

**DRAFT CONTAMINATION SCREENING EVALUATION REPORT ADDENDUM**

Florida Department of Transportation

District One

State Road (S.R.) 70 Project Development and Environment (PD&E) Study

W. of S.R. 31 to SE Highlands County Line Rd.

DeSoto County, Florida

Financial Management Number: 451942-1-22-01

ETDM Number: 14569

Date: October 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

# EXECUTIVE SUMMARY

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The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening of approximately 16.7 miles of State Road (S.R.) 70 from west of S.R. 31 to SE Highlands County Line Road in unincorporated DeSoto County, Florida.

As a component of the PD&E Study, a Contamination Screening Evaluation Report (CSER) was completed in March 2025 to assess potential contamination concerns related to the proposed improvements to S.R. 70. This report serves as an addendum to the original PD&E CSER, addressing the siting of 13 stormwater management facilities (SMF) and 11 floodplain compensation (FPC) sites proposed for the project. The SMF sites will require approximately 168.67 acres of right-of-way acquisition and 6.69 acres of drainage/access easements, while the FPC sites will require an estimated 49.51 acres of right-of-way acquisition and 1.97 acres of drainage/access easements.

The preliminary evaluation involved reviewing an environmental database and aerial imagery, conducting a visual reconnaissance of the project corridor and surrounding area, obtaining relevant environment records from state and local agencies, and assigning potential contamination ratings for each source within and adjacent to the project corridor.

The original CSER identified a total of 21 sites as having potential contamination sources located within or adjacent to the project corridor. This CSER Addendum identified a total of 3 additional sites. Of the 24 sites, 7 sites are located within or adjacent to the proposed SMF and FPC sites. All 7 sites were rated as having a “Medium” potential for contamination impact. Two sites may require permitting if construction activities require local dewatering.



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# 1 INTRODUCTION

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## 1.1 Project Description

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to evaluate options for widening State Road (S.R.) 70 in DeSoto County. The project limits cover approximately 16.7 miles of S.R. 70 from west of S.R. 31 (Mile Post (MP) 14.973) to SE Highlands County Line Road (MP 31.763), as needed to accommodate roadway tie-ins. The project is located in Sections 32-36 of Township 37 South, Range 25 East; Sections 31-36 of Township 37 South, Range 26 East; Sections 31-36 of Township 37 South, Range 27 East; Sections 1-5 of Township 38 South, Range 25 East; Sections 1-6 of Township 38 South, Range 26 East; and Sections 1-6 of Township 38 South, Range 27 East. The project limits are shown in **Figure 1-1**.

The objective of this PD&E study is to evaluate widening the existing two-lane undivided roadway to a four-lane divided roadway. The project will include the construction of shared use paths, wildlife crossing features, roadway signing and pavement markings, and stormwater management facilities including treatment ponds and floodplain compensation sites.

This project has been evaluated for its potential effects on various social, cultural, natural, and physical resources. In addition to resource-specific technical reports produced for this study, the project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14569.

Upon completion, this study will meet all requirements of the National Environmental Policy Act of 1969 (NEPA) as administered for the FDOT by the FDOT Office of Environmental Management (OEM) and the requirements of other federal and state laws to qualify the proposed project for federal-aid funding.

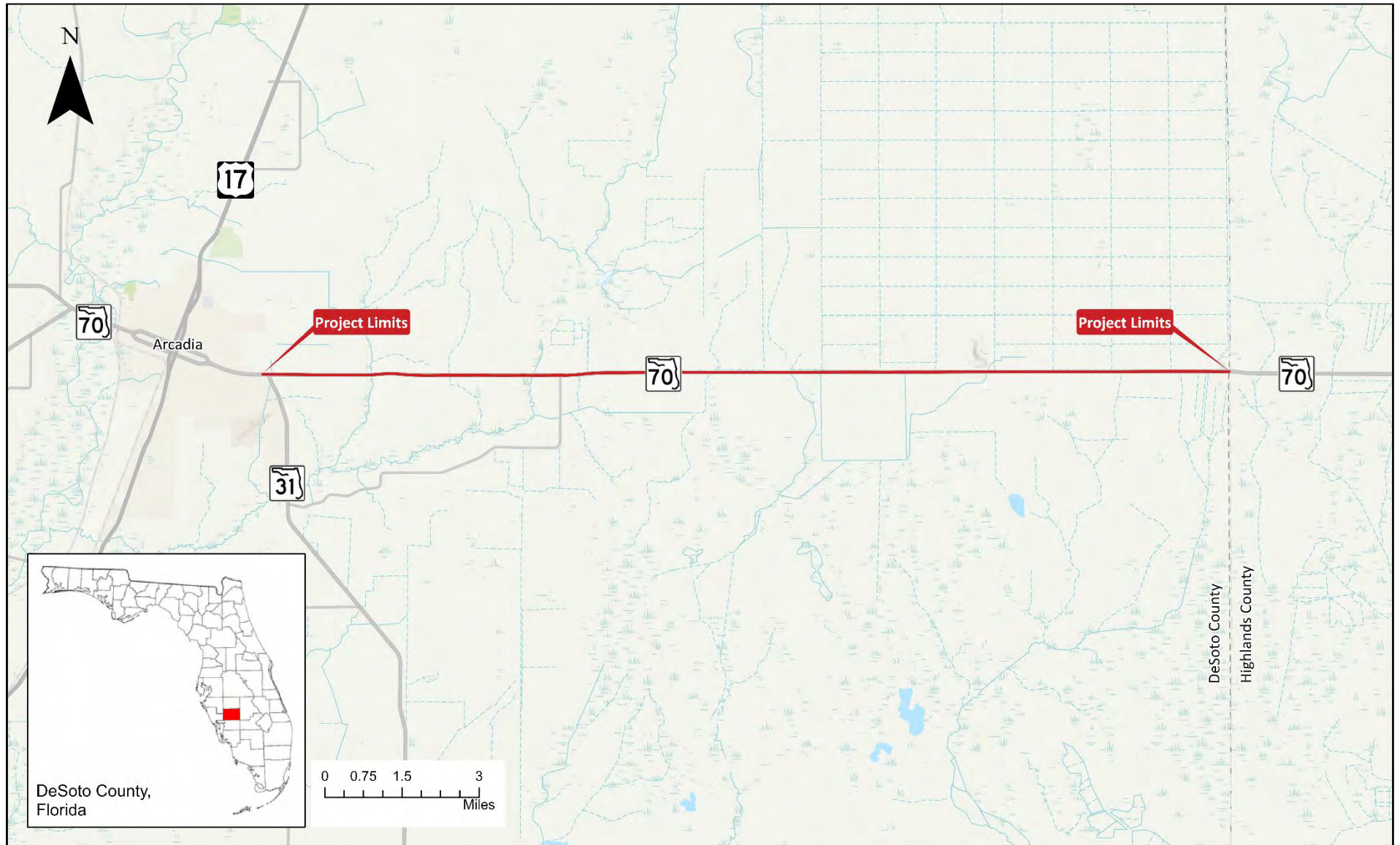
## 1.2 Purpose and Need

The purpose of this project is to address roadway and traffic safety conditions and improve emergency evacuation and incident response times on S.R. 70 from west of S.R. 31 to SE Highlands County Line Road in unincorporated DeSoto County. Other goals of the project are to maintain important east-west connectivity within the regional transportation network and accommodate freight activity within the area.

## 1.3 Existing Facility

S.R. 70 is part of Florida's Strategic Intermodal System (SIS) highway network and designated state hurricane evacuation route network. As part of the National Highway System, S.R. 70 is critical in the transportation network as it facilitates local and regional traffic and the movement of goods/freight. S.R. 70 is functionally classified as "Rural Principal Arterial – Other" within the project area, and the

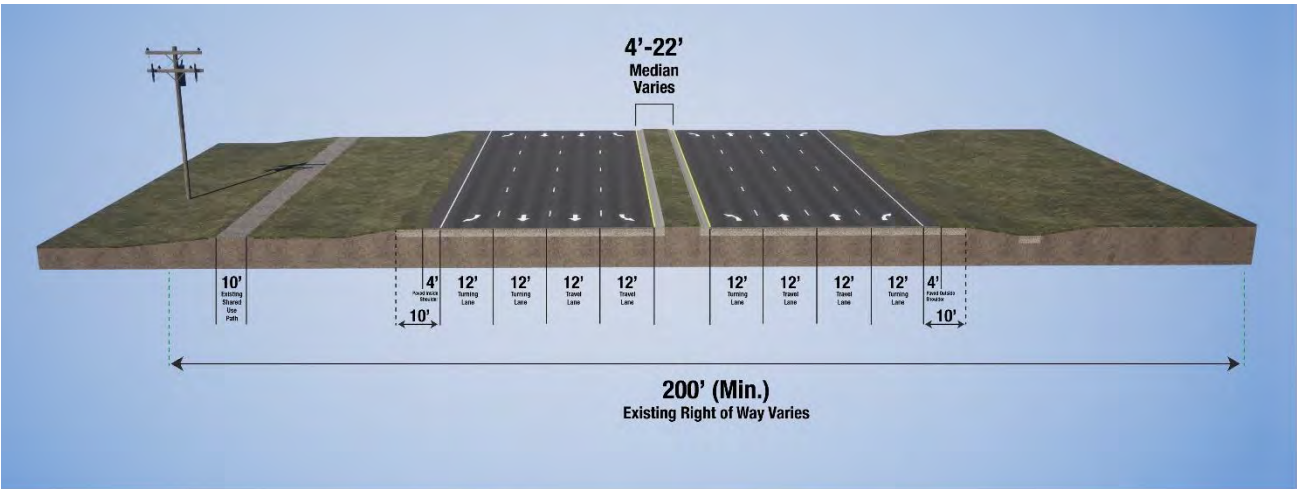
**Figure 1-1: Project Location Map**



project segment of the roadway has an existing context classification of C2-Rural. The posted speed limit on the corridor is generally 60 miles per hour (mph) with slower speeds ranging from 40 mph to 55 mph west of S.R. 31 to west of Townsend Road.

This segment of S.R. 70 consists of two existing roadway typical sections. From west of S.R. 31 to west of Townsend Road, S.R. 70 is a four-lane divided facility with 12-foot travel lanes and ten-foot outside shoulders (four feet paved). The travel lanes are separated by a raised grass median and intermittent right and left turn lanes. A portion of a ten-foot shared-use path is present on the northern side of the roadway, extending from west of S.R. 31 to west of Townsend Road (**Figure 1-2**). No designated bicycle lanes are present on either side of the facility.

**Figure 1-2: Existing S.R. 70 Roadway Typical Section from west of S.R. 31 to west of Townsend Road**



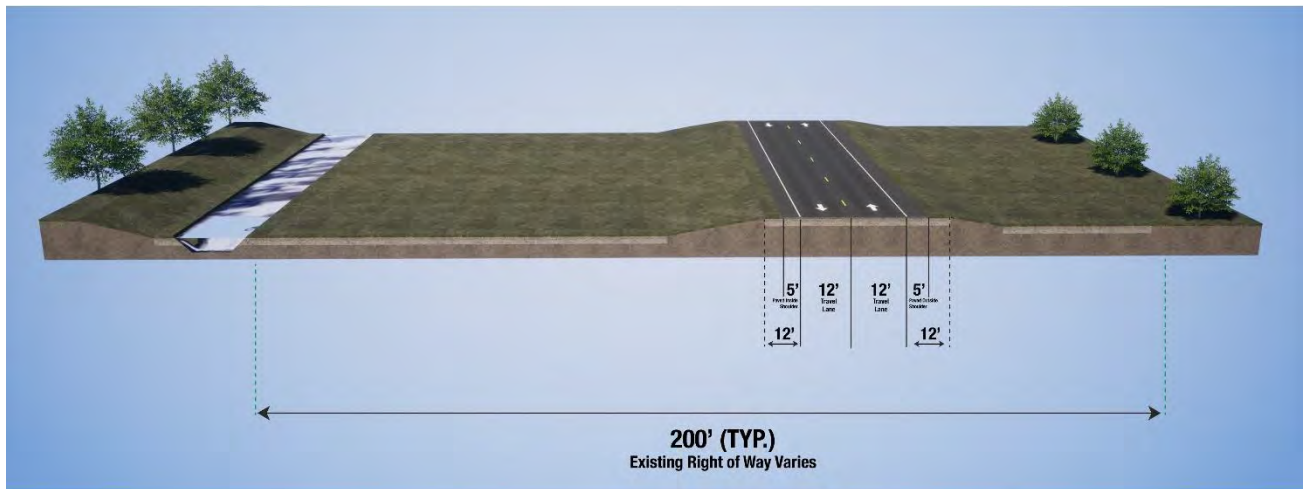
From west of Townsend Road to SE Highlands County Line Road, S.R. 70 becomes a two-lane undivided facility with 12-foot travel lanes and twelve-foot outside shoulders (five feet paved) (see **Figure 1-3**). There are no shared use path or designated bicycle facilities along this portion.

The existing typical section for the S.R. 70 bridges over Whidden Creek (aka Mare Branch) and Joshua Creek consists of two 12-foot travel lanes with guardrail and traffic railings (**Figure 1-4**). There are no shared use path or designated bicycle facilities at these locations.

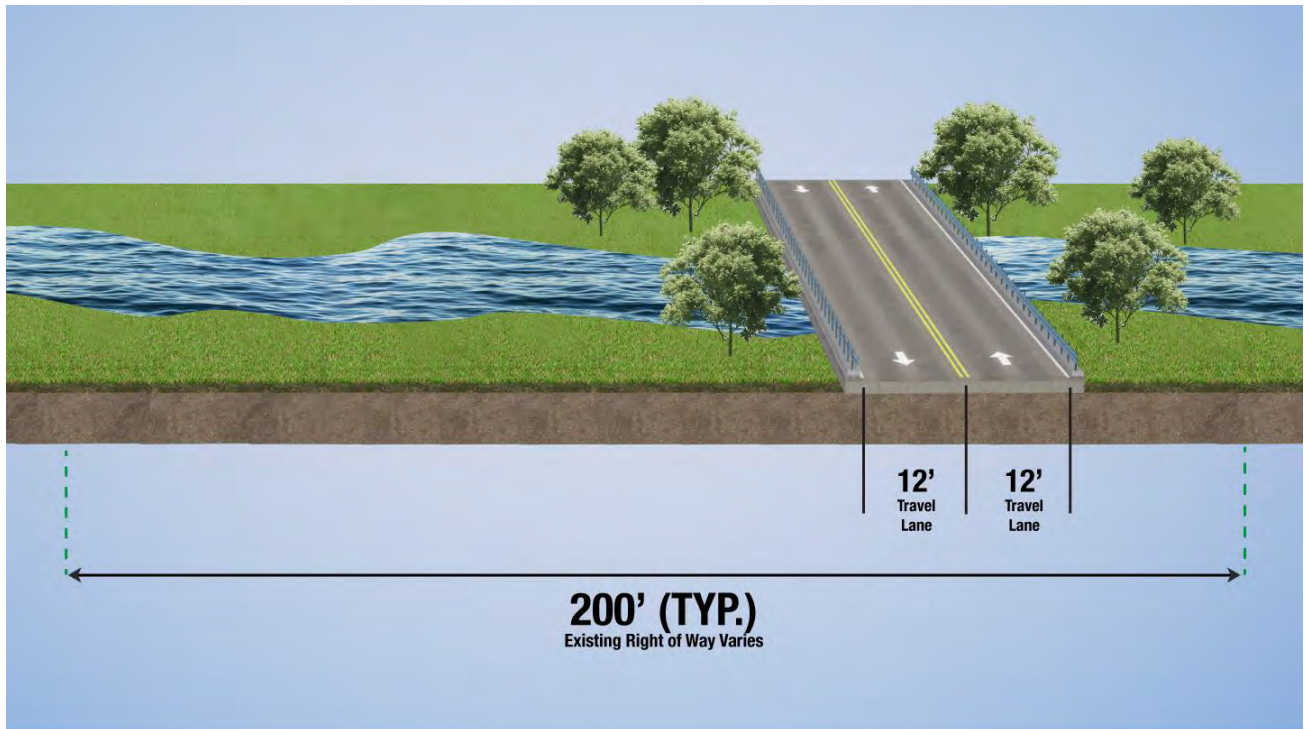
Existing right-of-way (ROW) along the project portion of S.R. 70 is generally 200 feet in width, but ranges from approximately 180 feet to 220 feet in width from west of S.R. 31 to C.R. 760, and from 200 feet to 350 feet in width from C.R. 760 to SE Highlands County Line Road; it is generally wider to the north than south along the eastern end.



**Figure 1-3: Existing S.R. 70 Roadway Typical Section from west of Townsend Road to SE Highlands County Line Road**



**Figure 1-4: S.R. 70 Typical Section for Existing Bridges Over Whidden Creek and Joshua Creek**



There are two bridges and five concrete bridge culverts along the corridor where lakes, streams, or wetlands intersect with the roadway. In addition, there are seven smaller concrete box culverts located along the project area. The two bridges and five concrete bridge culverts are as follows:

- S.R. 70 Concrete Bridge:
  - S.R. 70 over Whidden Creek (No. 040024)
  - S.R. 70 over Joshua Creek (No. 040027)

- S.R. 70 Concrete Bridge Culvert:
  - S.R. 70 over Tiger Bay (No. 040031)
  - S.R. 70 over Mossy Gully (No. 040032)
  - S.R. 70 over DCI Canal (No. 040033)
  - S.R. 70 over Long Point Marsh (No. 040037)
  - S.R. 70 over Parker Creek (No. 040940)

A full discussion of the existing roadway conditions can be found in the Preliminary Engineering Report (PER), prepared under separate cover.

## 1.4 Proposed Improvements

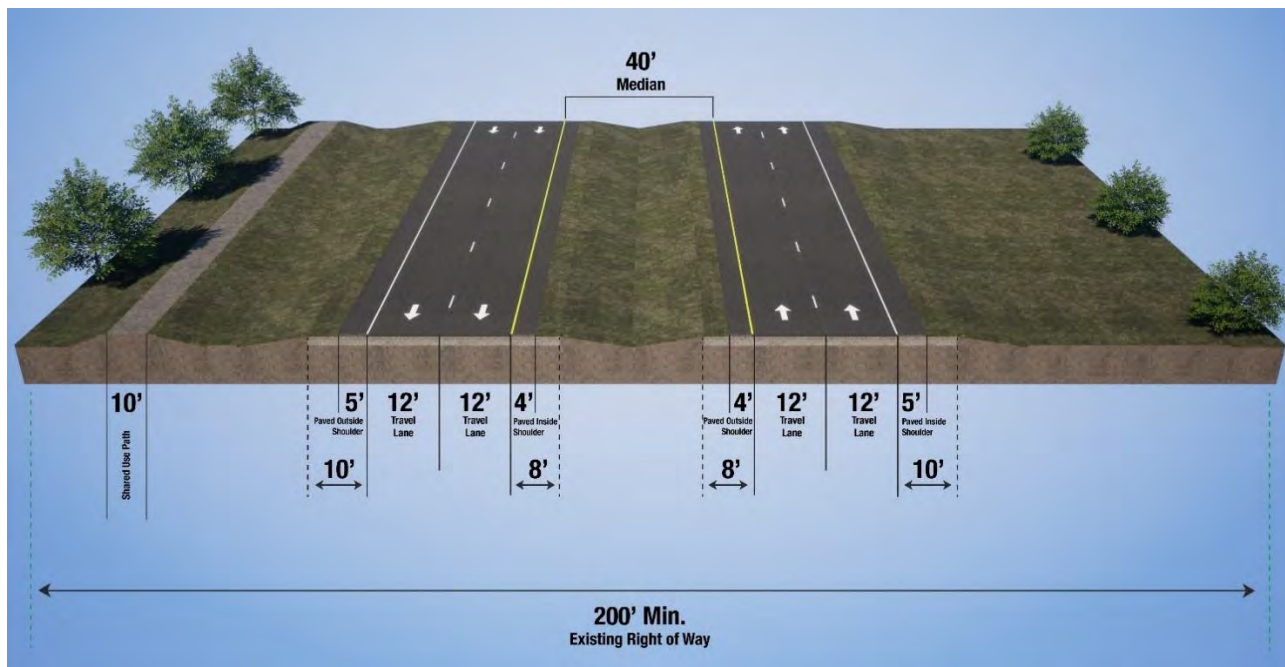
To meet the Purpose and Need, the Preferred Alternative will widen S.R. 70 from two to four lanes throughout the study limits. The Preferred Alternative includes milling and resurfacing of portions of the existing roadway, along with construction of the westbound lanes to the north of the existing travel lanes.

From west of S.R. 31 to west of Townsend Avenue, the Preferred Alternative will mill and resurface the existing roadway and shared use path, as consistent with **Figure 1-2**.

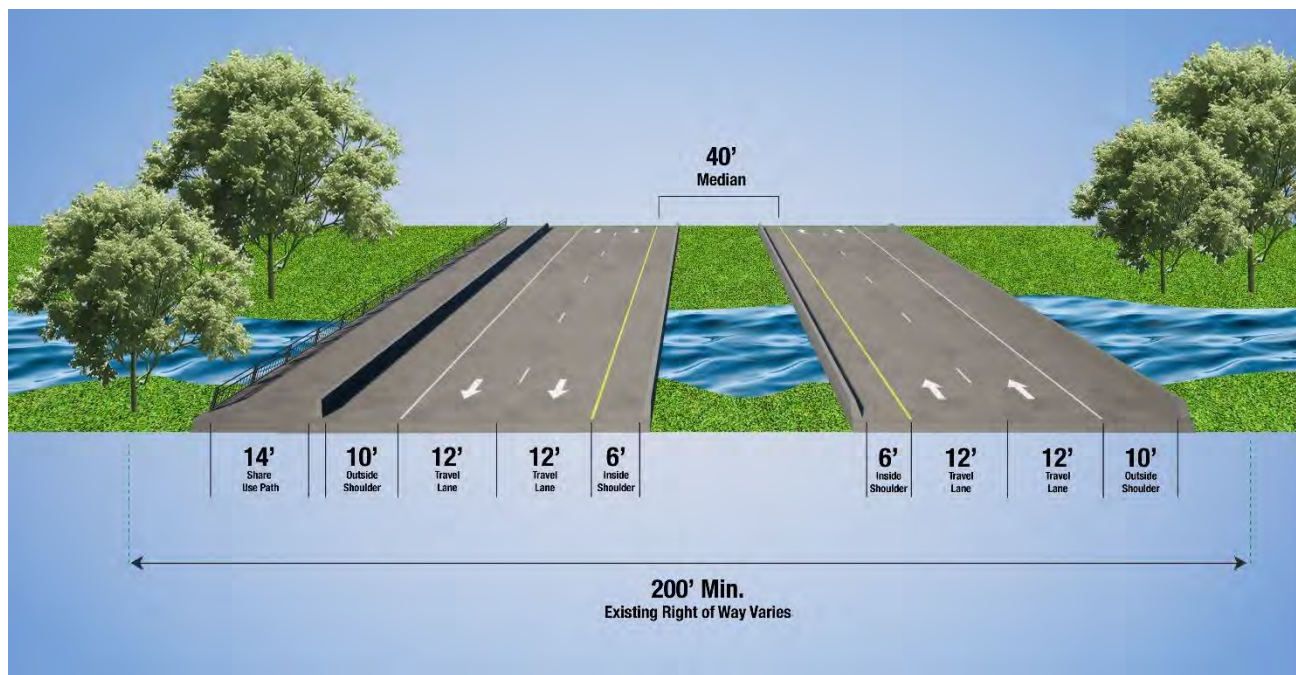
The Preferred Alternative from west of Townsend Avenue to west of Joshua Creek (**Figure 1-5**) generally consists of four 12-foot travel lanes, a 40-foot width median that includes 8-foot inside shoulders (4-foot paved), and 10-foot outside shoulders (five-foot paved). Improvements proposed within these limits will primarily consist of intermittent milling/resurfacing and widening/reconstruction of the existing lanes as the new eastbound lanes and widening/new construction of the new westbound lanes. A new ten-foot shared use path will be constructed adjacent to the northern right-of-way (ROW) line from the Toby's RV Resort entrance to the new westbound bridge over Joshua Creek.

The Preferred Alternative for the bridges over Whidden Creek and Joshua Creek (**Figure 1-6**) include four 12-foot travel lanes (two in each direction) with six-foot paved inside shoulders and ten-foot paved outside shoulders. Concrete barriers would be implemented on both shoulders. The westbound bridge will have a 14-foot shared use path with a concrete barrier separating pedestrian and bicycle users from the travel lane and a railing at the outside edge of the bridge. At Joshua Creek, the shared use path will switch from the north to the south side of S.R. 70 via a bicycle and pedestrian underpass under the reconstructed S.R. 70 bridges over Joshua Creek.

**Figure 1-5: S.R. 70 Preferred Alternative from west of S.R. 31 to west of Joshua Creek**



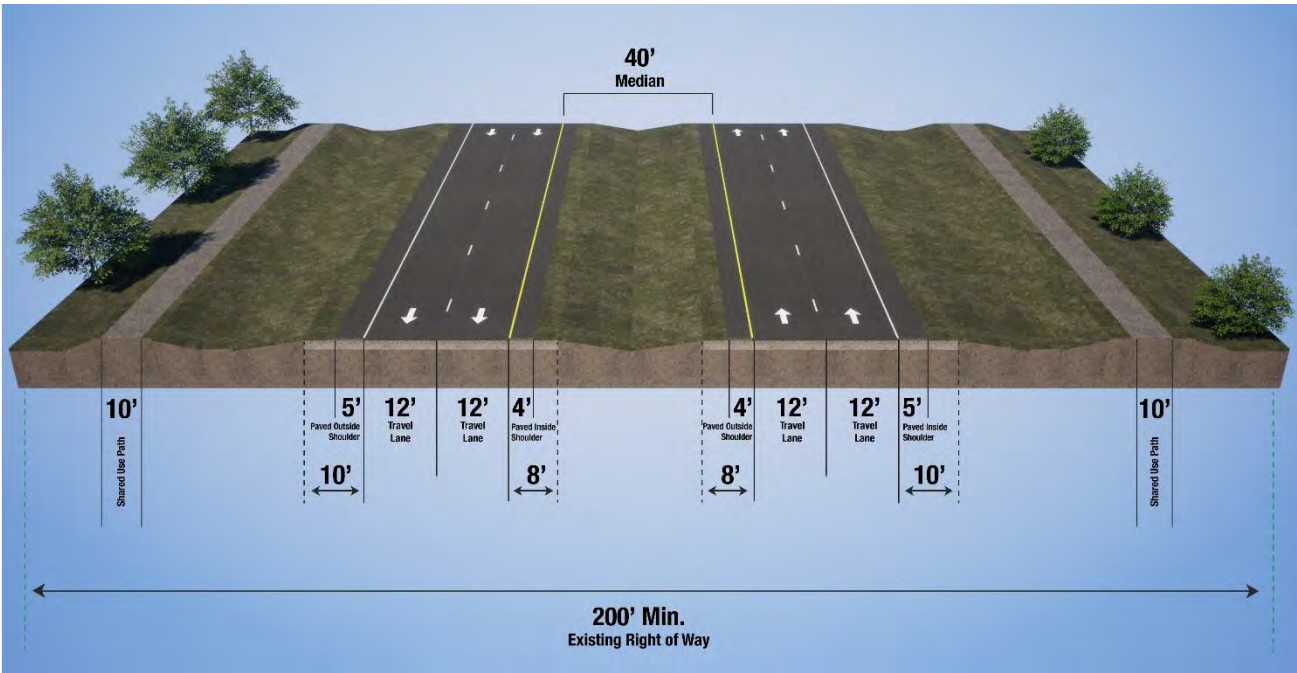
**Figure 1-6: Preferred Alternative for S.R. 70 Bridges Over Whidden Creek and Joshua Creek**





The Preferred Alternative east of Joshua Creek to C.R. 760 (**Figure 1-7**) features the construction of new westbound lanes to the north of the existing lanes, consisting of four 12-foot travel lanes (two in each direction) with an open median of 40 feet that includes eight-foot inside shoulders (four-foot paved), and ten-foot outside shoulders (five-foot paved). Between Joshua Creek and C.R. 760 two new ten-foot shared use paths will be constructed adjacent to both the northern and southern ROW lines. Along the north side of S.R. 70, the shared use path will end opposite the C.R. 760 intersection, while the shared use path adjacent to the southern ROW line will continue eastward.

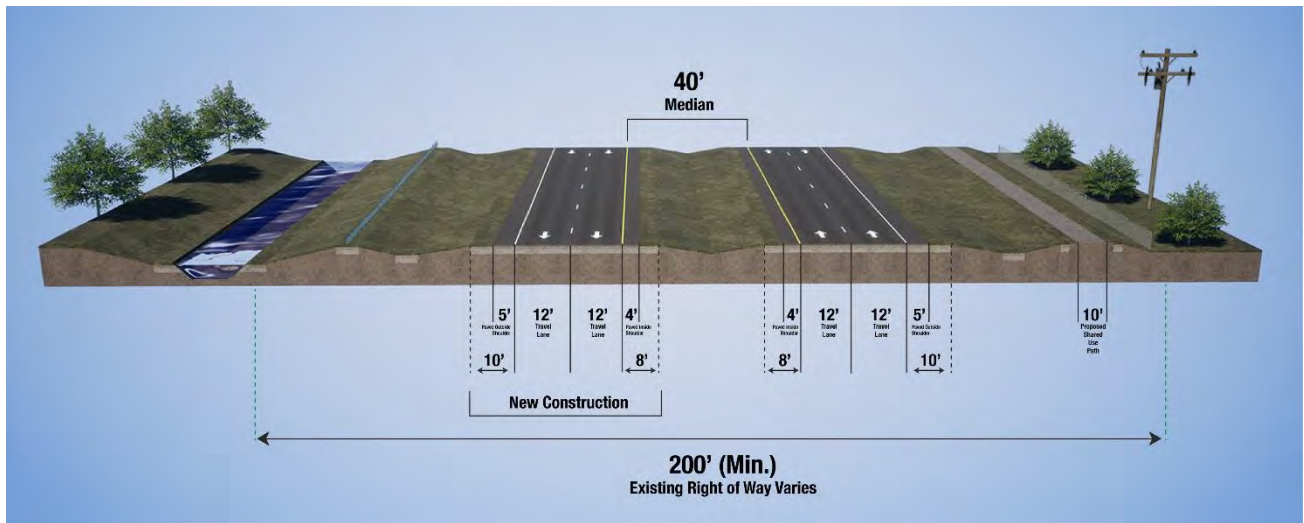
**Figure 1-7: S.R. 70 Preferred Alternative from east of Joshua Creek to C.R. 760**



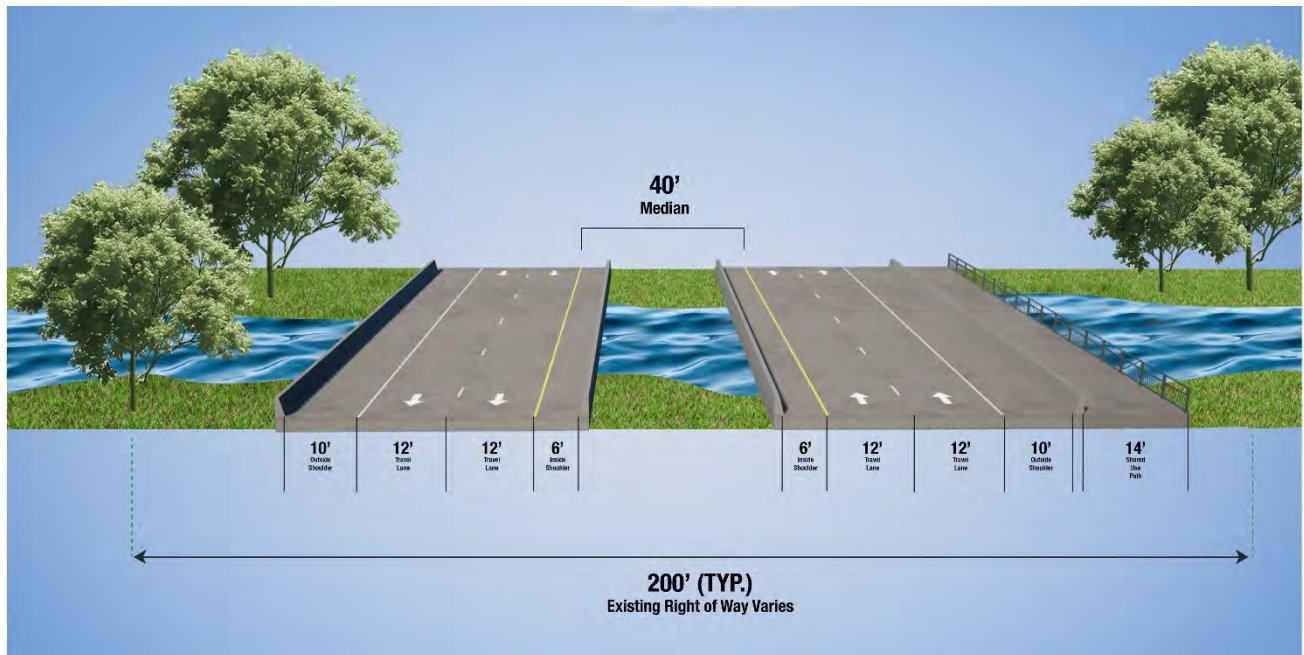
The Preferred Alternative from C.R. 760 to SE Highlands County Line Road (**Figure 1-8**) features the construction of new westbound lanes to the north of the existing lanes, consisting of four 12-foot travel lanes (two in each direction) with an open median of 40 feet that includes eight-foot inside shoulders (four-foot paved) and ten-foot outside shoulders (five-foot paved). A guardrail will be constructed adjacent to the westbound lanes and existing canal.

Between C.R. 760 and SE Highlands County Line Road, S.R. 70 has five additional bridge culvert crossings at Tiger Bay, Mossy Gully, DCI Canal, Long Point Marsh, and Parker Creek. The Preferred Alternative proposes new bridges (**Figure 1-9**) at each of these locations, including four 12-foot travel lanes (two in each direction) with six-foot paved inside shoulders and ten-foot paved outside shoulders. Concrete barriers would be implemented on both shoulders. The eastbound bridge will have a 14-foot shared use path with a concrete barrier separating pedestrian and bicycle users from the travel lane and a railing at the outside edge of the bridge.

**Figure 1-8: S.R. 70 Preferred Alternative from C.R. 760 to SE Highlands County Line Road**



**Figure 1-9: Preferred Alternative for S.R. 70 Bridges from C.R. 760 to SE Highlands County Line Road**



The project will include the construction of wildlife crossing features at the seven major bridge crossings, roadway signing and pavement markings, and stormwater management facilities including treatment ponds and floodplain compensation sites. The Concept Plans have been provided as **Appendix A**.

## 1.5 Purpose of Report

The purpose of this CSER Addendum is to conduct a subsequent review to evaluate known or potential contamination sources located within and/or adjacent to the proposed stormwater management facilities (SMF), floodplain compensation (FPC) sites (pond sites) and proposed maintenance and outfall easement areas. The CSER Addendum is developed by documenting a summary of the literature and map reviews, review of state and federal databases, and the field review for potential contamination sources.

The scope of work performed for this study included the following:

- Review of current and historical aerial photographs, maps, and other available data to evaluate current and prior land use;
- Review of available maps for a description of groundwater characteristics, potential soil types, environmental features, and general topography to estimate the direction of contaminant migration;
- Review of reasonably obtainable federal, state, and local environmental databases of existing and potentially contaminated sites within and/or adjacent to the project corridor;
- Conducting a visual inspection of the potential sites to evaluate the likely presence of significant contamination to the soil or groundwater;
- Evaluating the likely impact that the identified sites might have on the construction of the Build Alternative by rating each site; and,
- Preparation of this report.

The rating system used to assess the effect of a potential contamination source is recommended in the Contamination Chapter of the FDOT PD&E Manual. The rating system is defined as follows:

<b>NO</b>	<i>“A review of available information on the property and a review of the conceptual or design plans indicates there is no potential contamination impact to the project. It is possible that contaminants have been handled on the property. However, findings from the Level I evaluation indicate that contamination impacts are not expected.”</i>
<b>LOW</b>	<i>“A review of available information indicates that past or current activities on the property have an ongoing contamination issue; the site has a hazardous waste generator identification (ID) number, or the site stores, handles, or manufactures hazardous materials. However, based on the review of conceptual or design plans and/or findings from the Level I evaluation, it is not likely that there would be any contamination impacts to the project.”</i>
<b>MEDIUM</b>	<i>“After a review of conceptual or design plans and findings from a Level I evaluation, a potential contamination impact to the project has been identified. If there is insufficient information (such as regulatory records or site historical documents) to make a determination as to the potential for contamination impact, and there is reasonable suspicion that contamination may exist, the property should be rated at</i>

*least as a 'Medium'. Properties used historically as gasoline stations and which have not been evaluated or assessed by regulatory agencies, sites with abandoned in place underground petroleum storage tanks or currently operating gasoline stations should receive this rating."*

**HIGH**      *"After a review of all available information and conceptual or design plans, there is appropriate analytical data that shows contamination will substantially impact construction activities, have implications to ROW acquisition or have other potential transfer of contamination related liability to the FDOT."*

The rating system includes the type and severity of contamination as well as the proximity of the potential source to the project.

District One requires any site within 500 feet of the Project's ROW, that currently has documented contamination, be rated at least a "Medium" due to the potential to affect National Pollutant Discharge Elimination Systems (NPDES) dewatering during construction.

## 2 MAP AND LITERATURE REVIEW

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### 2.1 Land Use Review

#### 2.1.1 Sanborn Maps

The Sanborn map collection consists of a uniform series of large-scale maps dating from 1867 to the 1970s and depicting the commercial, industrial, and residential sections of cities and towns. The maps were designed to assist fire insurance agents in determining the degree of fire risk associated with a particular property and, therefore, show the size, shape, and construction of dwellings, commercial buildings, and factories as well as fire walls, locations of window and doors, sprinkler systems, and types of roofs. As a result, the map can provide a historical record of the land use on a particular property.

A review for available Sanborn maps was conducted; however, no Sanborn maps were available for this area of DeSoto and Highlands County.

#### 2.1.2 Local Zoning

The local zoning of an area can assist in the identification of past activities with a potential for environmental concerns. This information can often identify businesses historically associated with using potentially hazardous materials or petroleum products.

The DeSoto and Highlands County Property Appraisers were referenced to determine the owner of properties immediately adjacent to the project corridor. In addition, the DeSoto County and Highlands County GIS mapping systems were reviewed for local zoning information.

