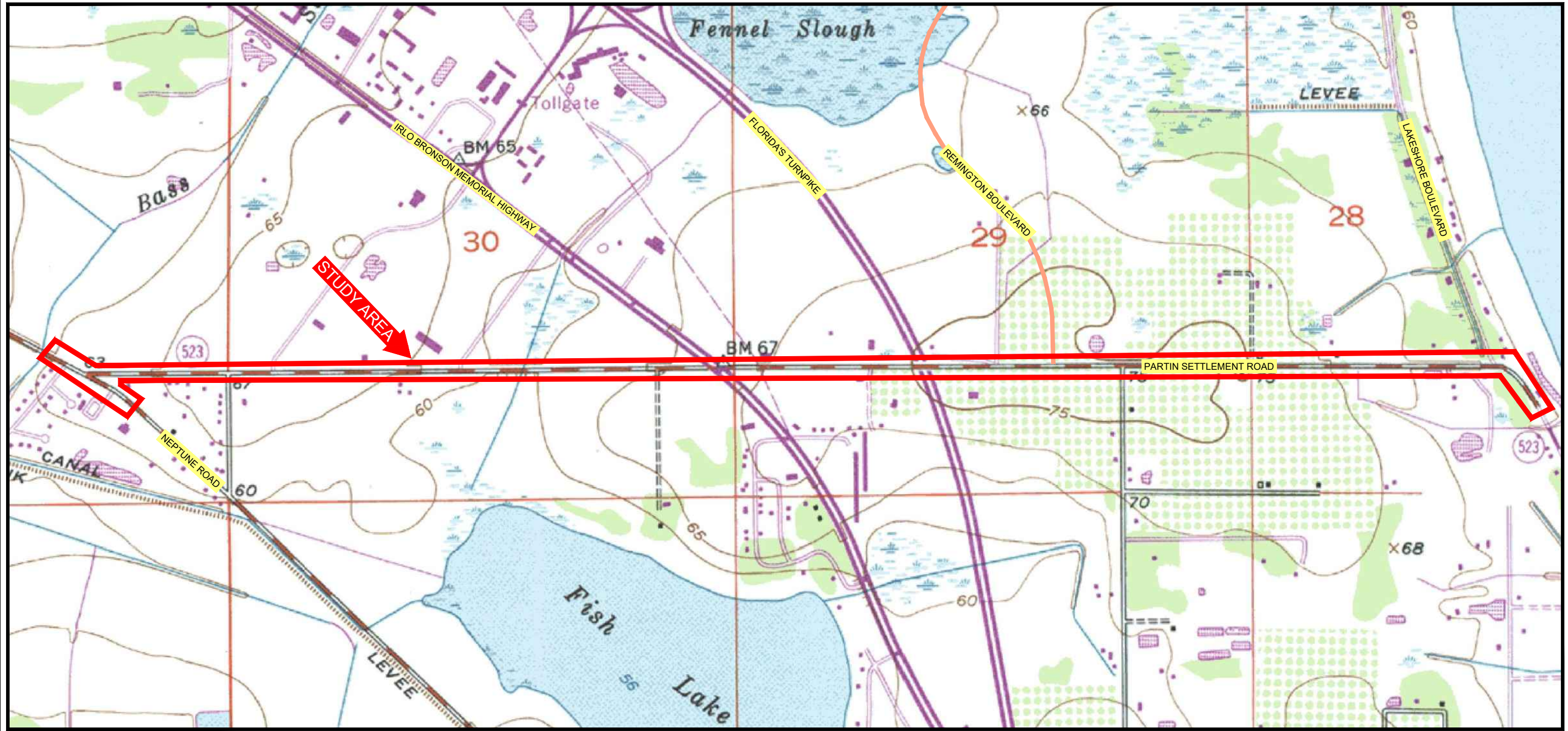
Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
						<p>for agricultural use. The products generated are used oil and related automotive waste products.</p> <ul style="list-style-type: none"> ■ <u>Historical Ariel Review:</u> The 1994 aerial show a facility located approximately 50 feet north of Partin Settlement Road that appears to coincide with the facility address. The historical aerial corresponding address location along Partin Settlement Road was a Citrus grove that extended approximately 1,700 feet northward.
17	<p>Pond 8A(2) (fka: Redman Gaines 2947 Partin Settlement Road)</p>	<p>NA (fka: 8841890)</p>	<p>Abutting to the south</p>	<p>Pesticides, Herbicides, Arsenic</p>	<p>Low to Medium</p>	<p><u>Site reconnaissance:</u> No visible environmental concerns were detected.</p> <ul style="list-style-type: none"> ■ <u>Historical Ariel Review:</u> Historical land use of the potential pond site locations included citrus grove operations from 1944 through 1997. The citrus groves were visible through 2007 but appear to be unmaintained at that time. The past land use at this pond parcel presents for potential impacts from potential past long term use of pesticides, herbicides and related heavy metal components contained in products used during that period. The past land use at this pond parcel presents a “Medium Risk” if excavated soils are managed off-site. The former listing for Redman Gaines, removed a 275 gallon diesel tank in November 1987,
18	<p>ALL Transmission World, 2542 E Irlo Bronson Memorial Highway 2, AKA: Classic Tire & Service, Inc.</p>	<p>FLD9842 34336</p>	<p>~1,000 feet south on Irlo Bronson Hwy</p>	<p>RCRA Conditionally Exempt SQG. Former Waste Tire Collection</p>	<p>Low</p>	<p><u>Site reconnaissance:</u> The products generated include used oil and related automotive waste products.</p> <ul style="list-style-type: none"> ■ <u>Notice of Violations:</u> The facility has had a number of Notices of Violation during 1992 and 2014, and 2015. All products are stored in tanks located in-side the existing facility building.
19	<p>SHELL-BRONSON #349 2300 East Irlo Bronson</p>	<p>9047117</p>	<p>~1300 feet north on Irlo Bronson Hy</p>	<p>LUST, UST, CLEANUP SITES, DWM CONTAM</p>	<p>Low</p>	<ul style="list-style-type: none"> ■ <u>Site reconnaissance:</u> Active convenience store with numerous monitoring wells were located within the facility boundaries. ■ <u>Three (3) USTs registered:</u> FDEP Storage Tank Registration Form indicates three 12,000 gallon registered USTs containing unleaded were installed in 1990. The UST was upgraded in May 2010 and included

**Table 1 – Contamination Risk Potential Summary (Cont.)
Partin Settlement Road Improvements**

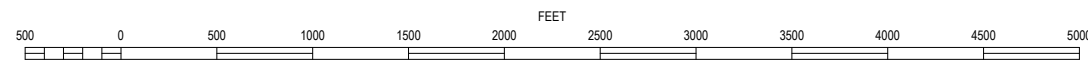
Site No.	Facility Name/Address	Fac. ID No.	Approximate distance/direction (feet) of facility/property from project ROW	Type of Concern	Initial Risk Rating	Comments
						<p>installation of new double walled (DW) product piping, DW Fill containment buckets, new dispenser and new UST piping sump.</p> <ul style="list-style-type: none"> ■ <u>Discharge Date:</u> July 2, 2010 petroleum discharge documented with FDEP. ■ <u>Assessment and Remedial related activities:</u> An site assessment, remedial action plan (RAP), and a RAP Modification was prepared in 2012 and 2013. A remedial system was installed in 2014 and operated up through August 2016. The soil vapor extraction (SVE) and air sparge (AS) Remedial Action (RA) operations were discontinued in August 2016. Post-Active Remedial Monitoring (PARM) phase continued until February 2017 when active RA was restarted and operated through February 2019. The site entered the PARM phase to present. The last PARM report dated June 18, 2020 request completion of the PARM activities and recommended the site be issued a Site Rehabilitation Completion Order SRCO. ■ See excerpts from select files found on the FDEP OCULUS database in the CSER Appendix H. ■ Based on the historical use and assessment data, this facility is assigned an initial potential contamination risk of “Low”.

APPENDIX B

EXHIBITS AND SITE PHOTOGRAPHS



SCALE 1"=1000'



ST CLOUD NORTH, FLORIDA
 ISSUED: 1987
 7.5 MINUTE SERIES (QUADRANGLE)



Project Mngr:	REP	Project No.	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No.	H1207434-1
Approved By:	REP	Date:	10-3-20

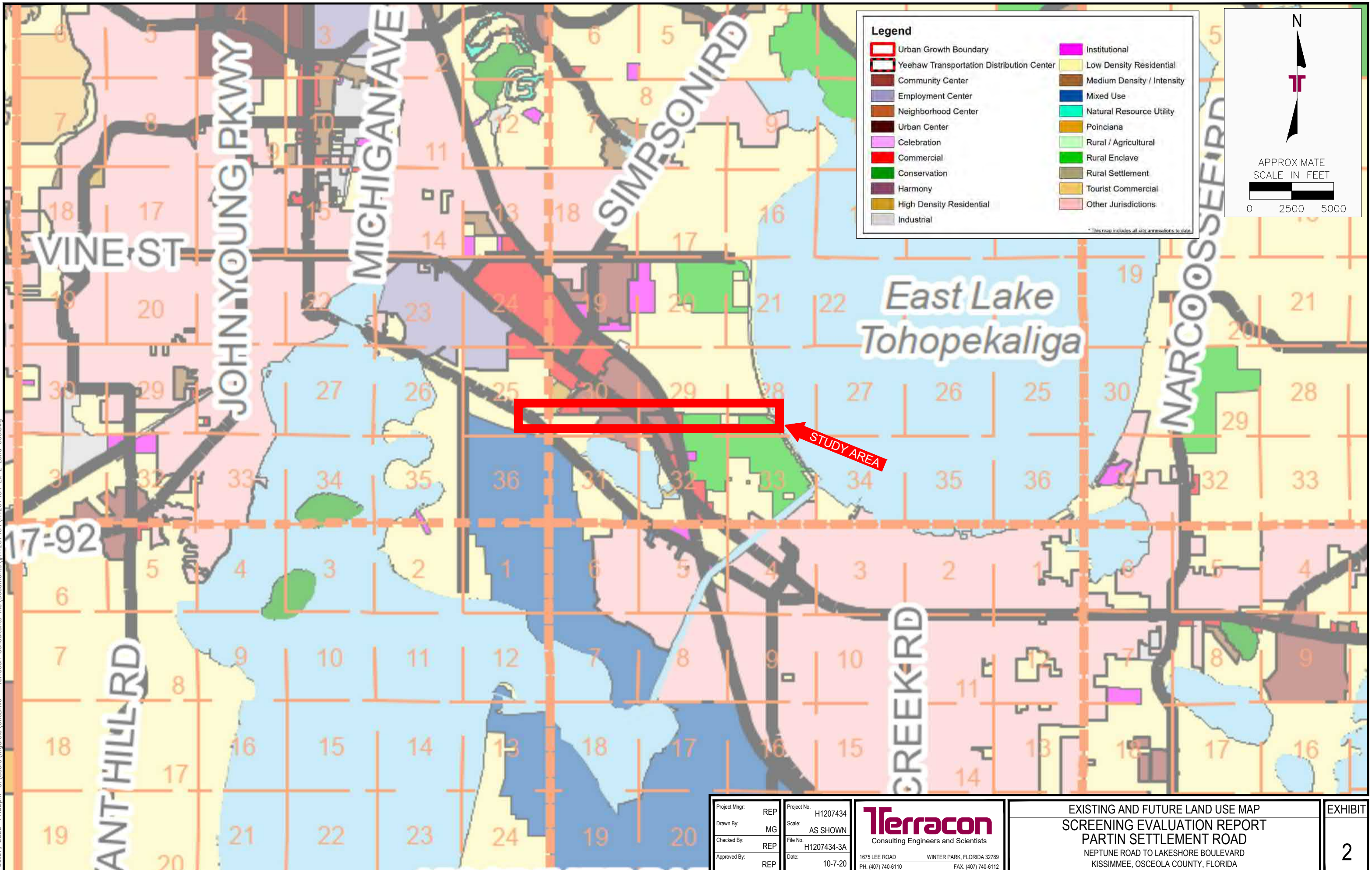
Terracon
 Consulting Engineers and Scientists
 1675 LEE ROAD WINTER PARK, FLORIDA 32789
 PH. (407) 740-6110 FAX. (407) 740-6112

TOPOGRAPHIC VICINITY MAP
 SCREENING EVALUATION REPORT
 PARTIN SETTLEMENT ROAD
 NEPTUNE ROAD TO REMINGTON BOULEVARD
 KISSIMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT
 1

Oct04, 2020-3:37pm N:\Projects\2020\H1207434\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cov\H1207434 Ex 1 Quad Map.dwg

Oct07, 2020-11:32am C:\Users\marcia\OneDrive - Terracon Consultants, Inc.\Documents\H1207434\H1207434_ Ex. 2 Land Use.dwg



Legend

Urban Growth Boundary	Institutional
Yeehaw Transportation Distribution Center	Low Density Residential
Community Center	Medium Density / Intensity
Employment Center	Mixed Use
Neighborhood Center	Natural Resource Utility
Urban Center	Poinciana
Celebration	Rural / Agricultural
Commercial	Rural Enclave
Conservation	Rural Settlement
Harmony	Tourist Commercial
High Density Residential	Other Jurisdictions
Industrial	

* This map includes all city annexations to date.

N

APPROXIMATE SCALE IN FEET

0 2500 5000

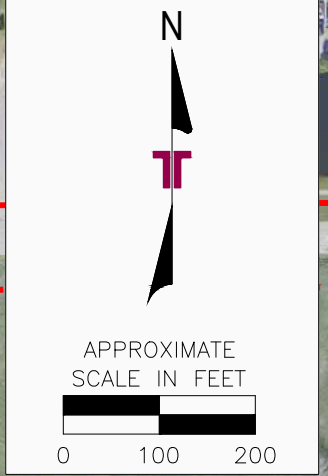
Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	10-7-20

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EXISTING AND FUTURE LAND USE MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

Dec07, 2020 - 3:06pm N:\Projects\2020\H1207434\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cadd\H1207434_ Ex_3_Locations.dwg



LEGEND

- - - STUDY AREA

APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

SITE RISK RATING	
# HIGH	# MEDIUM
# LOW	# NO RISK

FACILITY NUMBER	FACILITY NAME
1	CHEVRON, 2017 NEPTUNE ROAD
3	UPS TECHNOLOGIES, LLC, 2175 PARTIN SETTLEMENT ROAD

Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

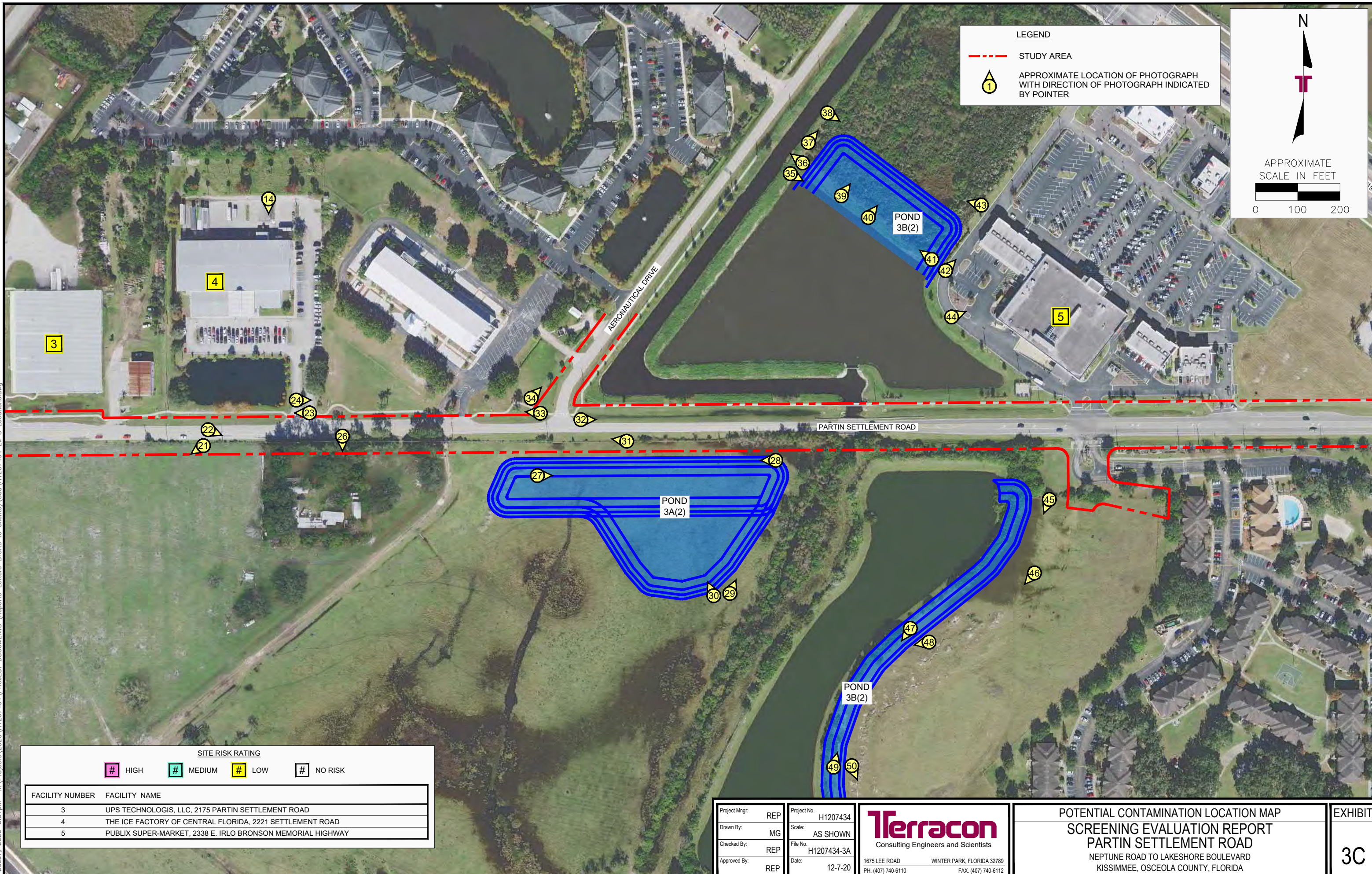
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Consulting Engineers and Scientists