The zoning types within a 500-ft buffer of the project study limits include A-10 (Agricultural 10), A-5 (Agricultural 5), RSF (Residential Single-Family), RM (Residential Multifamily), RMF (Residential Multifamily), MHP (Mobile Home Park), TTRVC (Travel Trailer Recreational Vehicle Campground), CG (Commercial General), CE (Commercial Established), IL (Industrial Light), and IH (Industrial Heavy). The zoning type IH (Industrial Heavy) is present within the project limits where a waste management site is located. There are no other obvious land uses adjacent to the project corridor that could offer a potential for contamination outside of those identified within this report.

#### 2.1.3 Current Land Use

The 2023 Florida Land Use, Cover and Forms Classification System (FLUCCS) land use map was reviewed to identify the various land uses currently found along the S.R. 70 corridor and SMF and FPC sites. The project location contains a mix of urban, rural, commercial, public utilities, and natural uses. The 2023 FLUCCS land use maps have been included in **Appendix B**.

#### **2.1.4 Future Land Use**

The ‘DeSoto County 2030 Future Land Use Map’ was evaluated to determine areas of predicted development. The map indicates that most of the area surrounding the project corridor from west of S.R. 31 to C.R. 760 is to transition from supporting Rural/Agricultural uses to urban uses, including Neighborhood Mixed Use, Low Density Residential, Urban Center Mixed Use, and Commercial. The area surrounding the project segment extending from C.R. 760 to SE Highlands County Line Road will continue to support Rural/Agriculture uses with a small section designated as Public Land/Institutional to accommodate the Desoto Correctional Institution. The Future Land Use Map is included in **Appendix C**.

### **2.2 Historical Aerials**

Site specific historical aerials along S.R. 70 were obtained from the FDOT Aerial Photography Archive database and reviewed in preparation of this report. The aerials are included in **Appendix D**. Aerials from 1968, 1972, 1985, 1995, 2004, 2009, 2014, 2017, 2020, and 2023 were evaluated to determine the historical land use and evidence of potential contamination concerns such as unexplained fill, cattle dipping vats, debris, etc. A summary of the findings can be found in **Table 2-1**.

**Table 2-1: Historical Aerial Summary**

<b>Year</b>	<b>Description</b>
1968	There is some residential development throughout the project corridor. Dorr Field is already being used as a correctional facility.
1972	Some commercial development around S.R. 31. More residential development around Cross Ave. Some development for Alico Citrus east of 4 Mile Grade Rd.
1985	Commercial development continues around S.R. 31. More residential development around Hansel Ave and Cross Ave.
1995	More residential development around S.R. 31. Development for Toby's RV Resort on the north side of S.R. 70 between S.R. 31 and SE Townsend Ave. More residential development at Cross Ave. Development for Florida Power and Light Company at 4 Mile Grade Rd.
2004	Commercial development on the south side of S.R. 70 east of S.R. 31 including Walmart Supercenter, Murphy USA, and Desoto Chrysler Dodge Jeep RAM. Some residential development and one Industrial land development from SE Townsend Ave to C.R. 760. Agricultural development for Arcadia Fruit Company on north side of S.R. 70 west of Highlands County Line.
2009	Building for Walgreens developed on the south side of S.R. 70, west of S.R. 31. Property for Chili's Grill & Bar and Crews Bank & Trust developed on the south side of S.R. 70, east of S.R. 31.
2014	Road widening and improvements were done from west of SE Airport Rd (East Arcadia) to approximately 0.7 miles east of S.R. 31. Arcadia Back Pressure Regulator site is being constructed on the south side of S.R. 70, east of SE Townsend Rd.
2017	Building for Taco Bell and Publix developed on the south side of S.R. 70 west of S.R. 31.
2020	Building for KFC developed west of S.R. 31 on south side of S.R. 70. Property developed for Desoto Recycling & Disposal on north side of S.R. 70, east of 4 Mile Grade Rd.
2023	Popeye's, east of S.R. 31, is being developed. West of S.R. 31, Take 5 Oil Change and Culver's is being developed. A dirt road was built from the south side of S.R. 70 at Black Bird Ranch, east of NE Four Mile Grade Rd. Addition of a warehouse at Arcadia Fruit Company on the north side of S.R. 70, west of Highlands County Line Rd.



## 2.3 Regional Hydrogeological Map Review

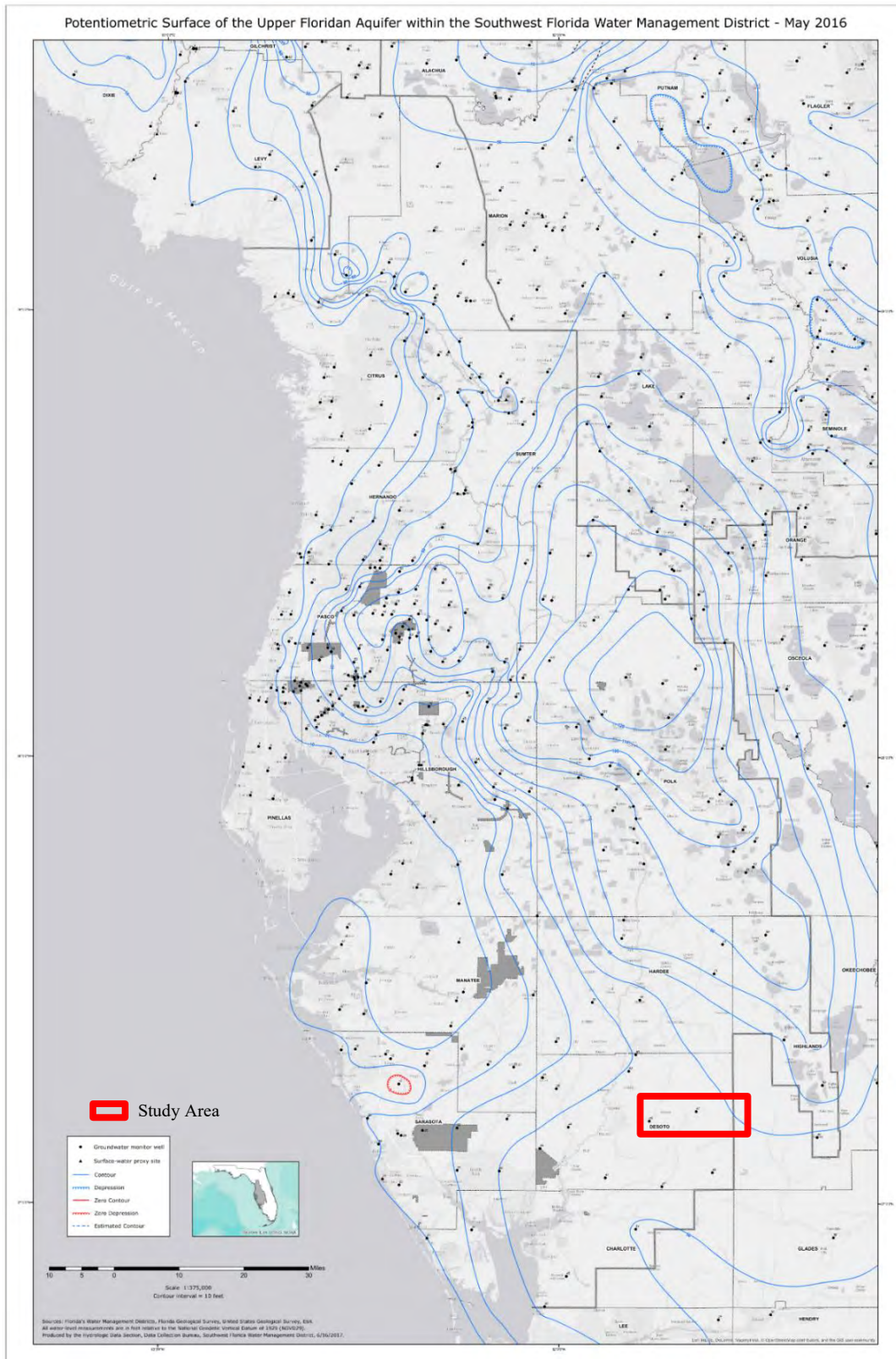
A review of available hydrogeological maps and publications for DeSoto County indicate the principal hydrogeological units beneath the county are the Surficial, Hawthorn, and Floridan Aquifer Systems. The surficial aquifer consists primarily of undifferentiated sands, shell material, silts and clayey sands of varying thickness and is found throughout the Southwest Florida Water Management District (SWFWMD). The thickness of the Surficial Aquifer System varies but may attain a thickness of 150 feet along the coast and has been estimated that it may be less than seven (7) feet below land surface in DeSoto County. The depth of the water table also varies and may be found at or near the land surface or as much as 60 to 70 feet below the ground surface in DeSoto County. Available site assessment documents for sites near the project corridor show the depth to water being between 2 and 16 feet below the ground surface. Rain and surface water run-off are readily absorbed by the porous surface sands of the Surficial Aquifer System and typically percolate down to the water table. For this reason, the Surficial Aquifer System is typically the aquifer most susceptible to contamination from surface discharges of hazardous substances.

A potentiometric surface map of the Floridan Aquifer within the SWFWMD, published in May 2016, was reviewed (**Figure 2-1**). The contours within the project area represent the approximate lower boundary of the Floridan Aquifer System in this region. Groundwater surrounding the project area will generally be expected to flow in the western direction. In DeSoto County, the highest recharge rates to the Floridan Aquifer are estimated to be zero to one (0-1) inches per year. These recharge areas are mainly in the eastern upland region and the northwest corner of the county. Discharge primarily happens along the Peace River Valley and in the southwestern part of the county.

Other key hydrogeologic features are the canals located along the corridor on the northern side of the ROW. While the canals could pose contamination concerns due to the discharge of pollutants into the canals from adjacent soil and groundwater systems, it is more likely to function as a hydraulic barrier, mitigating impacts to the ROW from more northerly sites. Some of the proposed SMF and FPC sites along the east half of the corridor are located within or adjacent to these canals or surface waters running from the canals.



**Figure 2-1: Potentiometric Surface Map**



## 2.4 USGS Topographic Map Review

A review of the United States Geological Survey (USGS) Topographic Map of the study area depicts the direction of the surficial water flow (runoff). The surface water runoff direction is generally a good indication of the direction of groundwater flow. The USGS map indicated that the surface water flow direction is generally west and towards the Gulf Coast. The USGS topographic map has been included in **Appendix E**.

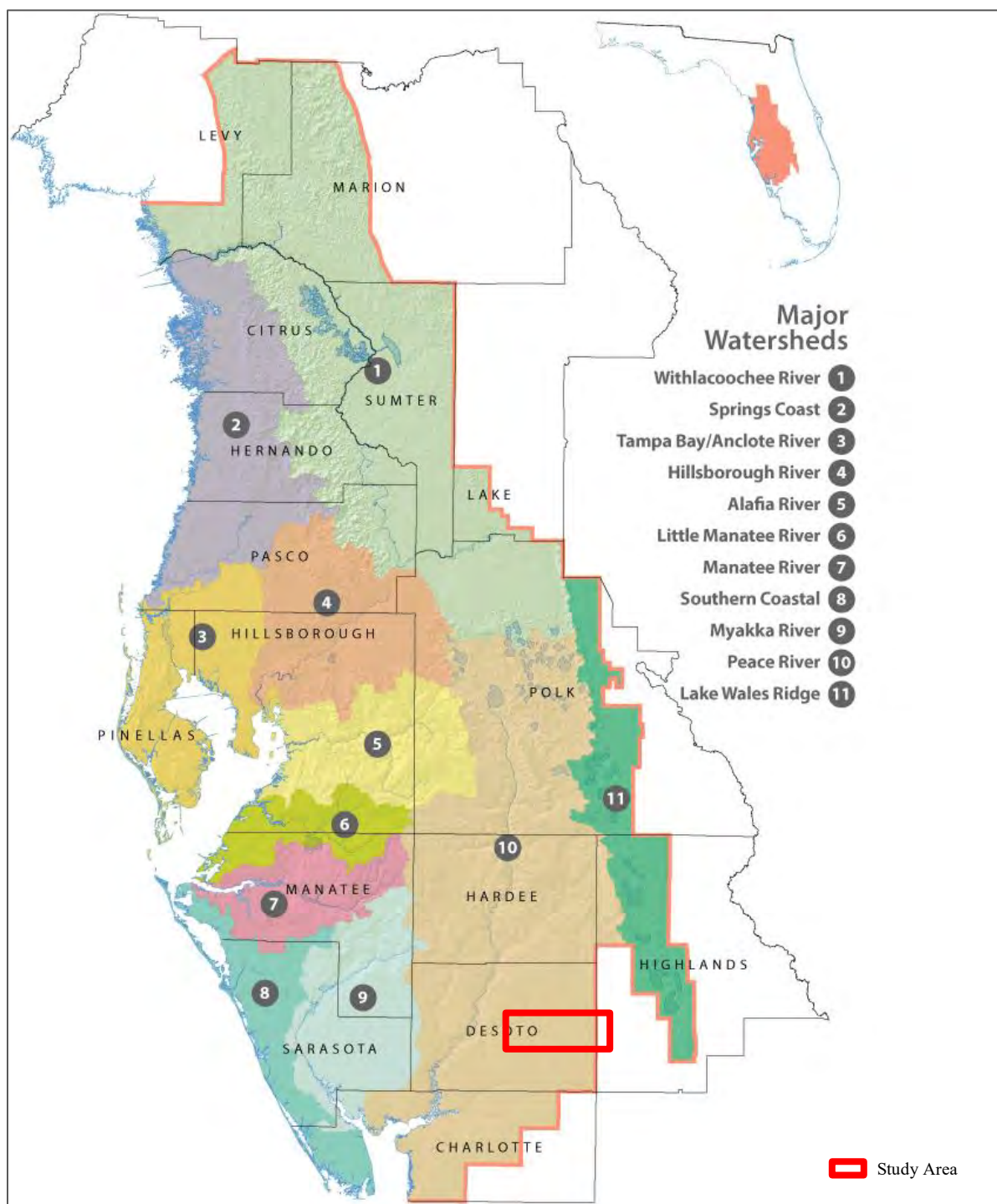
The topographic map provides visual identification of the existing drainage patterns using contour lines. The map also identifies all bodies of water including lakes, ponds, streams, and known wetlands. Local landscape variance may influence the directionality of the groundwater flow.

## 2.5 FDEP Drainage Basin Map Review

A review of the Florida Department of Environmental Protection (FDEP) drainage basin map, updated in 2023, was conducted to identify the watershed and drainage basins at the project location. As indicated in **Figure 2-2**, the project is located within the Peace River Watershed. The drainage basin map for the Peace River Watershed has been included in **Appendix F**, which includes the following basins:

- Peace River Above Joshua Creek
- Joshua Creek Above Peace River
- Unnamed Branch
- Honey Run
- Prairie Creek
- Cow Slough

**Figure 2-2: Watersheds Located Within SWFWMD**



## 2.6 FEMA Floodplain Map Review

A review of the existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (numbers 12027C0195C, 12027C0177C, 12027C0185C, 12027C0205C, 12027C0210C, and 12027C0230C, effective November 6, 2013) and the FEMA DFIRM GIS data published October 2020, for the project vicinity, was conducted. The FEMA map review identified locations along the S.R. 70 corridor where the roadway is located within the FEMA 100-year floodplain. The floodplains within the corridor are Zone A and AE. Flood Zone “A” is classified as an “area of the 100-year floodplain where base flood elevations (BFE) and flood hazard factors are not determined”. Areas identified as Zone “AE” are “areas of the 100-year floodplain where the BFE is determined.” Zone AE within the project limits consists of a static BFE ranging from 30 to 63 feet. The FEMA floodplains maps of the project segment have been included in **Appendix G**.

## 2.7 USDA Soil Survey Map Review

The review of the United States Department of Agriculture’s (USDA) Soil Survey for DeSoto and Highlands Counties was conducted to evaluate the flow characteristics and subsurface conditions as they relate to the migration of contamination. The USDA Soil Survey was then overlaid on an aerial photograph to identify the locations of each soil series along the S.R. 70 corridor. The Soil Survey Maps identifying the location of each soil series have been included in **Appendix H**. The following soil series, in **Table 2-2**, were identified within or immediately adjacent to the S.R. 70 corridor and stormwater management facilities. There were no soil series identified with a depth to water table greater than three feet.

**Table 2-2: Soil Summary Within ½ Mile**

<b>Map Symbol</b>	<b>Soil Name</b>	<b>Water Table Depth (Inches)</b>
2	Anclote Mucky Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
3	Basinger Fine Sand, 0 To 2 Percent Slopes	0 – 12
4	Basinger Fine Sand, Frequently Flooded	0
5	Basinger Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
7	Placid Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
10	Myakka Fine Sand, 0 To 2 Percent Slopes	6 – 18
11	Delray Mucky Fine Sand, Depressional	0
12	Basinger Fine Sand, 0 To 2 Percent Slopes	0 – 12
13	Eaugallie Fine Sand, 0 To 2 Percent Slopes	6 – 18
14	Farmton Fine Sand, 0 To 2 Percent Slopes	6 – 18
15	Felda Fine Sand, 0 To 2 Percent Slopes	3 – 18
16	Valkaria Fine Sand, 0 To 2 Percent Slopes	3 – 18
17	Felda Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
18	Floridana Mucky Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
19	Gator Muck, Frequently Ponded, 0 To 1 Percent Slopes	0
20	Immokalee Fine Sand, 0 To 2 Percent Slopes	6 – 18
20	Samsula Muck, Frequently Ponded, 0 To 1 Percent Slopes	0
21	Malabar Fine Sand, 0 To 2 Percent Slopes	3 – 18
22	Malabar Fine Sand, High, 0 To 2 Percent Slopes	6 – 18
23	Malabar Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	0
24	Myakka Fine Sand, 0 To 2 Percent Slopes	6 – 18
25	Ona Fine Sand, 0 To 2 Percent Slopes	6 – 18
26	Pineda-Pineda, Wet, Fine Sand, 0 To 2 Percent Slopes	6 – 18
29	Pineda-Pinellas Fine Sands	0 – 12
30	Pomello Fine Sand, 0 To 2 Percent Slopes	18 – 42
31	Pompano Fine Sand, 0 To 2 Percent Slopes	3 – 18
32	Punta Fine Sand, 0 To 2 Percent Slopes	6 – 18
34	Samsula Muck, Frequently Ponded, 0 To 1 Percent Slopes	0
36	Smyrna Fine Sand, 0 To 2 Percent Slopes	6 – 18
37	Tavares Fine Sand, 0 To 5 Percent Slopes	18 – 42
39	Smyrna Sand, 0 To 2 Percent Slopes	6 – 18
40	Valkaria Fine Sand, 0 To 2 Percent Slopes	3 – 18
41	Wabasso Fine Sand, 0 To 2 Percent Slopes	6 – 18
42	Zolfo Fine Sand, 0 To 2 Percent Slopes	18 – 42
99	Water	Non-Soil Series



# 3 REGULATORY AND FIELD REVIEW

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A search of the federal and state environmental databases for the project corridor was conducted in August 2024 and a supplemental review, including the SMF and FPC study area, was conducted in September 2025. The search was conducted using Map Direct, an interactive map that contains a summary of the environmental records from various local, state, and federal agencies. Other databases reviewed included the Public Notice of Pollution (PNP) Finder, the Superfund Enterprise Management System (SEMS), Resource Conservation and Recovery Act (RCRA), and the National Priorities List (NPL). The searches identify sites that have real or potential environmental issues related to previous or existing land use activities conducted on site. In addition to the databases mentioned, an environmental records search was requested from Environmental Data Resources (EDR) Inc. to ascertain additional risk of contamination within and surrounding the project corridor. The Executive Summary of the report can be found in **Appendix I**, full report available upon request. A buffer distance of one (1) mile from the ROW was used for the EDR records search; however, only records existing within 500 feet, 1,000 feet, and ½ mile (depending on site type) of the ROW are presented and discussed within this report for consistency with the Contamination Chapter of the PD&E Manual. A summary of the most common databases reviewed for this report are included below.

## 3.1 Federal: Environmental Protection Agency

The Environmental Protection Agency (EPA) databases reviewed for this report are listed and described below:

- Superfund Enterprise Management System (SEMS): previously known as the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), SEMS identifies facilities and/or locations that are being investigated by the EPA for potential or existing contamination. This includes No Further Remedial Action Planned (NFRAP) sites.
- Emergency Response Notification System (ERNS): lists locations where an accidental release of hazardous substances, including petroleum, has occurred. The FDEP Public Notice of Pollution (PNP) finder was evaluated to determine if any pollution spills have occurred within the project vicinity.
- National Priorities List (NPL): an inventory of facilities and/or locations with confirmed environmental contamination. These sites are often referred to as "Superfund" sites. The Superfund National Priorities mapper was evaluated.
- Resource Conservation and Recovery Information System (RCRIS): reports listings of facilities and/or locations that are generating, transporting, treating, storing, or disposing hazardous substances or waste. This category includes Resource Conservation and Recovery Act (RCRA), Hazardous Waste Small Quantity Generators (SQGs), Large Quantity Generators (LQGs), Conditionally Exempt SQGs and Transportation Storage & Disposal (TSDs) facilities.

- Corrective Actions Report (CORRACTS): identifies hazardous waste handlers with RCRA corrective action activity.

### 3.2 State: Florida Department of Environmental Protection

The state databases searched in accordance with FDOT requirements are listed and described below:

- Florida Leaking Underground Storage Tanks (LUST): database including facilities that have reported a possible release of contaminants from underground storage tanks. Included within this list are sites that are in the Florida Early Detection Incentive Program (EDI), the Abandoned Tank Restoration Program (ATRP), and the Petroleum Liability Insurance Restoration Program (PLIRP). These programs support remedial action or reimbursement for those sites with environmental problems due to leaking fuel storage tanks.
- Florida State-Funded Action Sites (SHWS): identifies facilities and/or locations that the FDEP has recognized with potential or existing environmental contamination. These sites are equivalent to SEMS. They may or may not already be listed on the federal SEMS list. Priority sites planned for cleanup using state funds are identified along with sites where potentially responsible parties will pay for cleanup.
- Florida Solid Waste Facilities (SWF/LF): an inventory of solid waste disposal facilities or landfills. The presence of a site on this list does not necessarily indicate existing environmental contamination, but rather the potential for contamination.
- Florida Registered Underground Storage Tanks (UST): records regulated stationary petroleum tanks. Inclusion on this list suggests the presence of stationary storage tanks, therefore, the potential for environmental problems. It does not necessarily indicate existing problems.
- Florida Registered Aboveground Storage Tanks (AST): records regulated stationary petroleum tanks. Inclusion on this list suggests the presence of stationary storage tanks, therefore, the potential for environmental problems. It does not necessarily indicate existing problems.
- Brownfield Areas (BF): Brownfield areas are defined by FDEP as abandoned, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. The primary goal for Florida Brownfield sites is to reduce health and environmental hazards on existing commercial and industrial sites that are abandoned or underused due to these hazards, and to create financial and regulatory incentives to encourage redevelopment and voluntary cleanup of contaminated properties. A Brownfield Area refers to a contiguous area of one or more Brownfield Sites. Not all the sites located within a Brownfield Area are contaminated.
- Dry Cleaners (Cleaners): included on this database are sites with dry cleaning solvent contamination resulting from the operations associated with a dry-cleaning facility.
- Cattle Dip Vats (CDV): Cattle dipping vats were used to control and eradicate the cattle fever tick. These locations were in operation from the 1910's through the 1950's and are known to present an environmental or public health hazard due to the pesticides and chemicals used for the process. FDEP and the Florida Department of Health were contacted to determine the

location of known CDVs. Both FDEP and FDH stated that there is no state database showing these locations.

### 3.3 Field Review

In addition to the regulatory database search, site reconnaissance and limited field investigation of the properties on or immediately adjacent to the S.R. 70 corridor was conducted. The initial field review took place on September 12, 2024, followed by a subsequent field review conducted on October 15–16, 2025. Field photos from both reviews have been included in **Appendix J**.

The reconnaissance consisted of visual inspections for evidence of potential contamination or environmental violations at the locations identified during the regulatory database search. Furthermore, both field reviews included visual investigations of potential sites that appeared to store or use hazardous materials but were not listed in any regulatory database. The site reconnaissance revealed above ground storage tanks on the Arcadia Fruit Company property that are located within approximately 450 feet west and 400 feet east of SMF 1009A. An agricultural pump station was also observed adjacent to the east side of FPC 1004B. Evidence of CDVs was not observed in either field review.



## 4 SITE RATING

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In accordance with the Contamination Chapter of the PD&E Manual, the study area was assumed to be approximately 500 feet from the proposed SMF and FPC sites for petroleum, drycleaners, and non-petroleum sites. For sites identified as non-landfill solid waste sites, such as recycling facilities, transfer stations, or debris placement areas, a distance of 1,000 feet from the SMF and FPC sites was used. For sites identified under SEMS, NPL, or Landfill Solid Wastes, a distance of one-half (½) mile was used. The review identified 3 additional sites not evaluated in the previous CSER and 4 sites within the SMF/FPC site study area that were previously evaluated. Site numbers 1-6, 8-17, and 20 are included in the March 2025 CSER. Aerial maps showing all site locations have been included in **Appendix K**.

All 7 of the identified sites were rated as “Medium”. Sites rated “Medium” are indicative of those sites that are in active petroleum remediation, have a known history of petroleum discharge at the site and are close enough to the project to potentially impact construction activities, or have insufficient database information to determine contamination impacts. This site rating includes land that has recently been used for farming and engaging in active agricultural practices. Further testing should be considered for sites rated “Medium”. General information from the FDEP OCULUS and other databases on each site is included in **Table 4-1**. Of the 24 SMF and FPC sites, 12 were found to be within or near potential contamination sources. All SMF and FPC sites and their spatial relationships to nearby potential contamination sources is included in **Table 4-2**.

A brief description is provided below for the 7 total potential contamination sites within or adjacent to the SMF and FPC sites.

- **Site 7: Murphy U.S. #6902**  
FDEP Facility ID: 9805491  
2769 SE Hwy 70  
Arcadia, FL 34266

This site is an active gas station housing two underground storage tanks (USTs) containing unleaded gas. A spill of less than 25 gallons of diesel fuel onto the concrete and into the storm drain was reported in 2003 due to overfilling of a vehicle fuel tank. The Fire Department responded by applying absorbents and closed the case. On April 15, 2024, a spill estimated at 80 gallons of gasoline was reported with two drains impacted. The drains were vacuumed prior to fuel entering the retention pond. The site is currently in compliance according to the last inspection document dated June 2024. A January 9, 2025 Site Assessment Report concluded that there were no dissolved hydrocarbon impacts at the site and a determination of No Further Action was issued May 15, 2025. The operation of USTs and onsite fueling at gas stations present several ongoing risks to groundwater and soil contamination from the potential leakage from USTs, spills during fueling, improper tank closer, and other associated risks. The history of contamination at this site could affect permitting if local dewatering is necessary. Due to this site being an active gas station, and its distance to project activities, this site was assigned a “Medium” risk rating. The January 9, 2025 Site Assessment Report can be found in **Appendix L**. This site is within 500 feet of SMF 0901A.

- **Site 18: Desoto C&D Disposal Facility**  
FDEP Facility ID: 92117  
14662 NW Hwy 70  
Arcadia, FL 34266

This solid waste facility is used as a supplemental disposal site for construction and demolition debris from Desoto Recycling and Disposal (DRD) which is located adjacent to the facility. The facility is in active groundwater monitoring due to a leachate storage impoundment leak detected on November 8, 2010, and the facility is seeking permit for expansion of the site. A sump pump was left pumping overnight resulting in over 100,000 gallons of leachate being released to the ground outside of impoundment #1 and the truck loading pad. All dirt that came in contact with the leachate was excavated and disposed of into the landfill and the leachate system was corrected on April 27, 2011. The groundwater sampling done in March 2024 showed that groundwater contaminant target levels (GCTLs) for arsenic were exceeded within 500 feet of S.R. 70 and approximately 1,500 feet from FPC 1008A. Since there are SMF and FPC sites within 1,000 feet of the property, this site could affect permitting if local dewatering is necessary. Due to possible contamination being present within 500 feet of the project area and this site being an active landfill, this site was assigned a “Medium” risk rating. The March 2024 Compliance Monitoring Report can be found in **Appendix L**. This site is within ½-mile of FPC 1008A and SMF 1007A.

- **Site 19: Alico, Inc.**  
FDEP Facility ID: None  
15562 NE Hwy 70  
Arcadia, FL 34266

This site is an active citrus grove that traverses approximately 2.28 miles along the north side of S.R. 70, east of Desoto Recycling and Disposal. There are no documented contamination or storage tanks on the property. Due to this being active farmland, this site was assigned a “Medium” risk rating. This site is within 500 feet of SMF 1007A and FPC 1009C. FPC 1008A and FPC 1009C are also adjacent to a canal running from the Alico, Inc. property.

- **Site 21: Rainbow Grove**  
FDEP Facility ID: 8839822  
17992 NE Hwy 70  
Arcadia, FL 34266

This site is an active citrus grove that traverses approximately 1.1 miles along the northeast side of the project corridor. There are nine registered petroleum above ground storage tanks (ASTs) in service at the site, which are shown in the DEP database to be located more than 2,000 feet from S.R. 70. There is no recent documentation on the tanks since the last registration forms in 1993. Due to this being active farmland, this site was assigned a “Medium” risk rating. This site is within 500 feet of SMF 1008A. Also, FPC 1010B and SMF 1009A are adjacent to a canal running from the Rainbow Grove property.

- **Site 22: Florida Power & Light Company (Formerly Southeast Groves)**  
FDEP Facility ID: None  
1274 NE Four Mile Grade  
Arcadia, FL 34266

This site appears to have been a recently active citrus grove that traverses approximately 1.14 miles along the north side of S.R. 70, at NE 4 Mile Grade Road. In the March 2025 CSER, this property was included with Alico, Inc. due to their adjoining location. However, according to the DeSoto County Property Appraiser, this property has been owned by Florida Power & Light Company since 2022 and was formerly owned by Southeast Groves LLC. There is no documented contamination or storage tanks on the property. Due to this being recently active farmland, this site was assigned a “Medium” risk rating. This site is within 500 feet of SMF 1004A, FPC 1003A, FPC 1005C, FPC 1004B, and SMF 1005C-1L. FPC 1003A is also adjacent to a canal running from the site property.

- **Site 23: Alico (Formerly Orange Co)**  
FDEP Facility ID: FLD053957866 / 8521198 / 8520909 / 8520908  
12010 NE Hwy 70  
Arcadia, FL 34266

This site has been used to maintain and harvest orange groves. The FDEP databases lists the facilities at this property under “Orange Co” and documents show that the property includes 15,000 acres of managed groves. According to the DeSoto County Property Appraiser, this land has been owned by Alico Inc. since 2015. FDEP also documents there being an air strip on site for an aircraft used to apply pesticides and fertilizers. This facility is categorized as a small quantity generator of waste oil. Also on the property are 3 ASTs containing gasoline and waste oil; as well as 1 AST and 2 USTs, containing gasoline, that were removed from the site. Due to this being active farmland, this site was assigned a “Medium” risk rating. The most recent FDEP Hazardous Waste Inspection Report, dated November 2011, is included in **Appendix L**. This site is within 500 feet of FPC 1005C, FPC 1004B, and SMF 1005C-1L.

- **Site 24: Arcadia Fruit Co**  
FDEP Facility ID: None  
18500 NE Hwy 70  
Arcadia, FL 34266

This site is active farmland that traverses approximately 1.1 miles along the north side of S.R. 70, at the east end of the corridor. There are no documented contamination sites or FDEP registered storage tanks on the property. However, the 2025 field review revealed two areas with ASTs located approximately 400-450 feet from SMF 1009A. Due to this being active farmland, this site was assigned a “Medium” risk rating. SMF 1009A is located within the site property and FPC 1010B is located within 500 feet of the site.

**Table 4-1: Summary of Identified Contamination Sites**

Site #	Name/Address	Facility ID/Source	Associated Pond Sites	Contaminants of Concern	Facility Status	Database*	Tank Status	Inspection/Cleanup Status	Site Rating
7	Murphy U.S. #6902 2769 SE Hwy 70 Arcadia, FL 34266	9805491	SMF 0901A	Unleaded Gas	Open	UST	2-20,000 GAL UST / IN SERVICE	In compliance	Medium
18	Desoto C&D Disposal Facility 14662 NW Hwy 70 Arcadia, FL 34266	92117	FPC 1008A, SMF 1007A	Source-separated organics, Construction/Demolition Debris, Disaster Debris	Active	SWF	-	In Compliance / Active Groundwater Monitoring	Medium
19	Alico, Inc. 15562 NE Hwy 70 Arcadia, FL 34266	Field Review	FPC 1008A, SMF 1007A, FPC 1009C	Agricultural chemicals	Active	-	-	-	Medium
21	Rainbow Grove 17992 NE Hwy 70 Arcadia, FL 34266	8839822	SMF 1008A, FPC 1010B, SMF 1009A	Agricultural chemicals, Unleaded Gas, Vehicular Diesel	Active	AST	7-550 GAL AST / IN SERVICE 2-500 AST / IN SERVICE	-	Medium
22	Florida Power & Light Company (Formerly Southeast Groves) 1274 NE Four Mile Grade Arcadia, FL 34266	Field Review	SMF 1004A, FPC 1003A, FPC 1005C, FPC 1004B, SMF 1005C-1L	Agricultural chemicals	Active	-	-	-	Medium
23	Alico (Formerly Orange Co) 12010 NE Hwy 70 Arcadia, FL 34266	FLD053957866 / 8521198 / 8520909 / 8520908	FPC 1005C, FPC 1004B, SMF 1005C-1L	Agricultural chemicals, Vehicular Diesel, Unleaded Gas, Waste Oil	Active	CESQG, AST, UST	1-10,000 GAL AST / IN SERVICE 2 - 5,000 GAL AST / IN SERVICE 1- 380 GAL AST / IN SERVICE 1-3,000 GAL AST / REMOVED FROM SITE 1-3,000 GAL UST / REMOVED FROM SITE 1-1,000 GAL UST / REMOVED FROM SITE	In compliance	Medium
24	Arcadia Fruit Co 18500 NE Hwy 70 Arcadia, FL 34266	Field Review	FPC 1010B, SMF 1009A	Agricultural chemicals	Active	-	-	-	Medium
<b>FDEP Database*:</b> AST – Aboveground Storage Tank CESQG – Conditional Exempt Small Quantity Generator SWF – Solid Waste Facility UST – Underground Storage Tank									

**Table 4-2: Stormwater Management Facilities and Proximate Contamination Sites**

<b>Pond Site</b>	<b>Proximate Contamination Site(s)</b>	<b>Facility IDs</b>	<b>Approx. Distance to Contamination Site</b>
SMF 0901A	Site 7 – Murphy U.S. #6902	9805491	300-ft
SMF 0902A	-	-	-
SMF 0903B	-	-	-
SMF 0904A	-	-	-
FPC 1001A	-	-	-
SMF 1001A	-	-	-
FPC 1002-NA	-	-	-
FPC 1002-SB	-	-	-
SMF 1002A	-	-	-
SMF 1003B	-	-	-
SMF 1004A	Site 22 – Florida Power & Light Company (Formerly Southeast Groves)	-	320-ft
FPC 1003A	Site 22 – Florida Power & Light Company (Formerly Southeast Groves)	-	320-ft / Adjacent to water source
FPC 1005C	Site 22 – Florida Power & Light Company (Formerly Southeast Groves)	-	Adjacent to Property
	Site 23 – Alico (Formerly Orange Co)	FLD053957866 / 8521198 / 8520909 / 8520908	Within Property
FPC 1004B	Site 22 – Florida Power & Light Company (Formerly Southeast Groves)	-	Adjacent to Property
	Site 23 – Alico (Formerly Orange Co)	FLD053957866 / 8521198 / 8520909 / 8520908	Within Property
SMF 1005C-1L	Site 22 – Florida Power & Light Company (Formerly Southeast Groves)	-	300-ft
	Site 23 – Alico (Formerly Orange Co)	FLD053957866 / 8521198 / 8520909 / 8520908	Within Property
FPC 1006A	-	-	-
SMF 1006A	-	-	-
FPC 1007C	-	-	-
FPC 1008A	Site 18 – DeSoto C&D Disposal Facility	92117	800-ft
	Site 19 – Alico, Inc.	-	Adjacent to canal
SMF 1007A	Site 18 – DeSoto C&D Disposal Facility	92117	900-ft
	Site 19 – Alico, Inc.	-	330-ft
FPC 1009C	Site 19 – Alico, Inc.	-	330-ft / Adjacent to canal
SMF 1008A	Site 21 – Rainbow Grove	8839822	330-ft
FPC 1010B	Site 21 – Rainbow Grove	8839822	Adjacent to canal
	Site 24 – Arcadia Fruit Co	-	400-ft
SMF 1009A	Site 21 – Rainbow Grove	8839822	Adjacent to canal
	Site 24 – Arcadia Fruit Co	-	Within Property

# 5 SUMMARY AND RECOMMENDATIONS

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## 5.1 Summary of Sites Identified During Review

The regulatory, literature, and field review conducted for this CSER Addendum identified a total of 7 sites as potential contamination sources located within or adjacent to the proposed SMF and FPC sites. All 7 sites were rated as having a “Medium” potential for contamination impact.

The following sites were rated Medium:

- Site 7 – Murphy U.S. #6902
- Site 18 – DeSoto C&D Disposal Facility
- Site 19 – Alico, Inc.
- Site 21 – Rainbow Grove
- Site 22 – Florida Power & Light Company (Formerly Southeast Groves)
- Site 23 – Alico (Formerly Orange Co)
- Site 24 – Arcadia Fruit Co

Two sites, Site 7 and Site 18, may require NPDES dewatering permits if dewatering is necessary during construction activities. A site that does not meet the conditions of Part 3.4.3 of the Construction Generic Permit (CGP) may qualify for coverage under Rule 62-621.300(1), F.A.C., or under an individual wastewater permit on the appropriate form listed in Rule 62-620.910, F.A.C.

## 5.2 Recommendations

Prior to any land acquisition or the start of construction, it is recommended that the current status of all sites identified during this evaluation be updated by reviewing the regulatory databases. It is also recommended that all sites that currently have active USTs and/or ASTs be re-evaluated prior to any land acquisition. Additional testing efforts will be determined by the District Contamination Impact Coordinator (DCIC).

The construction for this project is not expected to face any significant contamination-related impacts. The evaluation indicates that any potential issues will likely be resolved with Level III construction support activities such as source removal, effluent treatment, and asbestos abatement. Other minor support for well abandonments or adjustments may also be needed.

The estimated cost for Level II soil and groundwater sampling ranges from \$5,000 to \$10,000 per site. Level III water treatment support costs may vary from \$25,000 to \$100,000, depending on local dewatering requirements.

## 6 REFERENCES

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“Aquifer Characteristics within the Southwest Florida Water Management District.” Technical Services Department Resource Regulation of the Southwest Florida Water Management District. March 2018.

“Hydrologic Conditions for the month of May 2024.” Hydrologic Data Section, Data Collection Bureau, Southwest Florida Water Management District. June 25, 2024.

“Map Book: Potentiometric Surface of the Upper Floridan Aquifer from 2011 to Present.” Hydrologic Data Section, Data Collection Bureau, Southwest Florida Water Management District. 2017.

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(<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).

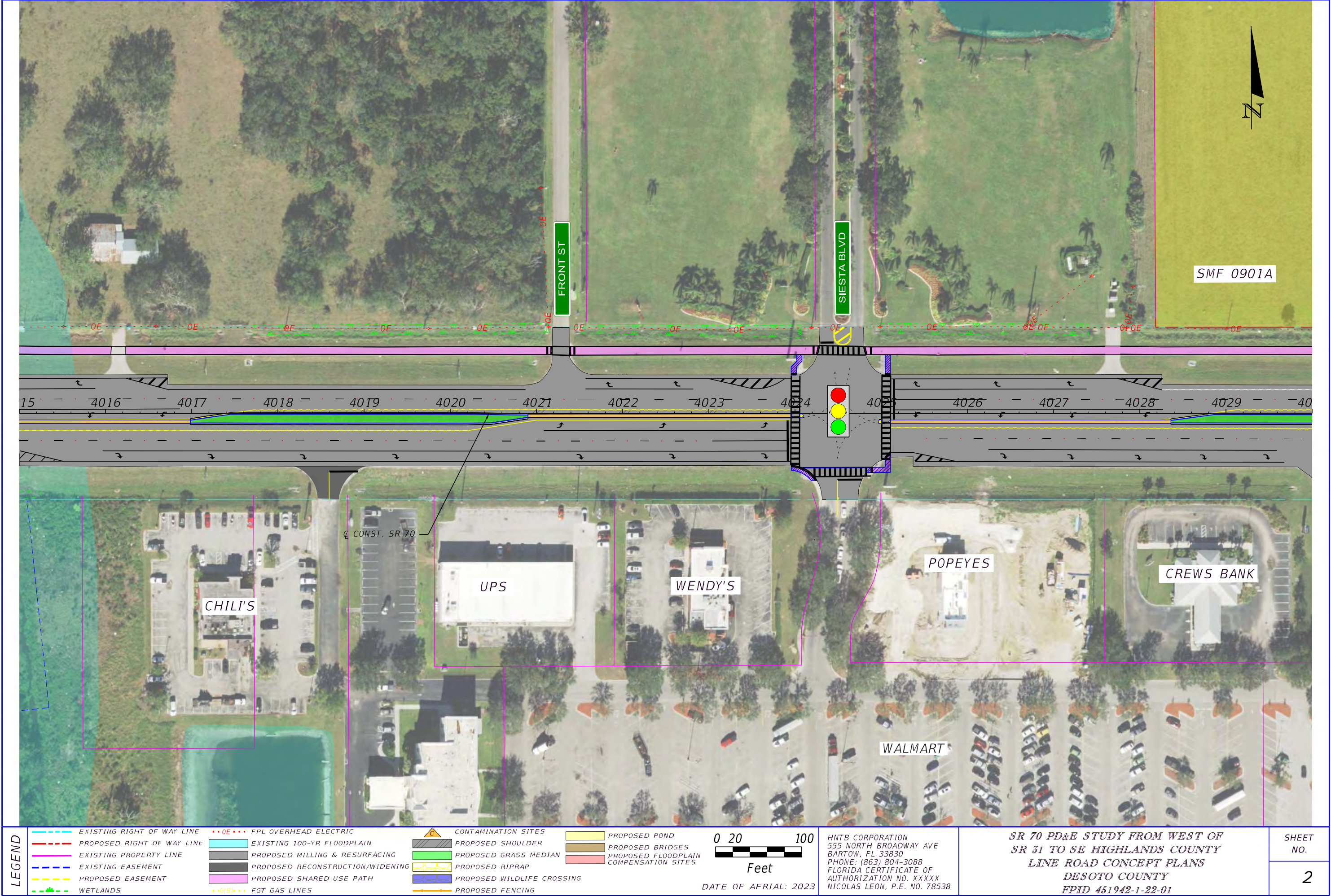


## **Appendix A – Preliminary Concept Plans**









LEGEND

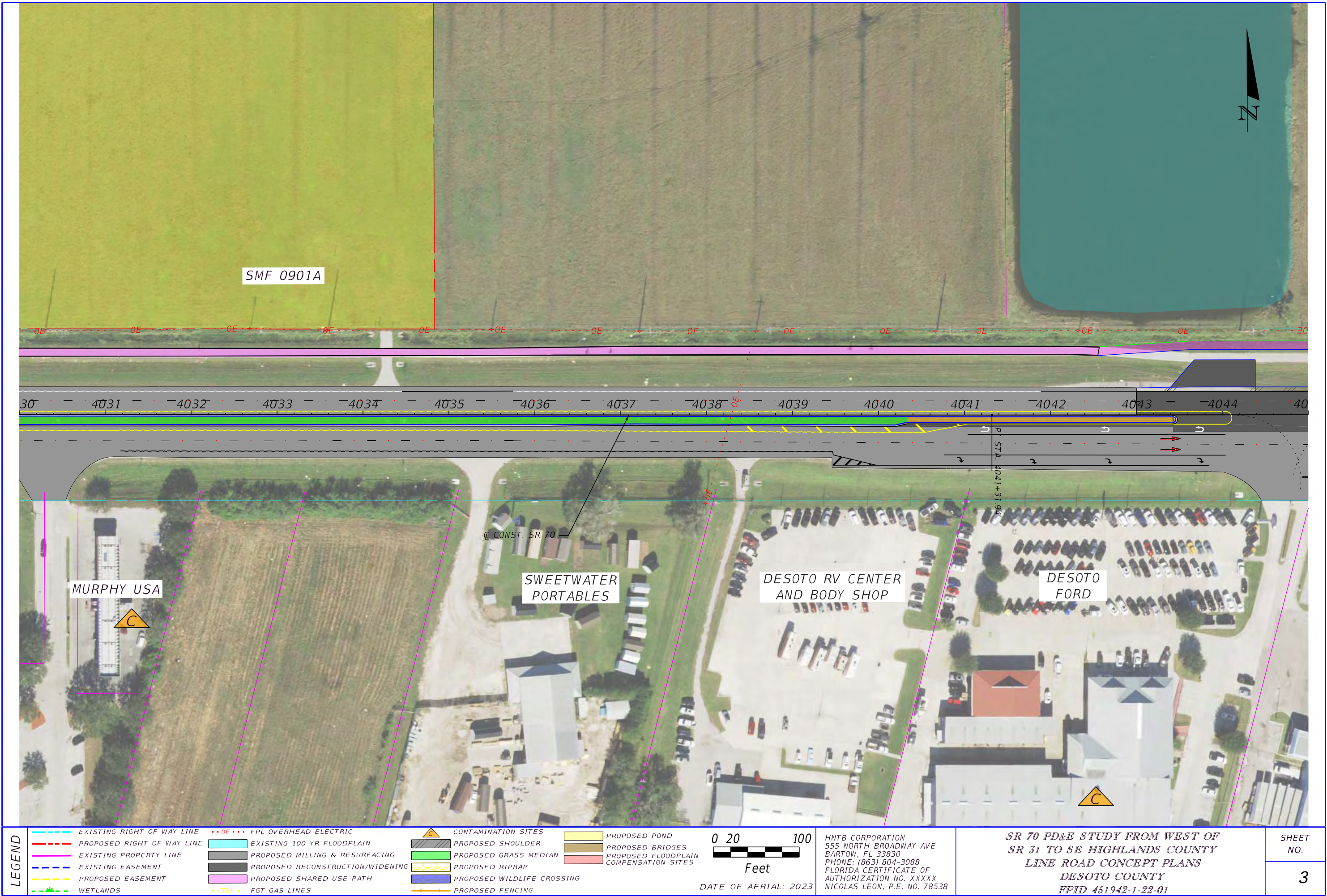
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PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

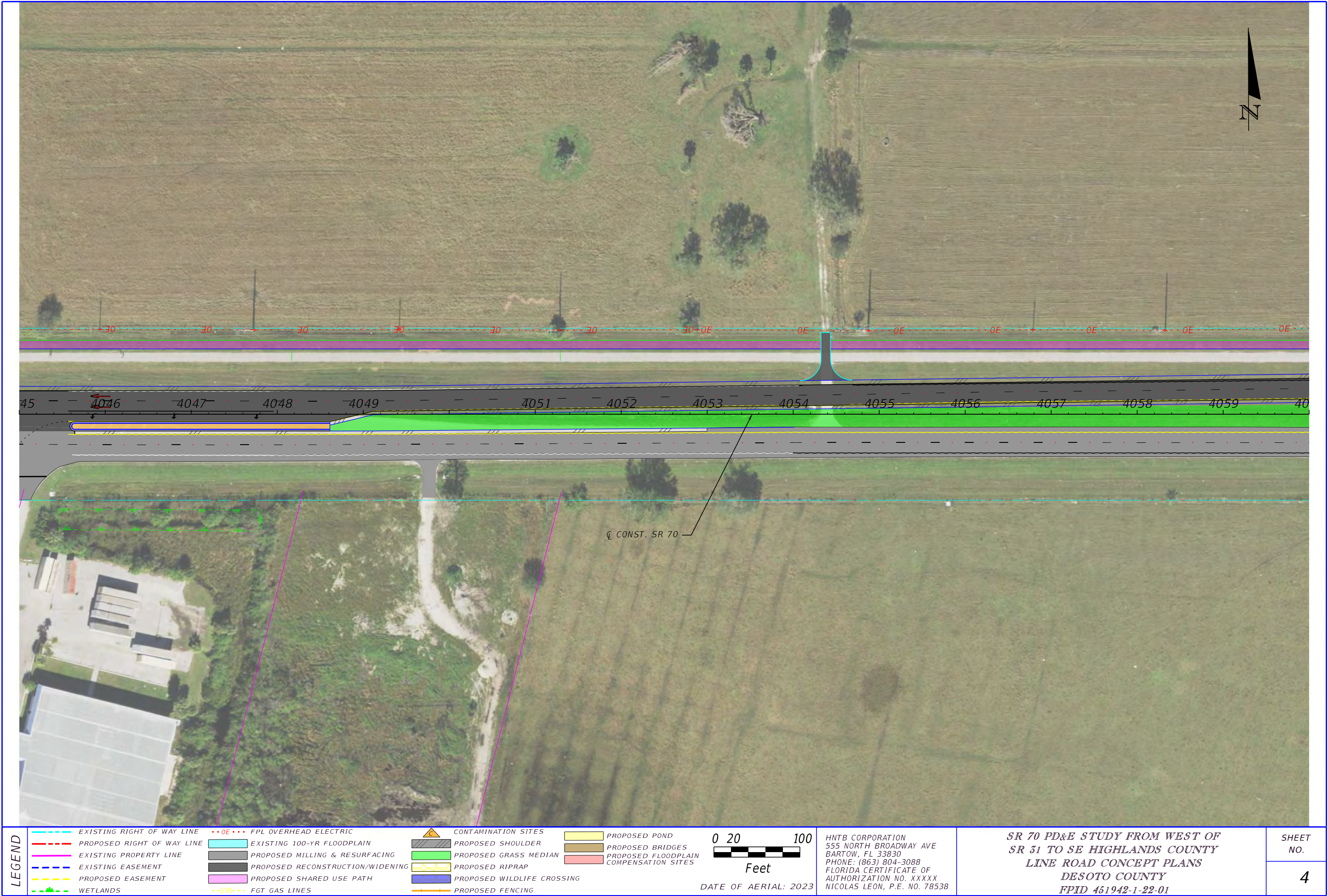
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET  
NO.  
2









LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

0E FPL OVERHEAD ELECTRIC

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B) FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

0 20 100

Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

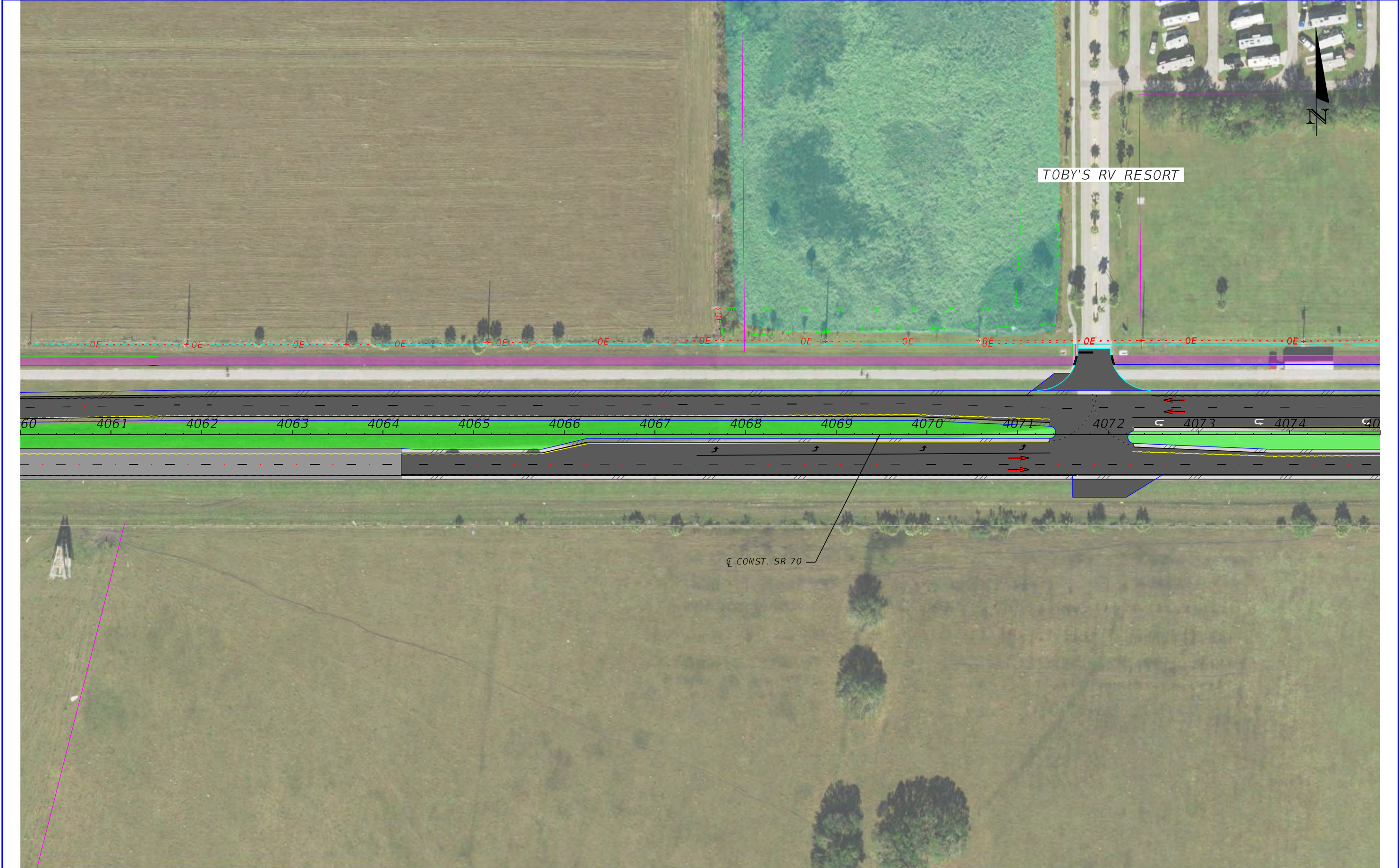
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.

4

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LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

020100

Feet

DATE OF AERIAL: 2023

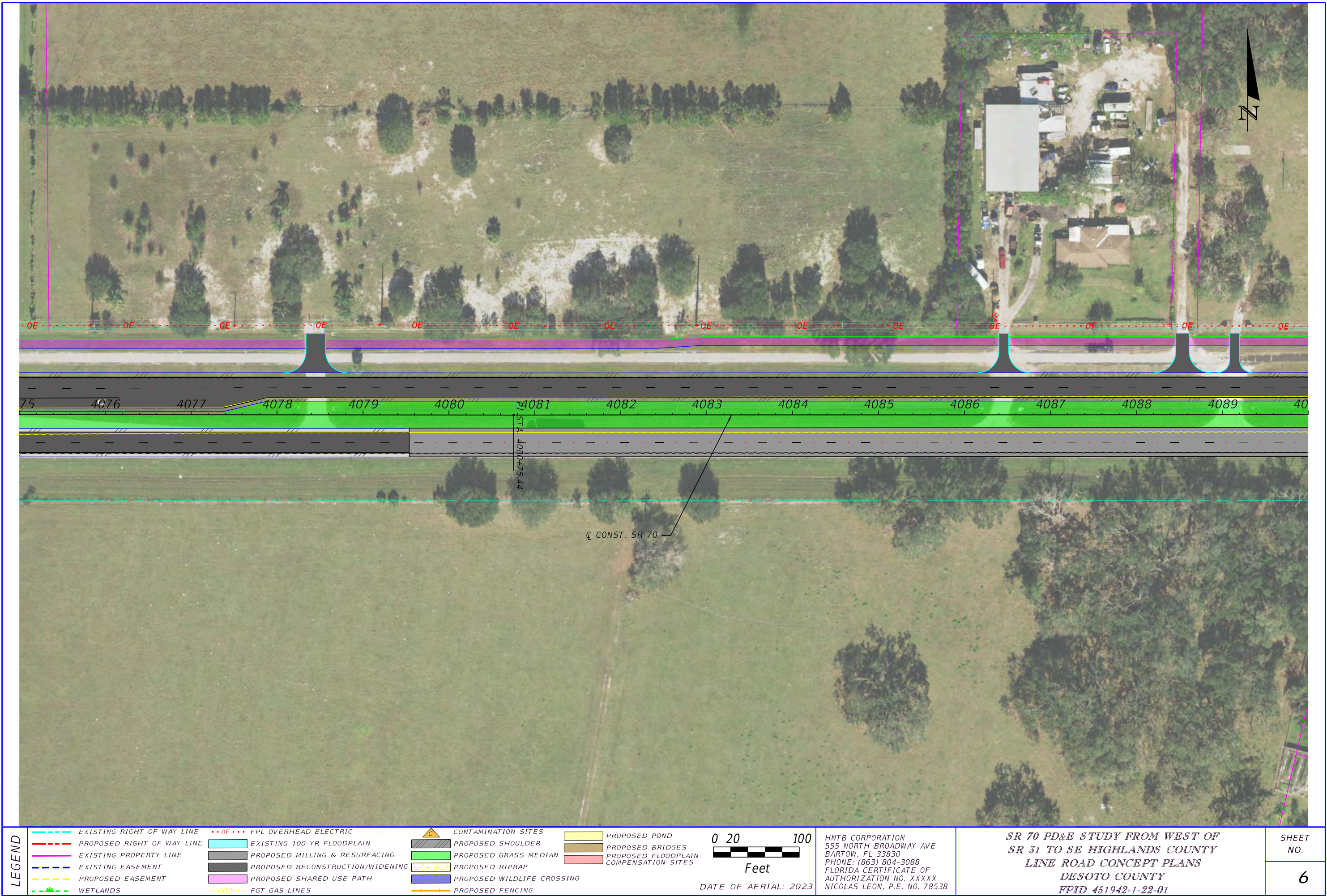
HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

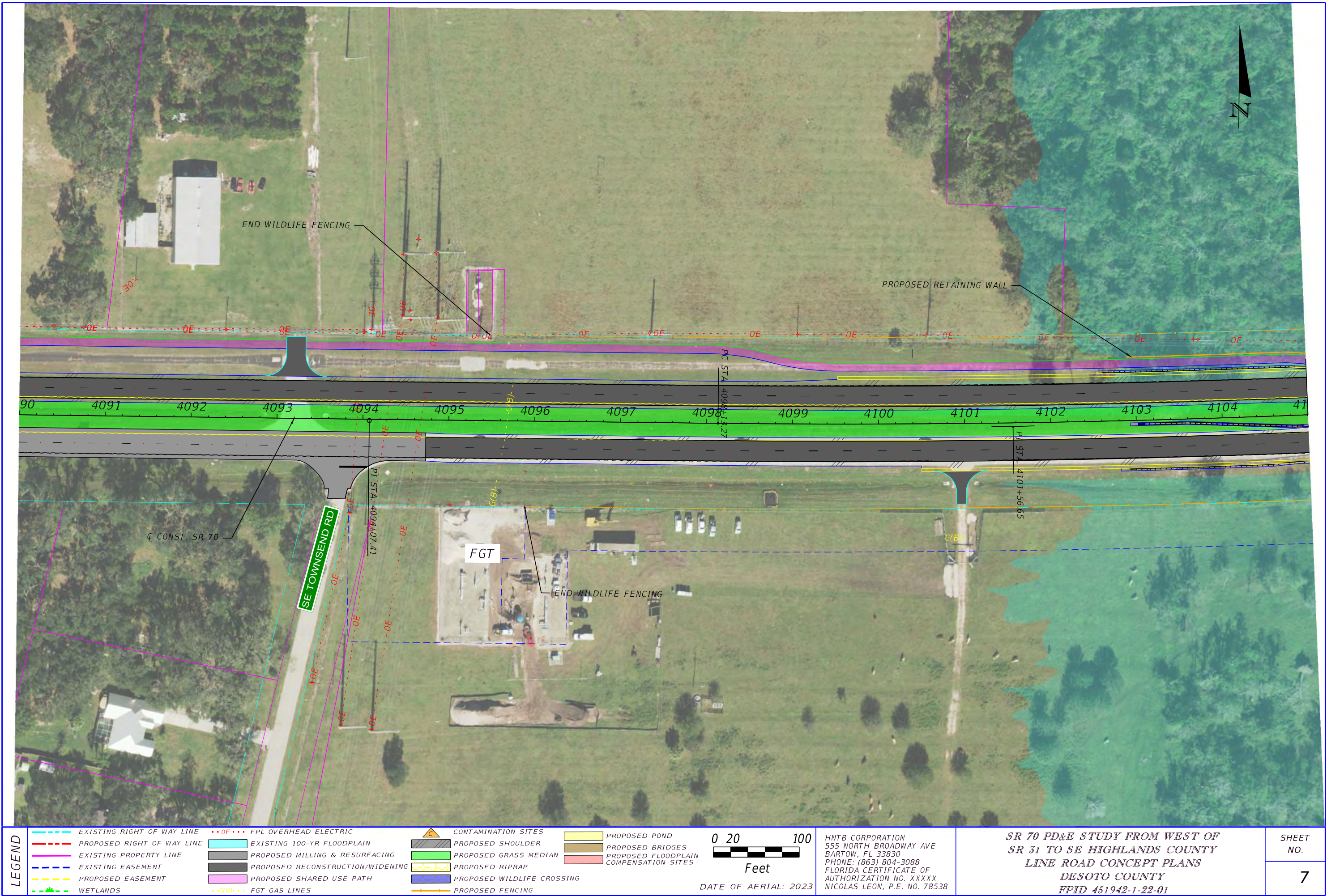
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5

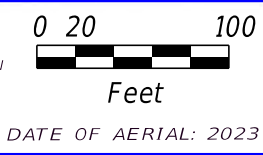








LEGEND	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

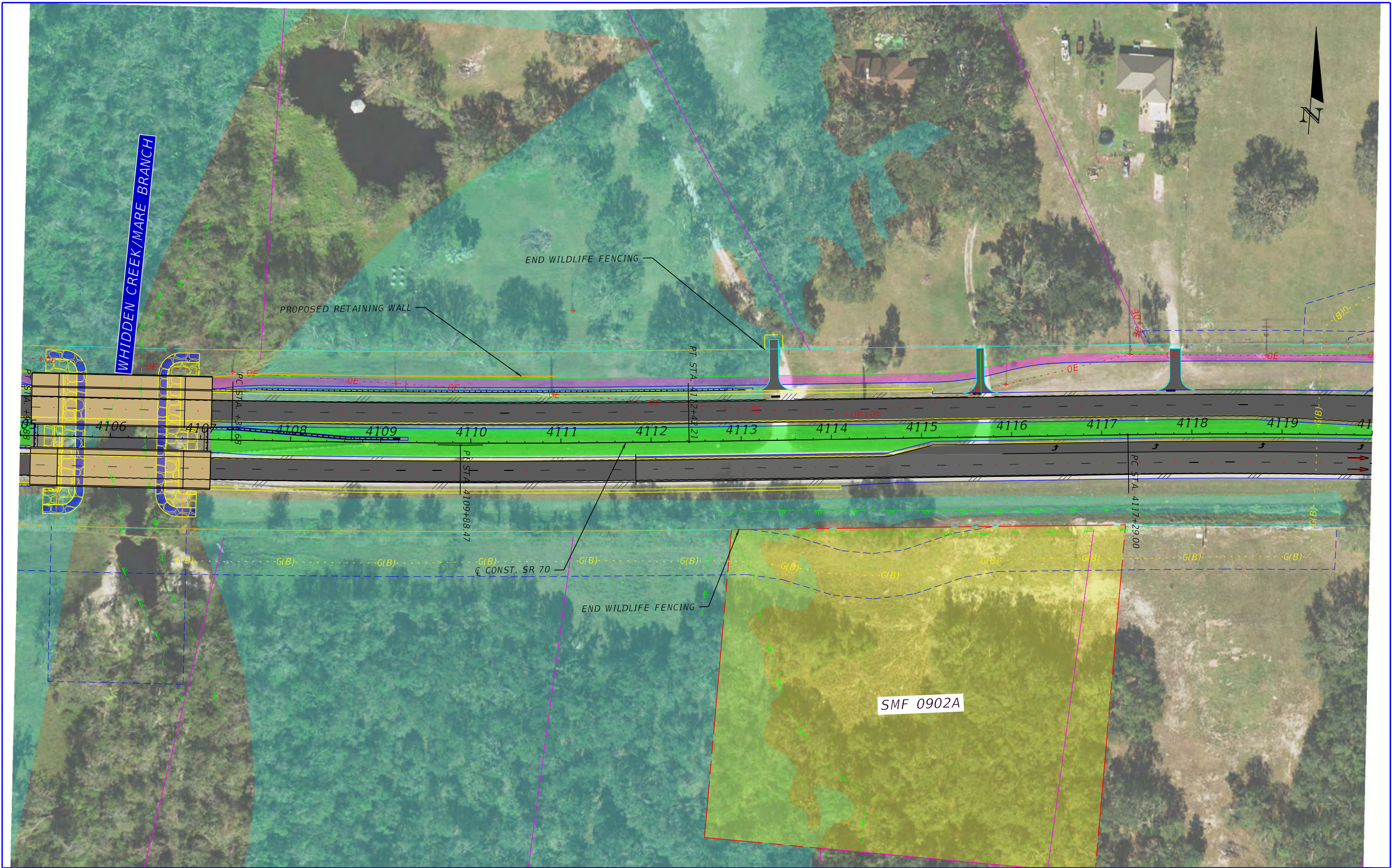


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BARTOW, FL 33830  
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AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01**

SHEET  
NO.  
**7**





LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

OE

FPL OVERHEAD ELECTRIC

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

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Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

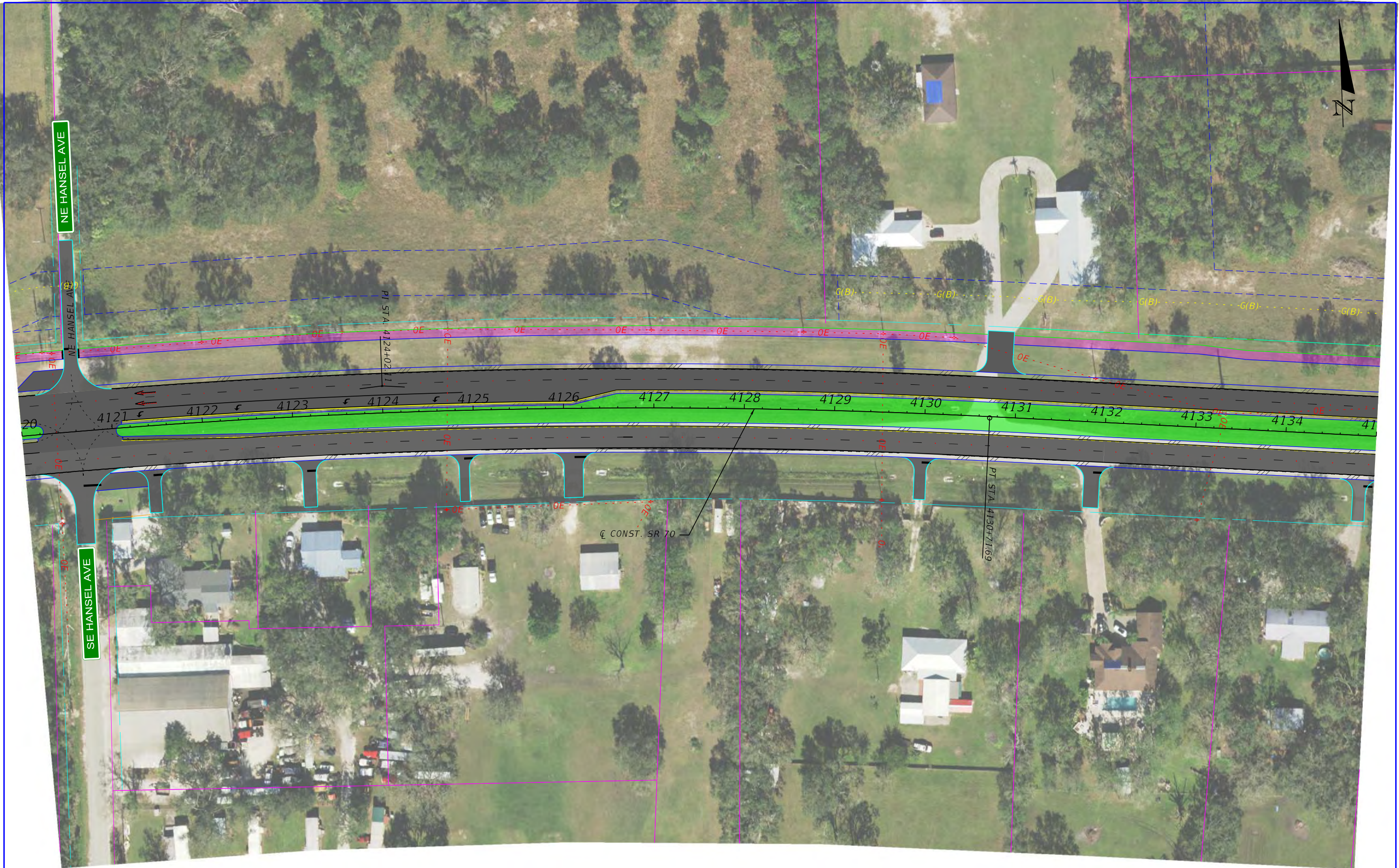
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.

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<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED RIPRAP	
	PROPOSED EASEMENT	FGT GAS LINES	PROPOSED WILDLIFE CROSSING	
	WETLANDS		PROPOSED FENCING	

0 20 100

Feet

DATE OF AERIAL: 2023

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BARTOW, FL 33830  
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AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01**

SHEET NO.

**9**





<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING		
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED FENCING		
WETLANDS				

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Feet

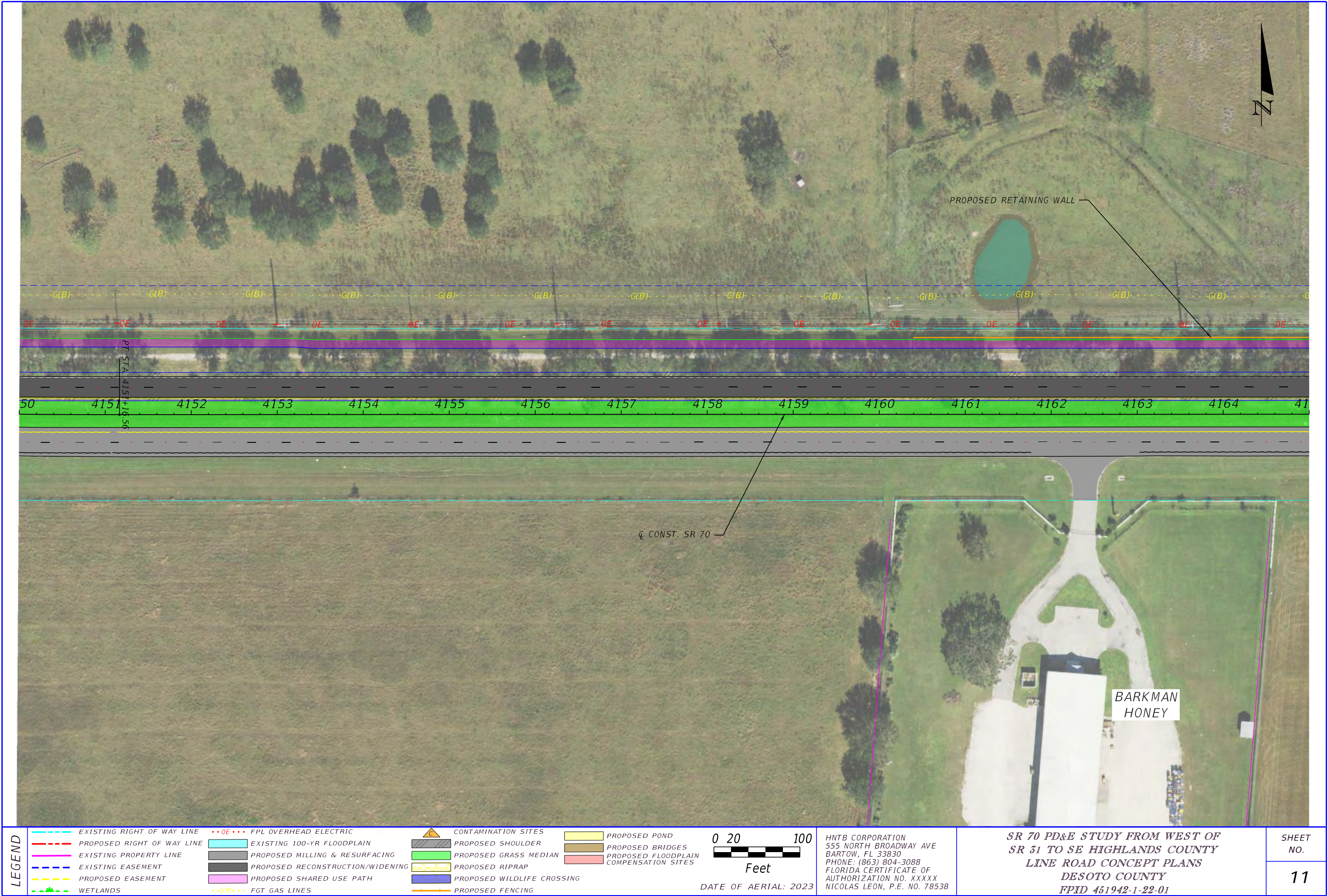
DATE OF AERIAL: 2023

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555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

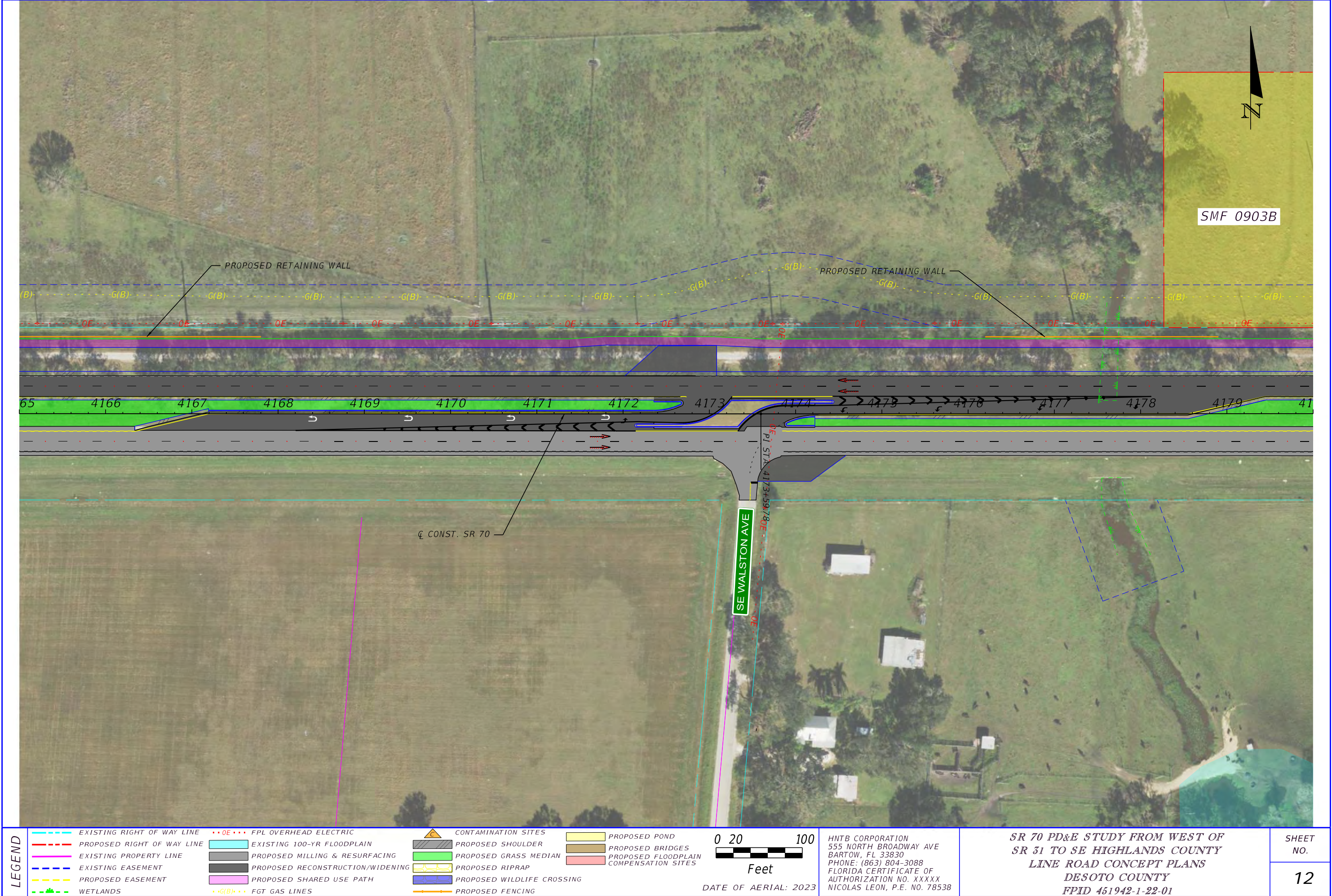
**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET NO.  
**10**













LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

0E

FPL OVERHEAD ELECTRIC

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

020100

Feet

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AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

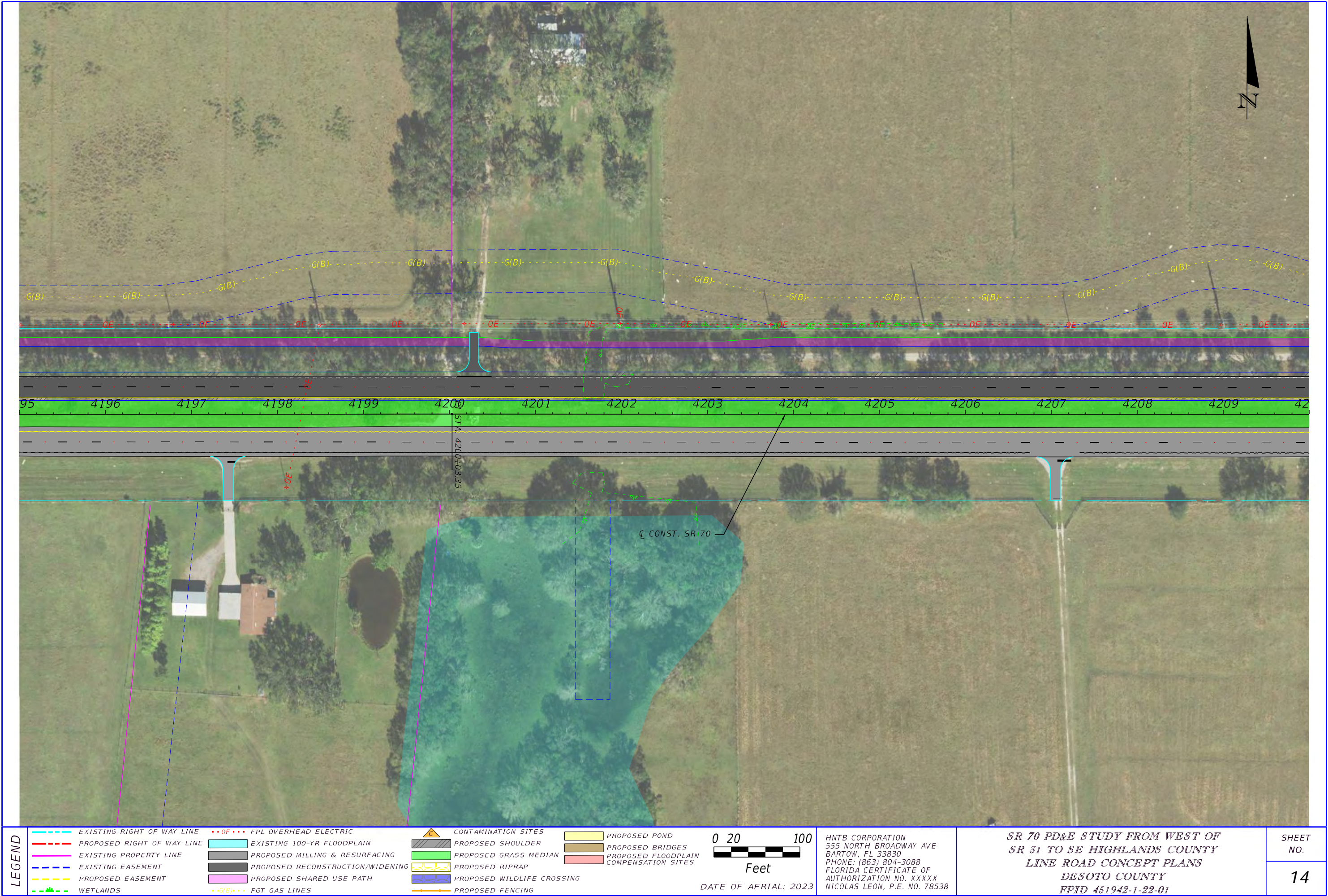
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.