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POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT
3B

Dec07, 2020 - 3:07pm N:\Projects\2020\H1207434\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cdd\H1207434_ Ex. 3 Locations.dwg



LEGEND

--- STUDY AREA

1 APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

N

APPROXIMATE SCALE IN FEET

0 100 200

SITE RISK RATING	
# HIGH	# MEDIUM
# LOW	# NO RISK

FACILITY NUMBER	FACILITY NAME
3	UPS TECHNOLOGIS, LLC, 2175 PARTIN SETTLEMENT ROAD
4	THE ICE FACTORY OF CENTRAL FLORIDA, 2221 SETTLEMENT ROAD
5	PUBLIX SUPER-MARKET, 2338 E. IRLON BRONSON MEMORIAL HIGHWAY

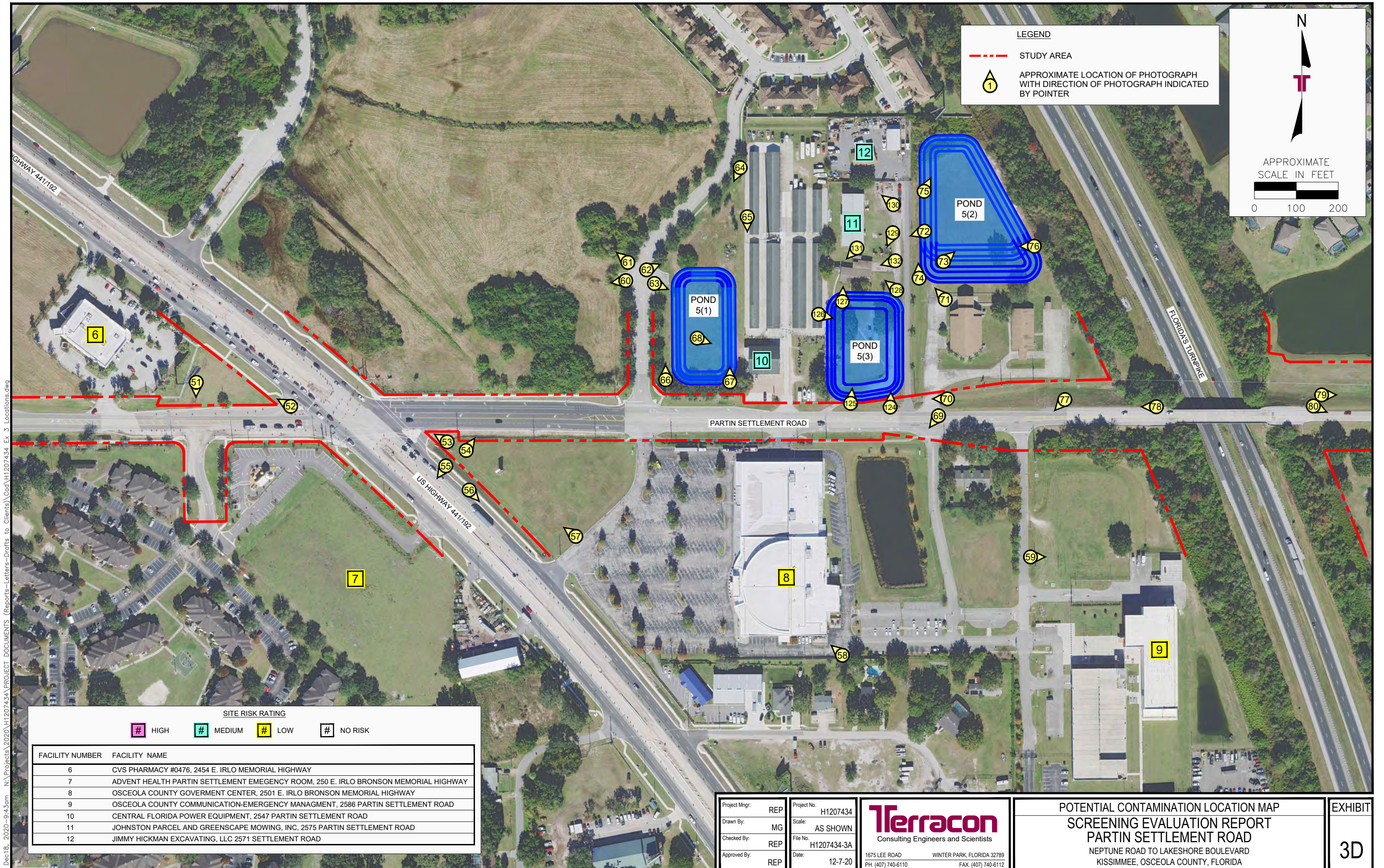
Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

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POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT
3C



LEGEND

--- STUDY AREA

1 APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

N

↑

APPROXIMATE SCALE IN FEET

0 100 200

SITE RISK RATING

HIGH # MEDIUM # LOW # NO RISK

FACILITY NUMBER	FACILITY NAME
6	CVS PHARMACY #0476, 2454 E. IRLO MEMORIAL HIGHWAY
7	ADVENT HEALTH PARTIN SETTLEMENT EMERGEY ROOM, 250 E. IRLO BRONSON MEMORIAL HIGHWAY
8	OSCEOLA COUNTY GOVERNMENT CENTER, 2501 E. IRLO BRONSON MEMORIAL HIGHWAY
9	OSCEOLA COUNTY COMMUNICATION-EMERGENCY MANAGEMENT, 2586 PARTIN SETTLEMENT ROAD
10	CENTRAL FLORIDA POWER EQUIPMENT, 2547 PARTIN SETTLEMENT ROAD
11	JOHNSTON PARCEL AND GREENSCAPE MOWING, INC, 2575 PARTIN SETTLEMENT ROAD
12	JIMMY HICKMAN EXCAVATING, LLC 2571 SETTLEMENT ROAD

Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

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POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT
3D

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Dec07, 2020 - 3:08pm N:\Projects\2020\H1207434\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cod\H1207434_ Ex. 3 Locations.dwg

N

APPROXIMATE SCALE IN FEET

LEGEND

STUDY AREA

APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

SITE RISK RATING	
HIGH	MEDIUM
LOW	NO RISK

FACILITY NUMBER	FACILITY NAME
13	MINKS ELECTRONICS, 2700 PARTIN SETTLEMENT ROAD (FKA: FIRE RESCUE SERVICE CENTER-CLOSED)
14	POND 8A(1), PARTIN SETTLEMENT ROAD
15	ORLANDO CELLUAR TELEPHONE CO. 2800 PARTIN SETTLEMENT ROAD
16	PRESTON WELLS & SONS, 2689 PARTIN SETTLEMENT ROAD

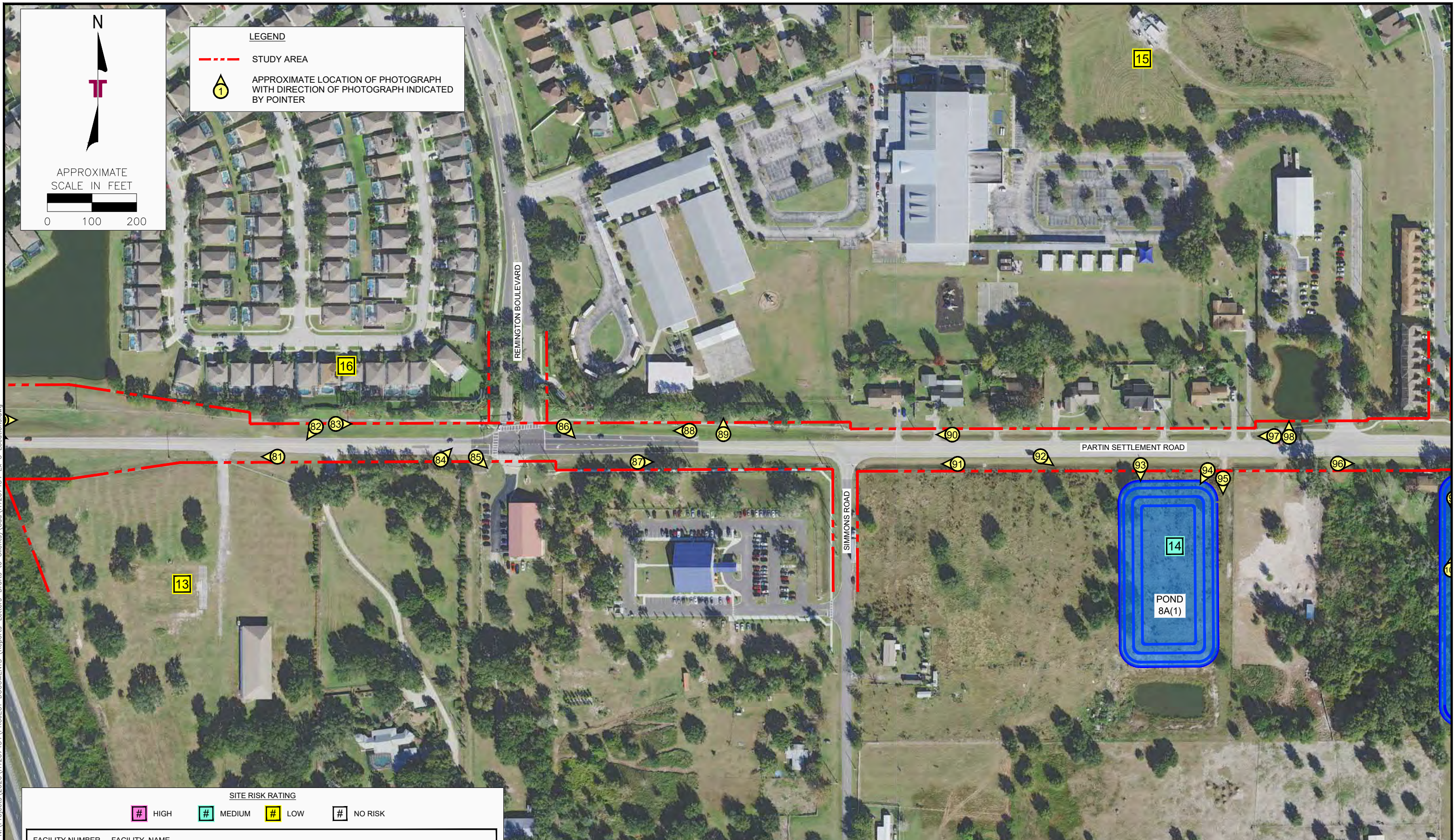
Project Mng:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

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POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT
3E



Dec07_2020-3:09pm N:\Projects_2020\H1207434\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Cdd\H1207434_ Ex. 3 Locations.dwg



LEGEND

- - - STUDY AREA

APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

N

APPROXIMATE SCALE IN FEET

0 100 200

SITE RISK RATING	
# HIGH	# MEDIUM
# LOW	# NO RISK

FACILITY NUMBER	FACILITY NAME
17	POND 8A(2), PARTIN SETTLEMENT ROAD

Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

Terracon

Consulting Engineers and Scientists

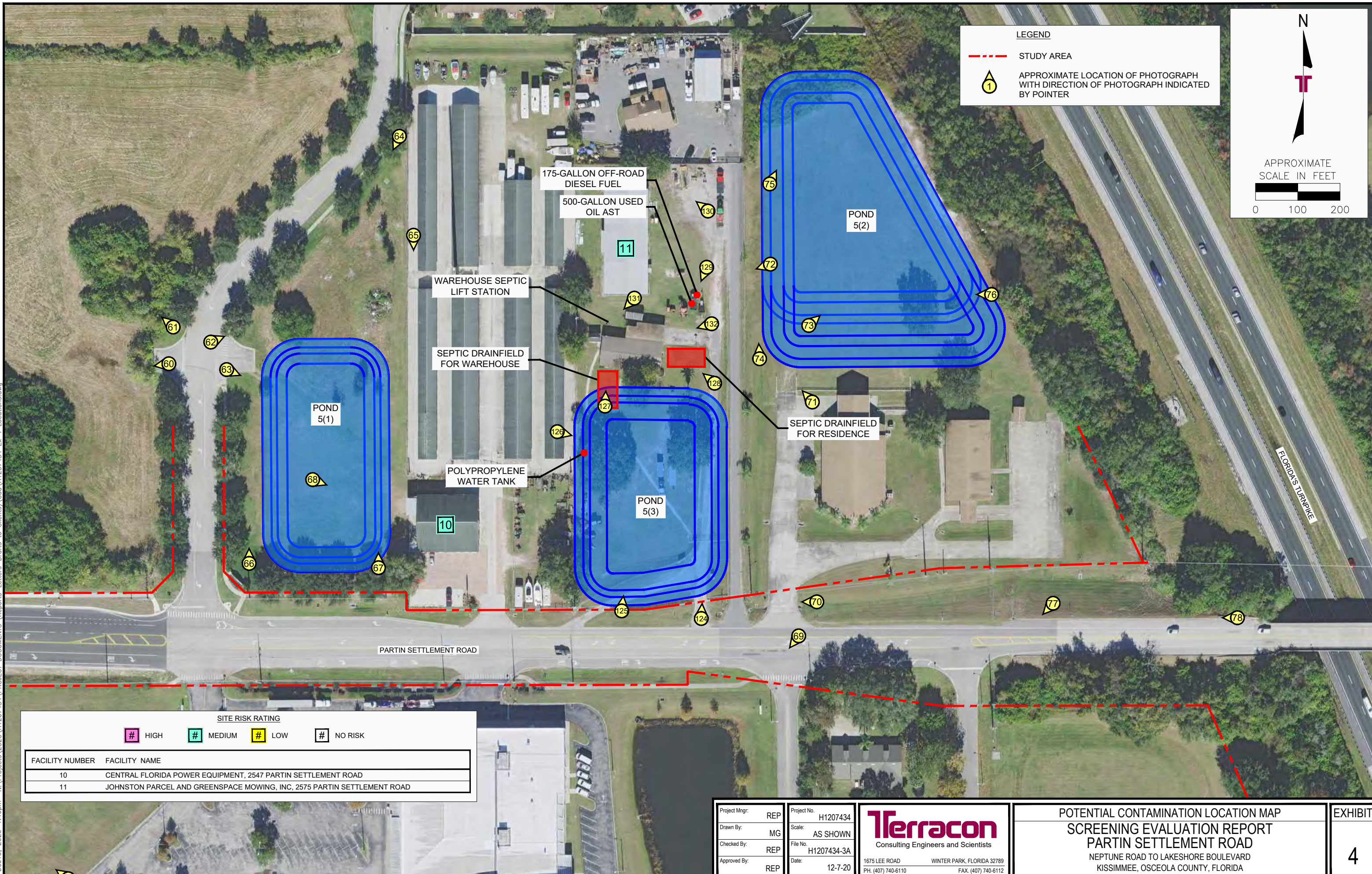
1675 LEE ROAD WINTER PARK, FLORIDA 32789
PH. (407) 740-6110 FAX. (407) 740-6112

POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA

EXHIBIT

3F

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LEGEND

- - - STUDY AREA

APPROXIMATE LOCATION OF PHOTOGRAPH WITH DIRECTION OF PHOTOGRAPH INDICATED BY POINTER

N

APPROXIMATE SCALE IN FEET

0 100 200

SITE RISK RATING	
# HIGH	# MEDIUM
# LOW	# NO RISK

FACILITY NUMBER	FACILITY NAME
10	CENTRAL FLORIDA POWER EQUIPMENT, 2547 PARTIN SETTLEMENT ROAD
11	JOHNSTON PARCEL AND GREENSPACE MOWING, INC, 2575 PARTIN SETTLEMENT ROAD

Project Mgr:	REP	Project No:	H1207434
Drawn By:	MG	Scale:	AS SHOWN
Checked By:	REP	File No:	H1207434-3A
Approved By:	REP	Date:	12-7-20

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POTENTIAL CONTAMINATION LOCATION MAP
SCREENING EVALUATION REPORT
PARTIN SETTLEMENT ROAD
NEPTUNE ROAD TO LAKESHORE BOULEVARD
KISSIMMEE, OSCEOLA COUNTY, FLORIDA



Photo #1 Chevron - Neptune



Photo #2



Photo #3



Photo #4



Photo #5



Photo #6



Photo #13



Photo #14



Photo #15 Pond 3A(1) site



Photo #16 Pond 3A(1) site



Photo #17 Pond 3A(1) site



Photo #18 Pond 3A(1) site



Photo #25



Photo #26 2232 Partin Settlement Road



Photo #27 Pond 3A(2)



Photo #28 Pond 3A(2)



Photo #29 Pond 3A(2)



Photo #30 Pond 3A(2)



Photo #37 Pond 3B(1)



Photo #38 Pond 3B(1)



Photo #39 Pond 3B(1)



Photo #40 Pond 3B(1)



Photo #41 Pond 3B(1)



Photo #42 Pond 3B(1)



Photo #49 Pond 3B(2)



Photo #50 Pond 3B(2)