13

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LEGEND	EXISTING RIGHT OF WAY LINE	••OE•• FPL OVERHEAD ELECTRIC	CONTAMINATION SITES
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING
	WETLANDS	G(B) FGT GAS LINES	PROPOSED FENCING

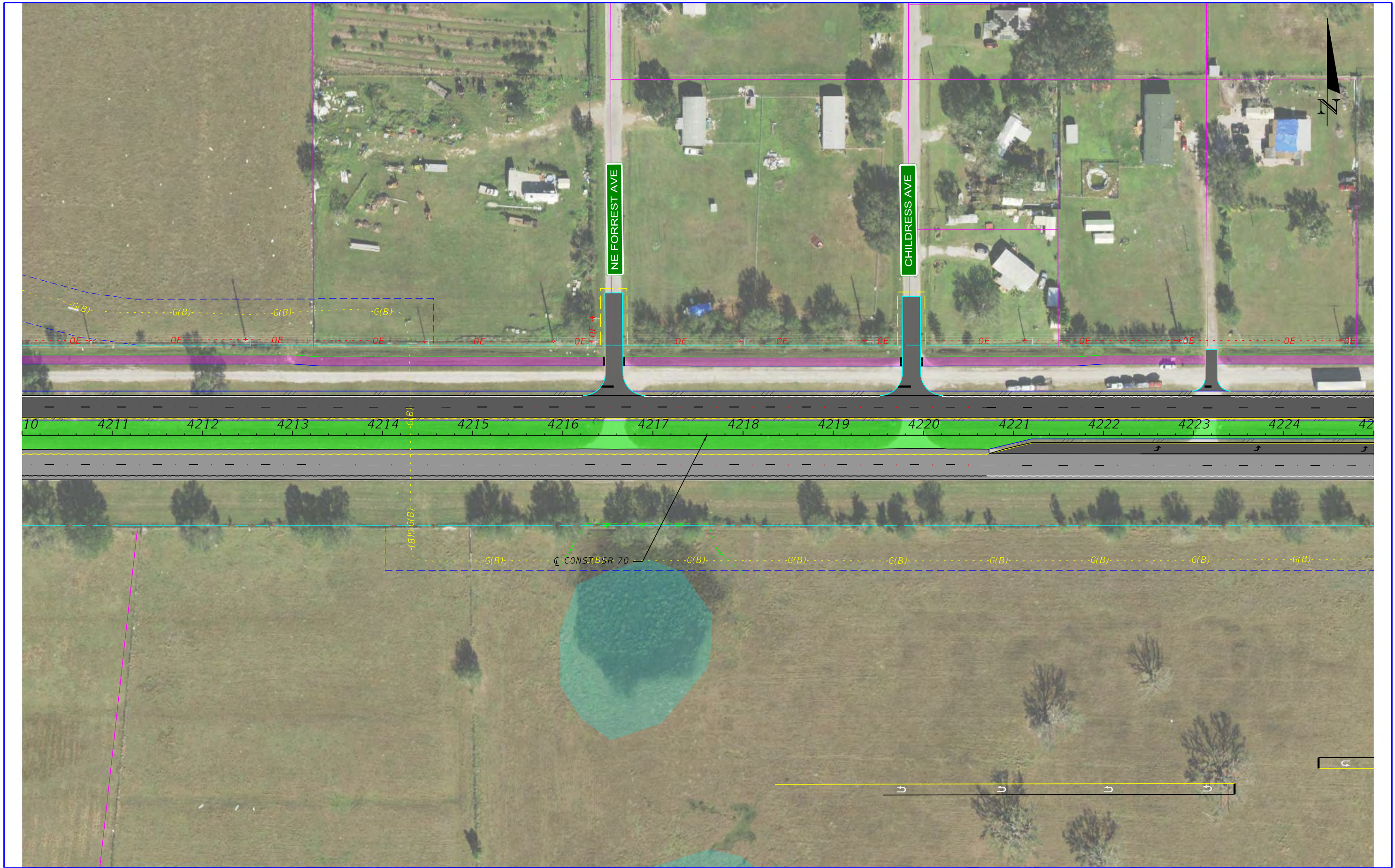
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DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.  
14





<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

0 20 100

Feet

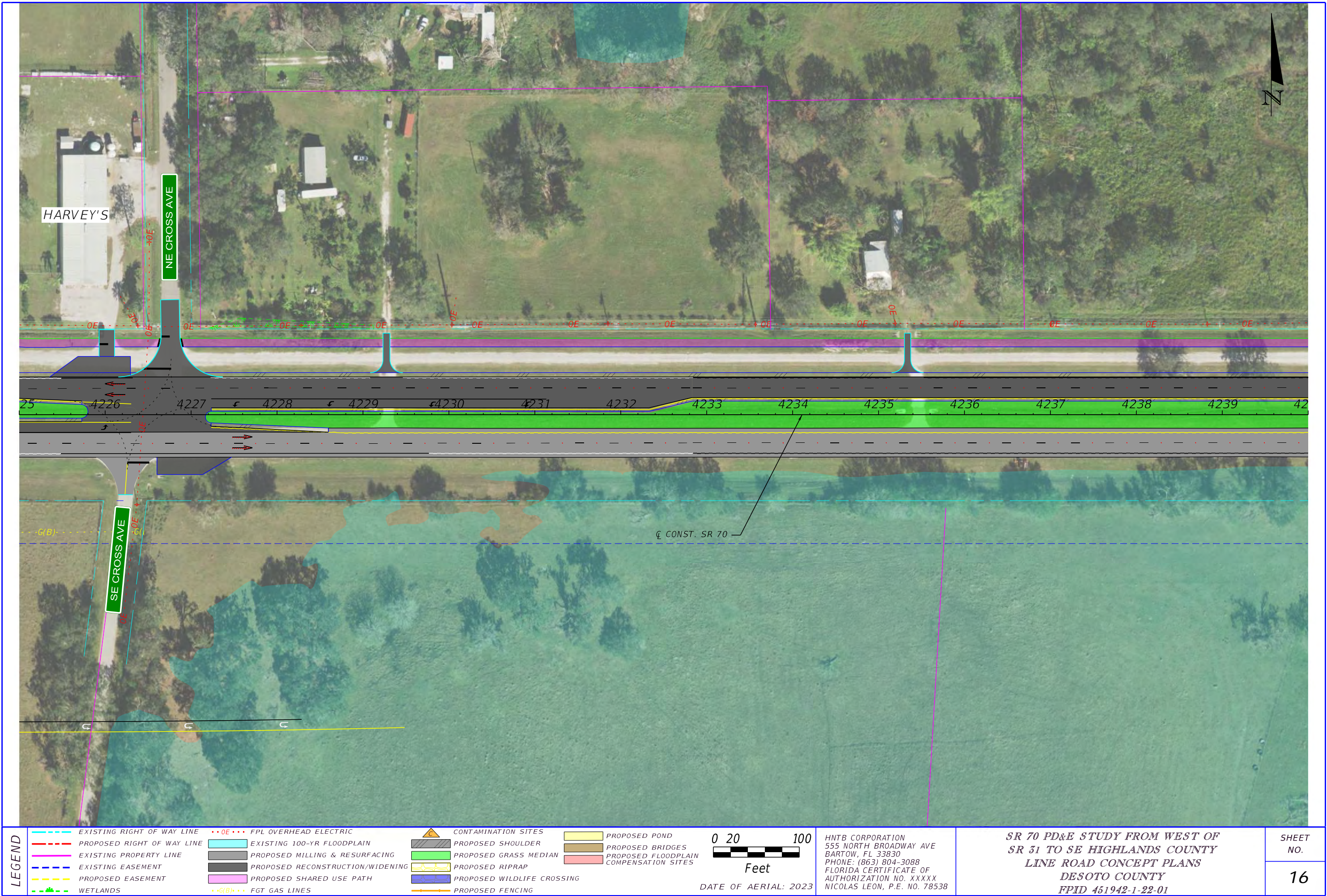
DATE OF AERIAL: 2023

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555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

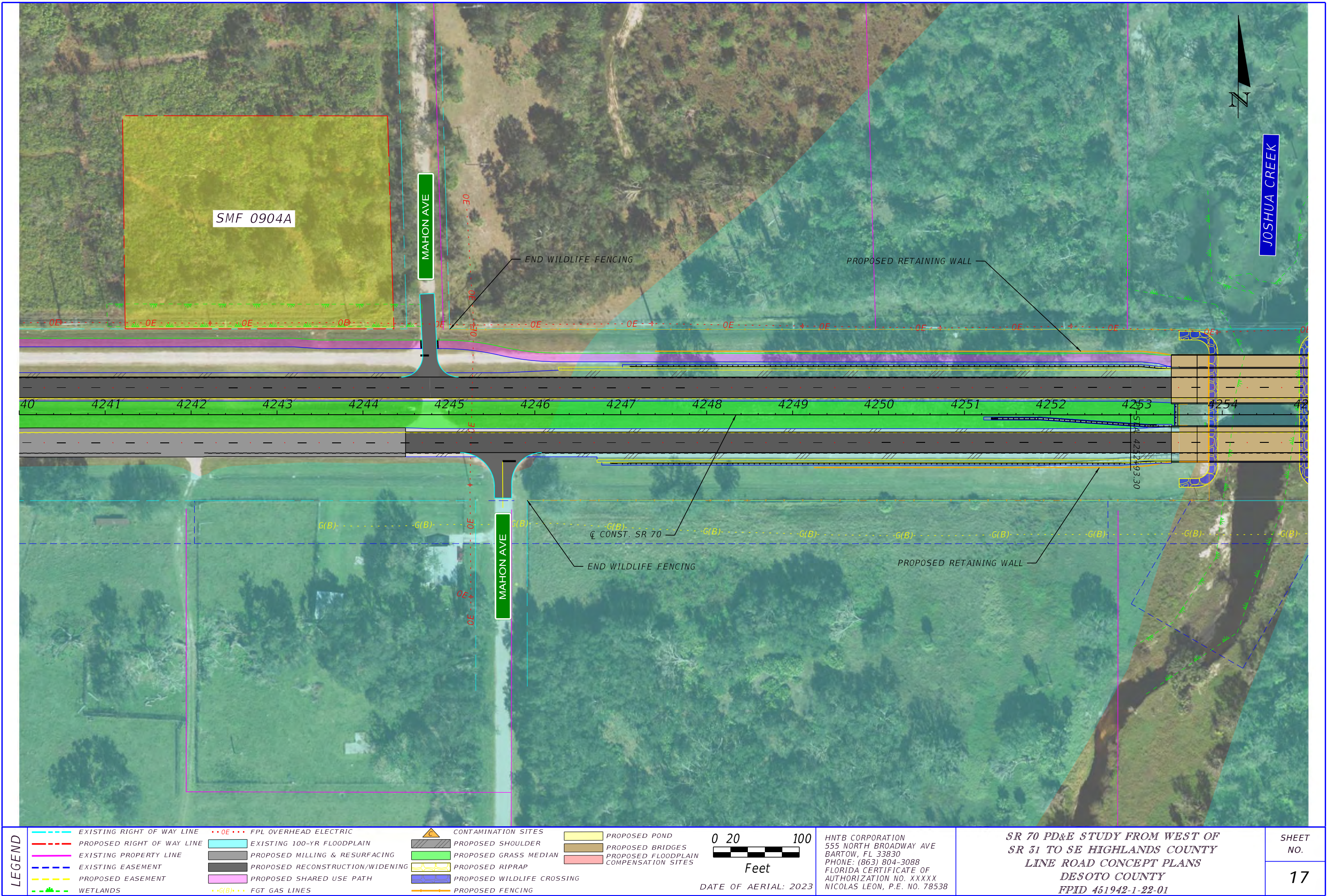
**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01**

SHEET NO.  
**15**





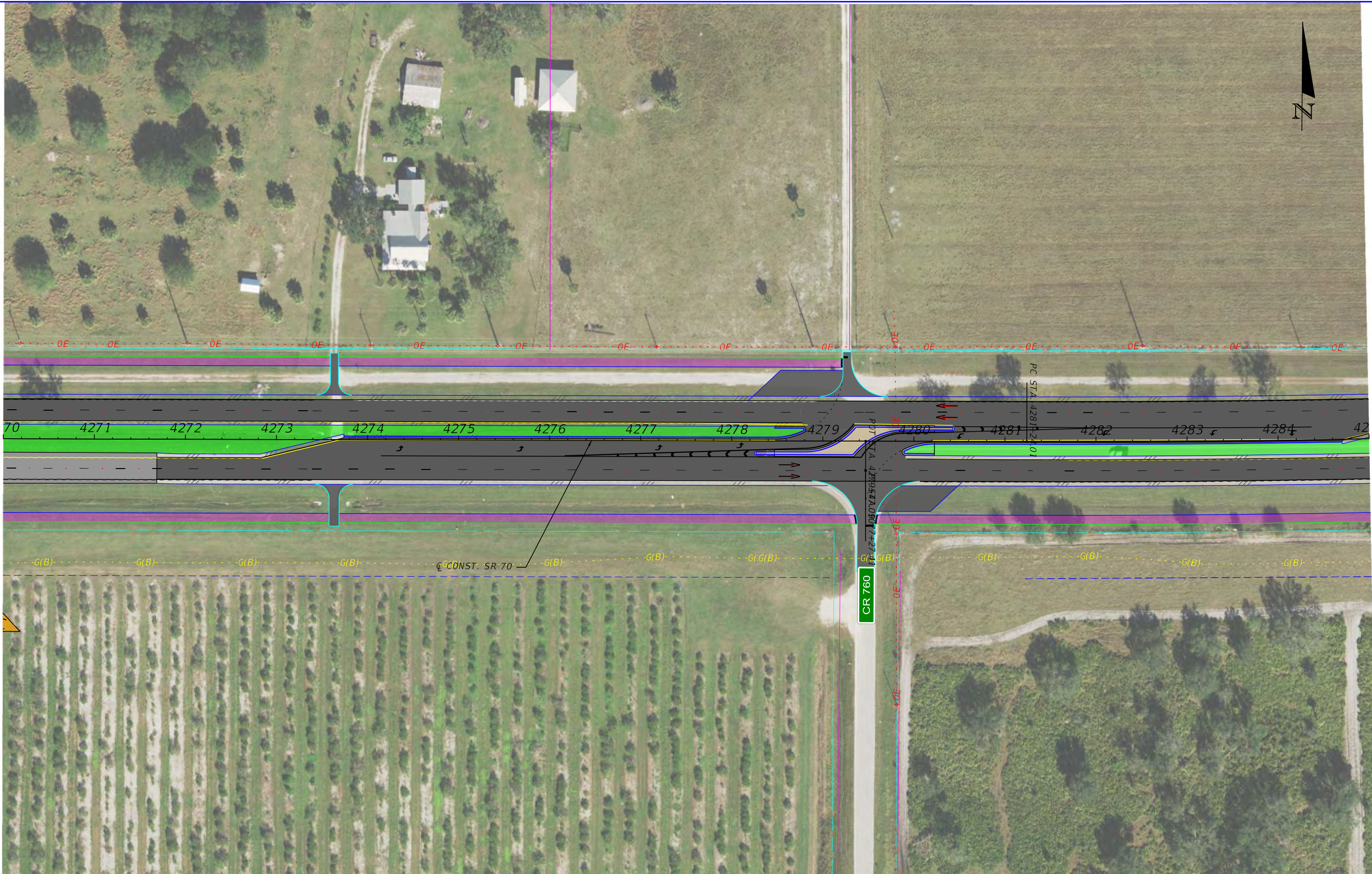






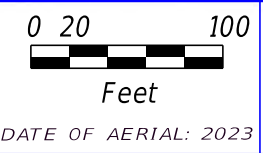






LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

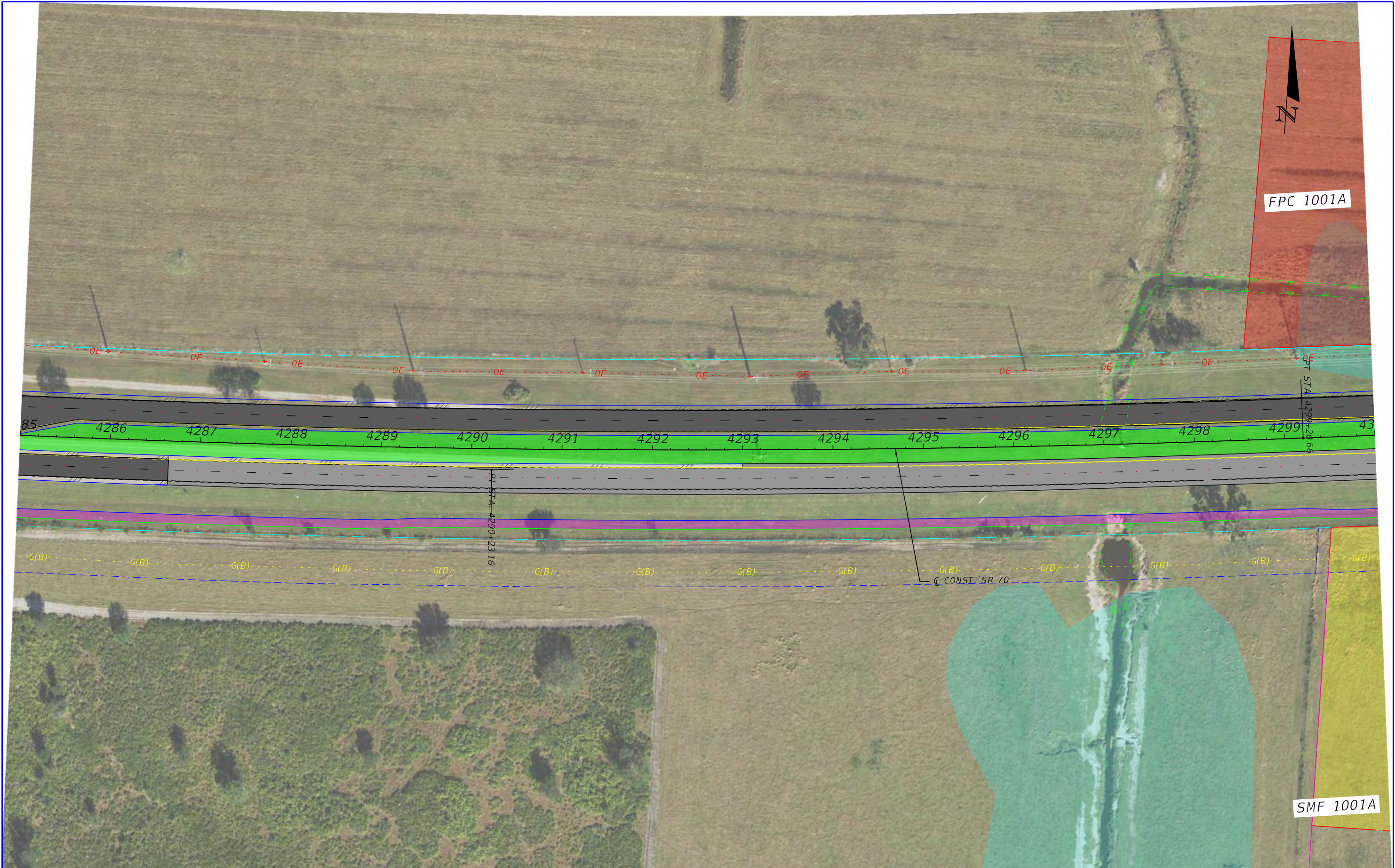


HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET  
NO.  
**19**





<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES	
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED RIPRAP		
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED WILDLIFE CROSSING		
WETLANDS		PROPOSED FENCING		

0 20 100

Feet

DATE OF AERIAL: 2023

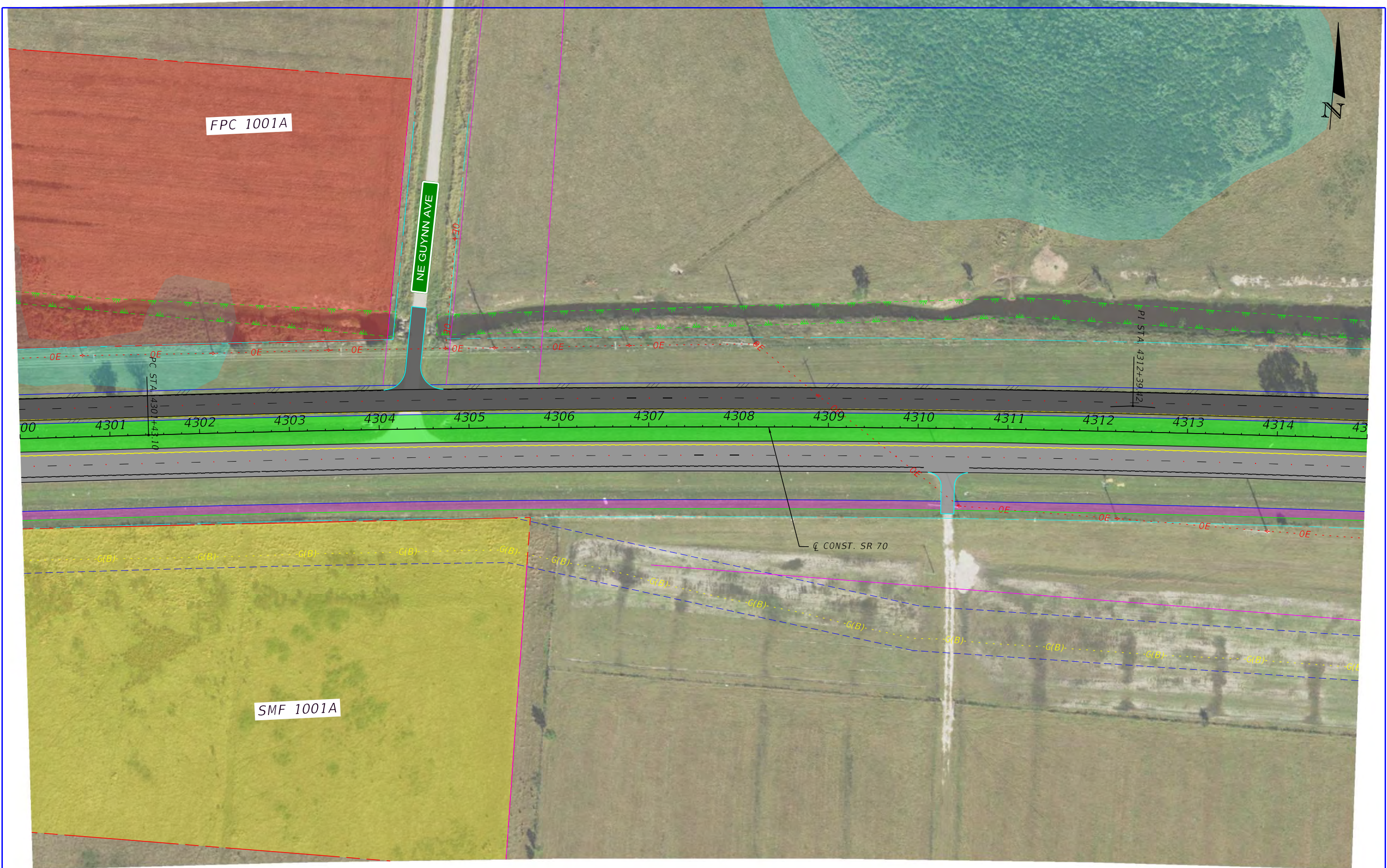
HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET NO.

**20**





<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING		
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED FENCING		
WETLANDS				

0 20 100

Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
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BARTOW, FL 33830  
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AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 51 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET NO.

**21**



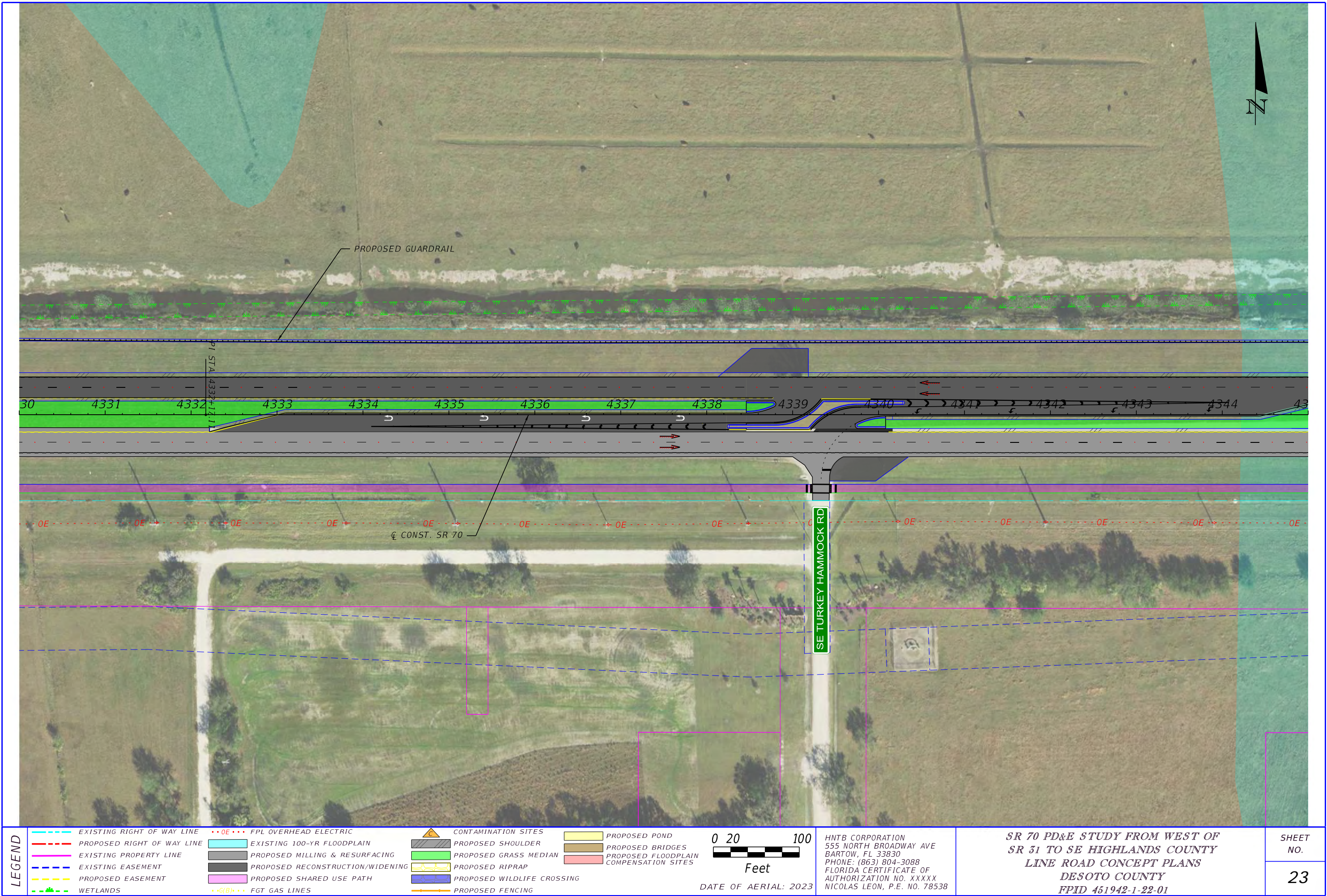


<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	PROPOSED RIGHT OF WAY LINE	EXISTING PROPERTY LINE	EXISTING EASEMENT	PROPOSED EASEMENT	WETLANDS	PROPOSED GUARDRAIL	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED WILDLIFE CROSSING	PROPOSED FENCING
	EXISTING 100-YR FLOODPLAIN	PROPOSED MILLING & RESURFACING	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED SHARED USE PATH	FGT GAS LINES	CONTAMINATION SITES	PROPOSED SHOULDER	PROPOSED BRIDGES	PROPOSED FLOODPLAIN COMPENSATION SITES	PROPOSED POND	PROPOSED BRIDGES
HNTB CORPORATION 555 NORTH BROADWAY AVE BARTOW, FL 33830 PHONE: (863) 804-3088 FLORIDA CERTIFICATE OF AUTHORIZATION NO. XXXXX NICOLAS LEON, P.E. NO. 78538											

**SR 70 PD&E STUDY FROM WEST OF  
SR 51 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

**SHEET  
NO.  
22**





LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

FPL OVERHEAD ELECTRIC

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

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Feet

DATE OF AERIAL: 2023

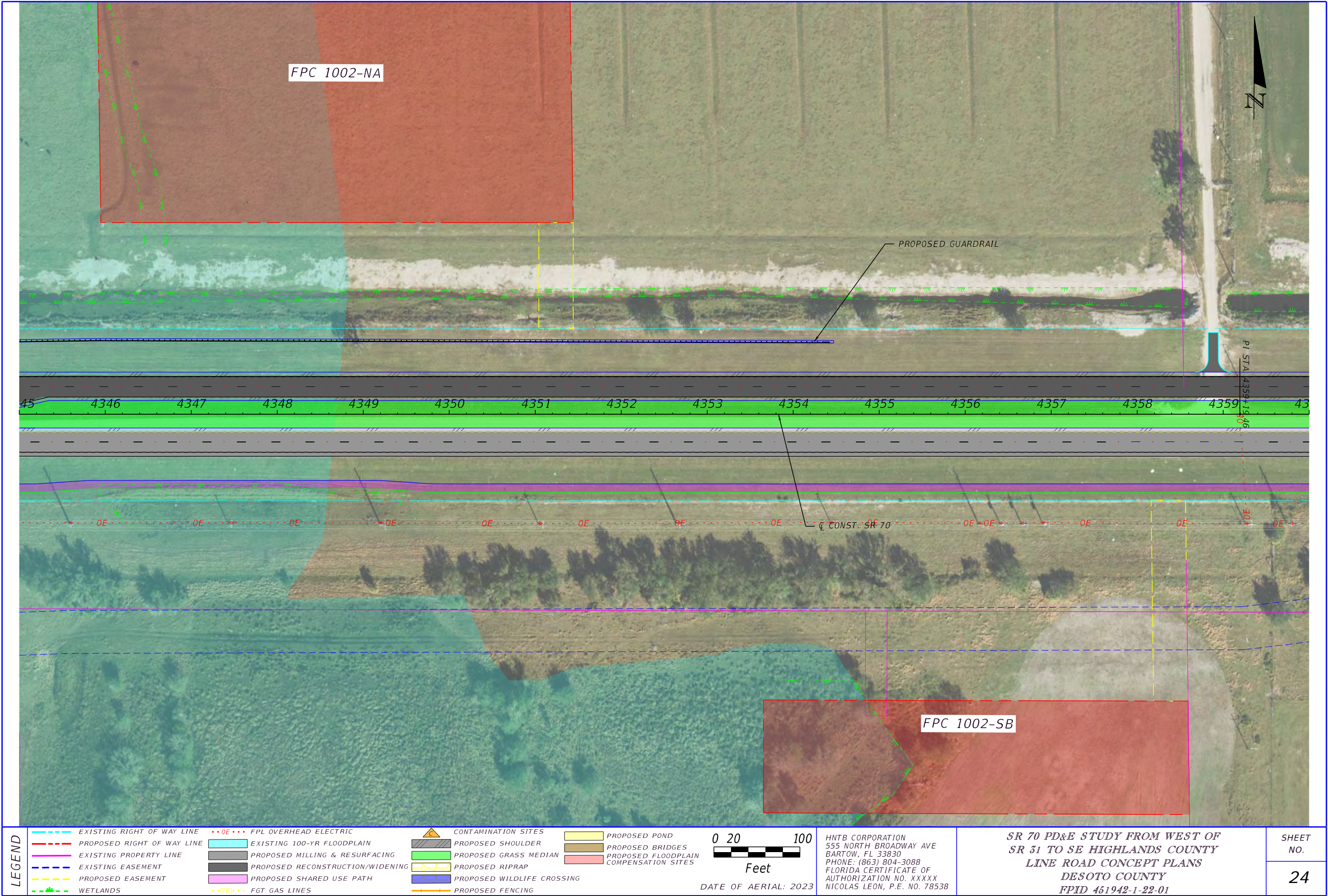
HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

SR 70 PD&E STUDY FROM WEST OF  
SR 51 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

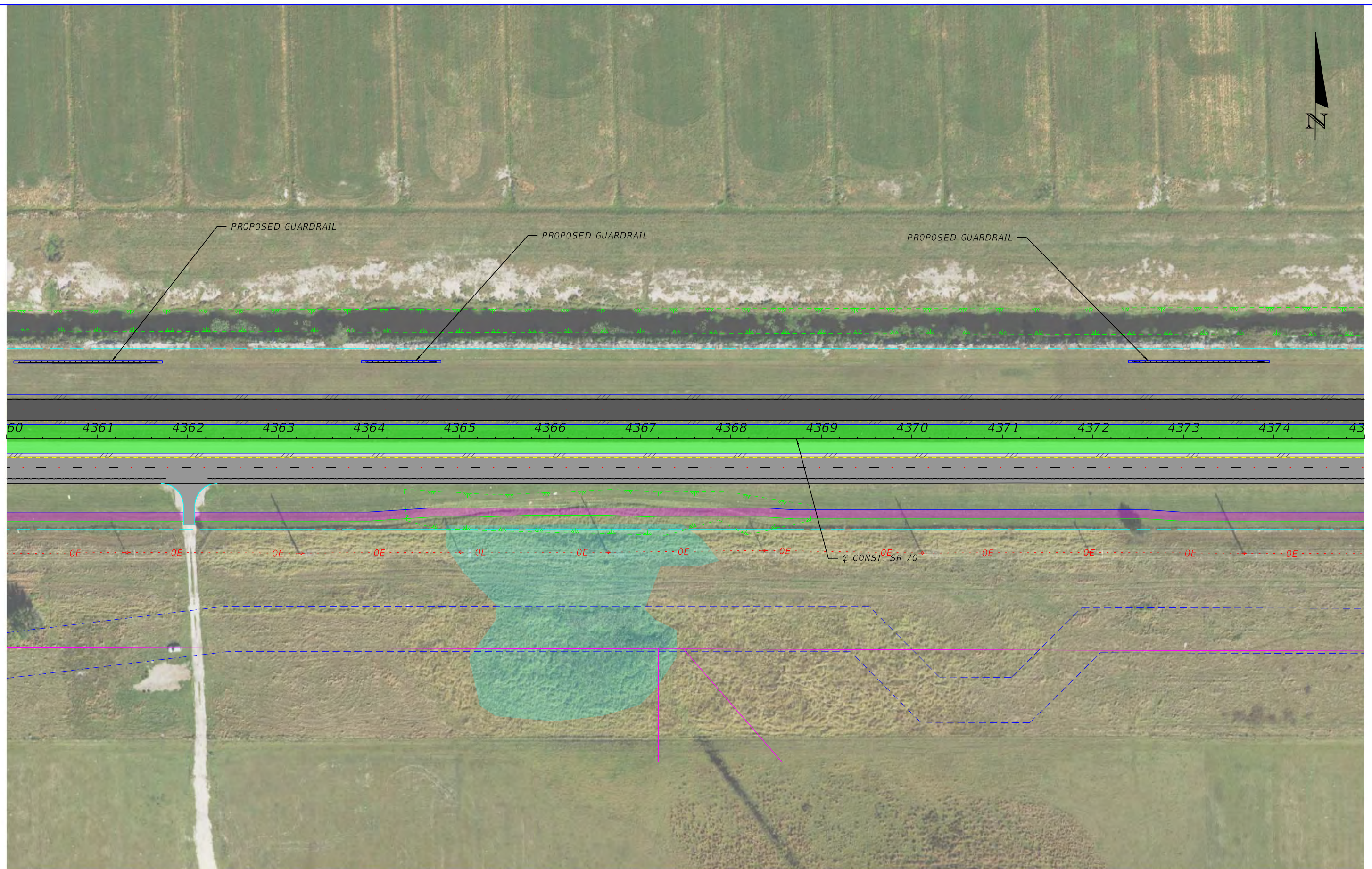
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23