Photo #51



Photo #52



Photo #53



Photo #54



Photo #61



Photo #62 Pond 5(1)



Photo #63 Pond 5(1)



Photo #64 Pond 5(1)



Photo #65 Central Mini-Storage



Photo #66 Pond 5(1)



Photo #73 Pond 5(2)



Photo #74 Pond 5(2)



Photo #75 Pond 5(2)



Photo #76 Pond 5(2)



Photo #77



Photo #78



Photo #85



Photo #86



Photo #87



Photo #88



Photo #89



Photo #90



Photo #97



Photo #98



Photo #99 Pond 8A(2), Misc yard and wood debris



Photo #100 Pond 8A(2)



Photo #101 Pond 8A(2)



Photo #102 Pond 8A(2)



Photo #109



Photo #110



Photo #111 Pond 8B(1)



Photo #112 Pond 8B(1)



Photo #113



Photo #114



Photo #121



Photo #122



Photo #123



Photo #124 – Pond 5(3), Johnston Parcel
south entrance



Photo #125 Pond 5(3) area

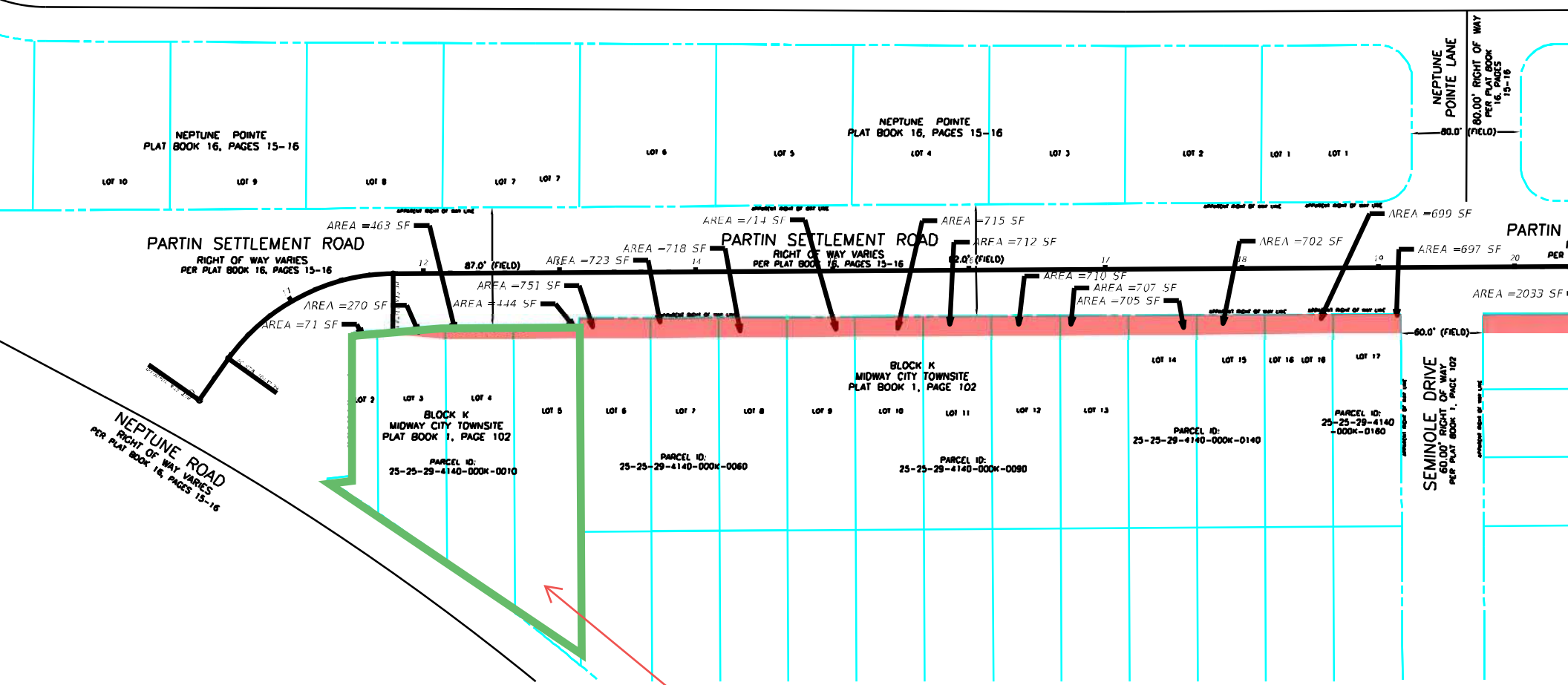


Photo #126 Pond 5(3) empty trailer
mounted tank

Appendix H.2

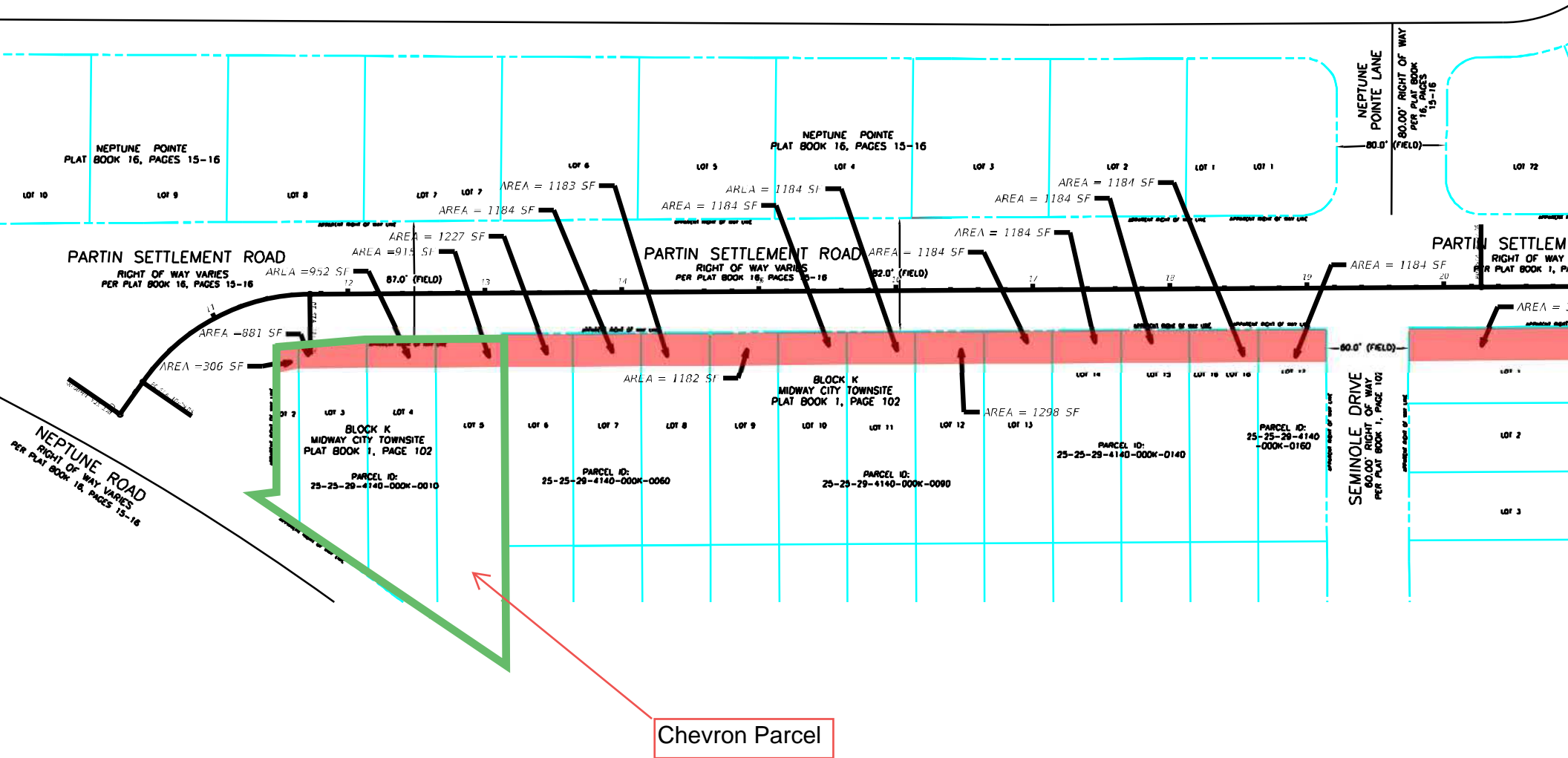
Chevron - Neptune Road and Partin Settlement Road Preliminary Design Information

OPTION 1: Chevron Parcel Settlement Road ROW Expansion - ~ 10 feet South



Chevron Parcel

OPTION 2: Chevron Partin Settlement Road ROW Expansion - ~ 20 feet South

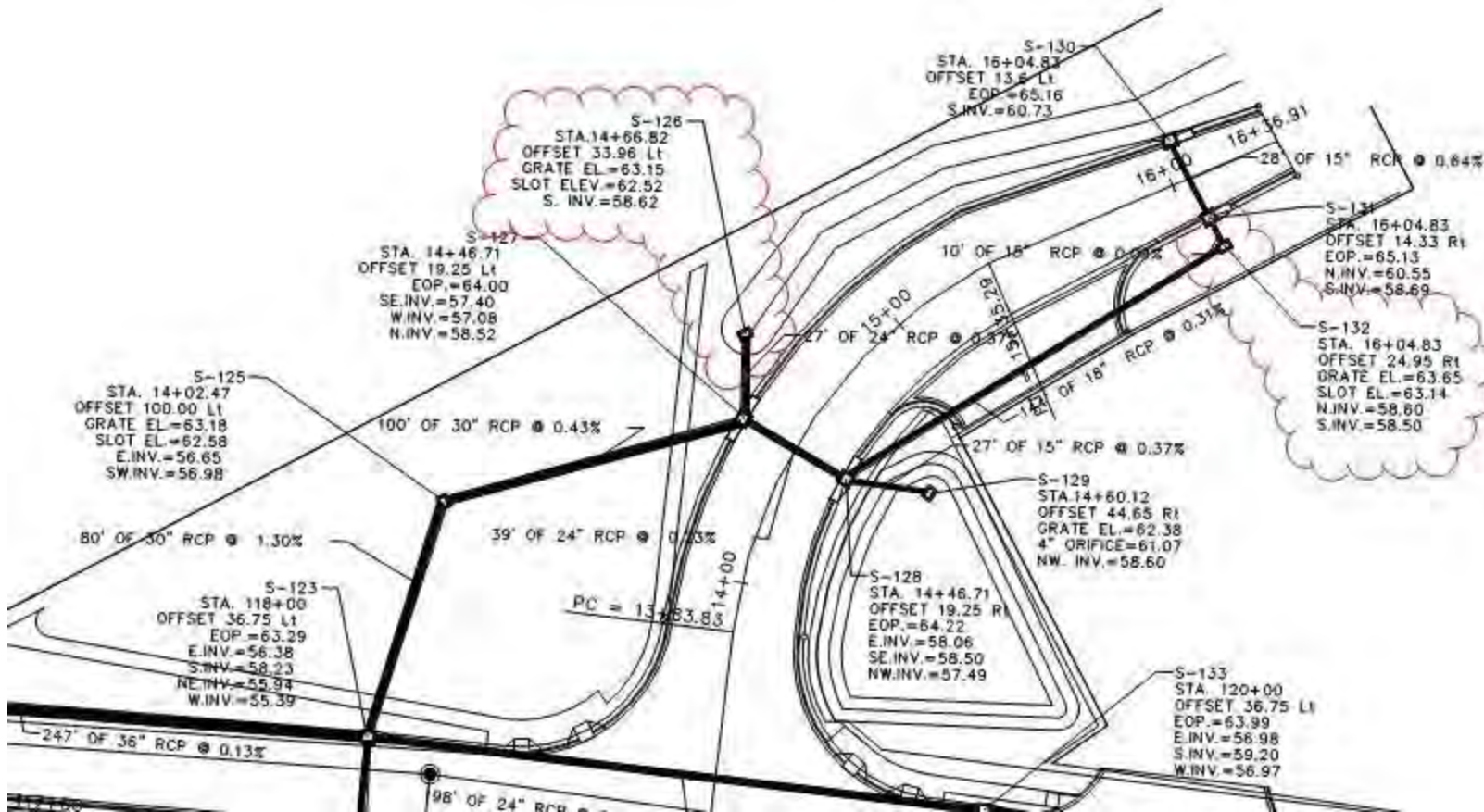


Penoyer, Robert E

From: Robert Butterfield <RButterfield@kpmfranklin.com>
Sent: Monday, December 14, 2020 9:06 AM
To: Penoyer, Robert E; Smith, Greg
Cc: Ray, Jennifer
Subject: RE: Status RE: Partin CSER

The tie-in points for the new storm sewer are indicated below with clouds. This is at the intersection with Neptune Road, where the Chevron station is located next to (east of) the pond. We may need to remove most of the system and replace with a configuration that works with our new roadway layout, thereby the controlling point could be further downstream, such as structure S-127 or S-125.

Nevertheless, the system is generally less than 7 feet deep, and our trunkline could be placed on the north side of the road to increase the offset from the Chevron station if needed.



Robert Butterfield, PE

Senior Project Engineer, KPMFranklin

6300 Hazeltine National Drive, Suite 118 | Orlando, Florida 32822

Office 407-410-8624 Ext: 2007 | Direct 407-994-4449

rbutterfield@kpmfranklin.com | www.kpmfranklin.com



APPENDIX D: EXISTING TRAFFIC INFORMATION



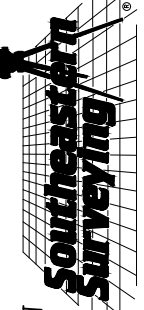
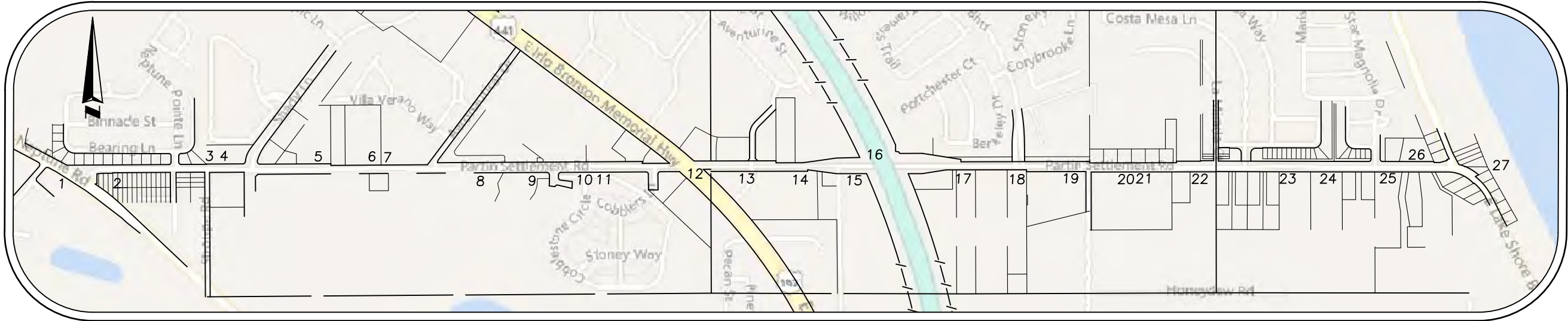
APPENDIX E: RIGHT-OF-WAY AND UTILITY MAPS

PARTIN SETTLEMENT ROAD

PRELIMINARY RIGHT OF WAY EXHIBIT

SHEET LAYOUT

SHEET 1: COVER SHEET
SHEETS 2-28: RIGHT OF WAY DETAILS



**SOUTHEASTERN SURVEYING
AND MAPPING CORPORATION**

6500 All American Boulevard Orlando,
Florida 32810-4350 (407) 292-8580
Certification Number LB2108 e-mail:
info@southeasternsurveying.com

EDWIN MUNOZ JR., PSM
Registered Land Surveyor
Number 7288

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Certified to:	
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
1 OF 28

LOT 12

NEPTUNE POINTE
PLAT BOOK 16, PAGES 15-16

LOT 11

LOT 10

LOT 9

LOT 8

LOT 7

APPARENT RIGHT OF WAY LINE
ELECTRIC

FIBER OPTIC
ELECTRIC

116.8' (CALC)

WATER

WATER

PARTIN SETTLEMENT ROAD

RIGHT OF WAY VARIES
PER PLAT BOOK 16, PAGES 15-16

APPARENT RIGHT OF WAY LINE

WATER

87.0' (FIELD)

10+00 10+50 11+00 11+50 12+00 12+50 13+00

SURVEY BASELINE N89°36'27"E

APPARENT RIGHT OF WAY LINE
OHL

OHL

OHL

NEPTUNE ROAD
RIGHT OF WAY VARIES
PER PLAT BOOK 16, PAGES 15-16

TRAFFIC

TRAFFIC

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TRAFFIC

FOUND 5/8" IRON ROD
UNREADABLE

FOUND 5/8" IRON ROD
STAMPED "LB 966"

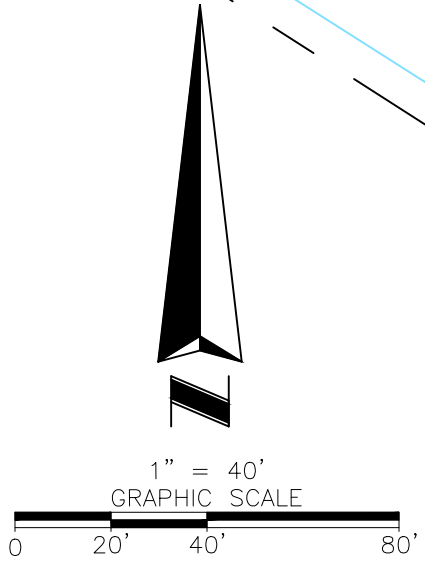
FOUND 1/2" IRON ROD
STAMPED "LB 966"