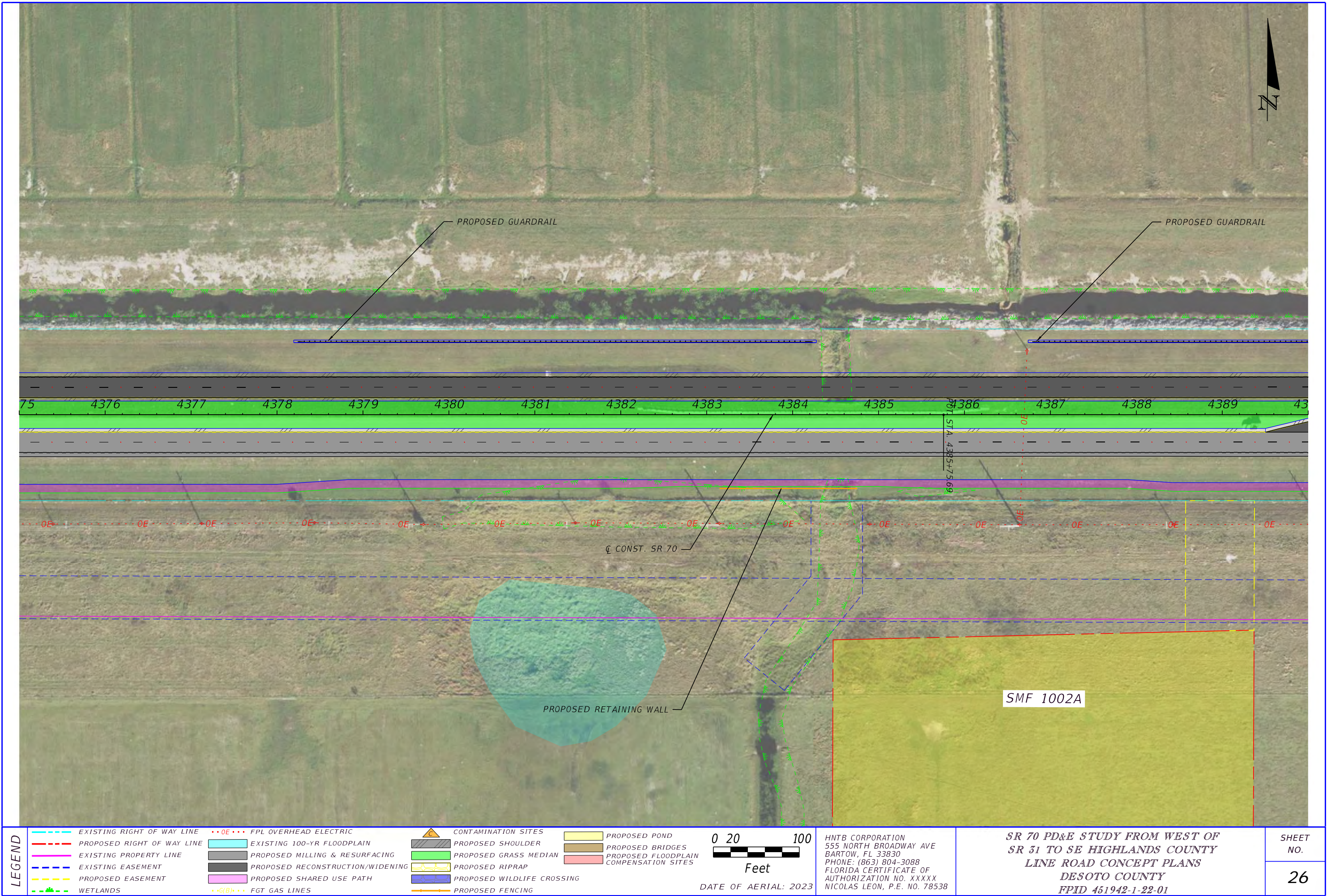




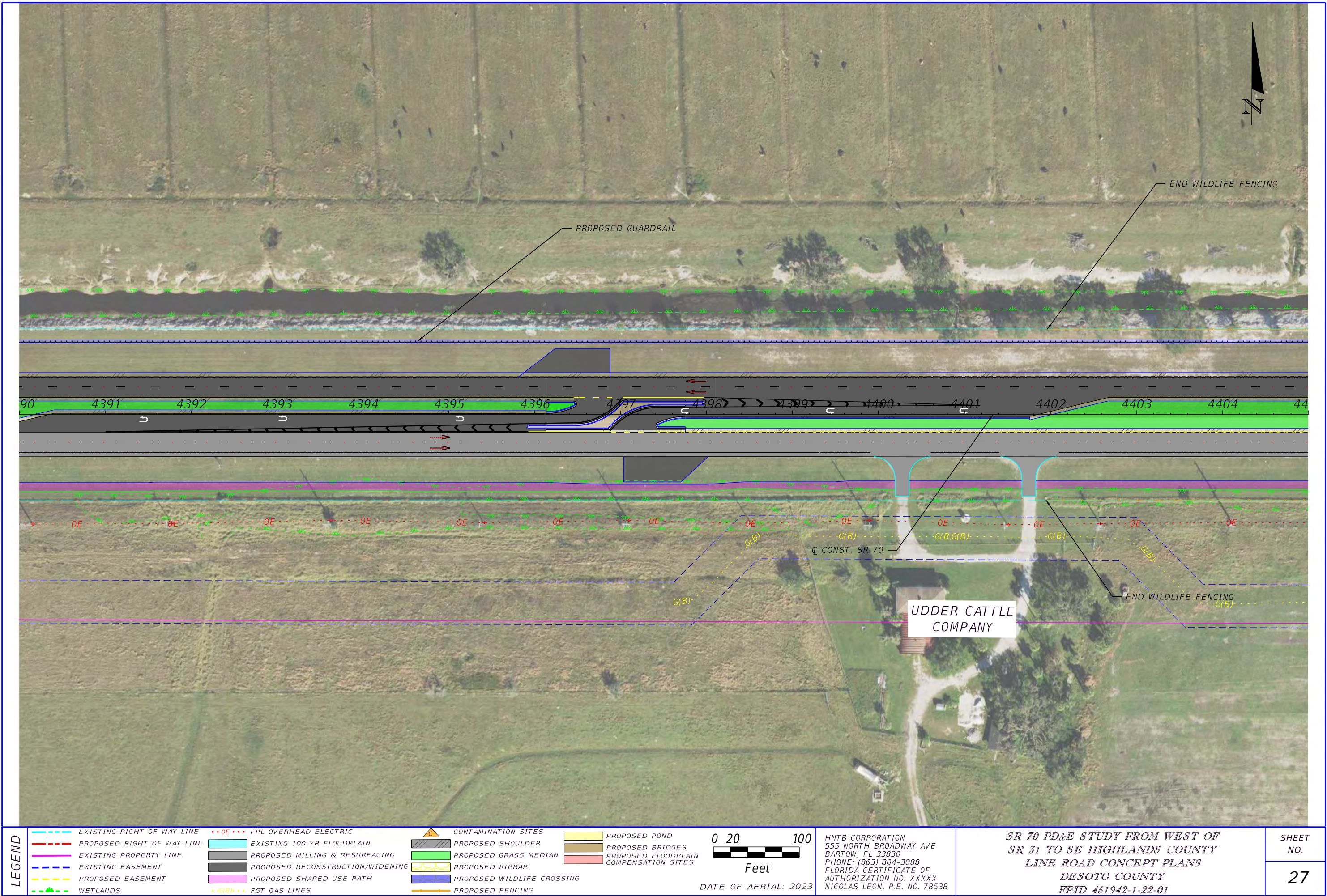


LEGEND	--- EXISTING RIGHT OF WAY LINE	••OE•• FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND	 DATE OF AERIAL: 2023	HNTB CORPORATION 555 NORTH BROADWAY AVE BARTOW, FL 33830 PHONE: (863) 804-3088 FLORIDA CERTIFICATE OF AUTHORIZATION NO. XXXXX NICOLAS LEON, P.E. NO. 78538	<b>SR 70 PD&amp;E STUDY FROM WEST OF            SR 31 TO SE HIGHLANDS COUNTY            LINE ROAD CONCEPT PLANS            DESOTO COUNTY            FPID 461942-1-22-01</b>	SHEET NO.
	--- PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES				25
	--- EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES				
	--- EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP					
	--- PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING					
	WETLANDS	••G(B)•• FGT GAS LINES	PROPOSED FENCING					









LEGEND	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

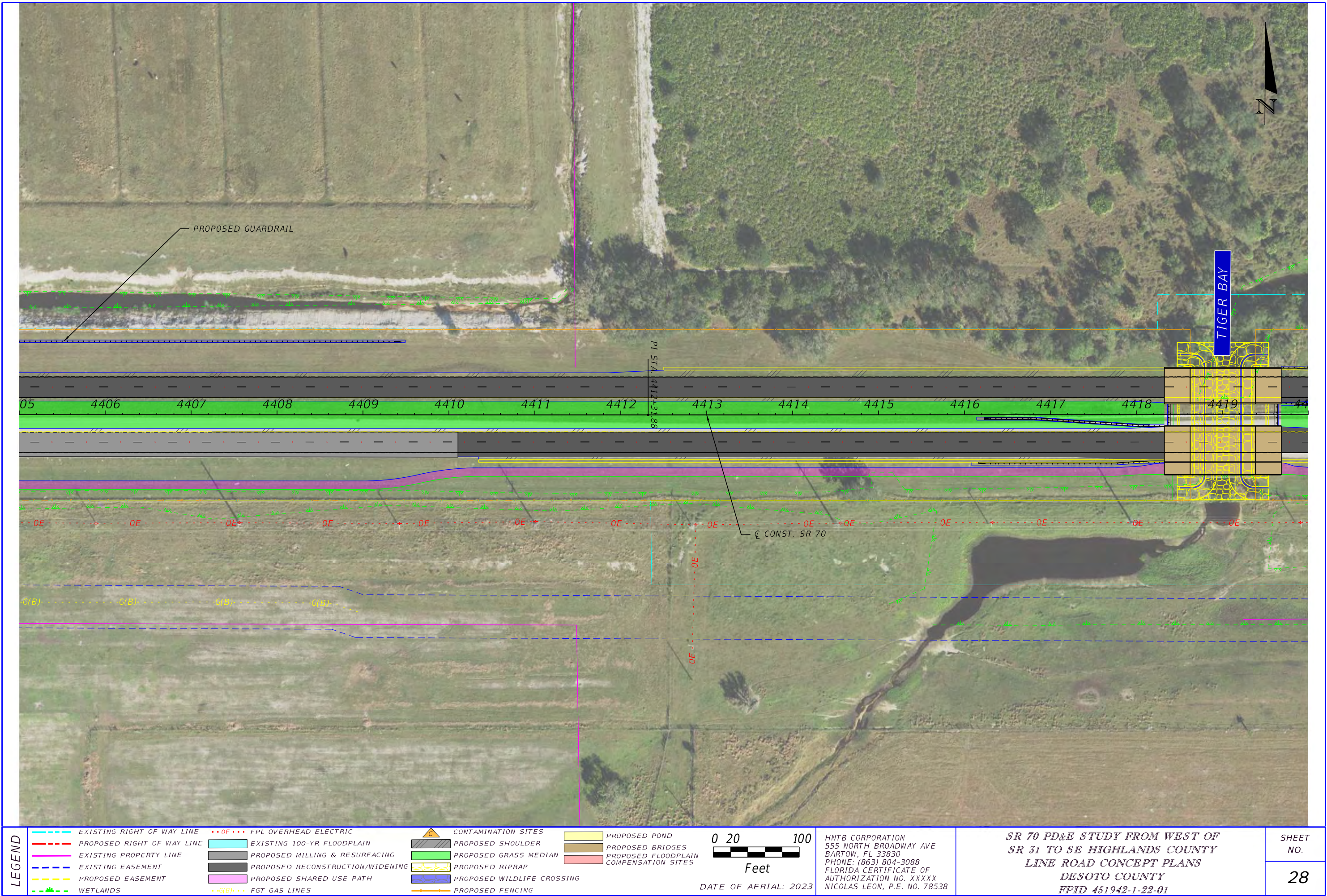
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DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
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NICOLAS LEON, P.E. NO. 78538

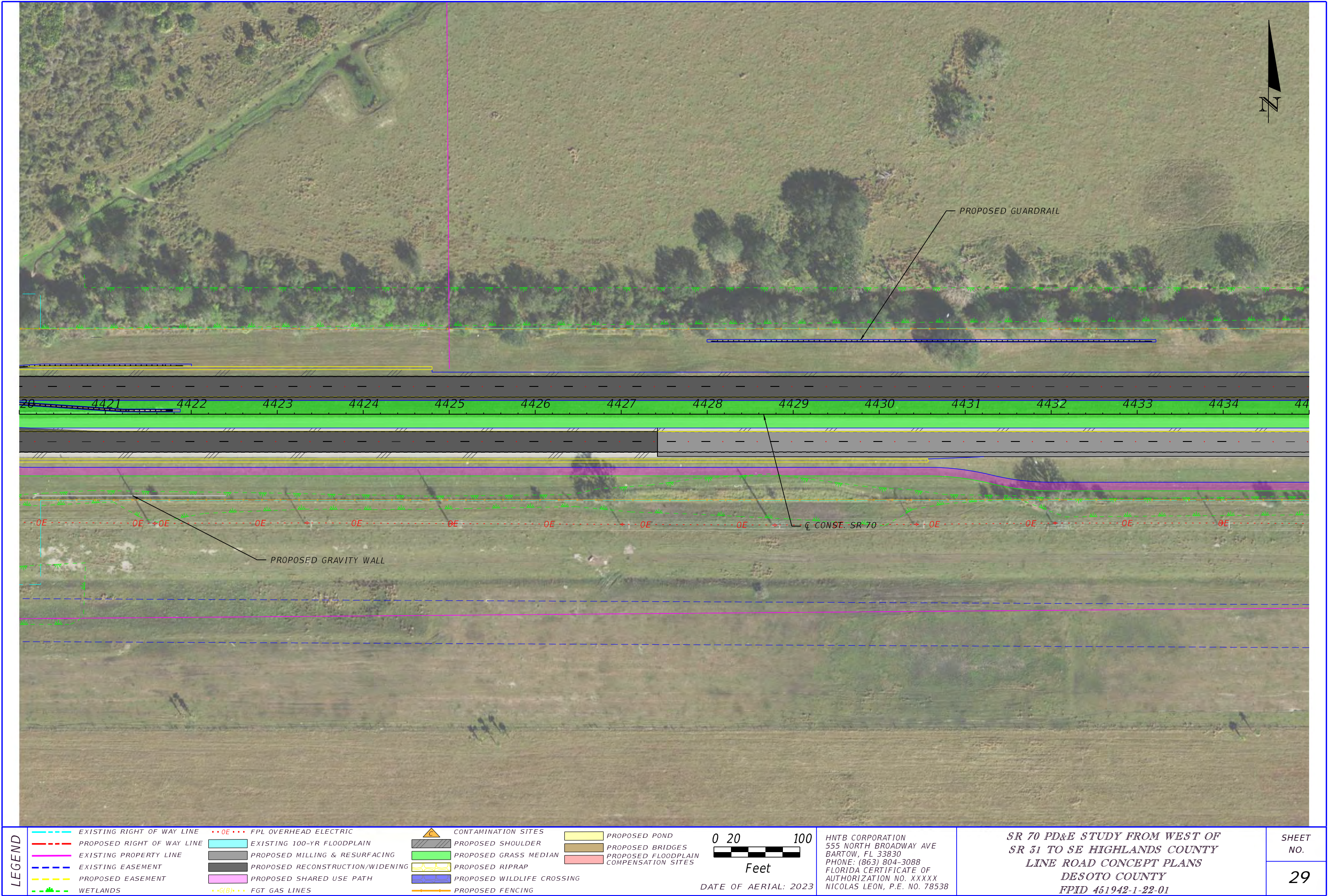
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.  
27

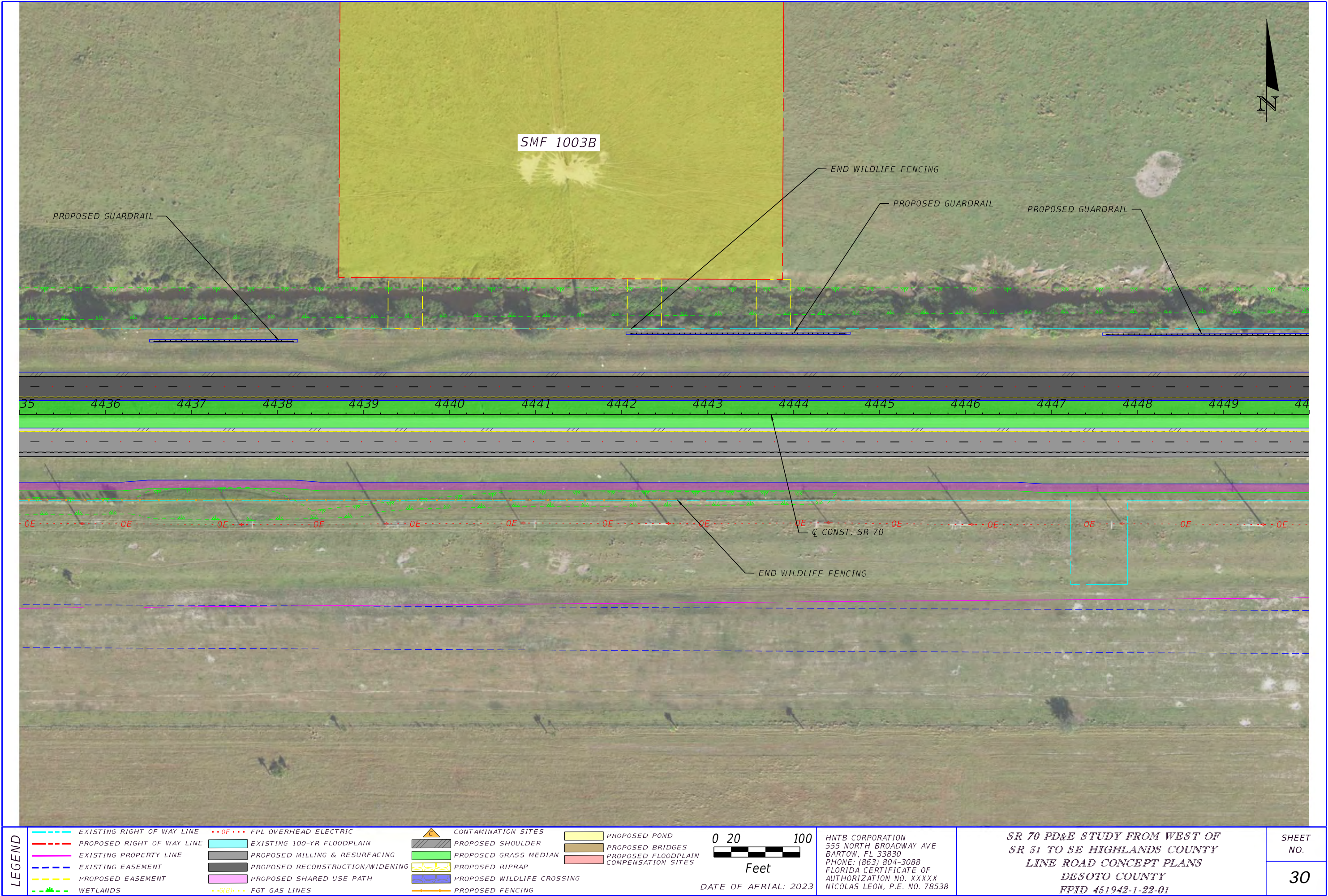








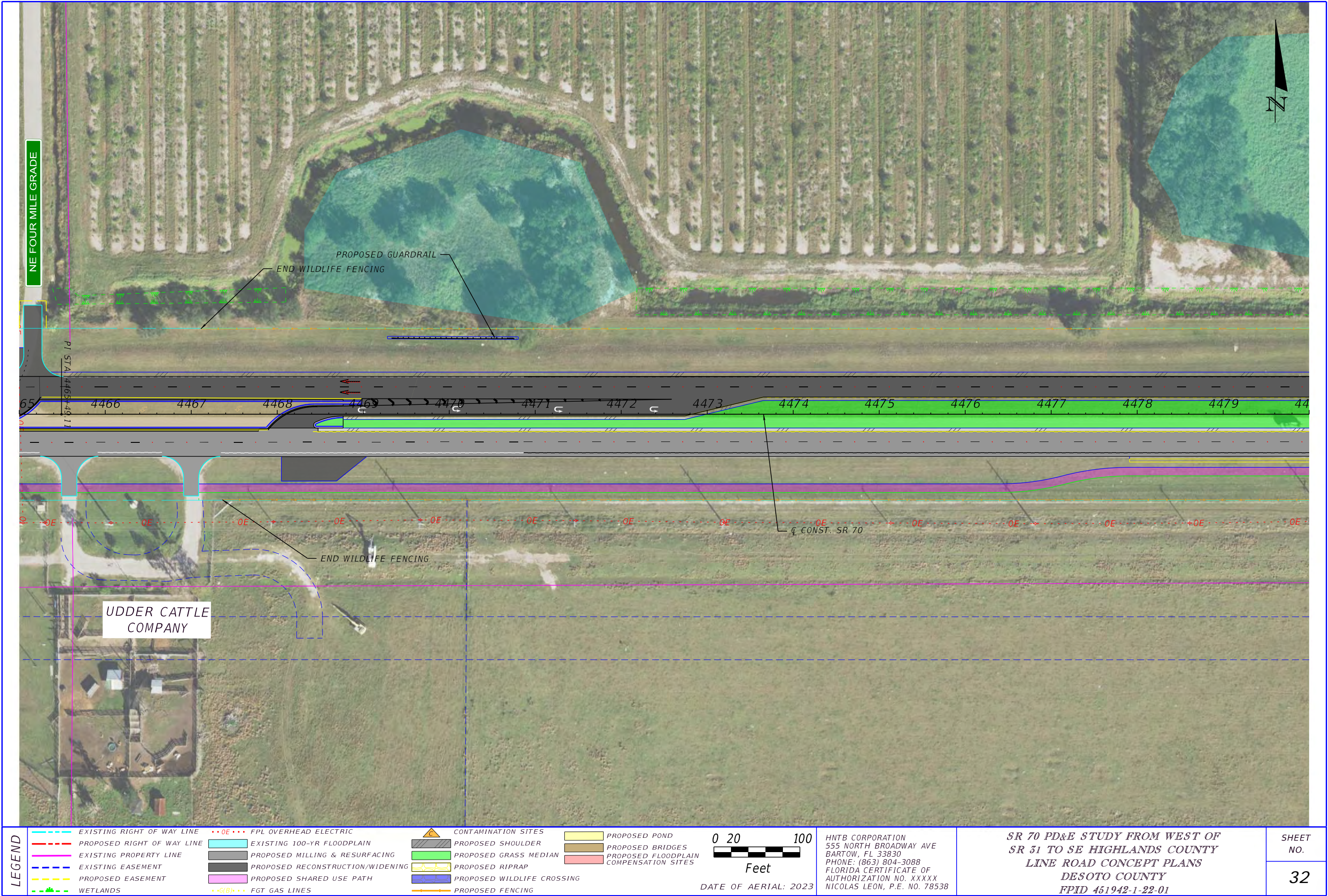












LEGEND	EXISTING RIGHT OF WAY LINE	PROPOSED RIGHT OF WAY LINE	EXISTING PROPERTY LINE	EXISTING EASEMENT	PROPOSED EASEMENT	WETLANDS
	EXISTING 100-YR FLOODPLAIN	PROPOSED MILLING & RESURFACING	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED SHARED USE PATH	FGT GAS LINES	CONTAMINATION SITES
	FPL OVERHEAD ELECTRIC	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED WILDLIFE CROSSING	PROPOSED FENCING	PROPOSED POND
	PROPOSED BRIDGES	PROPOSED FLOODPLAIN COMPENSATION SITES				

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Feet

DATE OF AERIAL: 2023

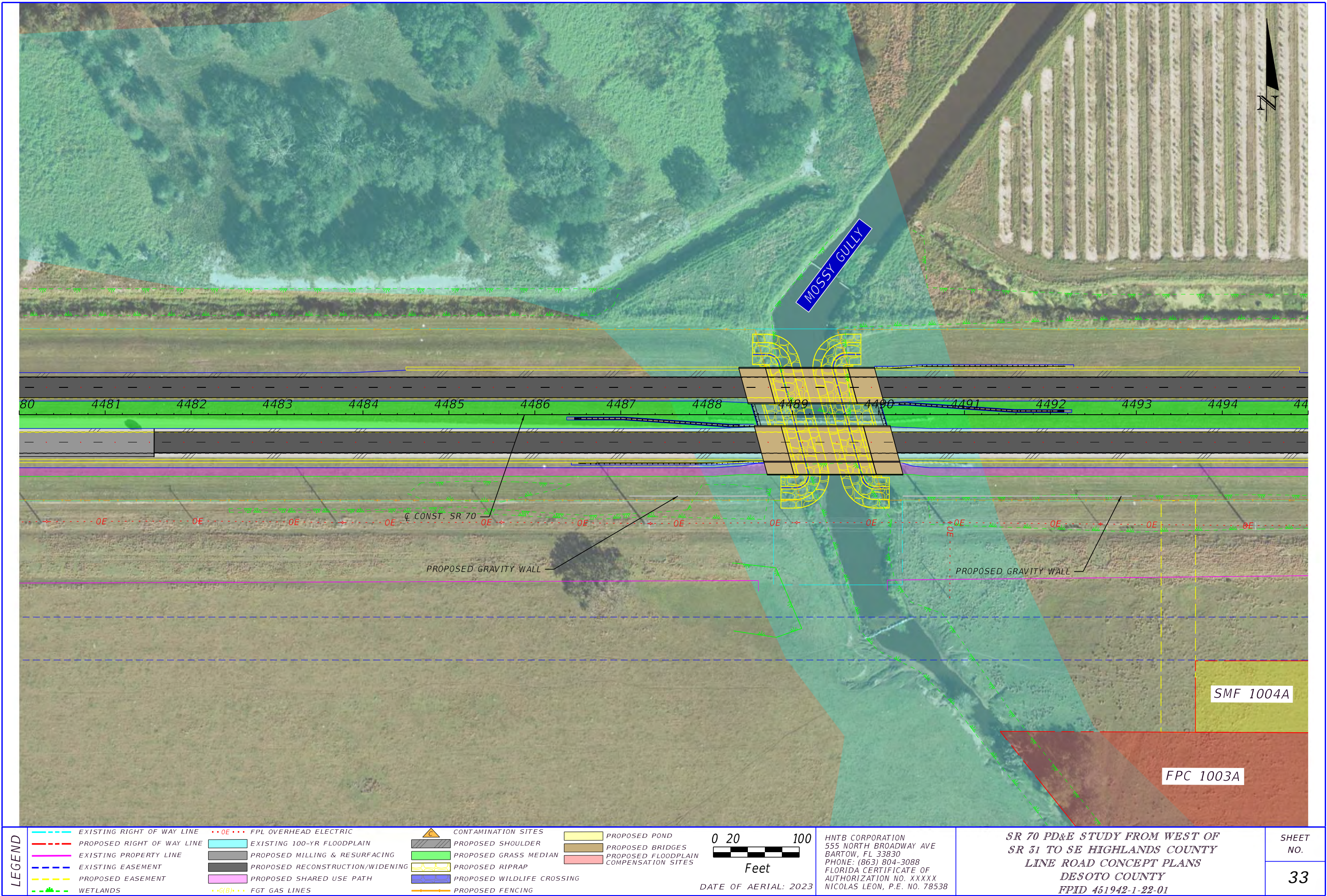
HNTB CORPORATION  
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SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01

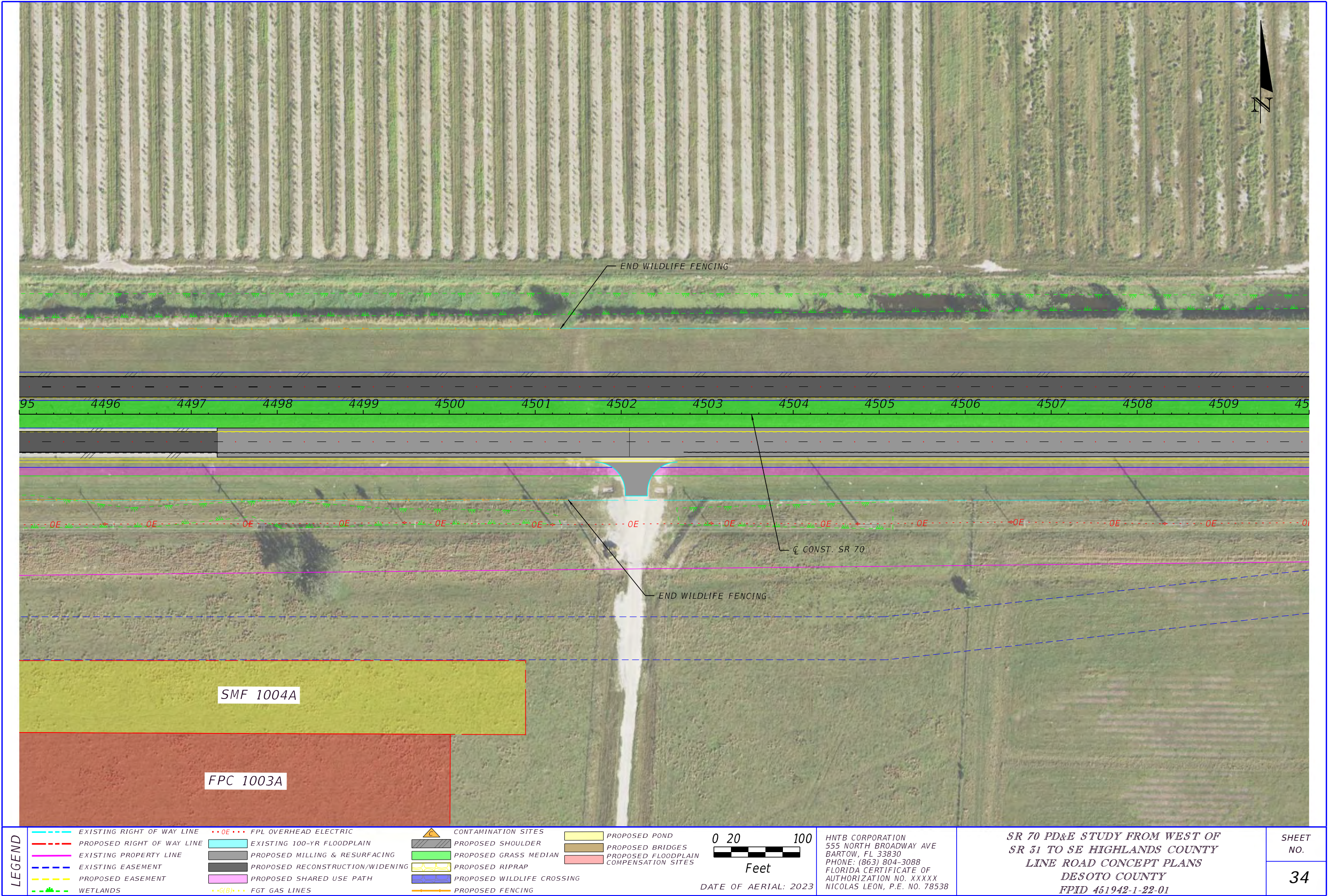
SHEET NO.