FOUND 1/2" IRON ROD
STAMPED "LB 966"

BLOCK K
MIDWAY CITY TOWNSITE
PLAT BOOK 1, PAGE 102

PARCEL ID:
25-25-29-4140-000K-0010

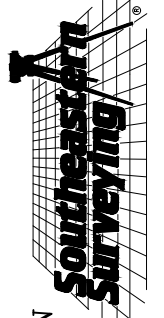
114.6' (CALC)



SEE SHEET 1

SEE SHEET 2

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



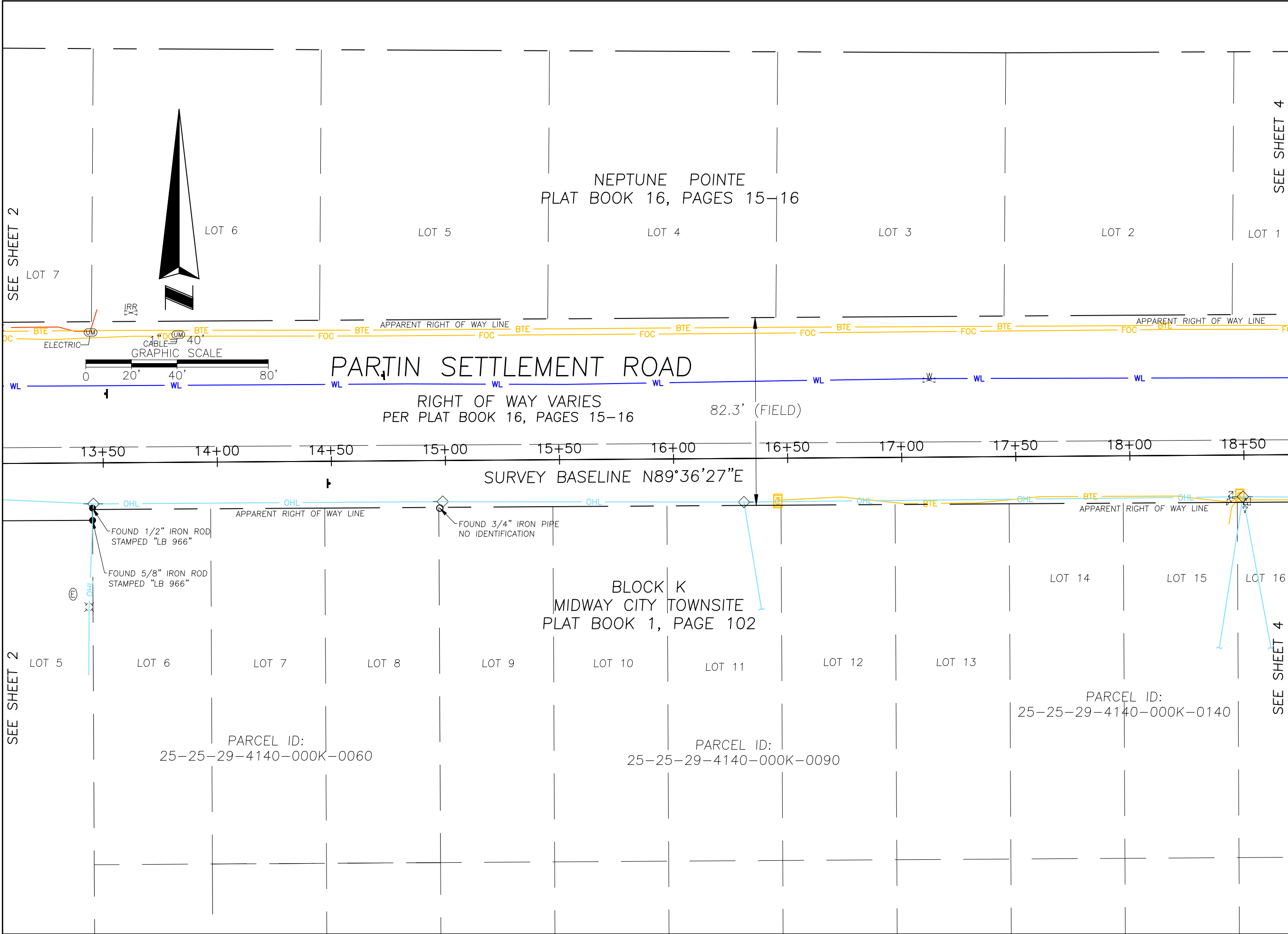
SOUTHEASTERN SURVEYING
AND MAPPING CORPORATION

6500 All American Boulevard Orlando,
Florida 32810-4350 (407) 292-8580
Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
2 OF 28



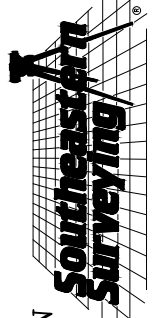
SEE SHEET 2

SEE SHEET 2

SEE SHEET 4

SEE SHEET 4

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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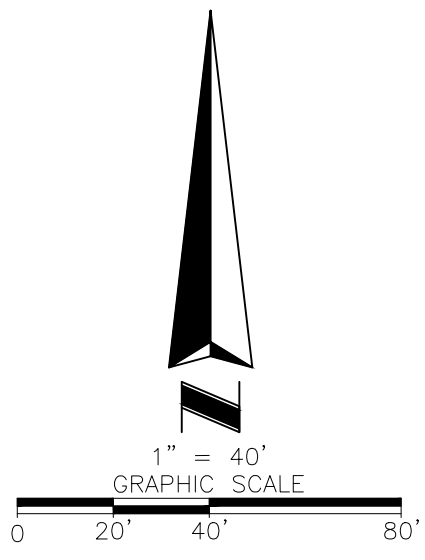
PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
3 OF 28

SEE SHEET 4

SEE SHEET 4



PARCEL ID:
30-25-30-0000-0023-0000
ORB 1400, PAGE 2111

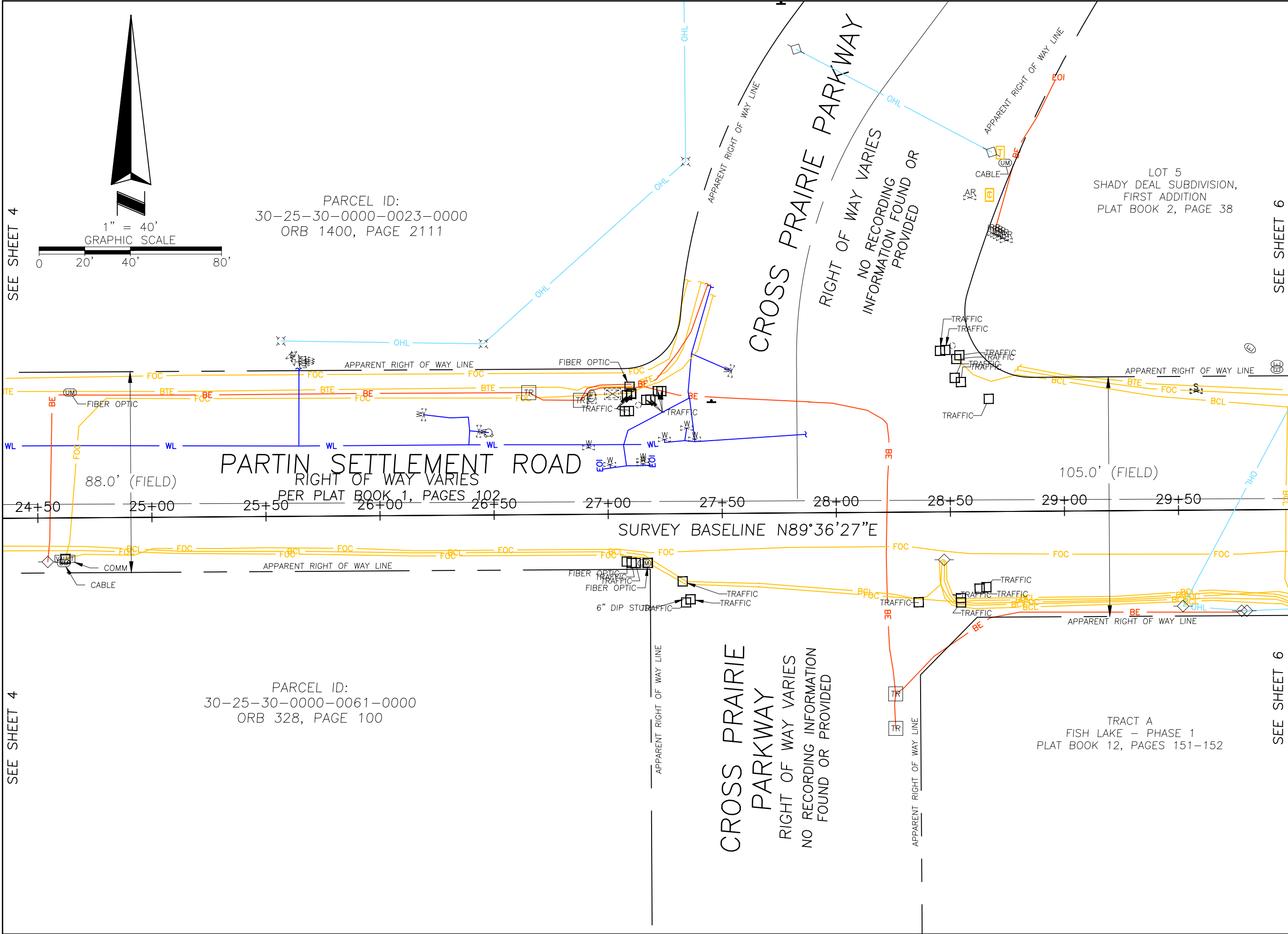
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30-25-30-0000-0061-0000
ORB 328, PAGE 100

CROSS PRAIRIE PARKWAY
RIGHT OF WAY VARIES
NO RECORDING INFORMATION FOUND OR PROVIDED

CROSS PRAIRIE PARKWAY
RIGHT OF WAY VARIES
NO RECORDING INFORMATION FOUND OR PROVIDED

LOT 5
SHADY DEAL SUBDIVISION,
FIRST ADDITION
PLAT BOOK 2, PAGE 38

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152



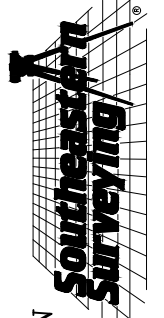
SEE SHEET 6

SEE SHEET 6

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info@southeasternsurveying.com

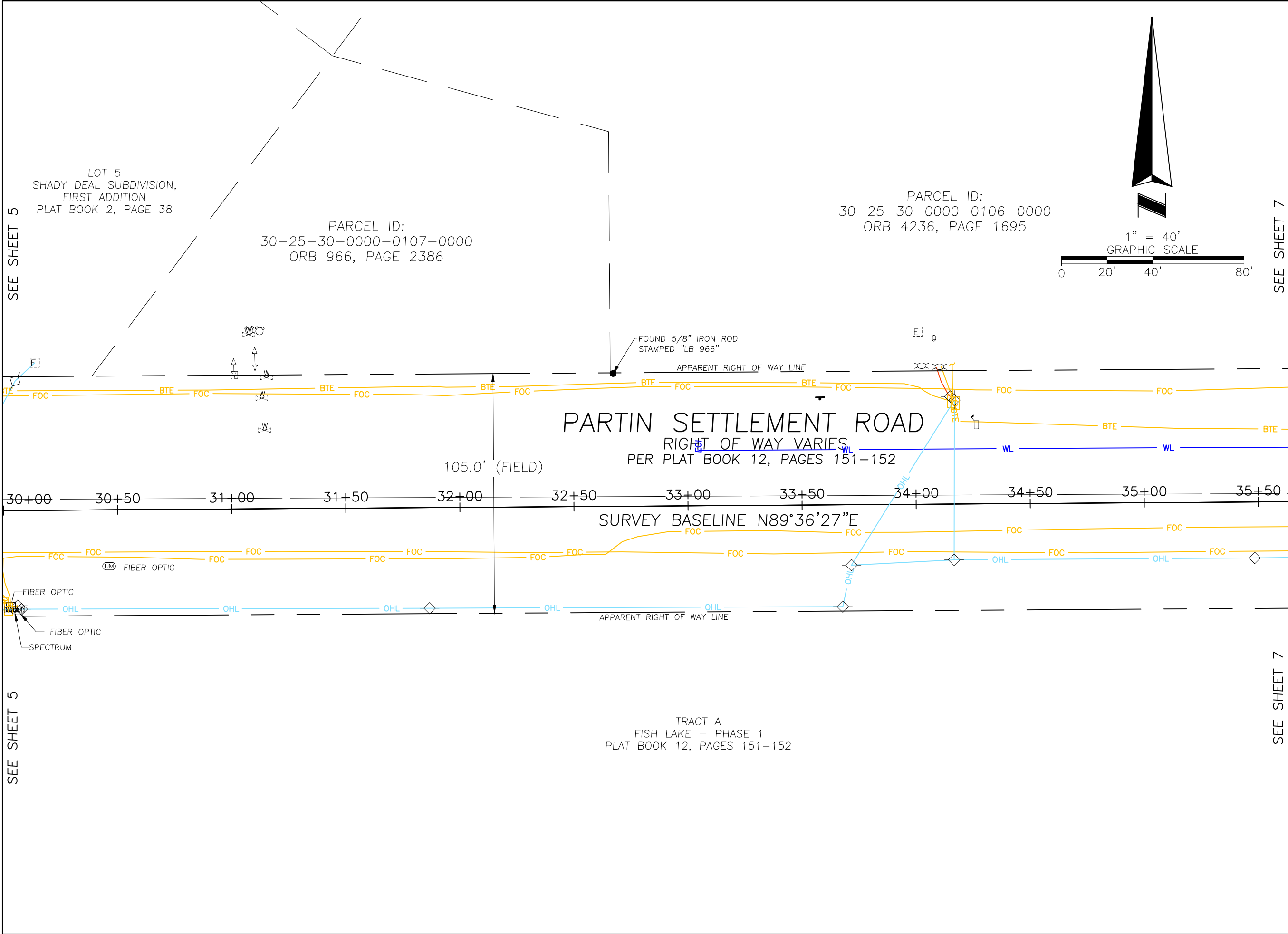
SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
5 OF 28



SEE SHEET 5

SEE SHEET 5

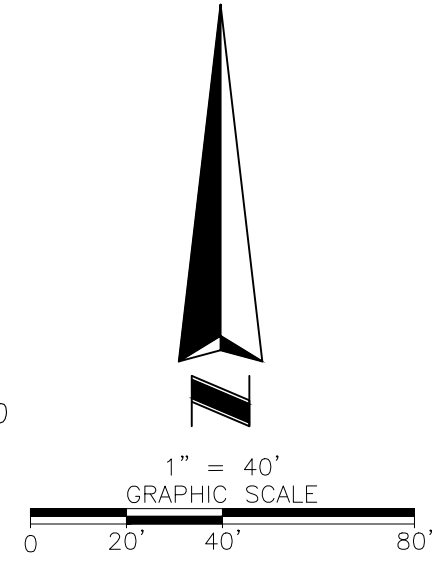
SEE SHEET 7

SEE SHEET 7

LOT 5
SHADY DEAL SUBDIVISION,
FIRST ADDITION
PLAT BOOK 2, PAGE 38

PARCEL ID:
30-25-30-0000-0107-0000
ORB 966, PAGE 2386

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ORB 4236, PAGE 1695

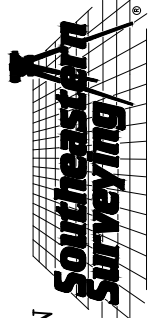


PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES
PER PLAT BOOK 12, PAGES 151-152

SURVEY BASELINE N89°36'27"E

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
6 OF 28

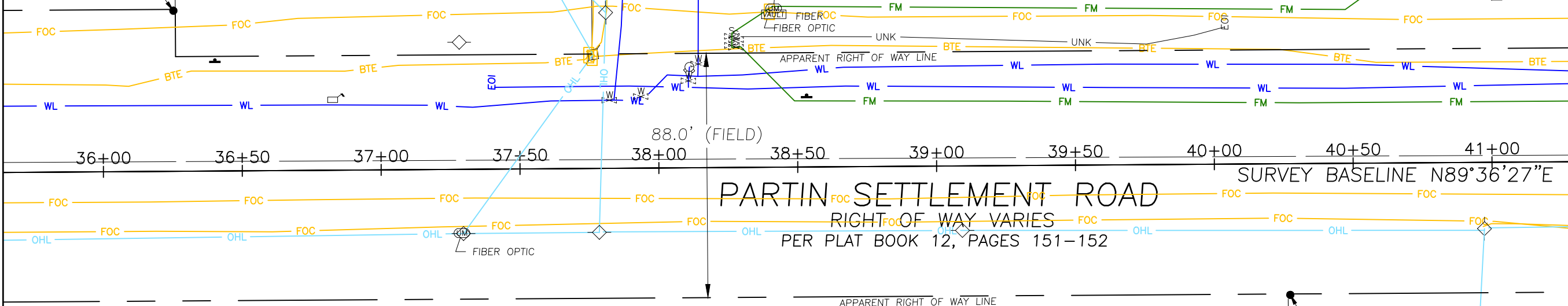
SEE SHEET 6

PARCEL ID:
30-25-30-0000-0105-0000
ORB 2537, PAGE 1850

PARCEL ID:
30-25-30-0000-0035-0000
ORB 1382, PAGE 1470

SEE SHEET 8

FOUND 5/8" IRON ROD
NO IDENTIFICATION



PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES
PER PLAT BOOK 12, PAGES 151-152