32









LEGEND		EXISTING RIGHT OF WAY LINE		FPL OVERHEAD ELECTRIC		CONTAMINATION SITES
		PROPOSED RIGHT OF WAY LINE		EXISTING 100-YR FLOODPLAIN		PROPOSED SHOULDER
		EXISTING PROPERTY LINE		PROPOSED MILLING & RESURFACING		PROPOSED GRASS MEDIAN
		EXISTING EASEMENT		PROPOSED RECONSTRUCTION/WIDENING		PROPOSED RIPRAP
		PROPOSED EASEMENT		PROPOSED SHARED USE PATH		PROPOSED WILDLIFE CROSSING
		WETLANDS		FGT GAS LINES		PROPOSED FENCING

DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

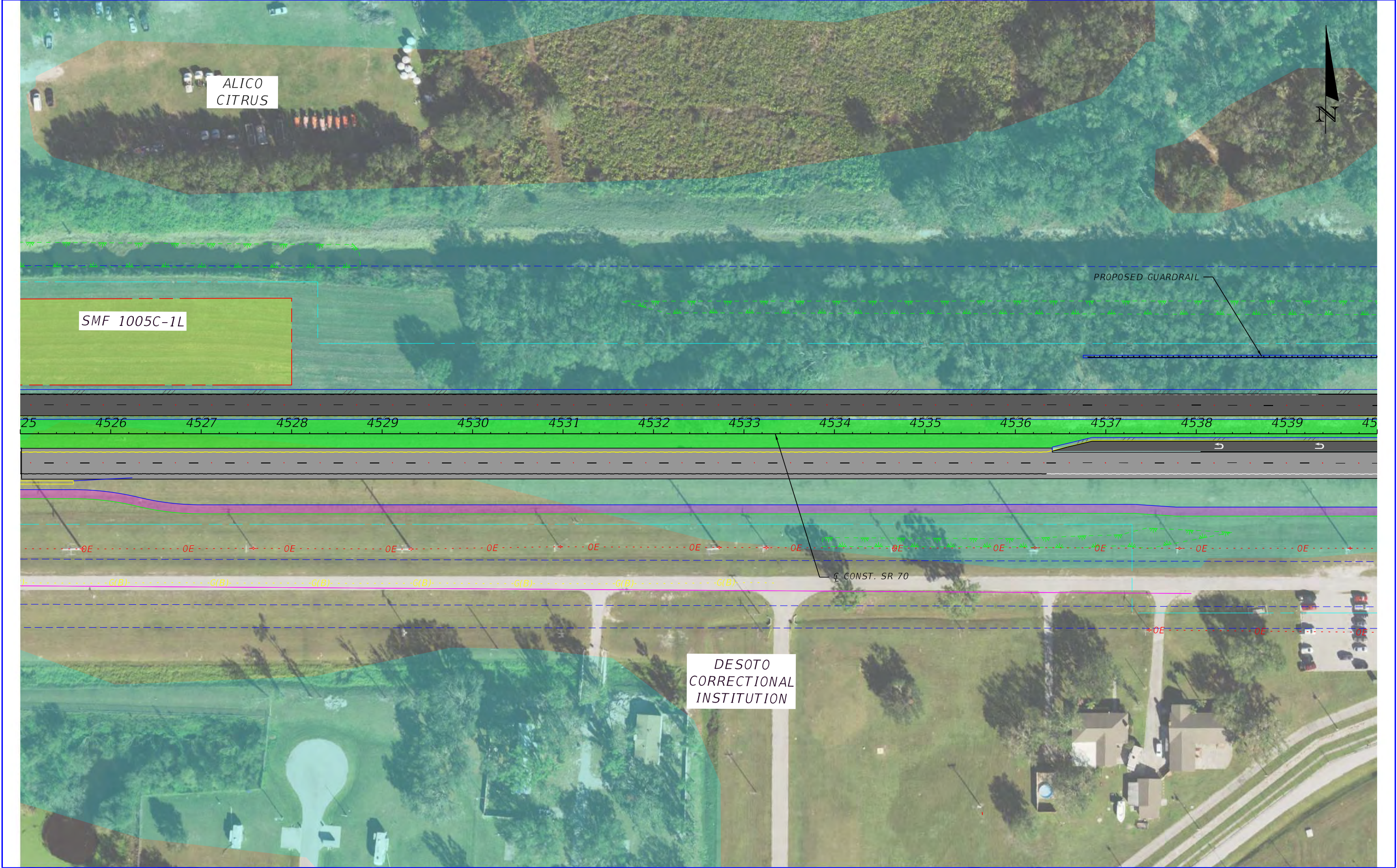
**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01**

SHEET  
NO.  
**34**









LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

0E

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B)

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

0 20 100

Feet

DATE OF AERIAL: 2023

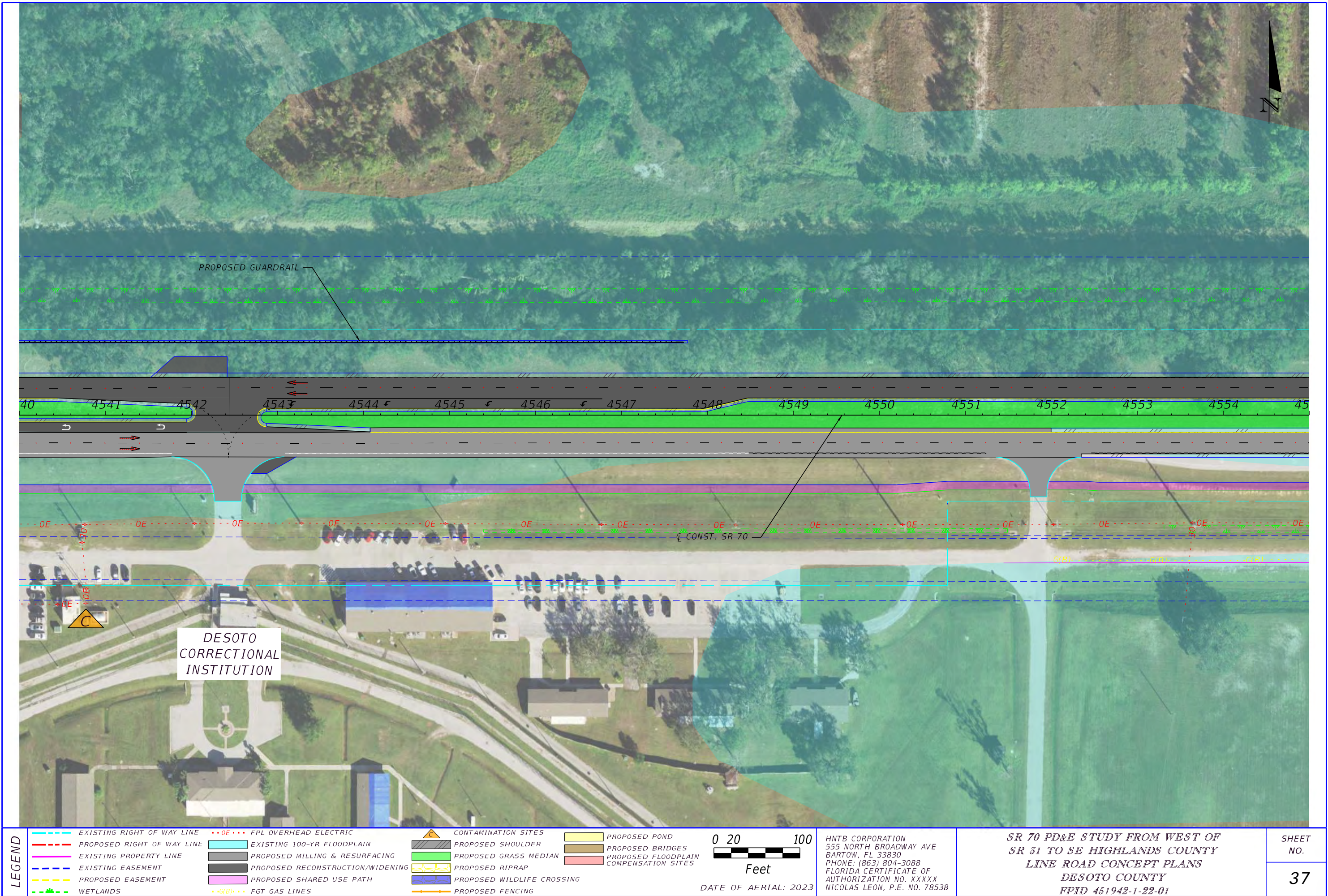
HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01

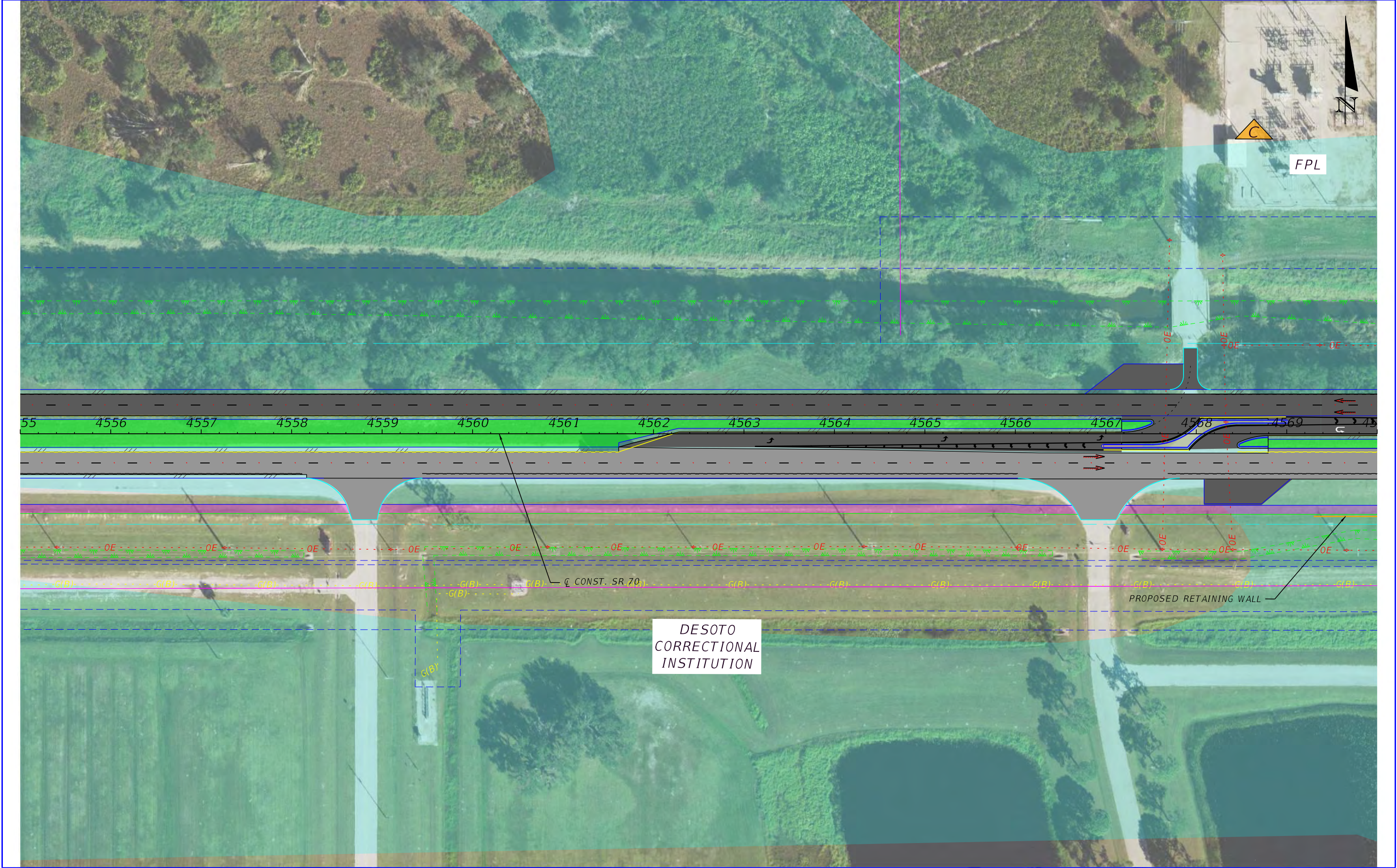
SHEET NO.

36









<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	PROPOSED FLOODPLAIN COMPENSATION SITES	
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING		
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED FENCING		
WETLANDS				

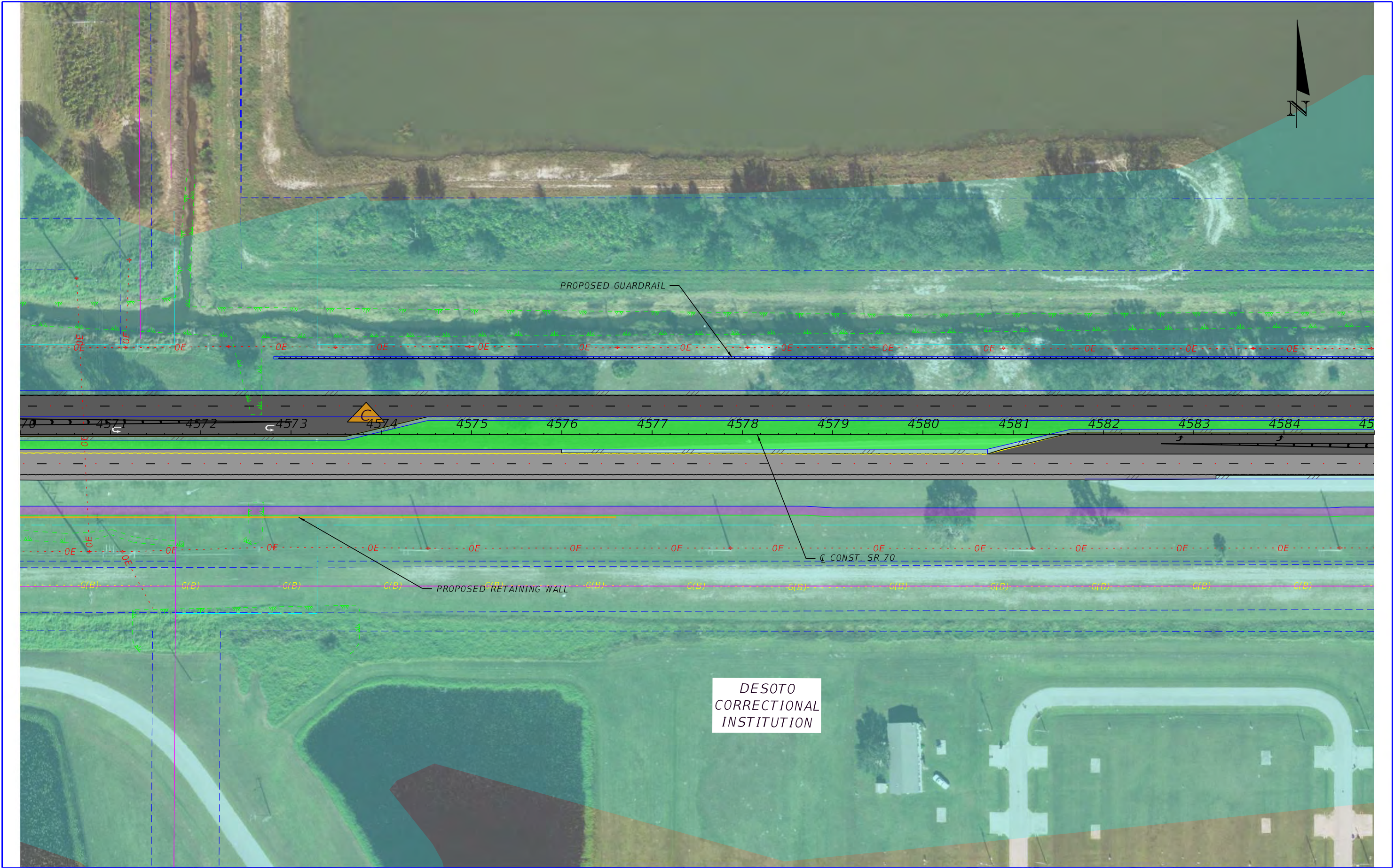
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DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
PHONE: (863) 804-3088  
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NICOLAS LEON, P.E. NO. 78538

**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

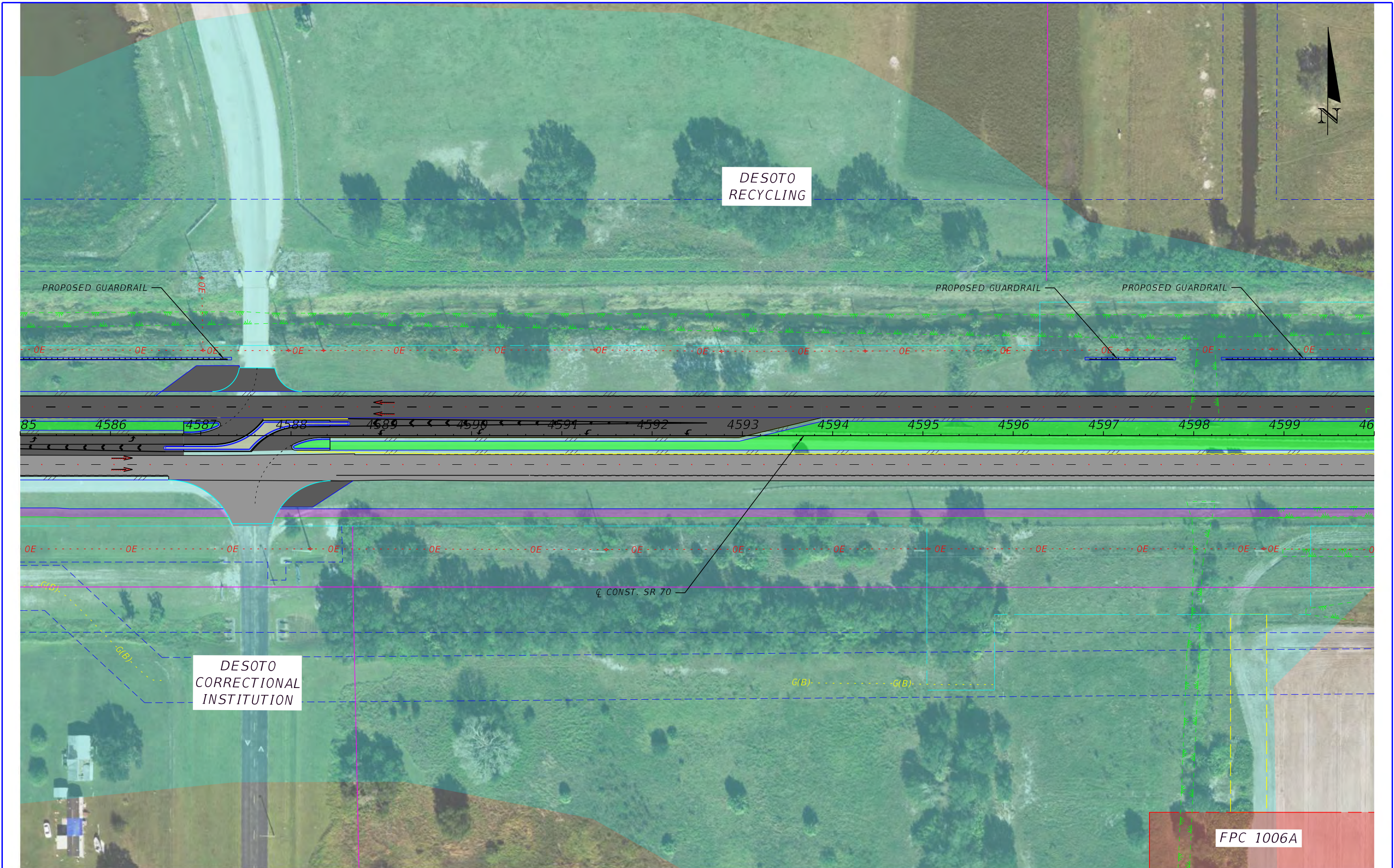
SHEET  
NO.  
**38**





LEGEND	--- EXISTING RIGHT OF WAY LINE	--- FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND	0 20 100 Feet DATE OF AERIAL: 2023	HNTB CORPORATION 555 NORTH BROADWAY AVE BARTOW, FL 33830 PHONE: (863) 804-3088 FLORIDA CERTIFICATE OF AUTHORIZATION NO. XXXXX NICOLAS LEON, P.E. NO. 78538	SR 70 PD&E STUDY FROM WEST OF SR 31 TO SE HIGHLANDS COUNTY LINE ROAD CONCEPT PLANS DESOTO COUNTY FPID 451942-1-22-01	SHEET NO.
	--- PROPOSED RIGHT OF WAY LINE	--- EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES				39
	--- EXISTING PROPERTY LINE	--- PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES				
	--- EXISTING EASEMENT	--- PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP					
	--- PROPOSED EASEMENT	--- PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING					
	--- WETLANDS	--- FGT GAS LINES	PROPOSED FENCING					





<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	PROPOSED RIGHT OF WAY LINE	EXISTING PROPERTY LINE	EXISTING EASEMENT	PROPOSED EASEMENT	WETLANDS	PROPOSED GUARDRAIL	PROPOSED MILLING & RESURFACING	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED SHARED USE PATH	PROPOSED FENCING	PROPOSED POND	PROPOSED BRIDGES	PROPOSED FLOODPLAIN COMPENSATION SITES				
	EXISTING 100-YR FLOODPLAIN	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED WILDLIFE CROSSING	PROPOSED FPL OVERHEAD ELECTRIC	PROPOSED MILLING & RESURFACING	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED SHARED USE PATH	PROPOSED FENCING	PROPOSED POND	PROPOSED BRIDGES	PROPOSED FLOODPLAIN COMPENSATION SITES	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED WILDLIFE CROSSING	PROPOSED FENCING	PROPOSED POND	PROPOSED BRIDGES

0 20 100 Feet

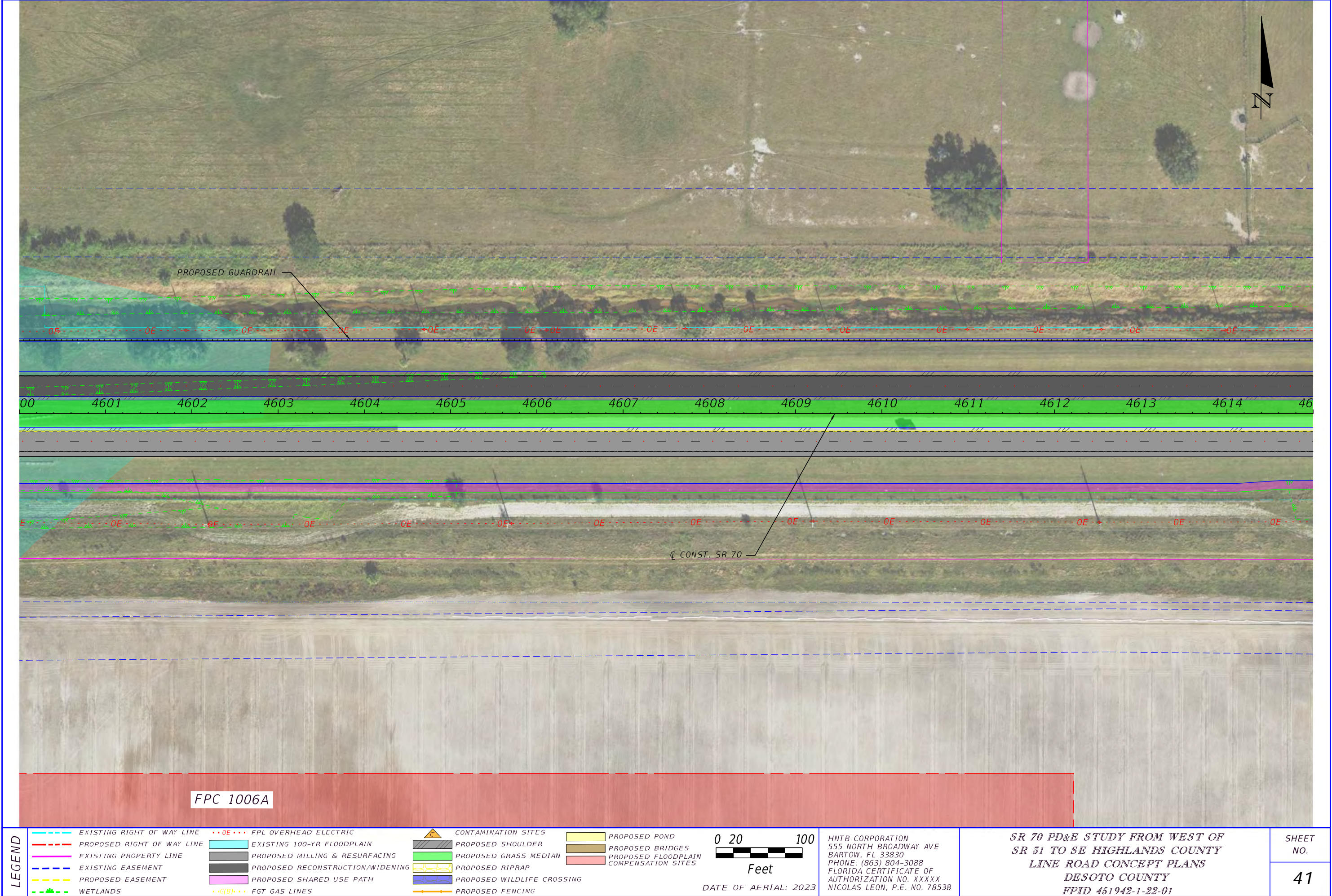
DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
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FLORIDA CERTIFICATE OF  
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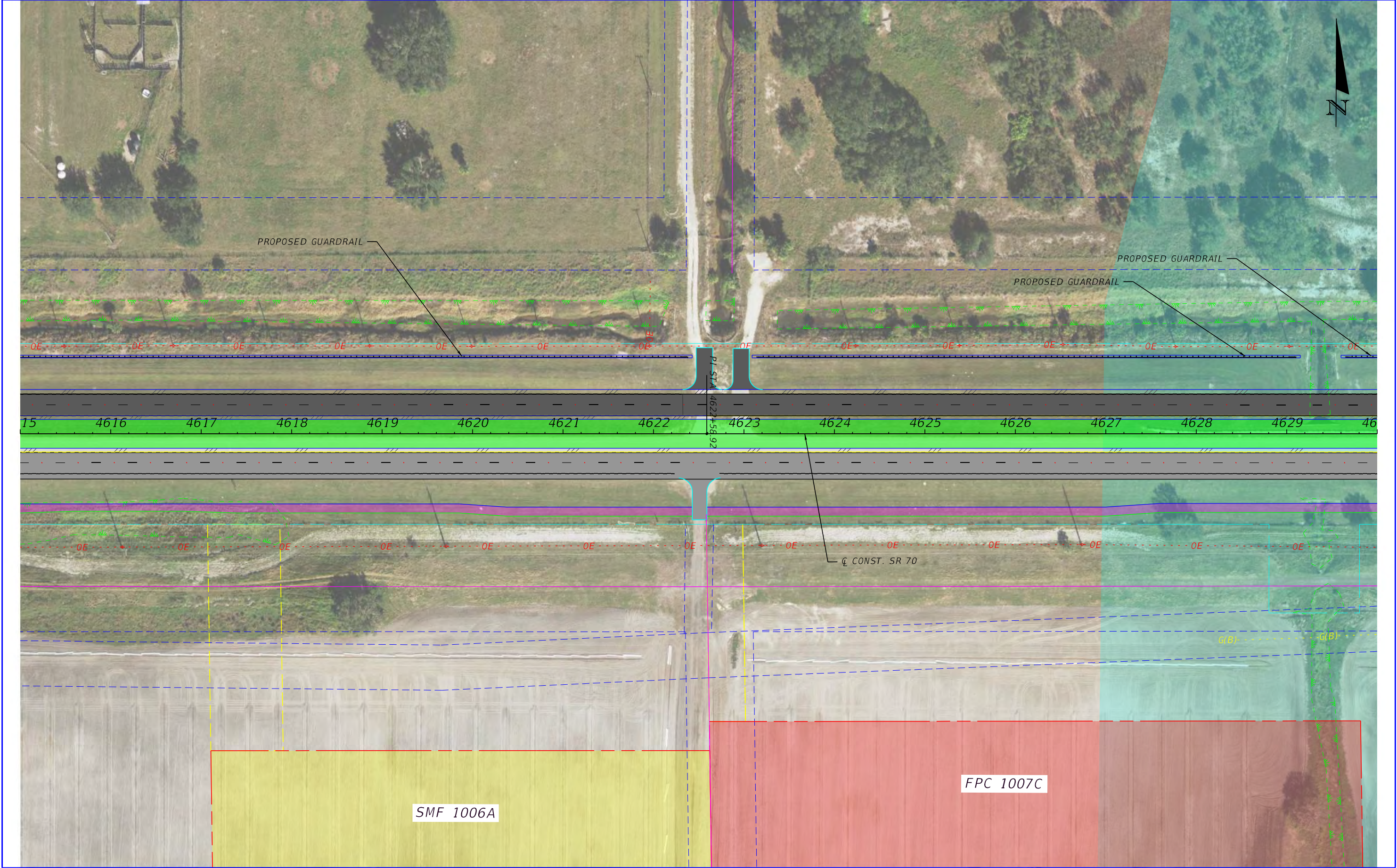
**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET NO.  
**40**









LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

---OE---

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

---G(B)---

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

020100

Feet

DATE OF AERIAL: 2023

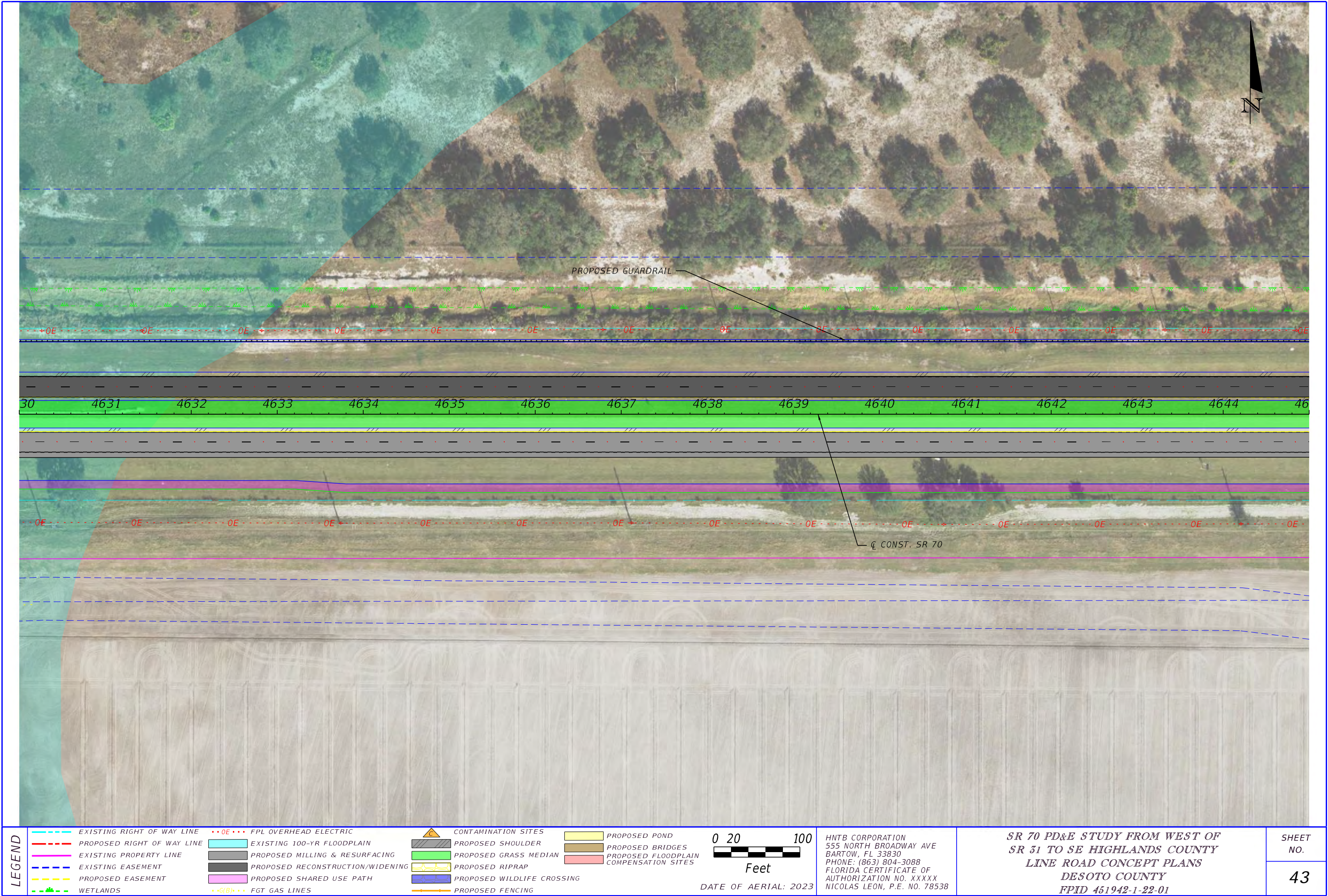
HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
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SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
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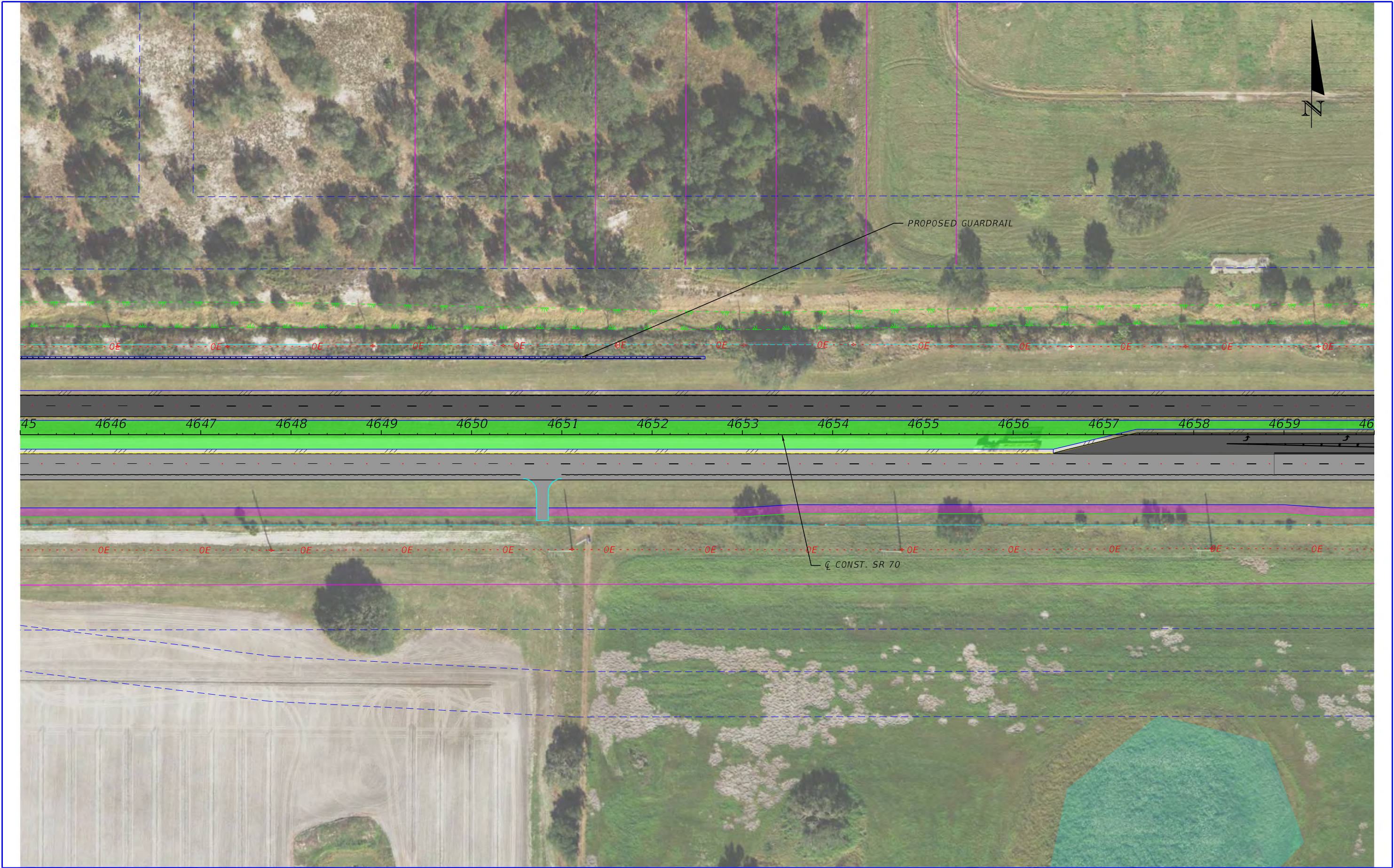
SHEET NO.

42









LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

---OE---

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

020100

Feet

DATE OF AERIAL: 2023

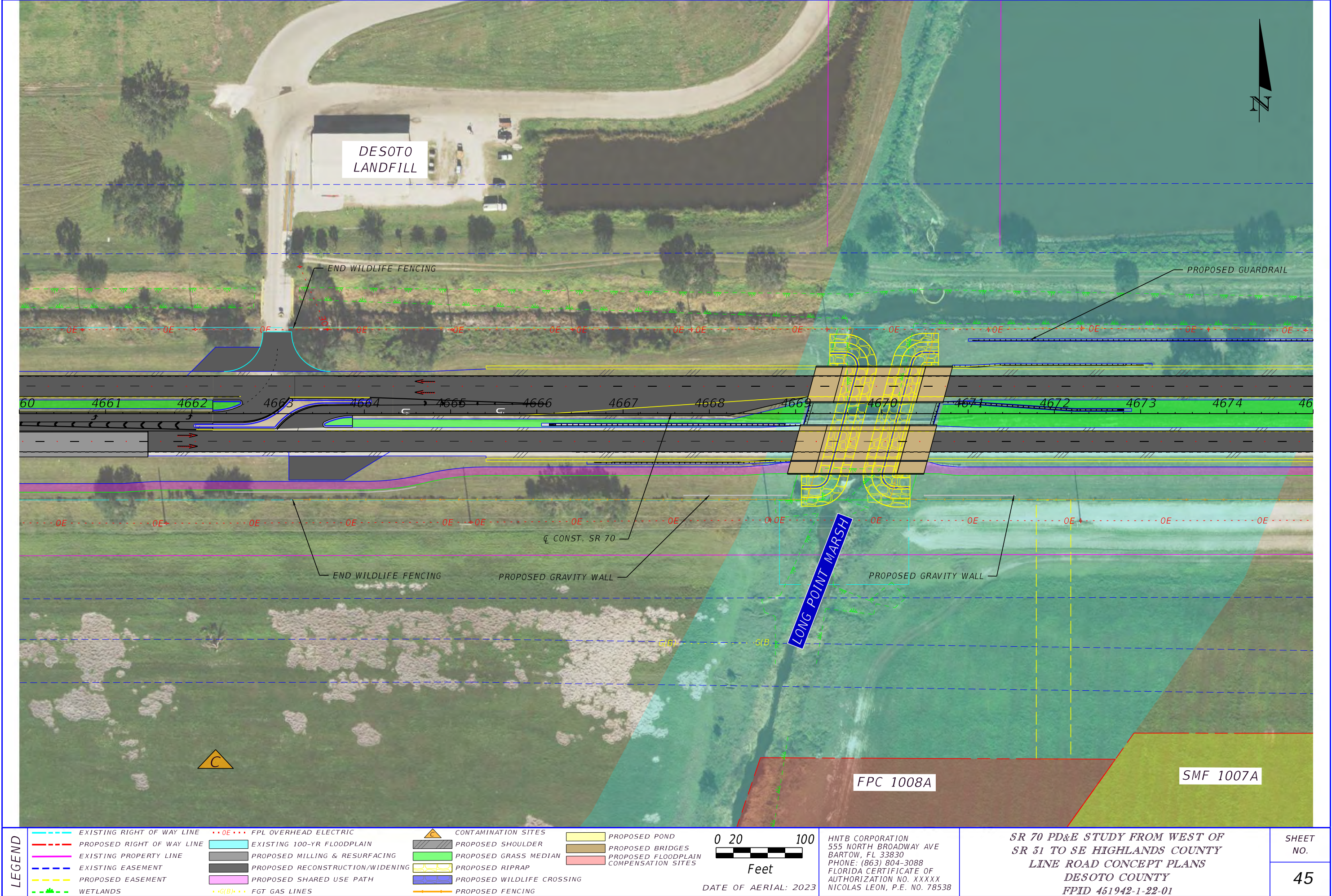
HNTB CORPORATION  
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BARTOW, FL 33830  
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LINE ROAD CONCEPT PLANS  
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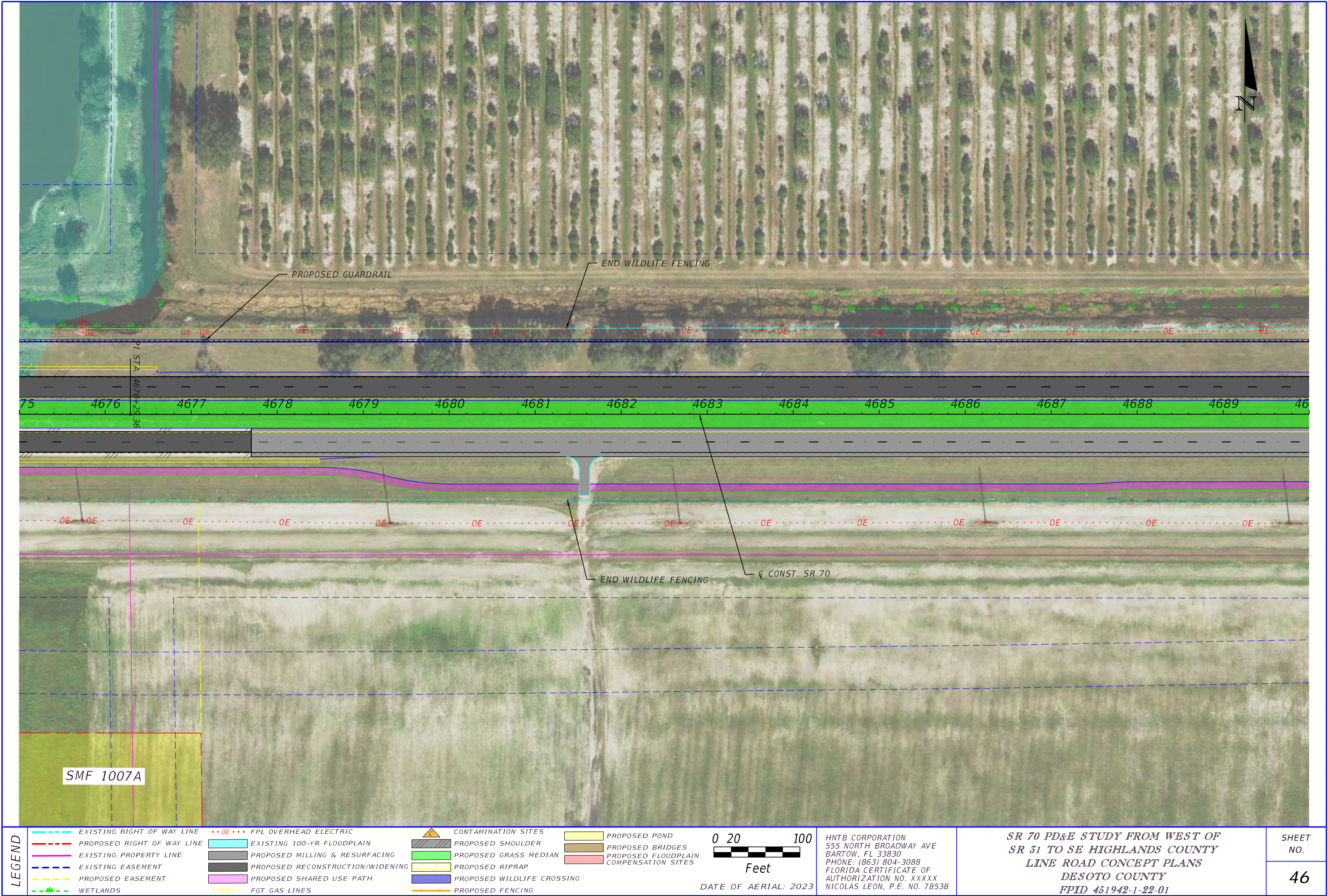
SHEET NO.

44

















LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

0E

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B) FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

020100

Feet

DATE OF AERIAL: 2023

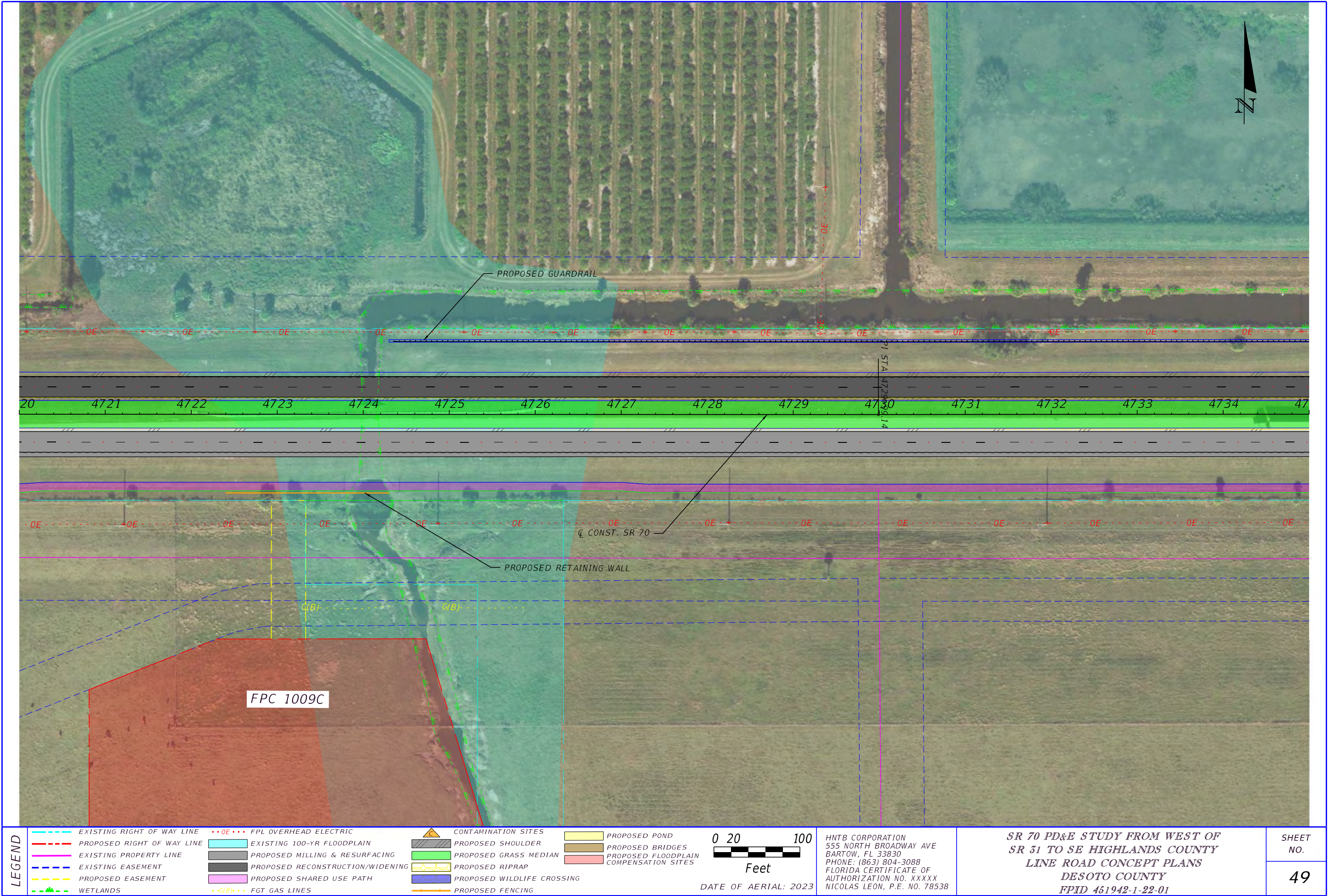
HNTB CORPORATION  
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LINE ROAD CONCEPT PLANS  
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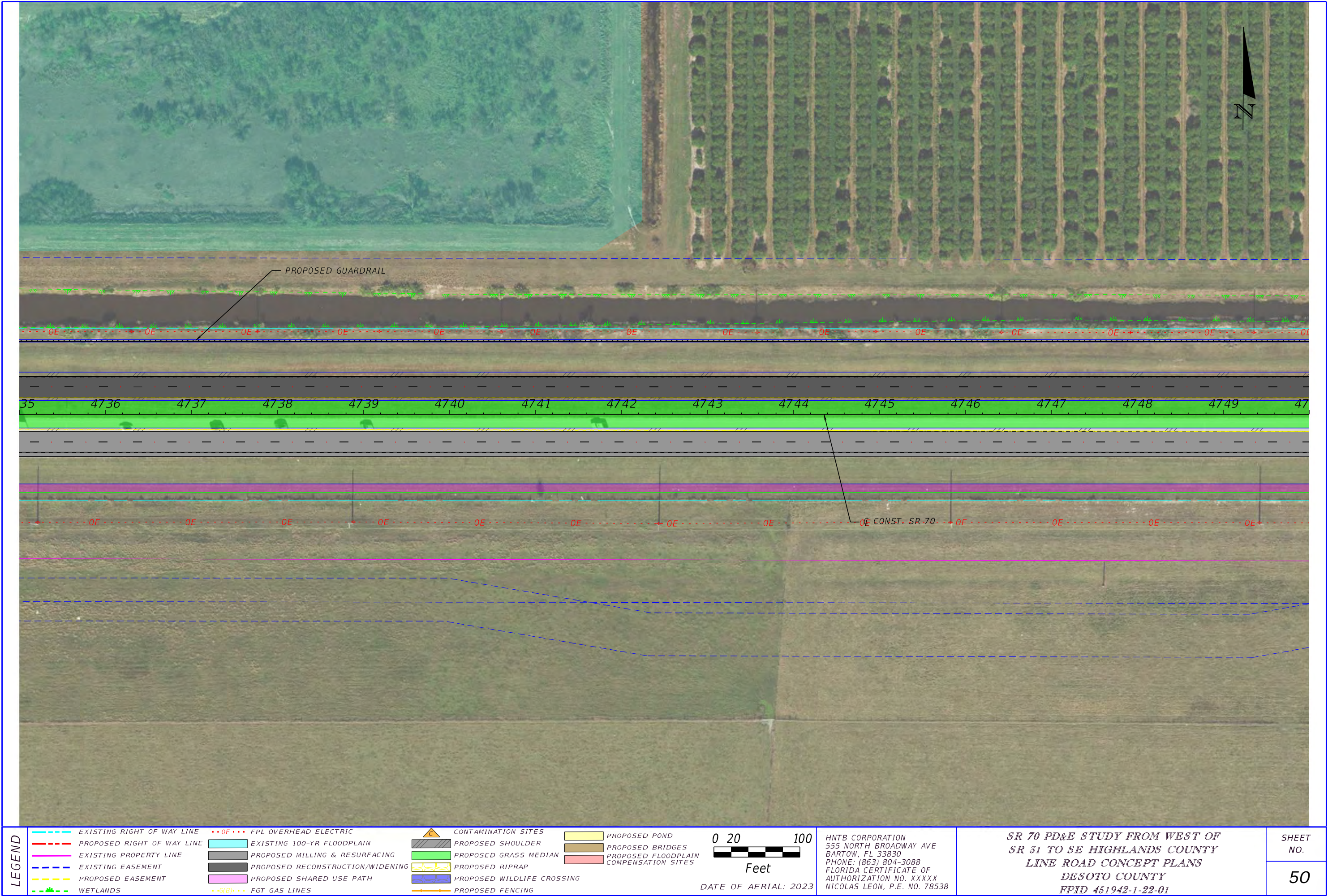
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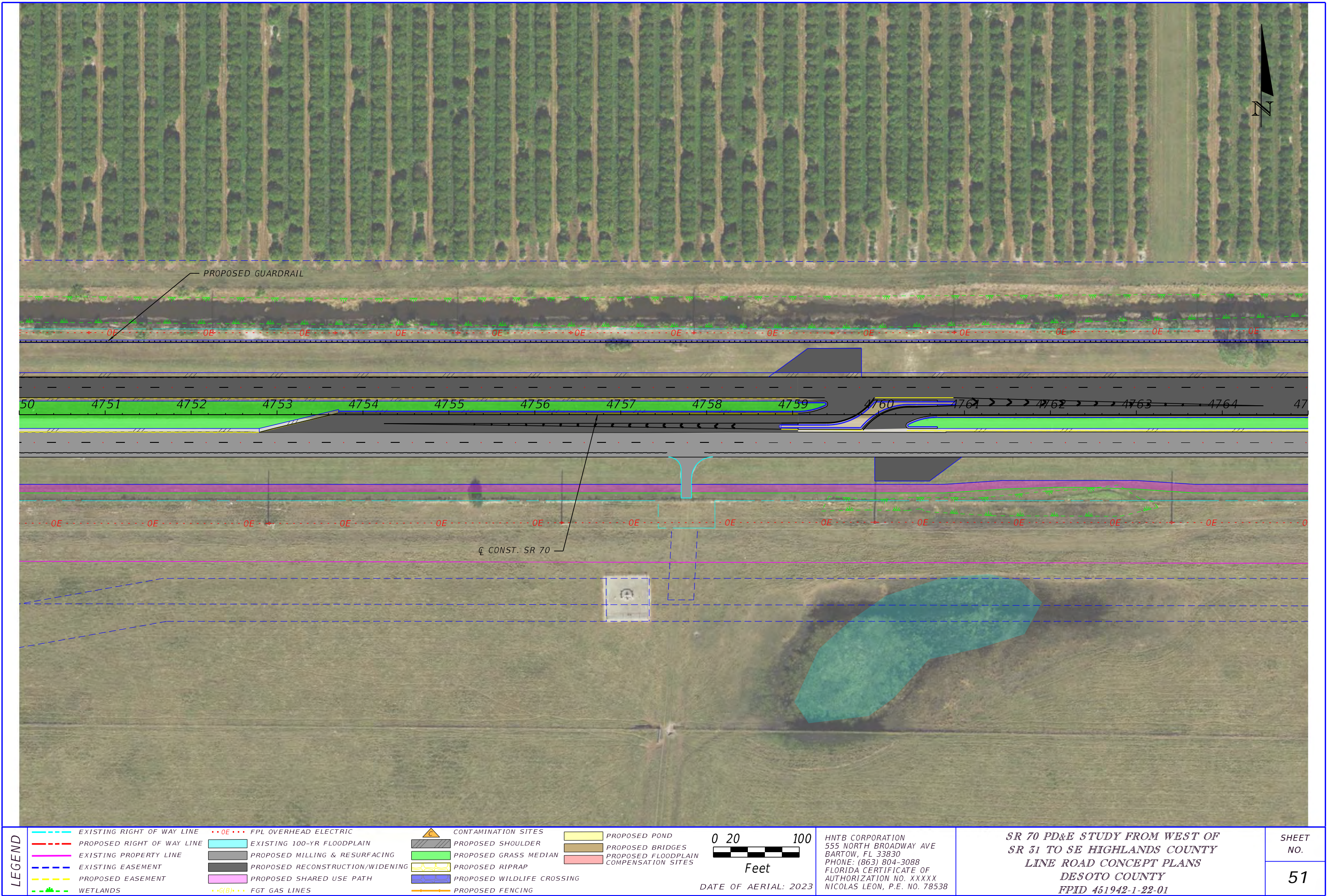












LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

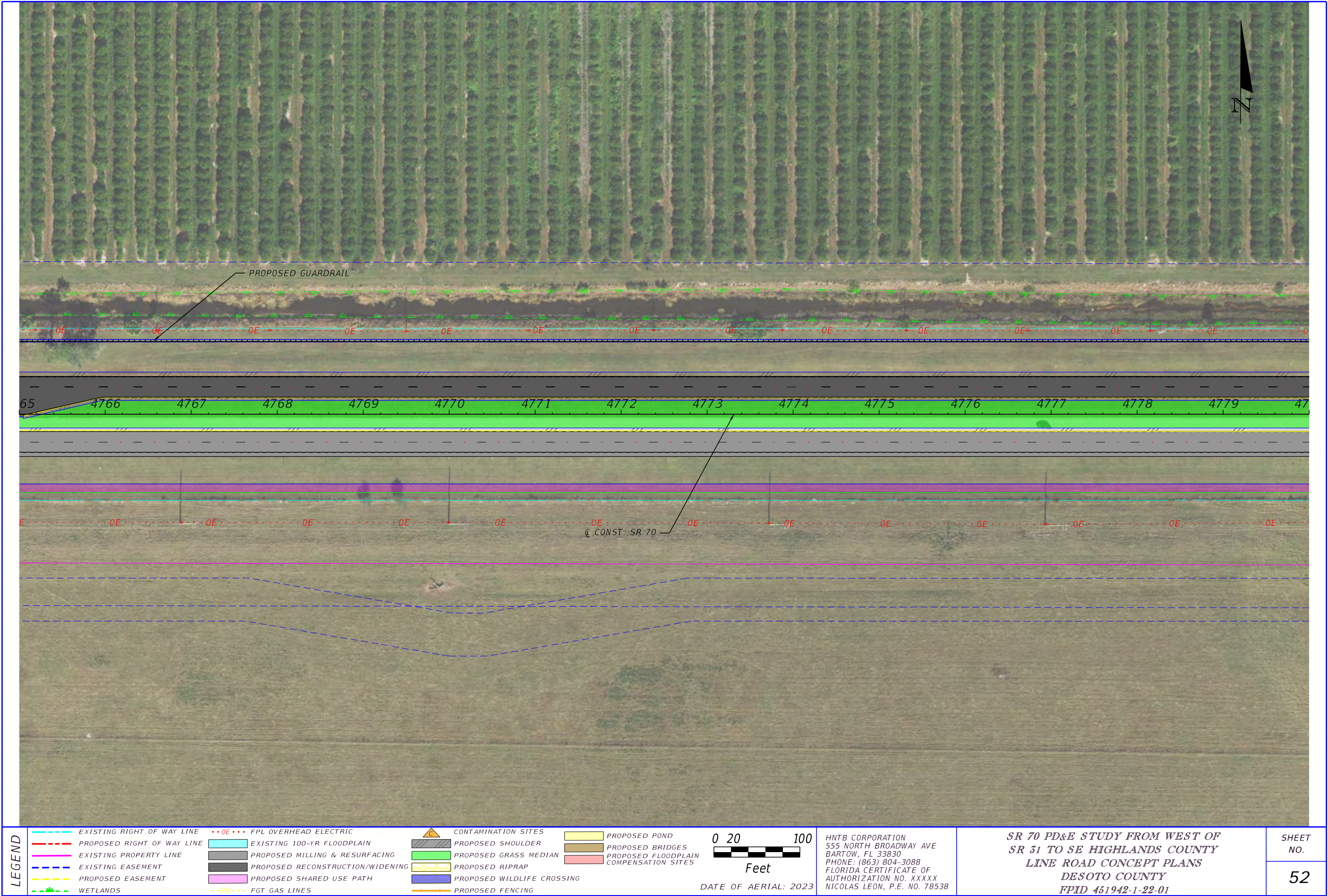
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DATE OF AERIAL: 2023

HNTB CORPORATION  
555 NORTH BROADWAY AVE  
BARTOW, FL 33830  
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FLORIDA CERTIFICATE OF  
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NICOLAS LEON, P.E. NO. 78538

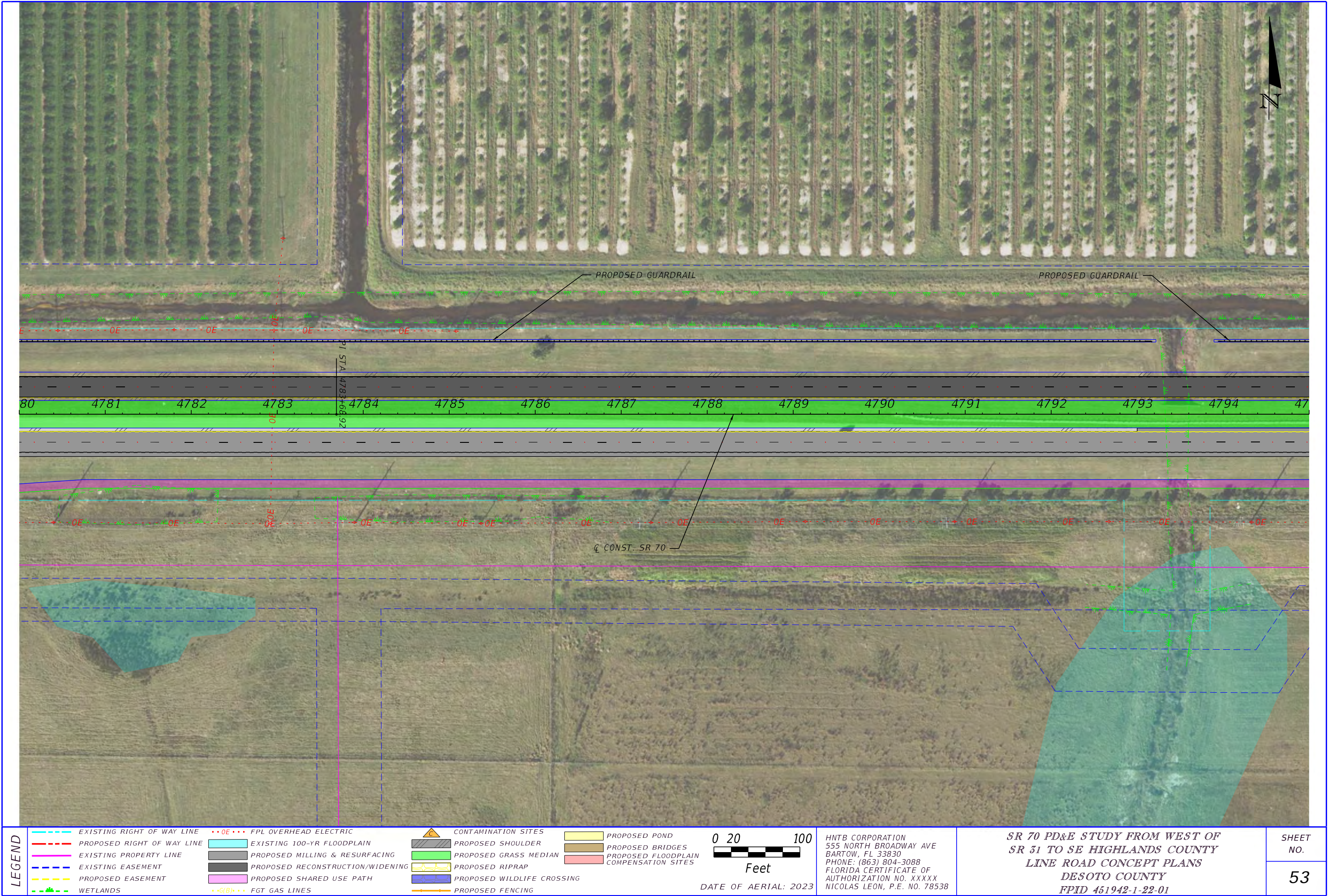
SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET  
NO.  
51













LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

---OE---

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B) FGT GAS LINES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

020100

Feet

DATE OF AERIAL: 2023

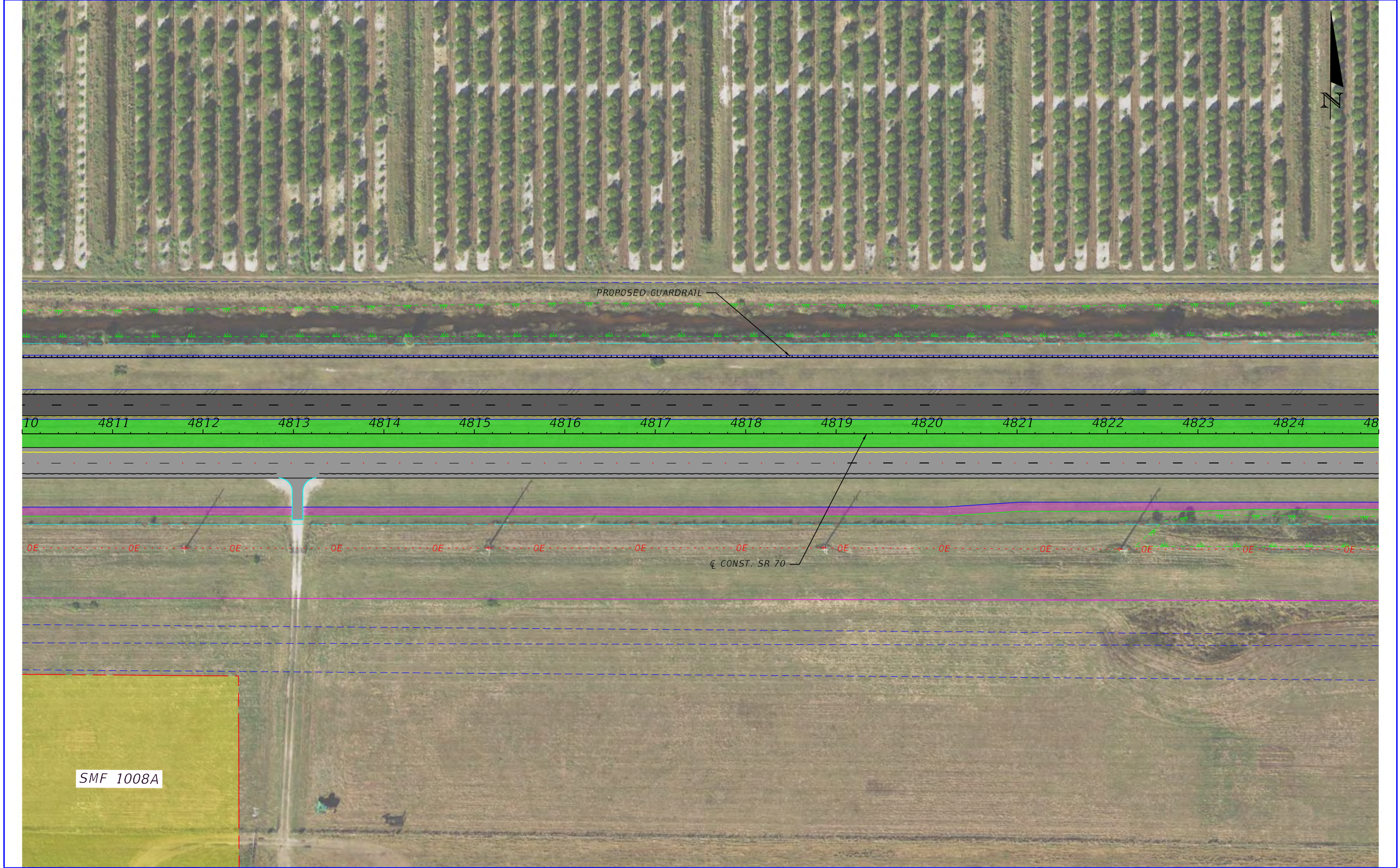
HNTB CORPORATION  
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SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.

54





LEGEND	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

0 20 100

Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
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SR 70 PD&E STUDY FROM WEST OF  
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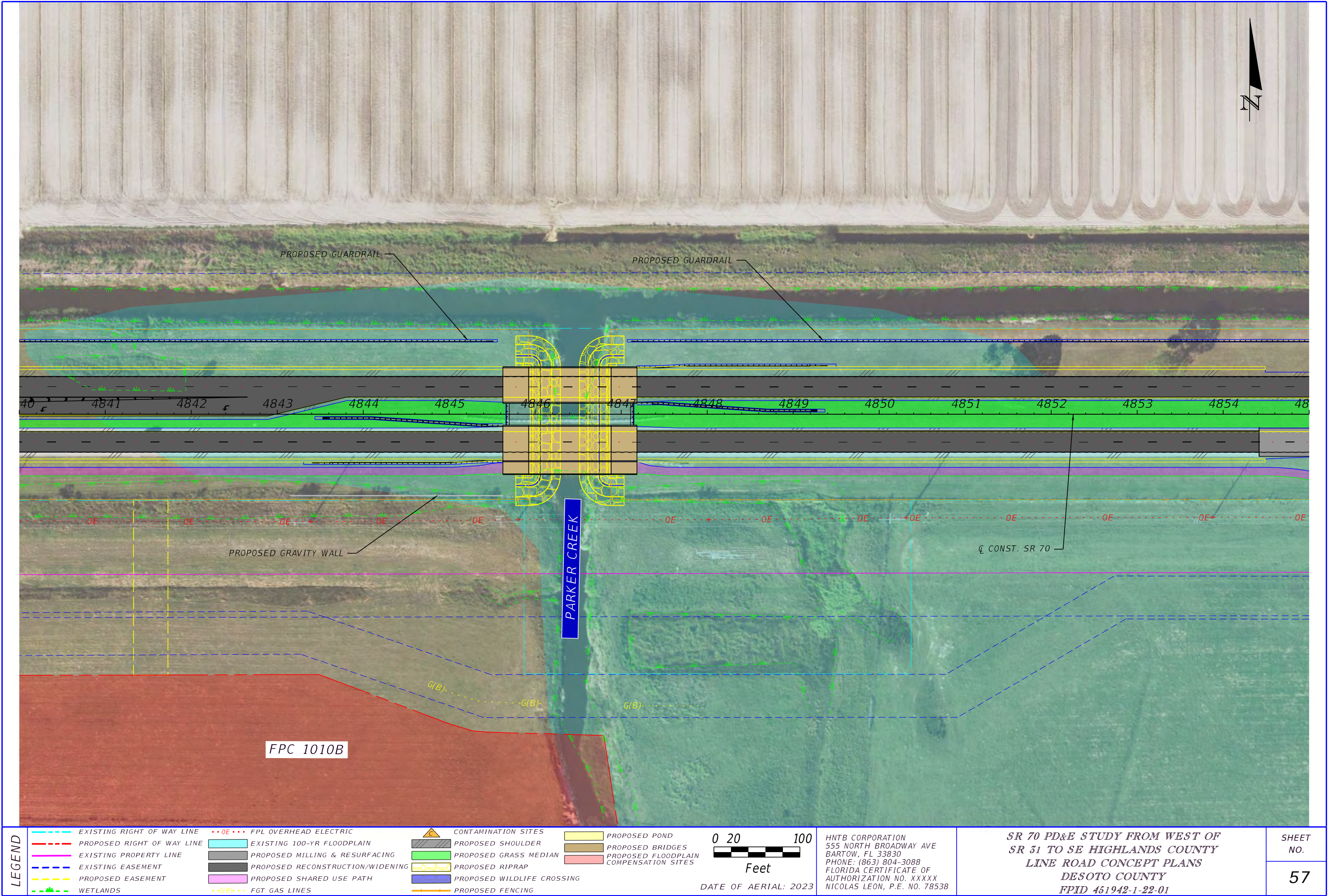
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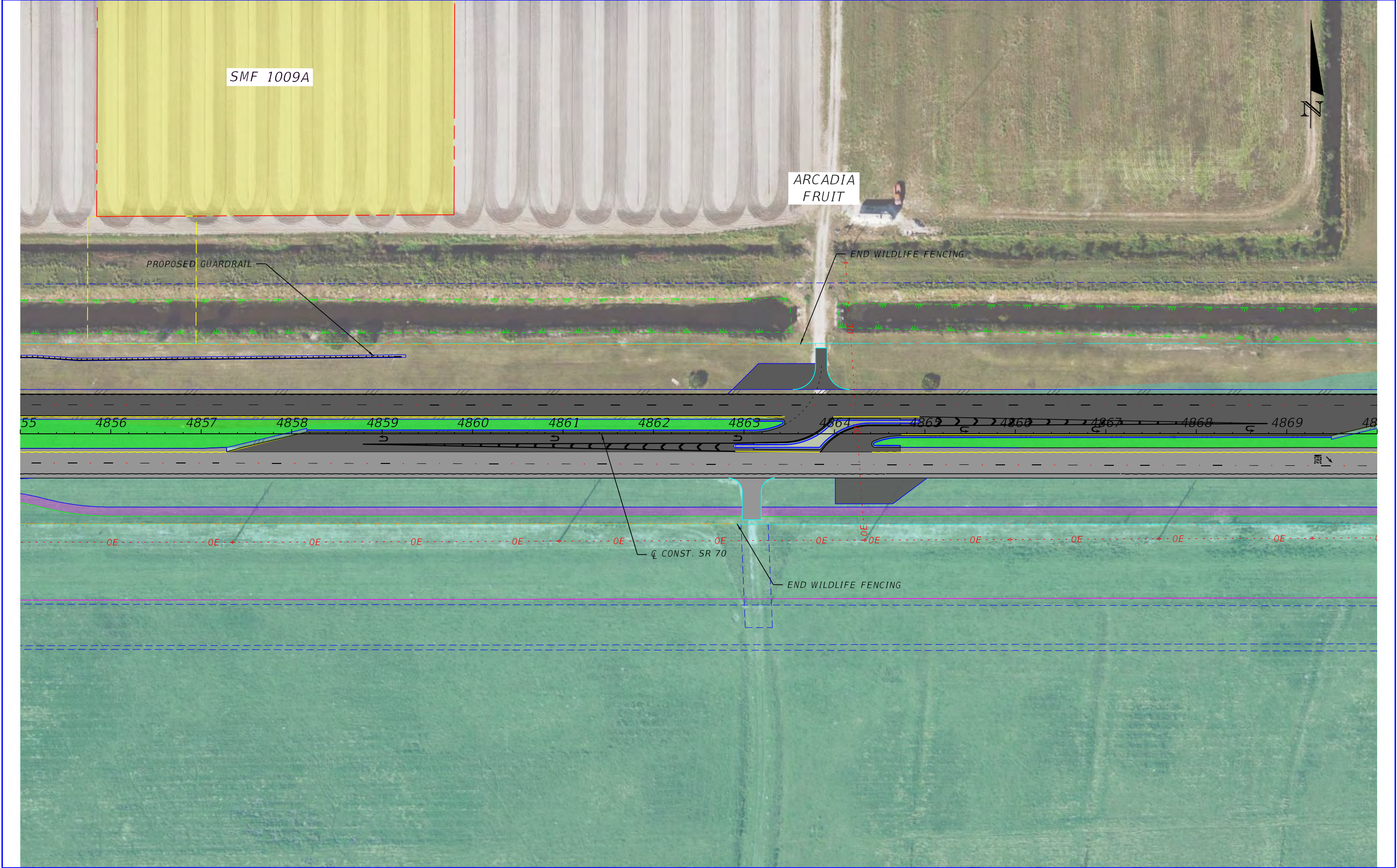












<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

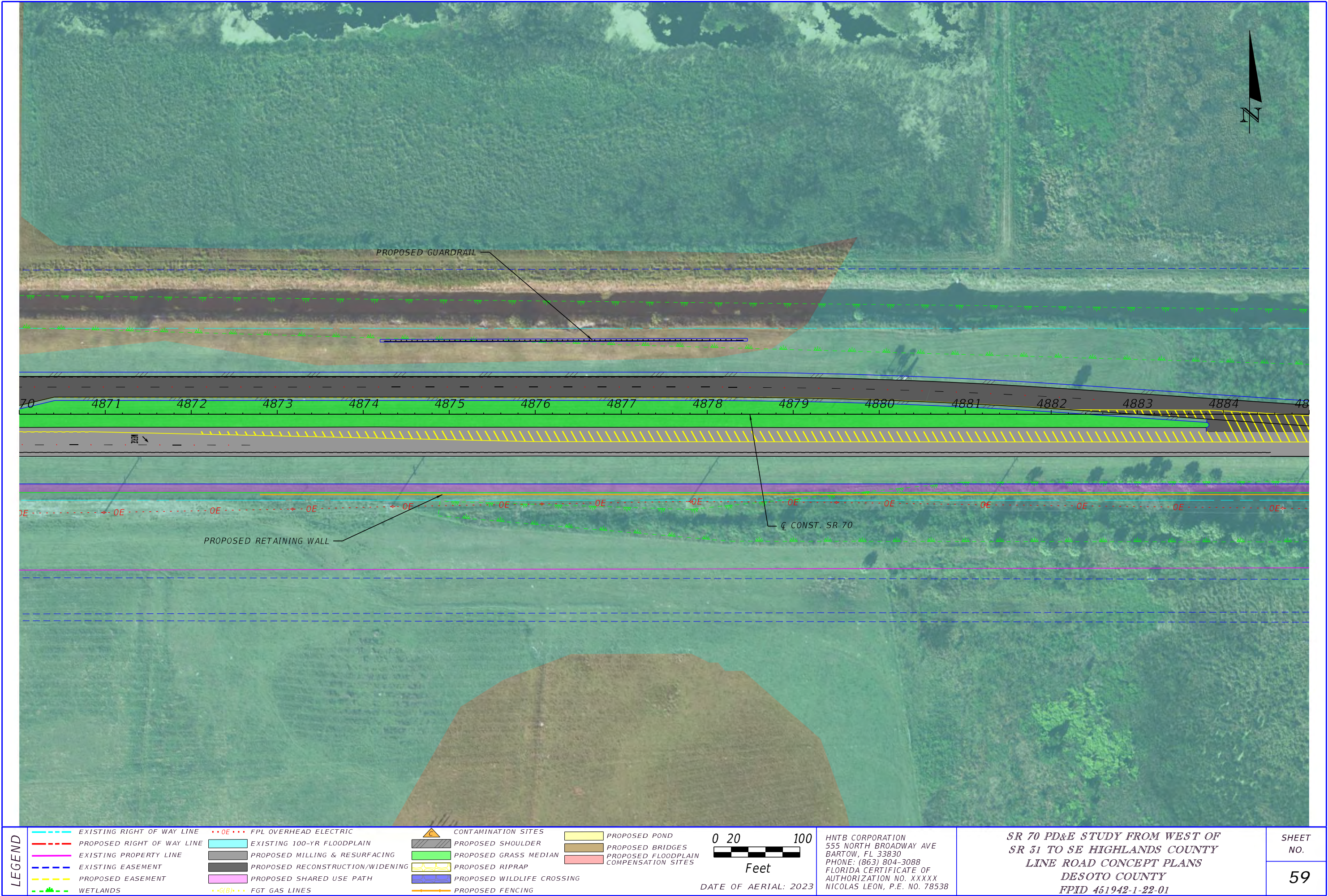
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**SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

SHEET NO.  
**58**





LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B) FGT GAS LINES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

G(B) FGT GAS LINES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

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PROPOSED FLOODPLAIN COMPENSATION SITES

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

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PROPOSED FENCING

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

0 20 100

Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
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BARTOW, FL 33830  
PHONE: (863) 804-3088  
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NICOLAS LEON, P.E. NO. 78538

SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 461942-1-22-01

SHEET  
NO.  
59

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LEGEND

EXISTING RIGHT OF WAY LINE	OE FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	G(B) FGT GAS LINES	PROPOSED FENCING	

0 20 100

Feet

DATE OF AERIAL: 2023

HNTB CORPORATION  
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BARTOW, FL 33830  
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SR 70 PD&E STUDY FROM WEST OF  
SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01

SHEET NO.