SURVEY BASELINE N89°36'27"E

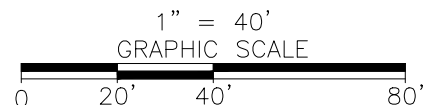
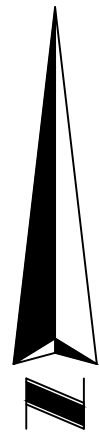
88.0' (FIELD)

FOUND 5/8" IRON ROD
LB 966

PARCEL ID:
30-25-30-0000
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ORB 1144, PAGE 2910

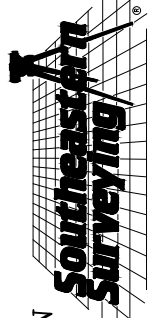
SEE SHEET 6

SEE SHEET 8



TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW

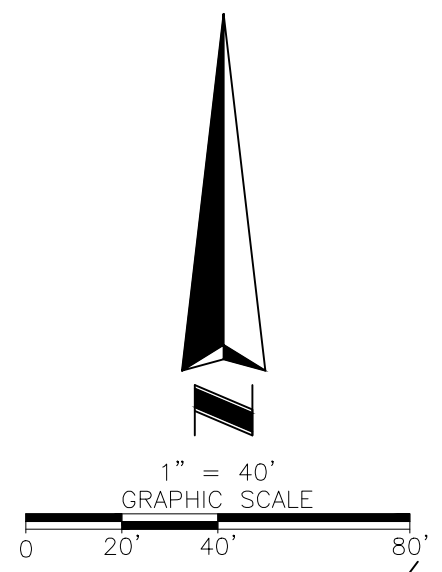
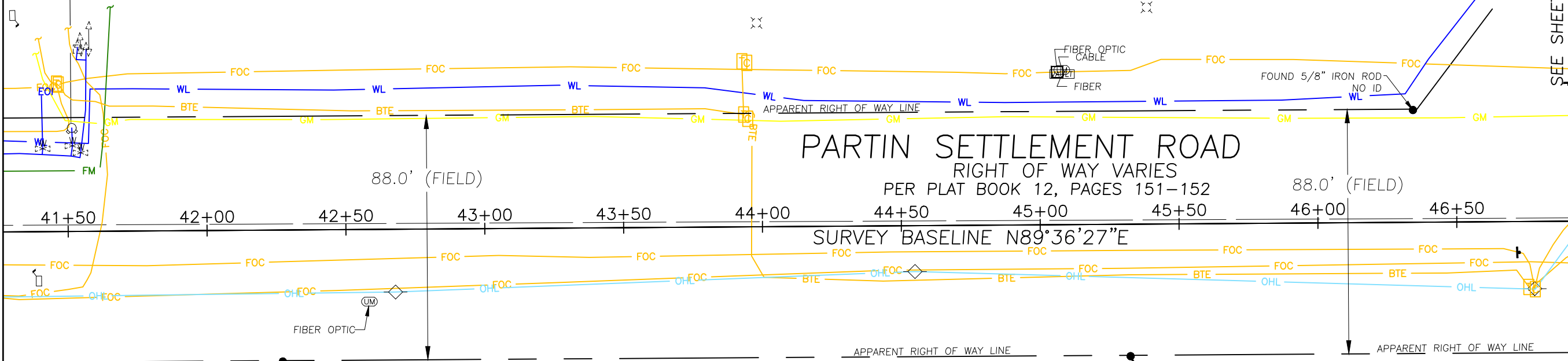
SHEET
NUMBER
7 OF 28

SEE SHEET 7

SEE SHEET 7

PARCEL ID:
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ORB 1382, PAGE 1470

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30-25-30-0000-0030-0000
ORB 1542, PAGE 1366



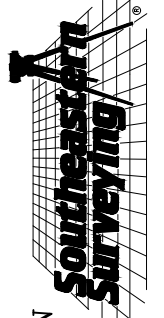
SEE SHEET 9

PARCEL ID:
30-25-30-0000-0070-0000
ORB 1144, PAGE 2910

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

SEE SHEET 9

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



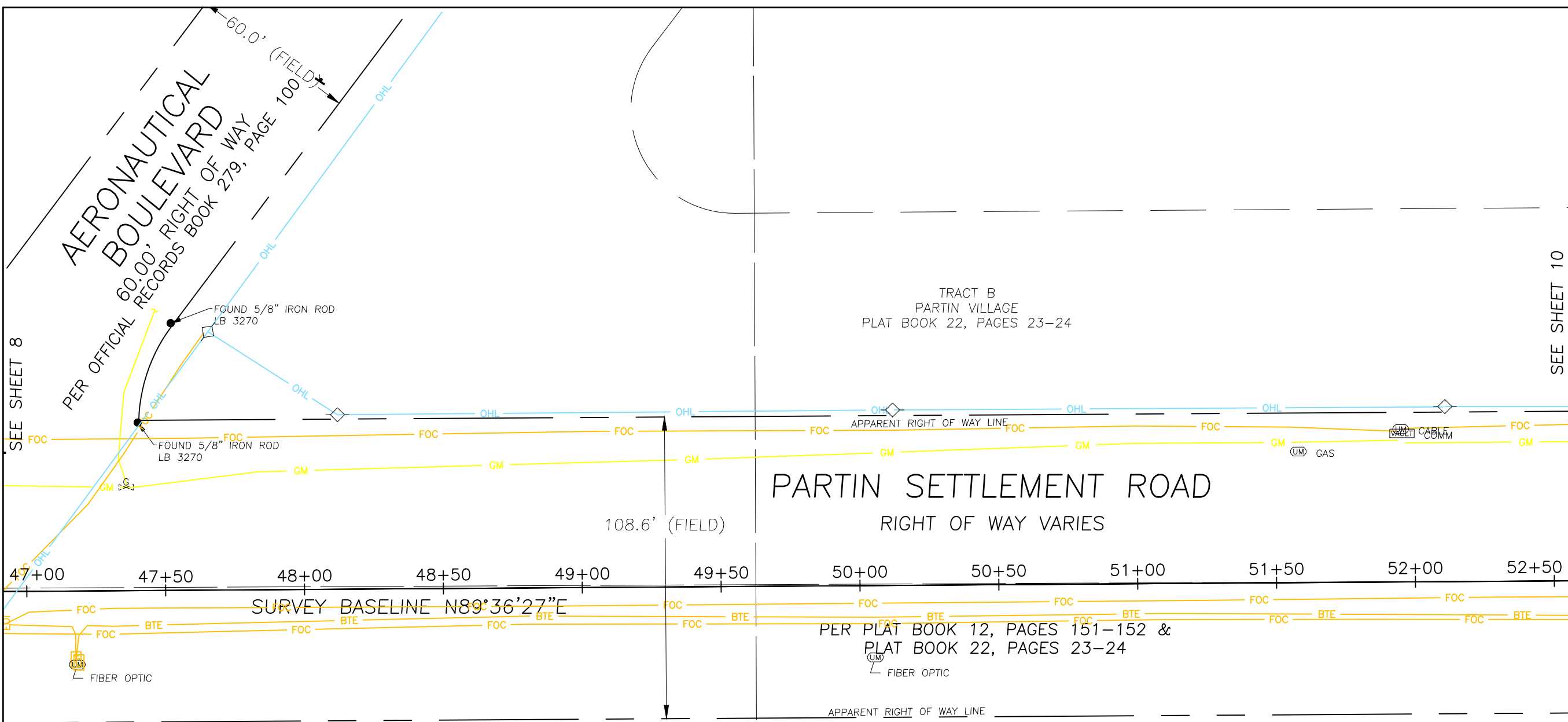
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Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
8 OF 28



SEE SHEET 8

SEE SHEET 8

SEE SHEET 10

SEE SHEET 10

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

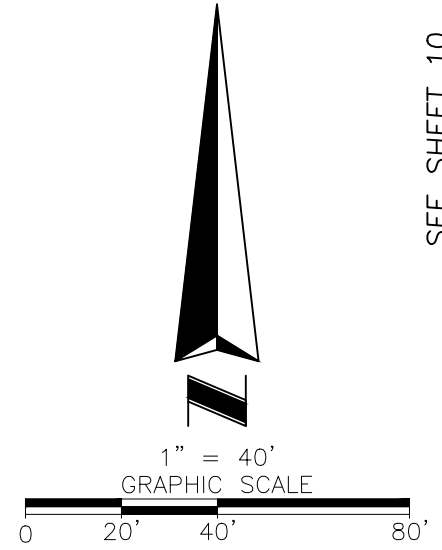
TRACT B
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

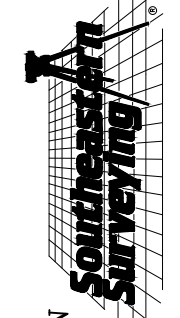
PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES

SURVEY BASELINE N89°36'27"E

PER PLAT BOOK 12, PAGES 151-152 &
PLAT BOOK 22, PAGES 23-24



SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
9 OF 28

SEE SHEET 9

SEE SHEET 9

SEE SHEET 11

SEE SHEET 11

TRACT B
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

TRACT SW
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

LOT 6
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

TRACT C
PARTIN VILLAGE
PLAT BOOK 22
PAGES 23-24

53+00 53+50 54+00 54+50 55+00 55+50 56+00 56+50 57+00 57+50 58+00

PARTIN SETTLEMENT ROAD

RIGHT OF WAY VARIES
PER PLAT BOOK 12, PAGES 151-152
& PLAT BOOK 22, PAGES 23-24

SURVEY BASELINE N89°36'27"E

108.6' (FIELD)

FOUND NAIL & DISK
PCP LB 966

APPARENT RIGHT OF WAY LINE

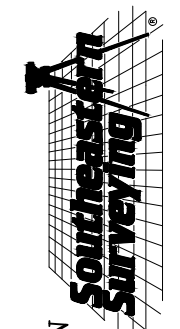
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FIBER OPTIC COMM

TRACT A
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

TRACT B
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



SOUTHEASTERN SURVEYING
AND MAPPING CORPORATION

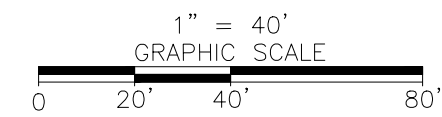
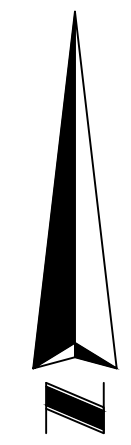
6500 All American Boulevard Orlando,
Florida 32810-4350 (407) 292-8580
Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project: Partin Settlement Road

Field Date: October 28, 2020
Drawn By: WMS
Scale: 1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
10 OF 28

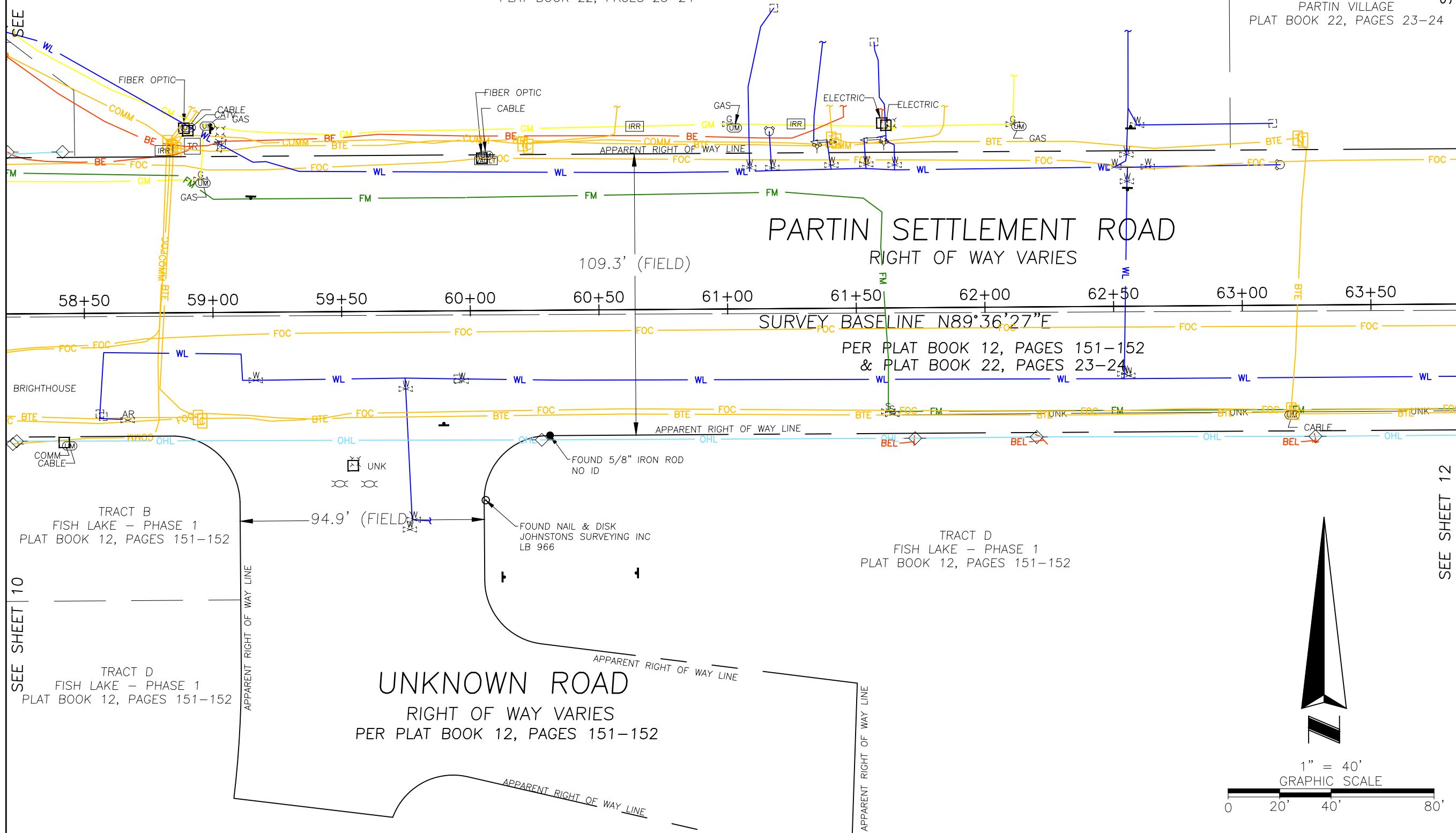


SEE SHEET 10

SEE SHEET 10

LOT 6
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

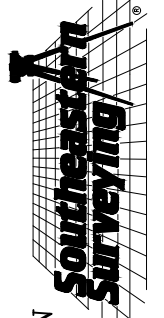
LOT 1
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24



SEE SHEET 12

SEE SHEET 12

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project: Partin Settlement Road

Field Date: October 28, 2020
Drawn By: WMS
Scale: 1" = 40'

**DRAWING NUMBER
64576 PRELIM RW**
**SHEET
NUMBER
11 OF 28**

SEE SHEET 11

SEE SHEET 11

SEE SHEET 13

SEE SHEET 13

LOT 1
PARTIN VILLAGE
PLAT BOOK 22, PAGES 23-24

LOT 1
PARTIN CORNERS
PLAT BOOK 20, PAGE 115

PARTIN SETTLEMENT ROAD

RIGHT OF WAY VARIES

PER PLAT BOOK 12, PAGES 151-152
& PLAT BOOK 22, PAGES 23-24

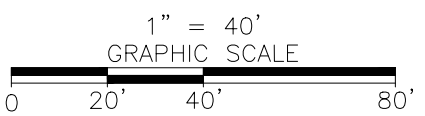
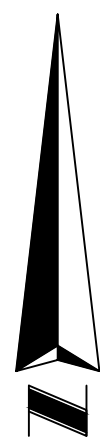
TRACT C
FISH LAKE - PHASE 1
PLAT BOOK 12, PAGES 151-152

64+00 64+50 65+00 65+50 66+00 66+50 67+00 67+50 68+00 68+50 69+00

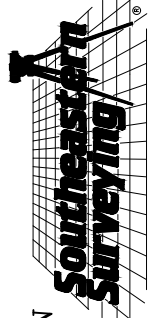
109.3' (FIELD)

88.5' (FIELD)

SURVEY BASELINE N89°36'27"F



SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



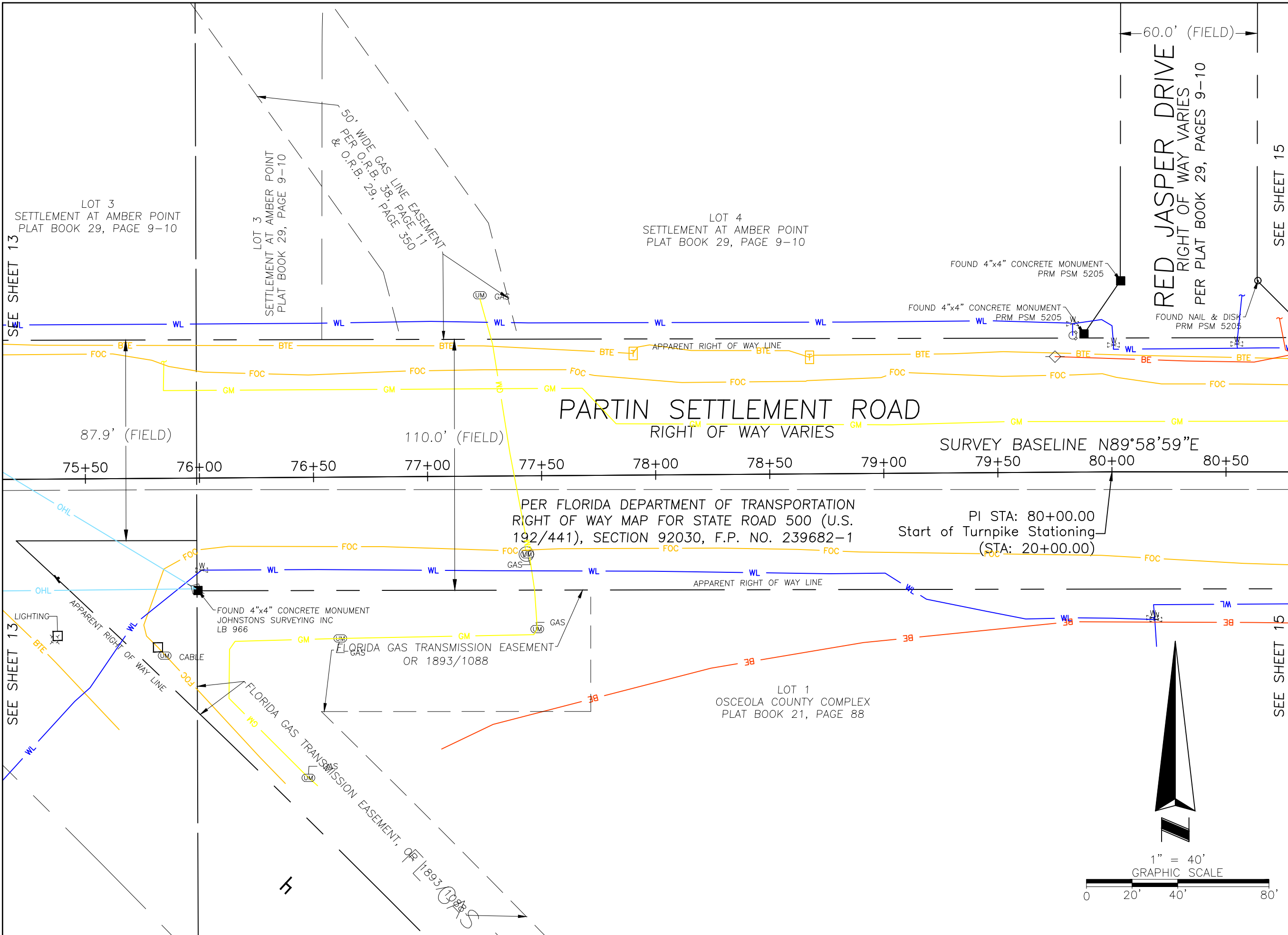
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Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
12 OF 28



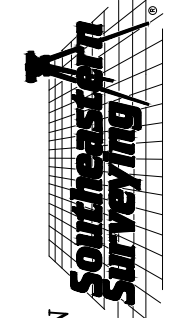
SEE SHEET 13

SEE SHEET 13

SEE SHEET 15

SEE SHEET 15

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

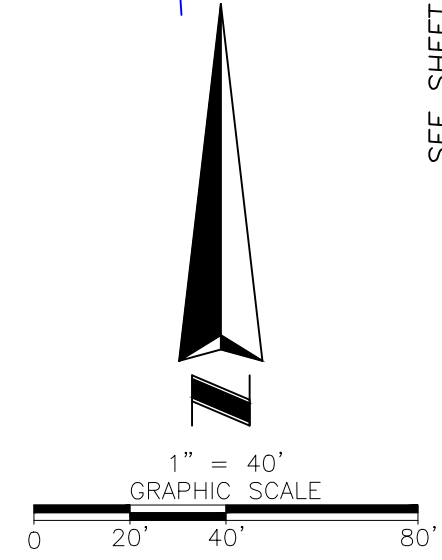


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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
14 OF 28



SEE SHEET 14

SEE SHEET 14

SEE SHEET 16

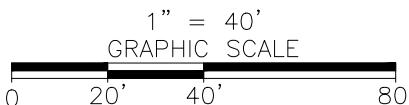
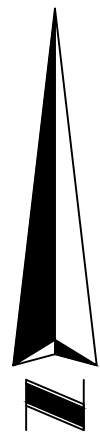
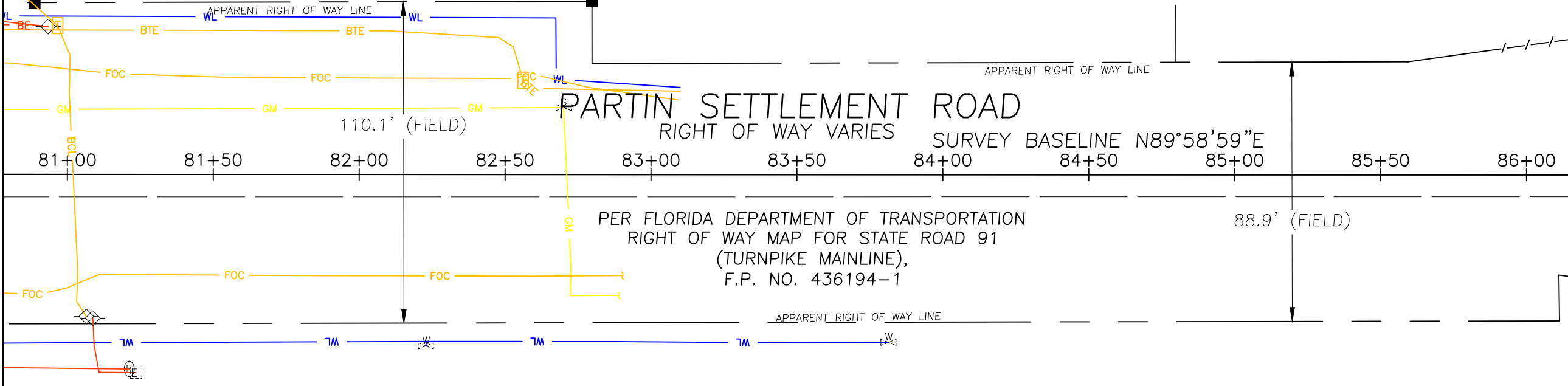
SEE SHEET 16

LOT 5
SETTLEMENT AT AMBER POINT
PLAT BOOK 29, PAGE 9-10

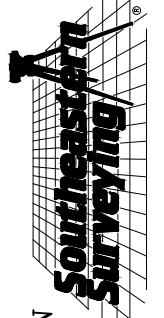
LOT 1
OSCEOLA COUNTY COMPLEX
PLAT BOOK 21, PAGE 88

FOUND 4"x4" CONCRETE MONUMENT
PRM PSM 5205

FOUND 4"x4" CONCRETE MONUMENT
PRM PSM 5205



SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW

SHEET
NUMBER
15 OF 28

SEE SHEET 15

SEE SHEET 15

LOT 5
SETTLEMENT AT AMBER POINT
PLAT BOOK 29, PAGE 9-10

LOT 2
OSCEOLA COUNTY COMPLEX
PLAT BOOK 21, PAGE 88

PARTIN SETTLEMENT ROAD

RIGHT OF WAY VARIES

SURVEY BASELINE N89°05'04"E

PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

86+50 87+00 87+50 88+00 88+50 89+00 89+50 90+00 90+50 91+00 91+50 92+00

PI STA: 87+64.22

163.0' (FIELD)

PI STA: 91+49.35

169.3' (FIELD)

FOUND 4"x4" CONCRETE MONUMENT
WMJ JOHNSTON
PLS 935

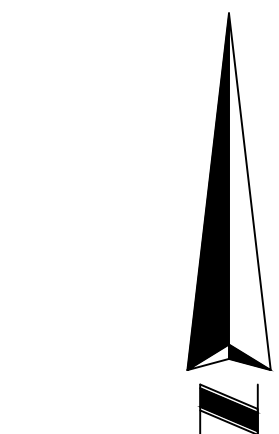
FOUND 6"x6" CONCRETE MONUMENT
R/W

FOUND 6"x6" CONCRETE MONUMENT
NO ID

FOUND 6"x6" CONCRETE MONUMENT
R/W

FOUND 5/8" IRON ROD
NO ID

FOUND 3"x3" CONCRETE MONUMENT
NO ID



1" = 40'
GRAPHIC SCALE
0 20' 40' 80'

APPARENT LIMITED ACCESS RIGHT OF WAY LINE

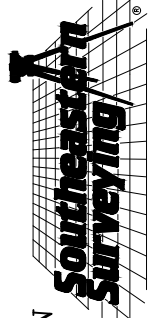
APPARENT LIMITED ACCESS RIGHT OF WAY LINE

APPARENT LIMITED ACCESS RIGHT OF WAY LINE

APPARENT LIMITED ACCESS RIGHT OF WAY LINE

APPARENT LIMITED ACCESS RIGHT OF WAY LINE

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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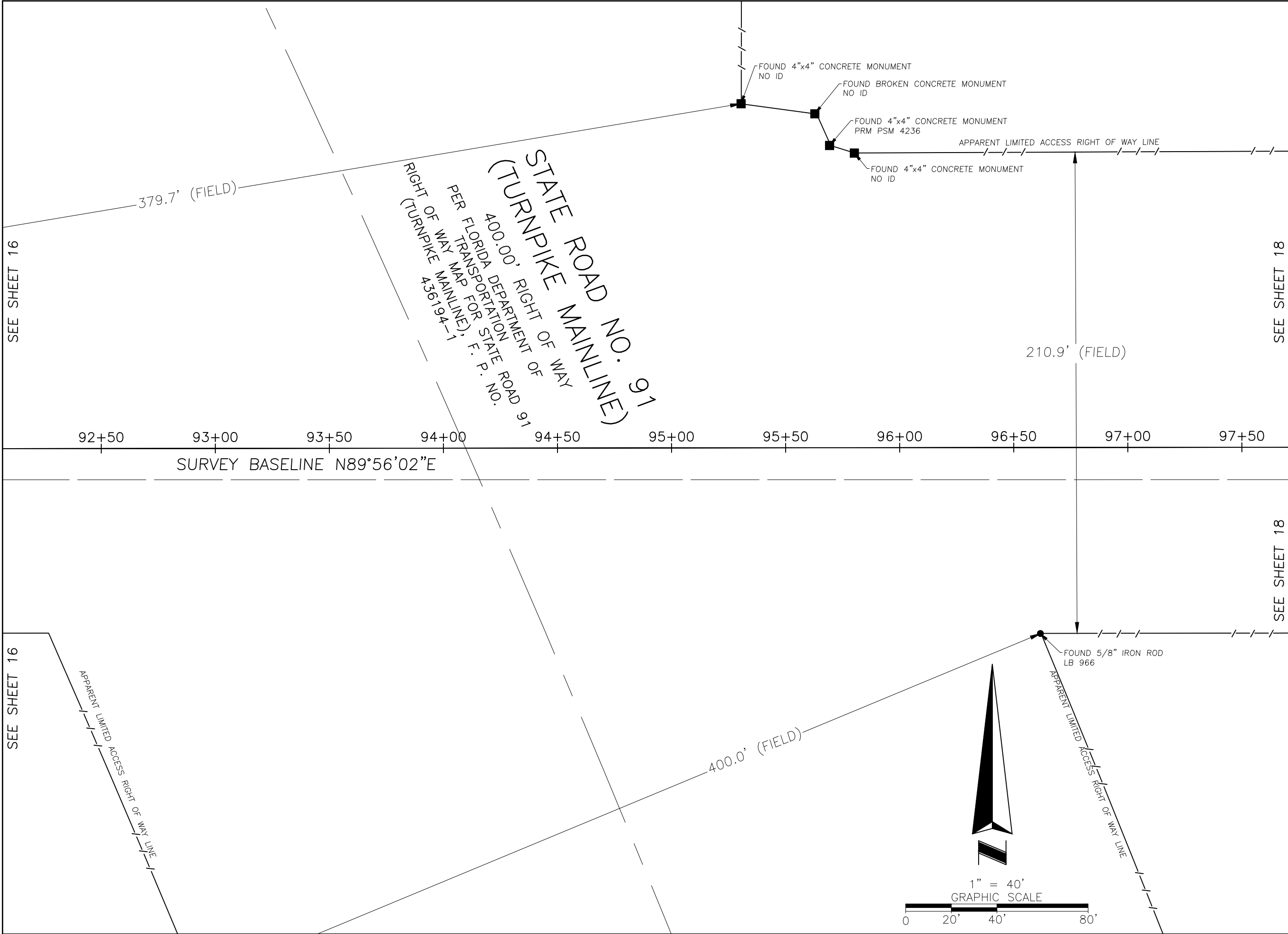
SEE SHEET 17

SEE SHEET 17

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
16 OF 28



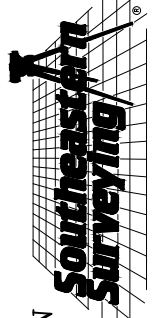
SEE SHEET 16

SEE SHEET 16

SEE SHEET 18

SEE SHEET 18

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

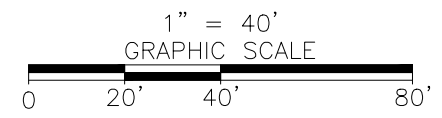


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Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
17 OF 28



SEE SHEET 17

SEE SHEET 17

SEE SHEET 19

SEE SHEET 19

FOUND 4"x4" CONCRETE MONUMENT
PRM PSM 4236

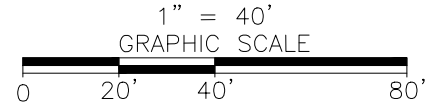
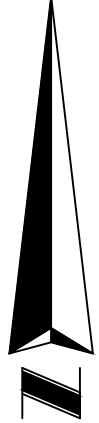
FOUND 4"x4" CONCRETE MONUMENT
PRM PSM 4236

FOUND 1/2" IRON ROD
LB 5824 GBA

FOUND 5/8" IRON ROD
LB 966

FOUND NAIL & DISK
JOHNSTONS SURVEYING INC
LB 966

FOUND 5/8" IRON ROD
LB 966



APPARENT LIMITED ACCESS RIGHT OF WAY LINE

APPARENT RIGHT OF WAY LINE

APPARENT RIGHT OF WAY LINE

SURVEY BASELINE N89°16'33"E

PI STA: 98+23.16

PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES
PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

PARCEL ID:
29-25-30-0000-0174-0000
ORB 5223, PAGE 17

PARCEL ID:
29-25-30-0000-0170-0000
ORB 5223, PAGE 17

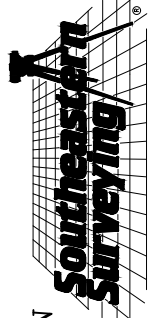
PARCEL ID:
29-25-30-0000
-0165-0000
ORB 5223, PAGE 17

211.3' (FIELD)

85.1' (FIELD)

98+00 98+50 99+00 99+50 100+00 100+50 101+00 101+50 102+00 102+50 103+00

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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AND MAPPING CORPORATION**
6500 All American Boulevard Orlando,
Florida 32810-4350 (407) 292-8580
Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
18 OF 28

SEE SHEET 18

SEE SHEET 18

SOMERSET
PLAT BOOK 16, PAGES 178-179

TRACT "D"
REMINGTON - PHASE 2

REMINGTON
BOULEVARD

RIGHT OF WAY VARIES
PER PLAT BOOK 11, PAGES 28-29

PARTIN SETTLEMENT ROAD

PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

PI STA: 108+82.68
End of Turnpike Stationing
(STA: 48+82.68)

SURVEY BASELINE N89°16'33"E
103+50 104+00 104+50

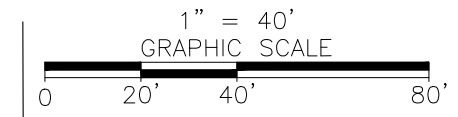
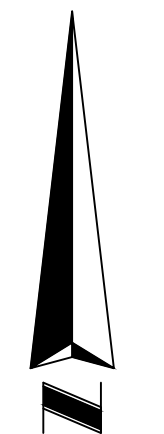
PI STA: 104+81.40

SURVEY BASELINE N89°44'49"E

85.2' (FIELD)
107+00 107+50 108+00 108+50

FOUND 1/2" IRON ROD
NO IDENTIFICATION

FOUND 5/8" IRON ROD
NO IDENTIFICATION



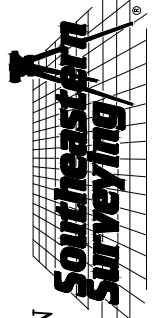
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ORB 5301, PAGE 237

PARCEL ID:
29-25-30-0000-0161-0000
ORB 2223, PAGES 2070-2073

SEE SHEET 20

SEE SHEET 20

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
19 OF 28

PARCEL "L"
 REMINGTON - PHASE 2
 PLAT BOOK 11, PAGES 28-29

TRACT "E"
 REMINGTON - PHASE 2

PARTIN SETTLEMENT ROAD
 RIGHT OF WAY VARIES

SURVEY BASELINE N89°49'20"E
 PER FLORIDA DEPARTMENT OF TRANSPORTATION
 RIGHT OF WAY MAP FOR STATE ROAD 91
 (TURNPIKE MAINLINE),
 F.P. NO. 436194-1

PARCEL ID:
 29-25-30-0000-0145-0000
 ORB 5134, PAGE 603

SEE SHEET 19

SEE SHEET 21

SEE SHEET 21

10" DIP WATER SERVICES

OPTIGHTING

FIBER OPTIC

WL

109+00

109+50

110+00

110+50

111+00

111+50

112+00

112+50

113+00

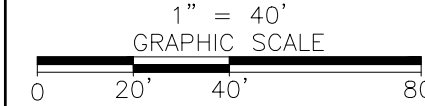
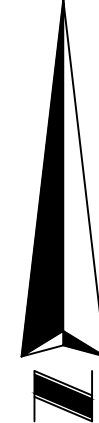
113+50

114+00

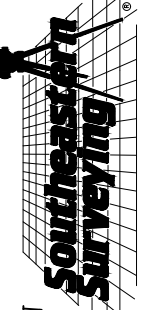
114+50

105.6' (FIELD)

FOUND 5/8" IRON ROD
 NO IDENTIFICATION



SEE SHEET 1 FOR NOTES,
 LEGEND AND DESCRIPTION.



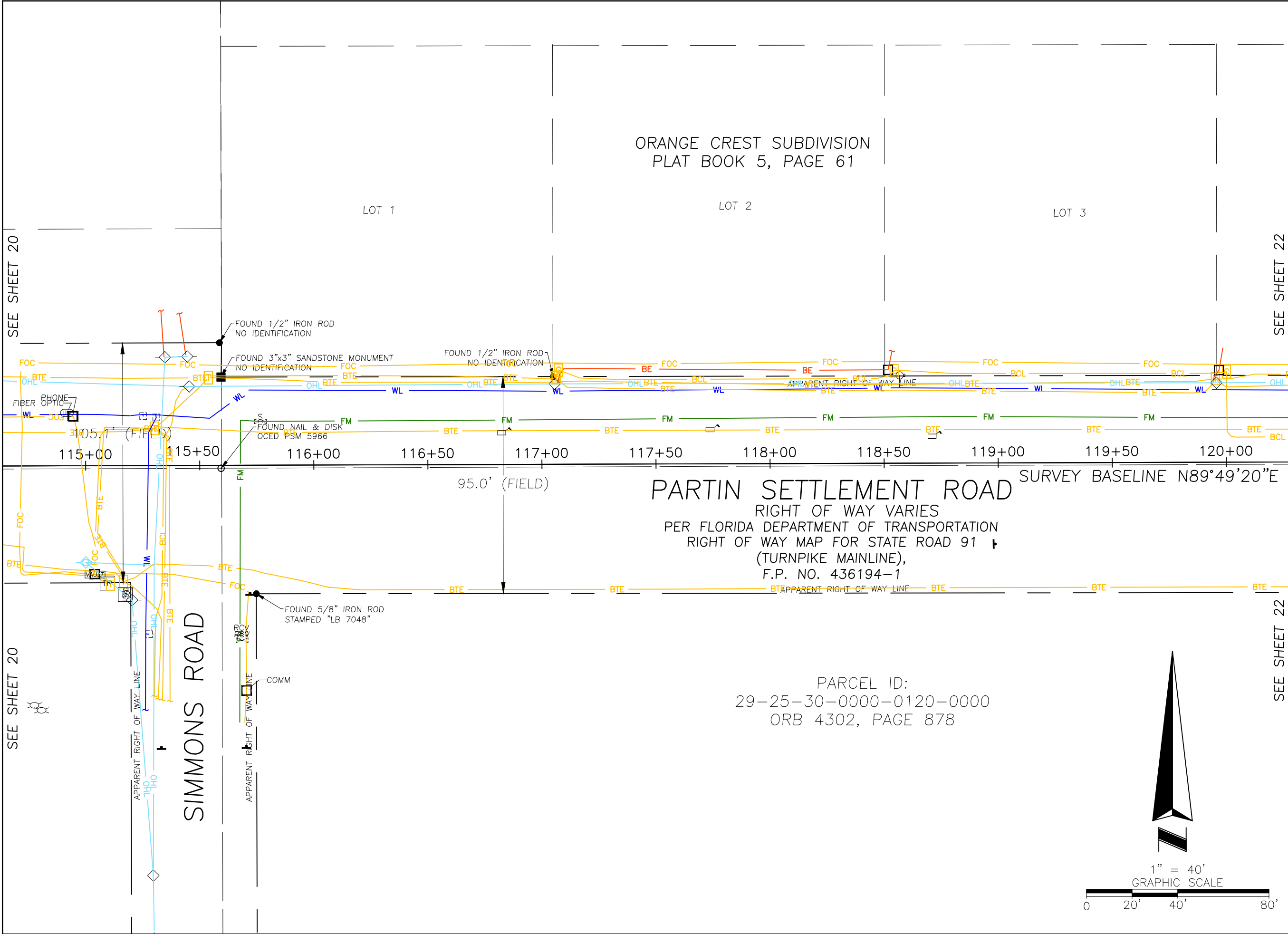
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 Florida 32810-4350 (407) 292-8580
 Certification Number LB2108 e-mail:
 info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
 SHEET
 NUMBER
20 OF 28



ORANGE CREST SUBDIVISION
PLAT BOOK 5, PAGE 61

LOT 1

LOT 2

LOT 3

PARTIN SETTLEMENT ROAD

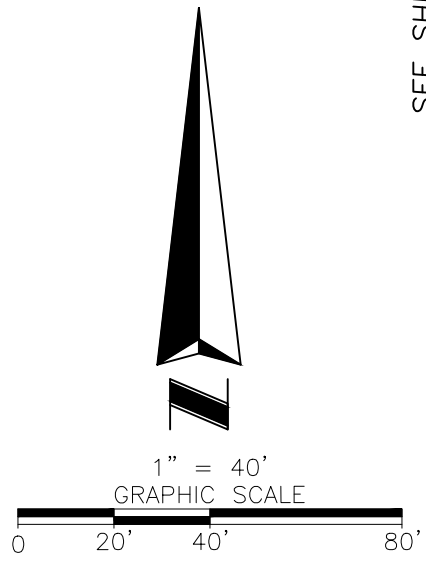
RIGHT OF WAY VARIES
PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

PARCEL ID:
29-25-30-0000-0120-0000
ORB 4302, PAGE 878

SIMMONS ROAD

SURVEY BASELINE N89°49'20"E

95.0' (FIELD)



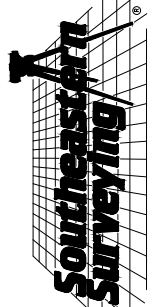
SEE SHEET 20

SEE SHEET 20

SEE SHEET 22

SEE SHEET 22

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
21 OF 28

SEE SHEET 21

SEE SHEET 21

SEE SHEET 23

SEE SHEET 23

ORANGE CREST SUBDIVISION
PLAT BOOK 5, PAGE 61

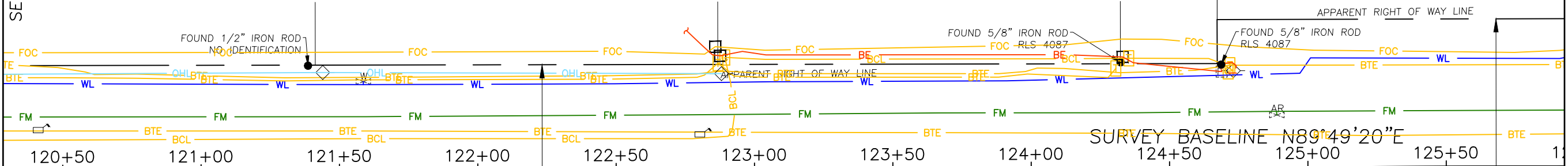
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ORB 1040, PAGE 618

LOT 4

LOT 5

LOT 6

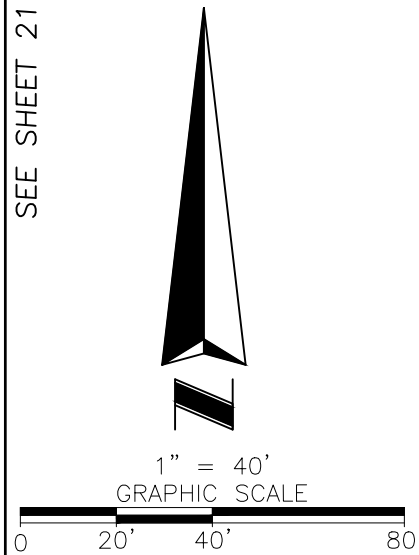
LOT 7



95.3' (FIELD)

PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES
PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

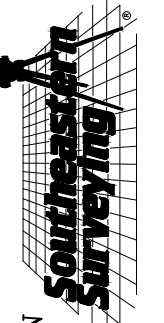
111.6' (FIELD)



PARCEL ID:
29-25-30-0000-0120-0000
ORB 4302, PAGE 878

PARCEL ID:
29-25-30-0000-0115-0000
ORB 5438, PAGE 1903

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

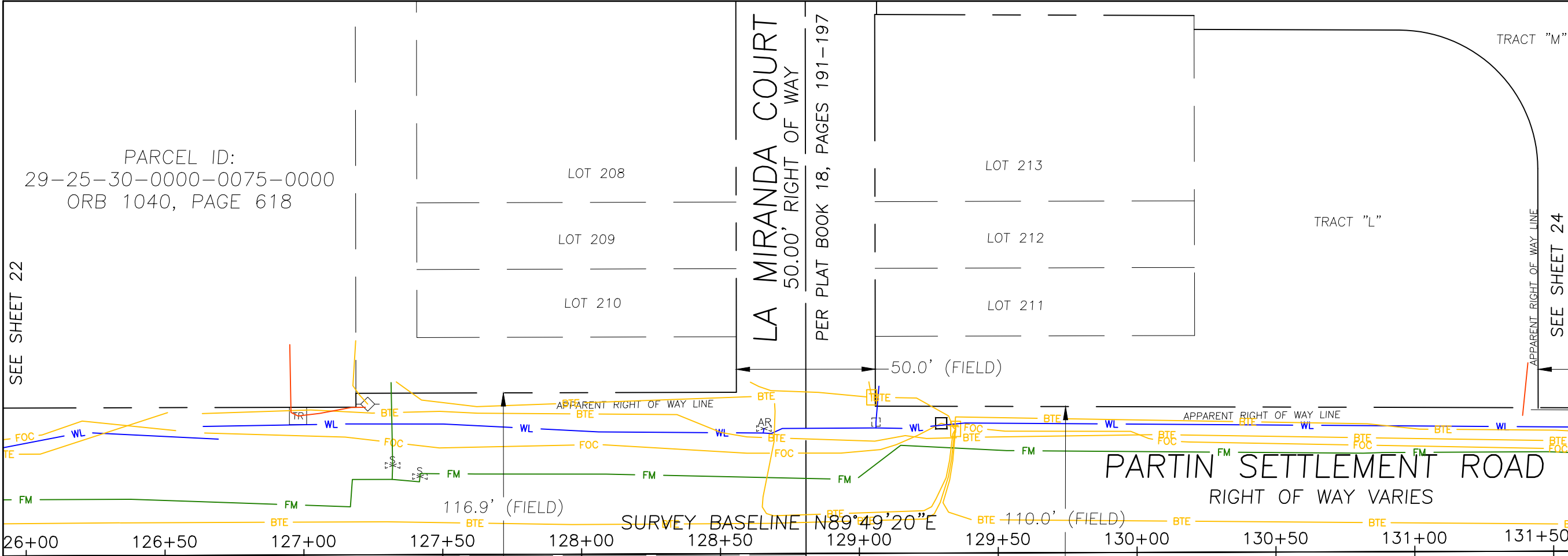


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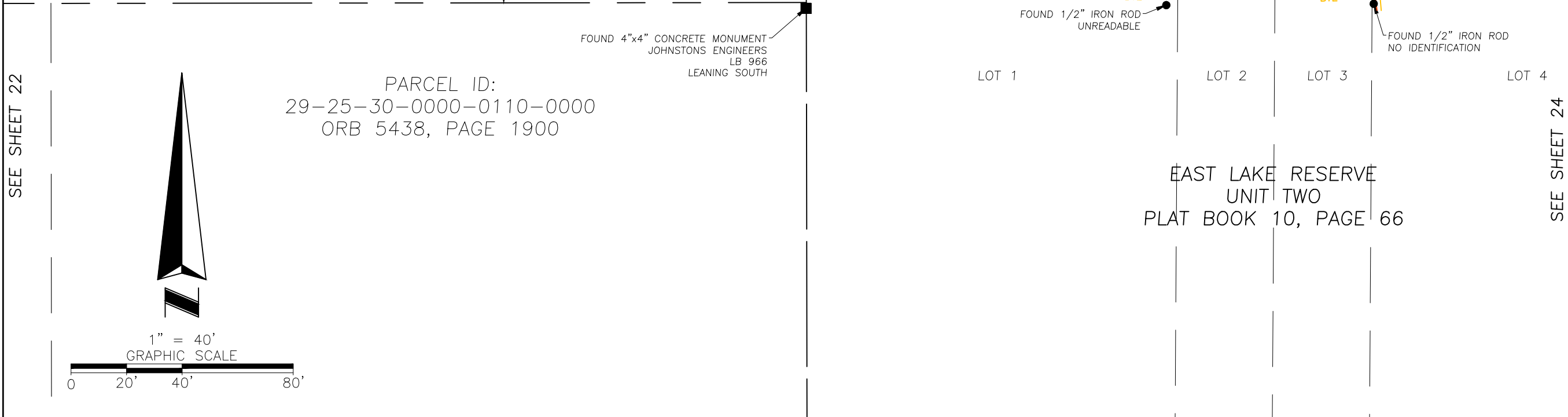
PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
22 OF 28



PER FLORIDA DEPARTMENT OF TRANSPORTATION
 RIGHT OF WAY MAP FOR STATE ROAD 91
 (TURNPIKE MAINLINE),
 F.P. NO. 436194-1



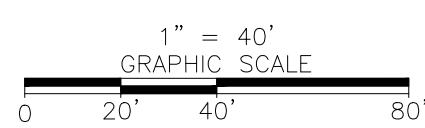
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 ORB 1040, PAGE 618

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 29-25-30-0000-0110-0000
 ORB 5438, PAGE 1900

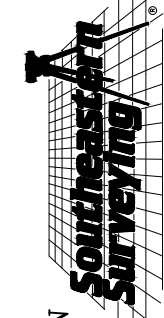
LA MIRANDA COURT
 50.00' RIGHT OF WAY
 PER PLAT BOOK 18, PAGES 191-197

PARTIN SETTLEMENT ROAD
 RIGHT OF WAY VARIES

EAST LAKE RESERVE
 UNIT TWO
 PLAT BOOK 10, PAGE 66



SEE SHEET 1 FOR NOTES,
 LEGEND AND DESCRIPTION.



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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
 SHEET NUMBER
23 OF 28

SEE SHEET 23

SEE SHEET 23

COSTA MESA LANE
RIGHT OF WAY VARIES

PER PLAT BOOK 18, PAGES 191-197

APPARENT RIGHT OF WAY LINE

TRACT "B"

LOT 1 LOT 2 LOT 3 LOT 4 LOT 4 LOT 5 LOT 6 LOT 7

LAGO BUENDIA PHASE 1
PLAT BOOK 18, PAGES 191-197

SEE SHEET 25

100.0' (FIELD)

TRACT "B"

APPARENT RIGHT OF WAY LINE

PARTIN SETTLEMENT ROAD
RIGHT OF WAY VARIES

SURVEY BASELINE N89°49'20"E

110.0' (FIELD)

132+00 132+50 133+00 133+50 134+00 134+50 135+00 135+50 136+00 136+50 137+00

PER FLORIDA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP FOR STATE ROAD 91
(TURNPIKE MAINLINE),
F.P. NO. 436194-1

FOUND 4"x4" CONCRETE MONUMENT
JOHNSTONS ENGINEERS
LB 966

LOT 4

FOUND 1/2" IRON ROD
UNREADABLE

LOT 3

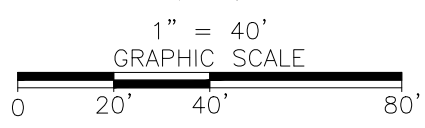
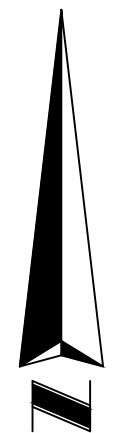
FOUND 1/2" IRON ROD
UNREADABLE

LOT 2

FOUND 1/2" IRON ROD
UNREADABLE

LOT 1

FOUND 4"x4" CONCRETE MONUMENT
JOHNSTONS ENGINEERS
LB 966

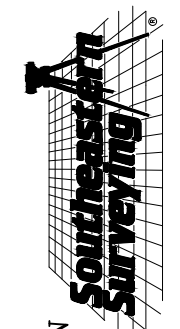


EAST LAKE RESERVE
PLAT BOOK 18, PAGE 65

PARCEL ID:
28-25-30-0000-0037-0000
ORB 4406, PAGE 1387

SEE SHEET 25

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



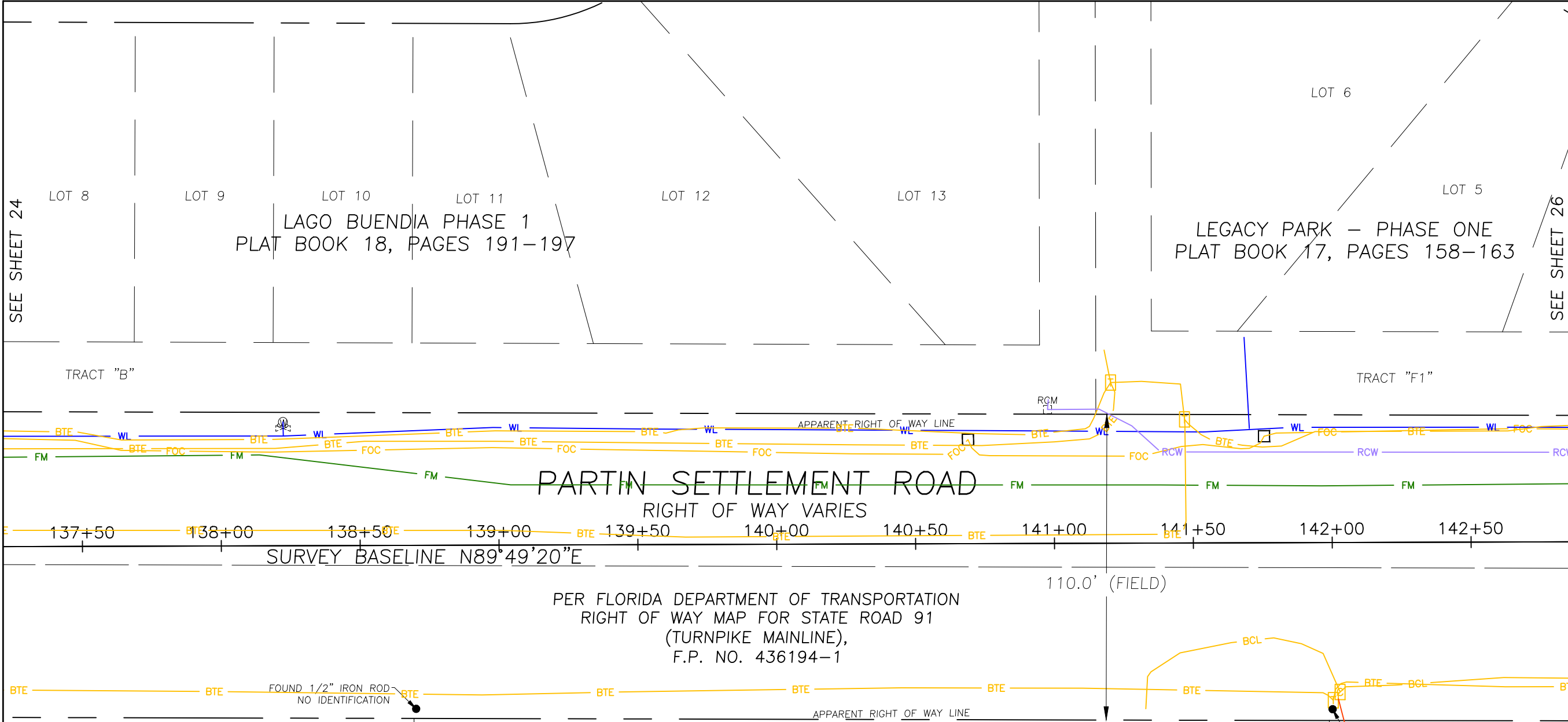
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Florida 32810-4350 (407) 292-8580
Certification Number LB2108 e-mail:
info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT

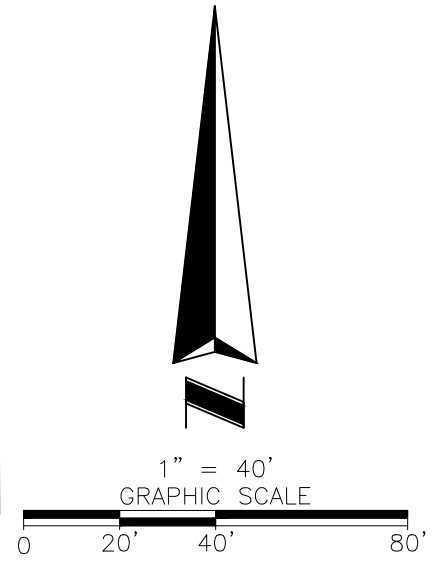
Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
24 OF 28



SEE SHEET 24

PARCEL ID:
28-25-30-0000-0037-0000
ORB 4406, PAGE 1387

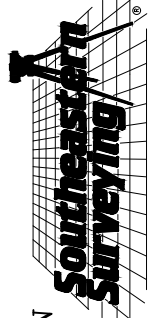


PARCEL ID:
28-25-30-0000-0032-0000
ORB 5099, PAGE 1569

PARCEL ID:
28-25-30-0000-0106-0000
ORB 5704,
PAGE 1673

SEE SHEET 26

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

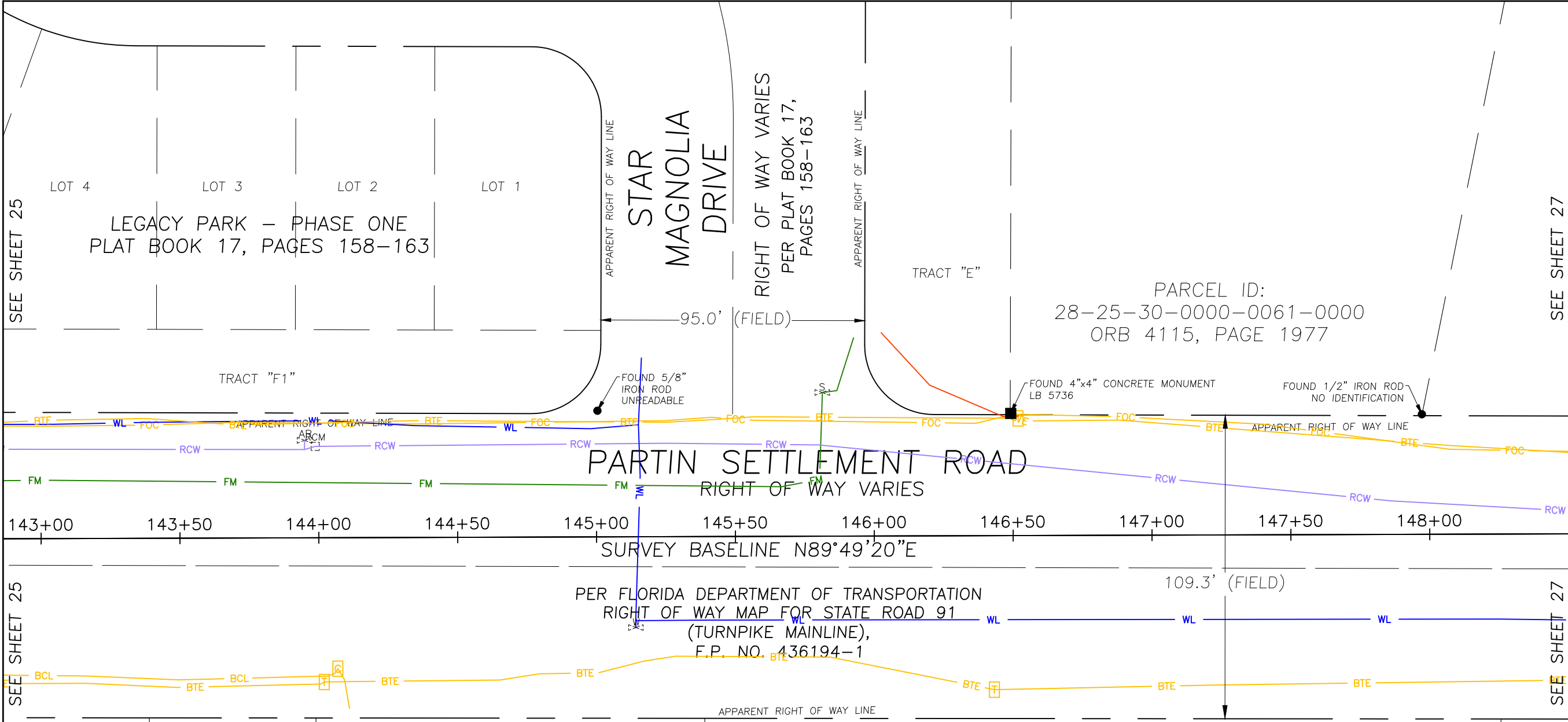


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PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET NUMBER
25 OF 28



PARCEL ID:
 28-25-30-0000-0106-0000
 ORB 5704,
 PAGE 1673

PARCEL ID:
 28-25-30-0000-0104-0000
 ORB 5645,
 PAGE 912

PARCEL ID:
 28-25-30-0000-0107-0000
 ORB 2222, PAGE 2676

PARCEL ID:
 28-25-30-0000-0103-0000
 ORB 2194, PAGE 2325

PARCEL ID:
 28-25-30-0000-01000-0000
 ORB 2095, PAGE 1704

1" = 40'
 GRAPHIC SCALE

0 20' 40' 80'

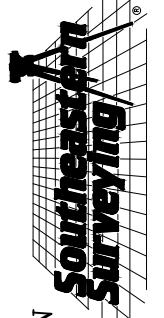
SEE SHEET 25

SEE SHEET 25

SEE SHEET 27

SEE SHEET 27

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



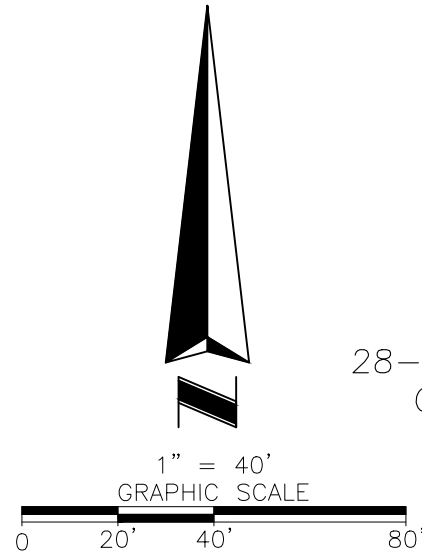
**SOUTHEASTERN SURVEYING
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PRELIMINARY RIGHT OF WAY EXHIBIT

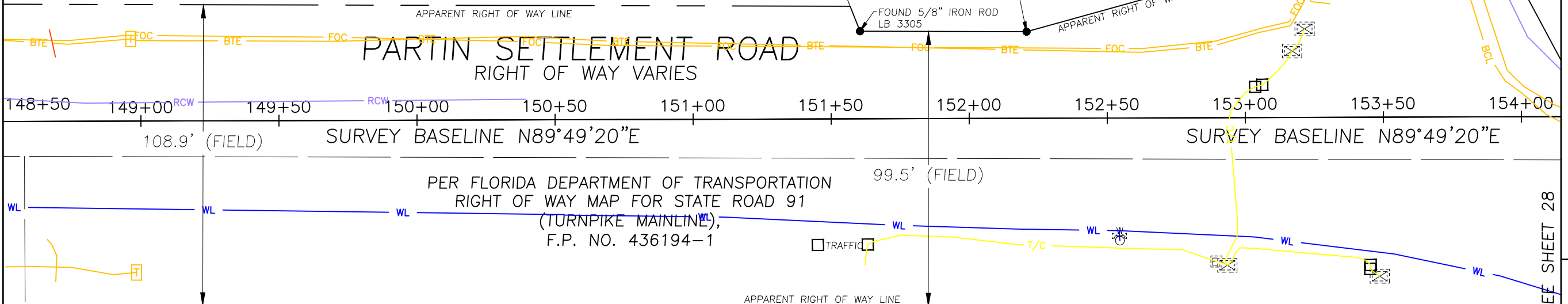
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Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
 64576 PRELIM RW
SHEET
 NUMBER
 26 OF 28

SEE SHEET 26



PARCEL ID:
28-25-30-0000-0061-0000
ORB 4200, PAGE 1019



SEE SHEET 26

PARCEL ID:
28-25-30-0000-01000-0000
ORB 2095, PAGE 1704

PARCEL ID:
28-25-30-0000-0105-0000
ORB 2194, PAGE 2333

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28-25-30-0000-0108-0000
ORB 2194, PAGE 2342

OCEAN GULF ESTATES, SECTION II
PLAT BOOK 2, PAGE 56

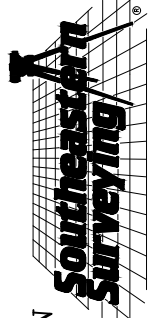
LOT 1

LOT 2

SEE SHEET 28

SEE SHEET 28

SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

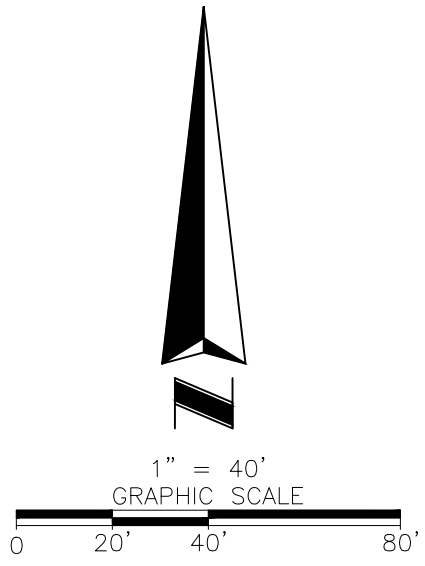
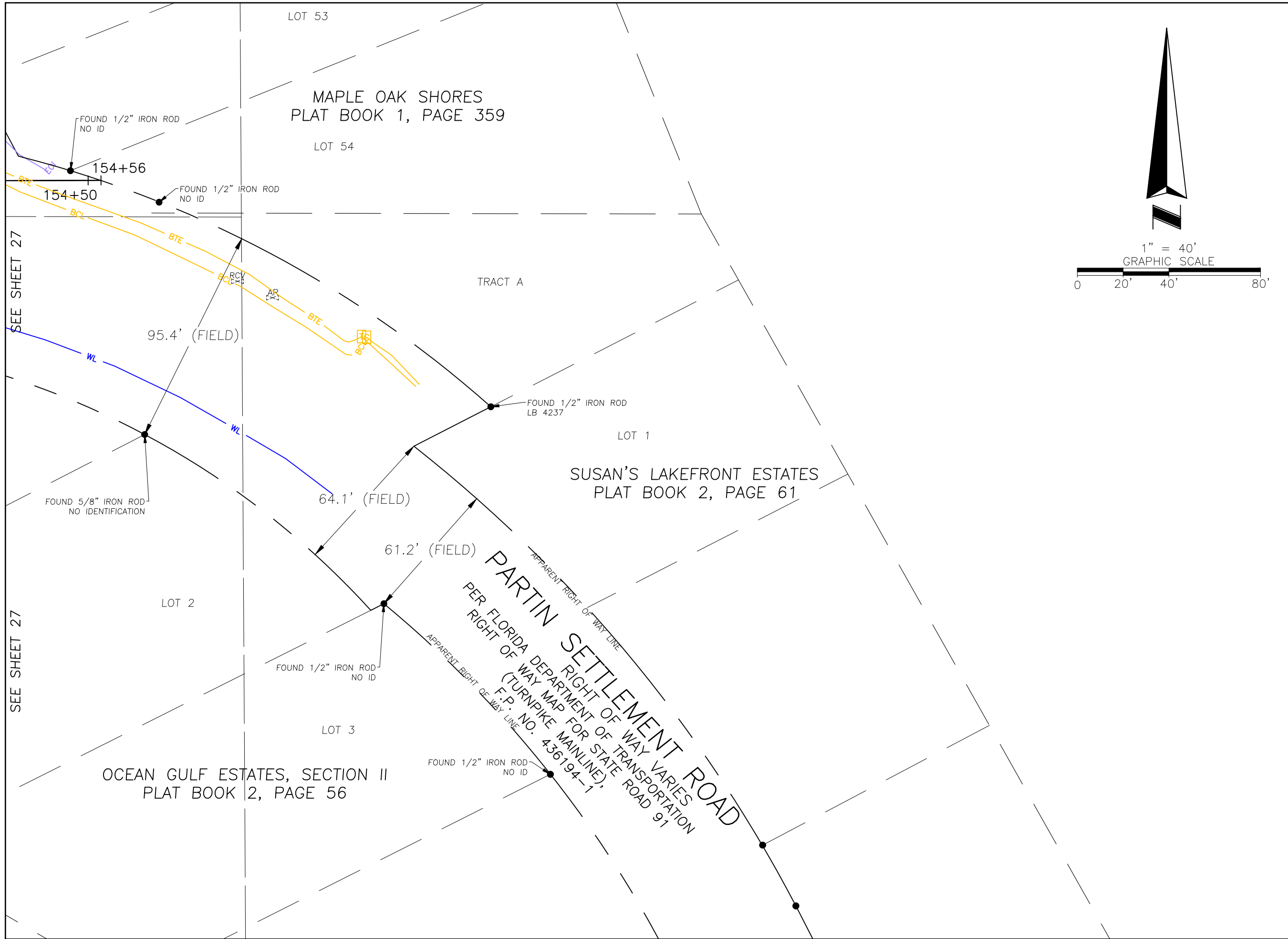


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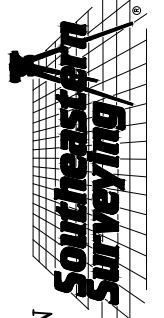
PRELIMINARY RIGHT OF WAY EXHIBIT

Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
27 OF 28



SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.



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info@southeasternsurveying.com

PRELIMINARY RIGHT OF WAY EXHIBIT	
Project:	Partin Settlement Road
Field Date:	October 28, 2020
Drawn By:	WMS
Scale:	1" = 40'

DRAWING NUMBER
64576 PRELIM RW
SHEET
NUMBER
28 OF 28