60





LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

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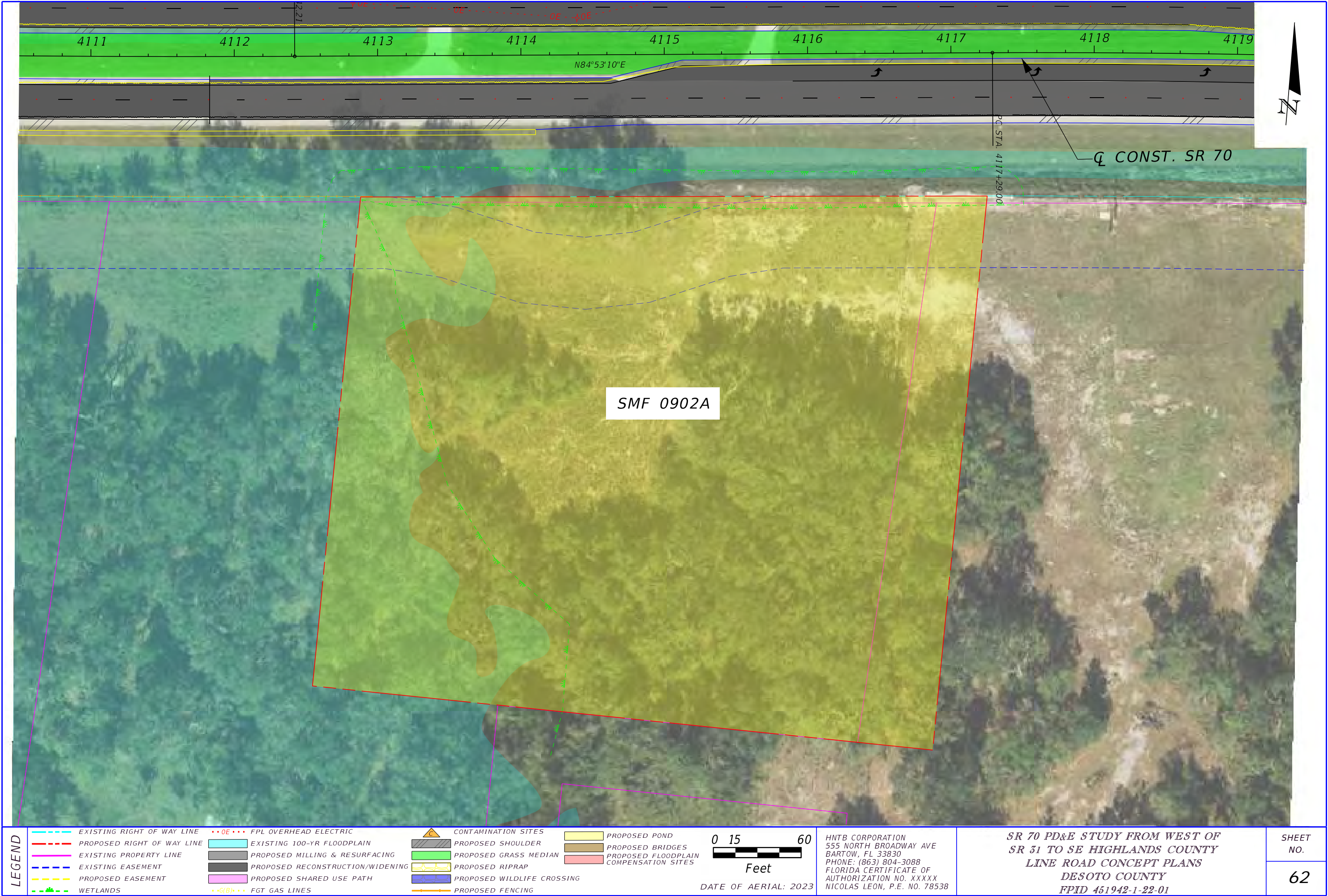
HNTB CORPORATION  
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PHONE: (863) 804-3088  
FLORIDA CERTIFICATE OF  
AUTHORIZATION NO. XXXXX  
NICOLAS LEON, P.E. NO. 78538

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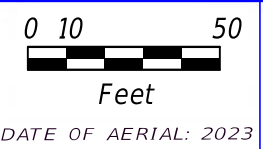
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S89°57'47"E

S89°57'47"E

LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	



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SHEET NO.  
**63**

FAC NOTE





LEGEND	EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
	EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
	PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
	WETLANDS	FGT GAS LINES	PROPOSED FENCING	

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LINE ROAD CONCEPT PLANS  
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64

FAC NOTE









LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

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FPL OVERHEAD ELECTRIC

EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

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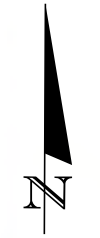
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SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
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PROP. EASEMENT

PROP. EASEMENT

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LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	

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EXISTING RIGHT OF WAY LINE

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 EXISTING 100-YR FLOODPLAIN


PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/W

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 CONTAMINATION SITES

PROPOSED SHOULDER

 PROPOSED GRASS MEDIAN

G  PROPOSED RIPRAP

 PROPOSED WILDLIFE

PROPOSED BOND

PROPOSED POND

PROPOSED BRIDGES

PROPOSED BRIDGES  
PROPOSED FLOODPLAIN

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DESOTO COUNTY  
FPID 451942-1-22-01*

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68

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<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
	PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	PROPOSED FLOODPLAIN COMPENSATION SITES	
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING		
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED FENCING		
WETLANDS				

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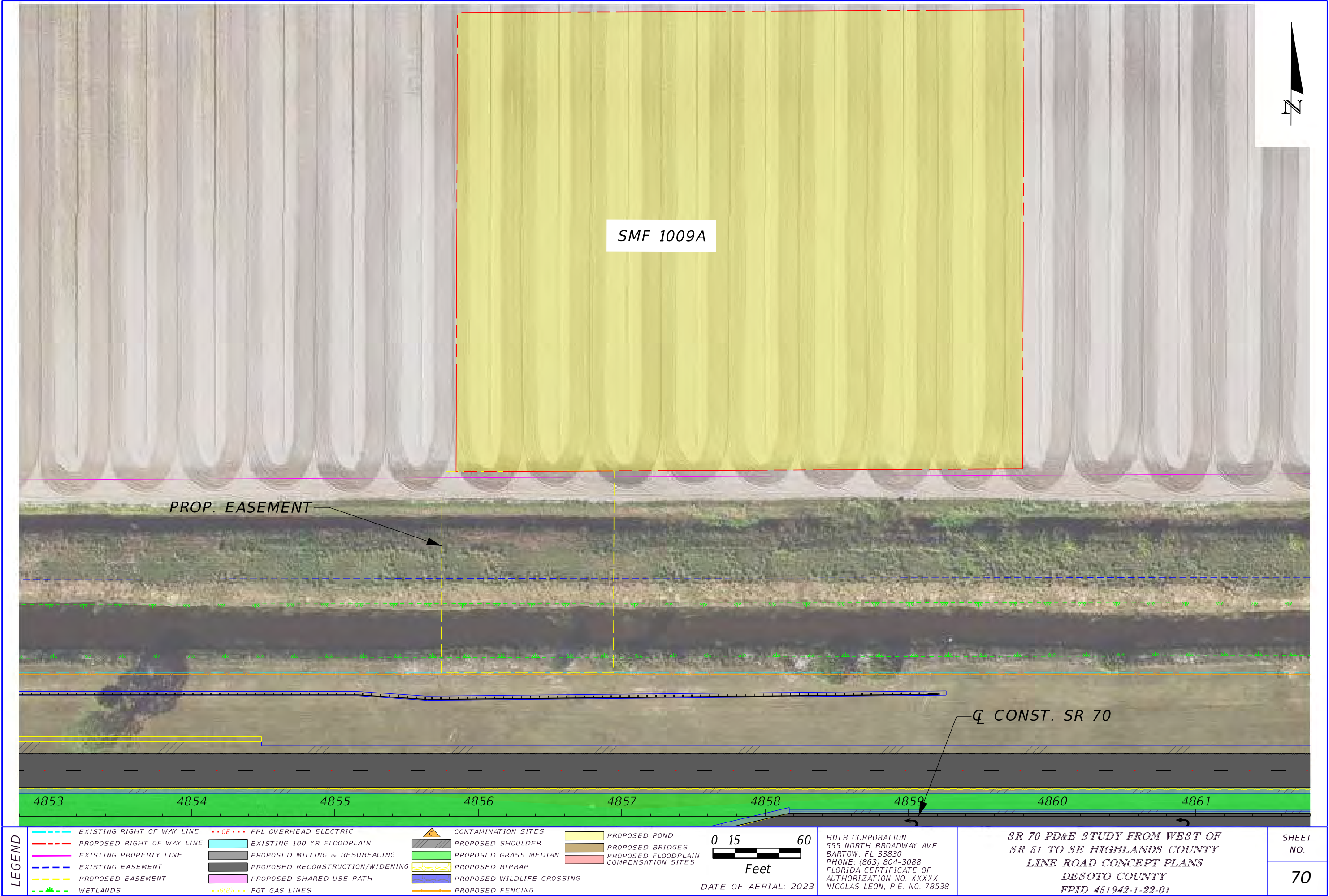
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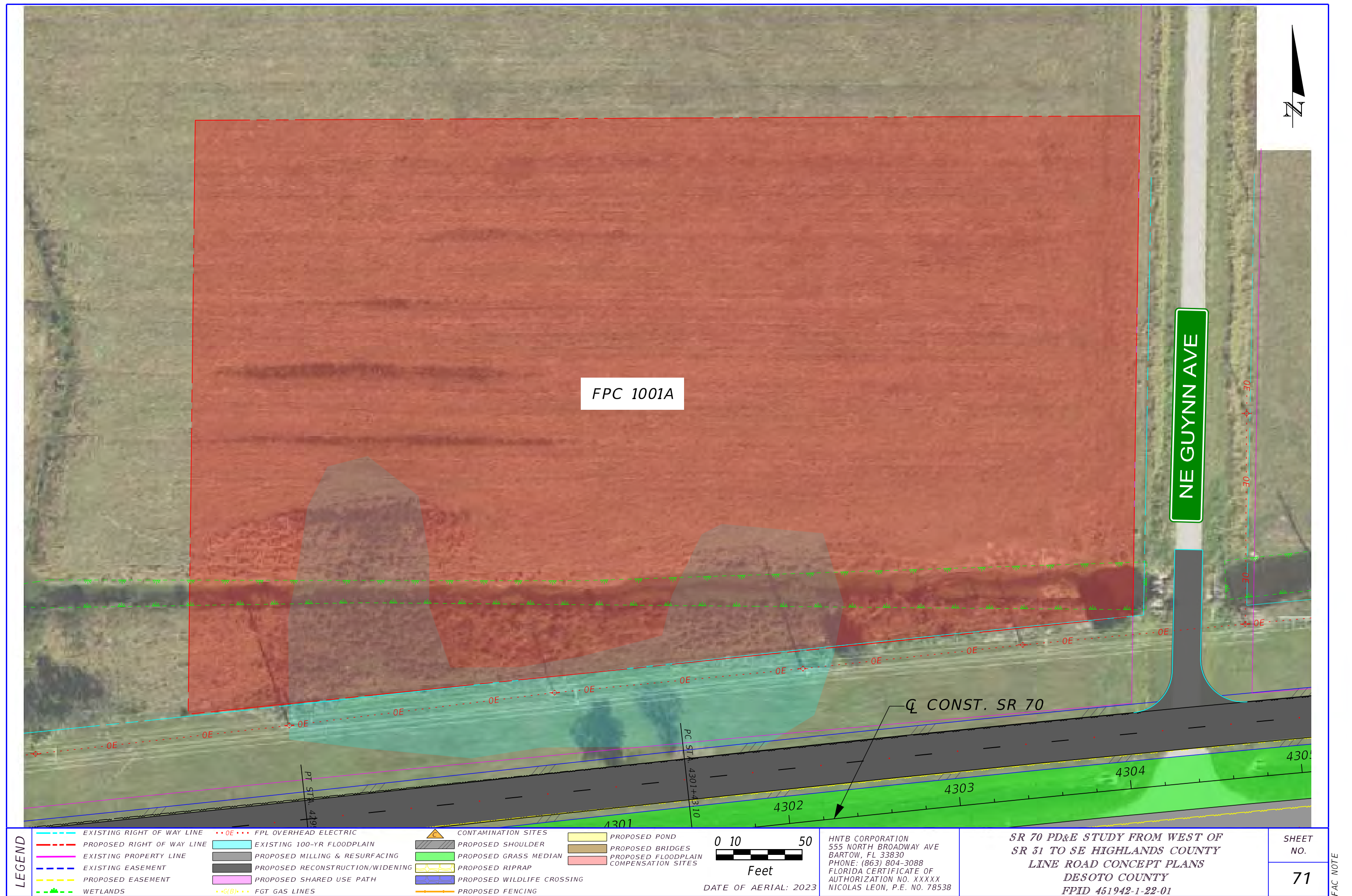
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SR 31 TO SE HIGHLANDS COUNTY  
LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
FPID 451942-1-22-01**

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PROP. EASEMENT

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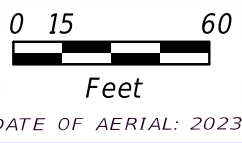
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N89°45'41"E

N89°45'41"E

LEGEND

EXISTING RIGHT OF WAY LINE	FPL OVERHEAD ELECTRIC	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED MILLING & RESURFACING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED RIPRAP	
PROPOSED EASEMENT	PROPOSED SHARED USE PATH	PROPOSED WILDLIFE CROSSING	
WETLANDS	FGT GAS LINES	PROPOSED FENCING	



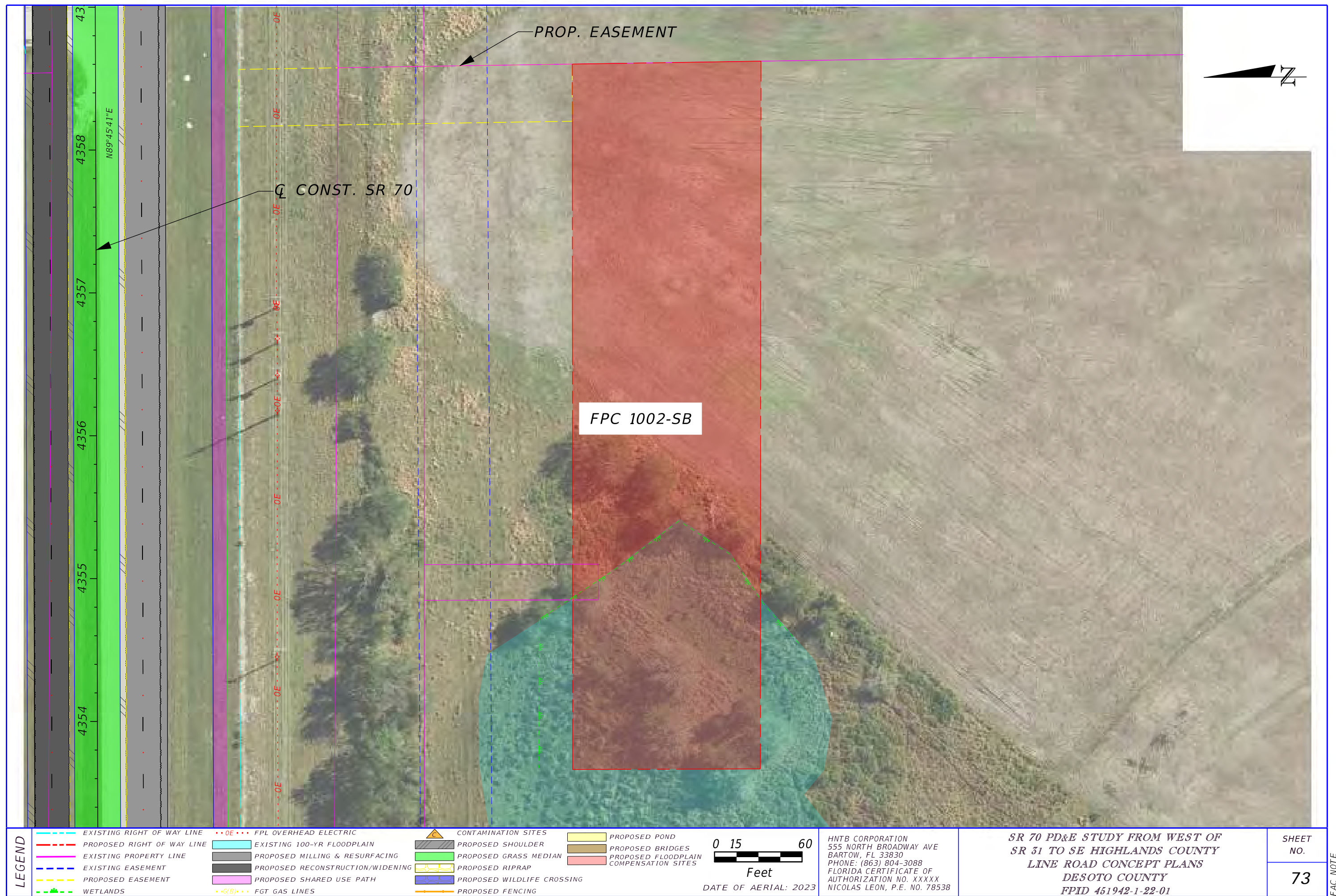
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LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
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LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

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EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

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LINE ROAD CONCEPT PLANS  
DESOTO COUNTY  
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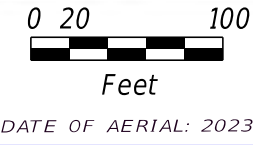




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LEGEND

	EXISTING RIGHT OF WAY LINE		FPL OVERHEAD ELECTRIC		CONTAMINATION SITES		PROPOSED POND
	PROPOSED RIGHT OF WAY LINE		EXISTING 100-YR FLOODPLAIN		PROPOSED SHOULDER		PROPOSED BRIDGES
	EXISTING PROPERTY LINE		PROPOSED MILLING & RESURFACING		PROPOSED GRASS MEDIAN		PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT		PROPOSED RECONSTRUCTION/WIDENING		PROPOSED RIPRAP		
	PROPOSED EASEMENT		PROPOSED SHARED USE PATH		PROPOSED WILDLIFE CROSSING		
	WETLANDS		FGT GAS LINES		PROPOSED FENCING		



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FAC NOTE





LEGEND

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

EXISTING PROPERTY LINE

EXISTING EASEMENT

PROPOSED EASEMENT

WETLANDS

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EXISTING 100-YR FLOODPLAIN

PROPOSED MILLING & RESURFACING

PROPOSED RECONSTRUCTION/WIDENING

PROPOSED SHARED USE PATH

FGT GAS LINES

CONTAMINATION SITES

PROPOSED SHOULDER

PROPOSED GRASS MEDIAN

PROPOSED RIPRAP

PROPOSED WILDLIFE CROSSING

PROPOSED FENCING

PROPOSED POND

PROPOSED BRIDGES

PROPOSED FLOODPLAIN COMPENSATION SITES

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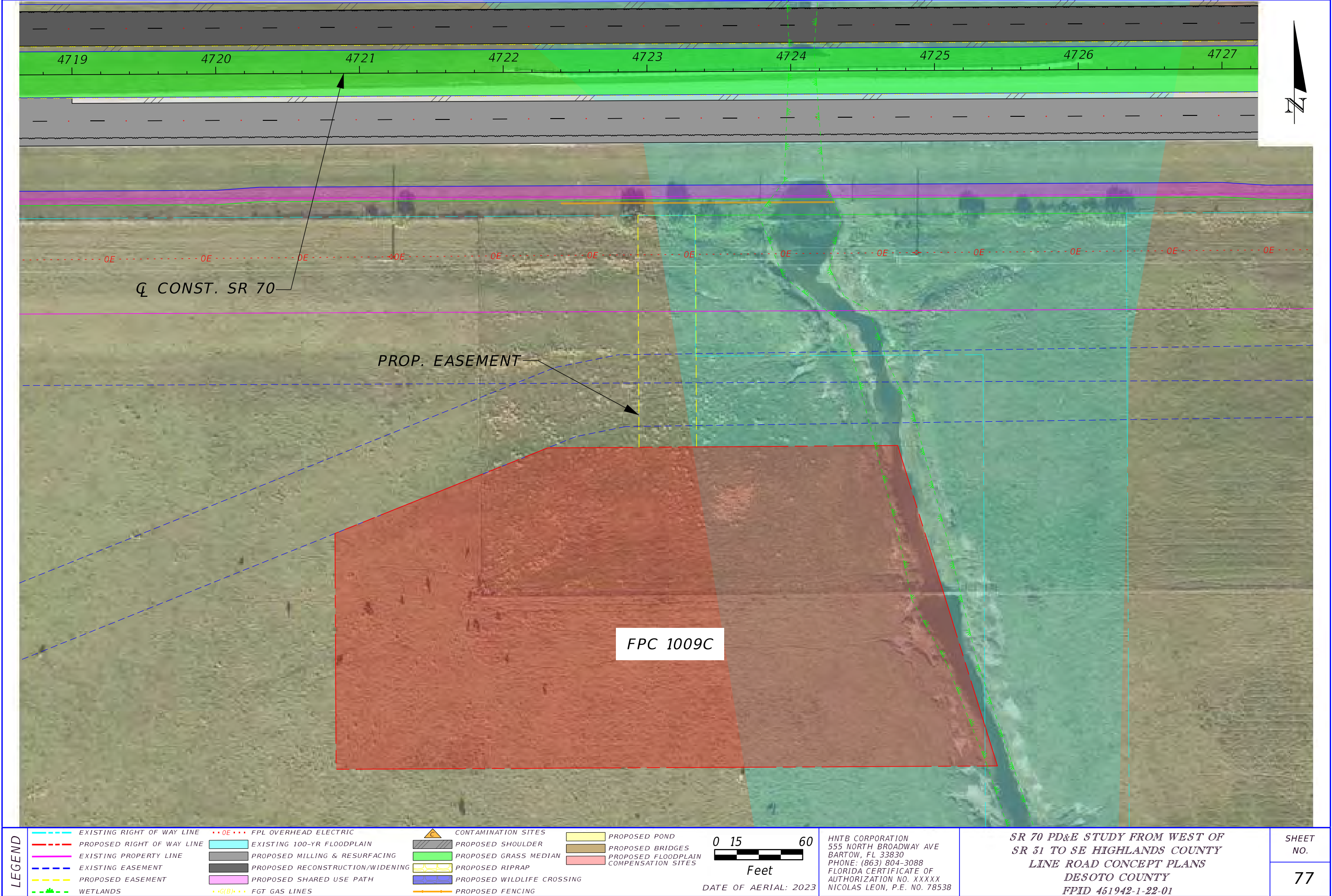
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	PROPOSED RIGHT OF WAY LINE		EXISTING 100-YR FLOODPLAIN		PROPOSED SHOULDER		PROPOSED BRIDGES
	EXISTING PROPERTY LINE		PROPOSED MILLING & RESURFACING		PROPOSED GRASS MEDIAN		PROPOSED FLOODPLAIN COMPENSATION SITES
	EXISTING EASEMENT		PROPOSED RECONSTRUCTION/WIDENING		PROPOSED RIPRAP		
	PROPOSED EASEMENT		PROPOSED SHARED USE PATH		PROPOSED WILDLIFE CROSSING		
	WETLANDS		FGT GAS LINES		PROPOSED FENCING		

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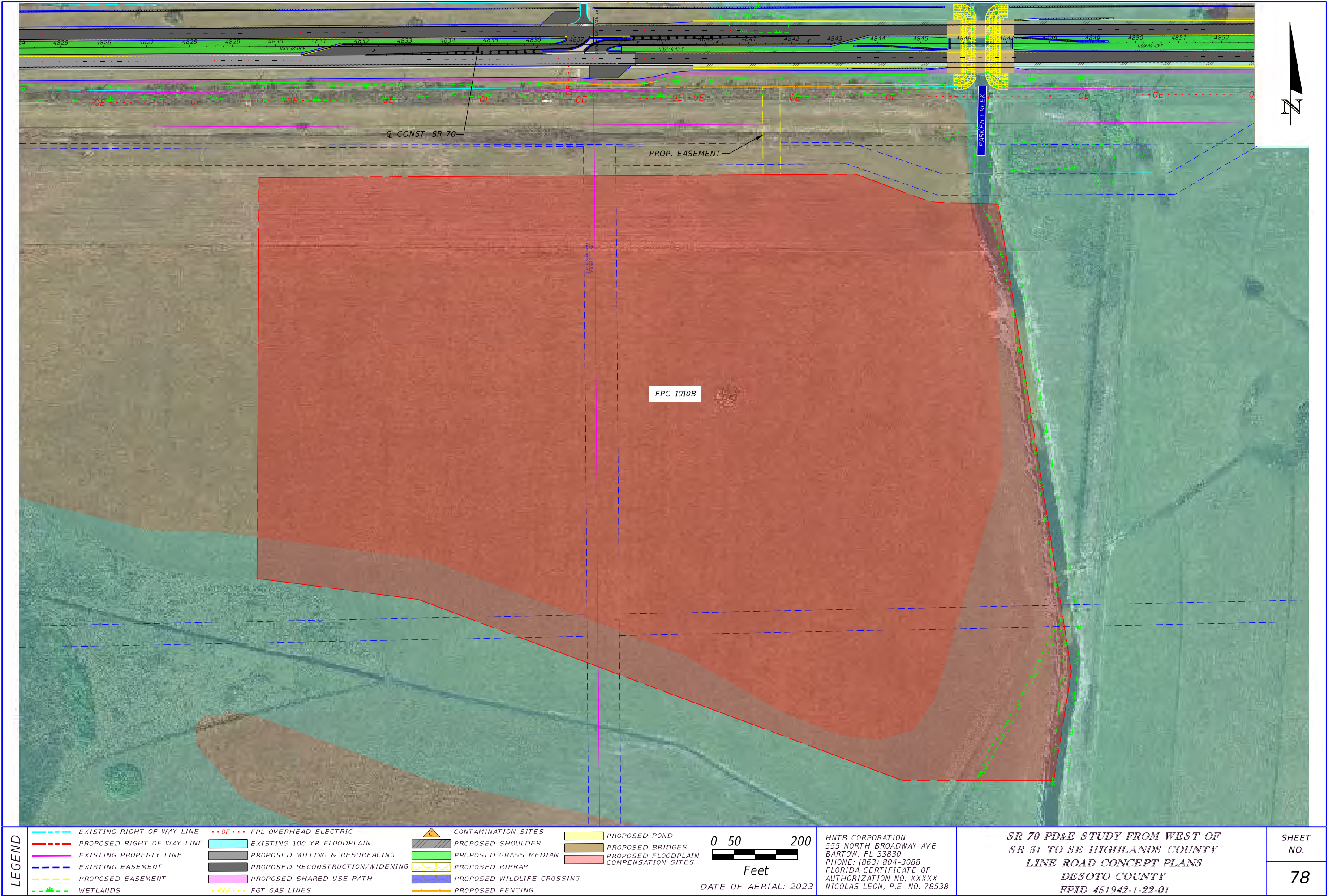
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LEGEND

EXISTING RIGHT OF WAY LINE	EXISTING 100-YR FLOODPLAIN	CONTAMINATION SITES	PROPOSED POND
PROPOSED RIGHT OF WAY LINE	PROPOSED MILLING & RESURFACING	PROPOSED SHOULDER	PROPOSED BRIDGES
EXISTING PROPERTY LINE	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED GRASS MEDIAN	PROPOSED FLOODPLAIN COMPENSATION SITES
EXISTING EASEMENT	PROPOSED SHARED USE PATH	PROPOSED RIPRAP	
PROPOSED EASEMENT	FGT GAS LINES	PROPOSED WILDLIFE CROSSING	
WETLANDS		PROPOSED FENCING	

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<b>LEGEND</b>	EXISTING RIGHT OF WAY LINE	PROPOSED RIGHT OF WAY LINE	EXISTING PROPERTY LINE	EXISTING EASEMENT	PROPOSED EASEMENT	WETLANDS
	EXISTING 100-YR FLOODPLAIN	PROPOSED MILLING & RESURFACING	PROPOSED RECONSTRUCTION/WIDENING	PROPOSED SHARED USE PATH	FPL OVERHEAD ELECTRIC	FGT GAS LINES
	CONTAMINATION SITES	PROPOSED SHOULDER	PROPOSED GRASS MEDIAN	PROPOSED RIPRAP	PROPOSED WILDLIFE CROSSING	PROPOSED FENCING
	PROPOSED POND	PROPOSED BRIDGES	PROPOSED FLOODPLAIN COMPENSATION SITES			

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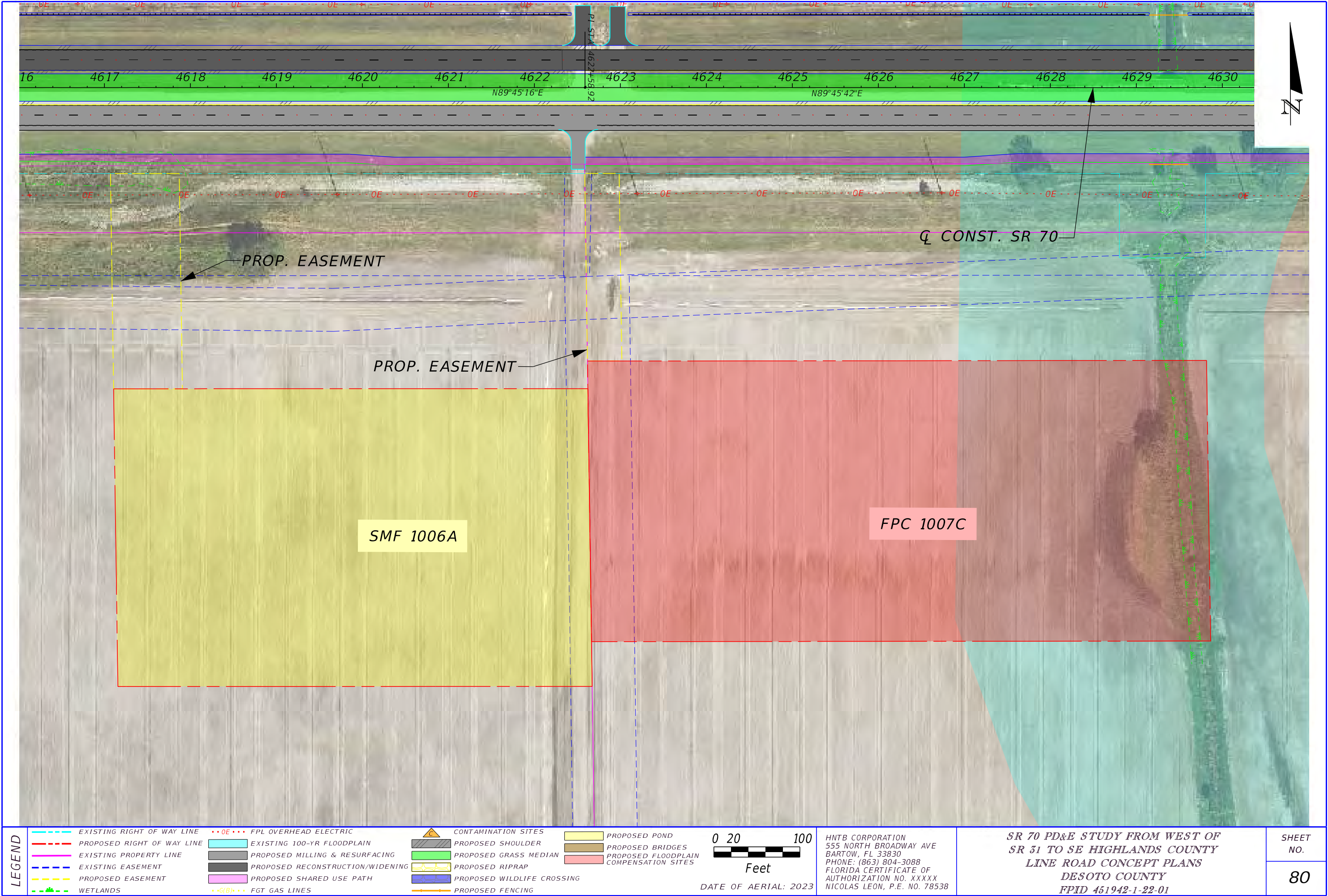
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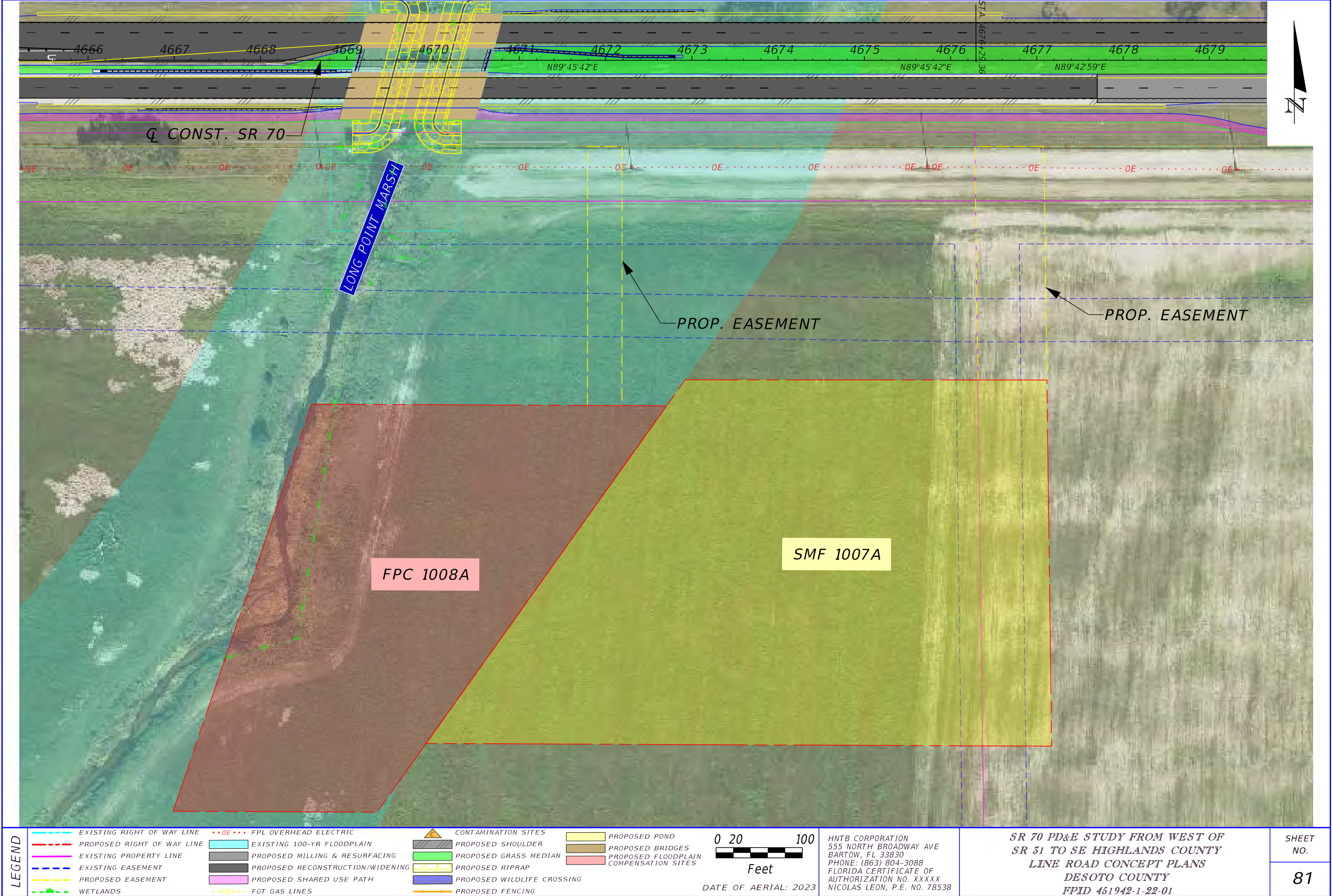
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## **Appendix B – 2023 SWFWMD FLUCCS Land Use Maps**



## Land Use Definitions

- 1100: Residential, Low Density – This category is reserved for all residential areas with less than two dwelling units per acre. Contamination impacts are generally not expected for this land use category.
- 1200: Residential, Medium Density – This category is reserved for all residential areas with two to five dwelling units per acre. Contamination impacts are generally not expected for this land use category.
- 1300: Residential, High Density – This category is reserved for all residential areas with six or more dwelling units per acre. Contamination impacts are generally not expected for this land use category.
- 1400: Commercial and Services – This category encompasses a diverse range of land uses associated with product and service distribution. It includes various individual types of commercial properties, often found in complex mixtures. These properties encompass secondary structures like sheds, warehouses, office buildings, driveways, parking lots, and landscape areas. Examples of commercial properties include clothing retail stores, gasoline stations, professional services, day care facilities, dry cleaning establishments, and tourist resorts. Notably, many of these sites feature large, paved parking lots for easy patron accessibility. Due to the wide variety of facilities within this category, there is a potential for contamination impacts.
- 1500: Industrial – This category is reserved for areas where manufacturing, assembly or processing of materials and products are accomplished. Industrial areas span a wide array of industry types, ranging from light manufacturing and industrial parks to heavy manufacturing plants. These areas also include facilities for administration, research, assembly, storage, warehousing, shipping, and associated parking lots and grounds. In Florida, typical examples of industrial types include pulp and lumber mills, oil refineries with tank farms, chemical plants, and brick-making facilities. Because this category includes a wide range of facilities, there is a potential for contamination impacts.
- 1700: Institutional – This category includes educational, religious, military, medical and health care, governmental, correctional, commercial childcare, and other institutional programs. Some facilities are considered ‘self-sufficient’ containing their own power generator and sanitary disposal systems. As a result, there is a potential for contamination impacts for parcels identified under this land use category.
- 1900: Open Land – This category includes undeveloped land within urban areas and inactive land with street patterns but without structures. This land normally does not exhibit any indication of intended use. Contamination impacts are generally not expected for this land use category.
- 2100: Cropland and Pastureland – This category includes agricultural land which is managed for the production of row or field crops and improved, unimproved, and woodland pastures. While fertilizer may be used, contamination impacts are generally not expected for this land use category.



- 2140: Row Crops – This category is reserved for agricultural land consisting of row crops. This includes corn, tomatoes, potatoes, beans, peanuts, soybeans, strawberries, and tobacco. While fertilizer may be used, contamination impacts are generally not expected for this land use category.
- 2200: Tree Crops – This category is reserved for orchards and groves. This includes citrus groves, fruit orchards, other groves, and abandoned groves. Contamination impacts are generally not expected for this land use category.
- 2400: Nurseries and Vineyards – This category is composed of nurseries, floricultural areas and seed-and-sod areas used perennially and generally not rotated with other uses. This includes tree nurseries, sod farms, ornamentals, vineyards, floriculture, and timber nurseries. While the land may be fertilized, contamination impacts are generally not expected for this land use category.
- 2600: Other Open Lands (Rural) – This category includes those agricultural lands whose intended usage cannot be determined. Included are fallow crop land which is harvested agricultural land not currently in crop production. While fertilizer may be used, contamination impacts are generally not expected for this land use category.
- 3100: Herbaceous (Dry Prairie) – This category includes upland prairie grasses which occur on non-hydric soils but may be occasionally inundated by water. These grasslands are generally treeless with a variety of vegetation types dominated by grasses, sedges, rushes, and other herbs including wire grasses with some saw palmetto present. Contamination impacts are generally not expected for this land use category.
- 3200: Shrub and Brushland – This category includes palmetto prairies, coastal scrub, and other shrubs and brush. Contamination impacts are generally not expected for this land use category.
- 3300: Mixed Rangeland – This category is reserved for land that is more than one-third intermixture of either grassland or shrub-brushland range species. Contamination impacts are generally not expected for this land use category.
- 4110: Pine Flatwoods – This category is a subcategory of Upland Coniferous Forests (4100), dominated by either slash pine, longleaf pine, or both and less frequently pond pine. The common flatwoods understory species include saw palmetto, wax myrtle, gallberry, and a wide variety of herbs and brush. Contamination impacts are generally not expected for this land use category.
- 4200: Upland Hardwood Forests – This category includes upland hardwood forests consisting of Xeric Oak, Brazilian Pepper, Oak, Pine, Hickory, Melaleuca, Temperate Hardwoods, Tropical Hardwoods, Live Oak, Cabbage Palm, Wax Myrtle, and Willow. Contamination impacts are generally not expected for this land use category.
- 4340: Hardwood – Coniferous Mixed – This category is reserved for those forested areas in which neither upland conifers nor hardwoods achieve a 66% crown canopy dominance. Contamination impacts are generally not expected for this land use category.
- 5100: Streams and Waterways – This category includes rivers, creeks, canals, and other linear water bodies. Where the water course is interrupted by a control structure, the impounded water area will be placed in the Reservoirs category (5300). Contamination impacts are generally not expected for this land use category.



- 5200: Lakes – This category includes all lakes of any size. This category includes all freshwater and saltwater bodies that are greater than half an acre in size and are typically natural in origin. It does not include water bodies that are entirely man-made or those that are excessively altered. This category can offer a chance of contamination depending on the facilities that are along the lake edge.
- 5300: Reservoirs – This category is reserved for artificial impoundments of water. They are used for irrigation, flood control, municipal and rural water supplies, recreation, and hydro-electric power generation. There is a potential for contamination impacts for parcels identified under this land use category.
- 6150: Streams and Lake Swamps (Bottomland) – This category is often referred to as bottomland or stream hardwoods and is usually found on, but not restricted to, river, creek, and lake flood plain or overflow areas. It includes a wide variety of predominantly hardwood species. Contamination impacts are generally not expected for this land use category.
- 6200: Wetland Coniferous Forests – This category includes all Wetland Coniferous Forests consisting of Cypress, Pond Pine, Atlantic White Cedar, Cabbage Palm, Hydric Pine Flatwoods, Hydric Pine Savanna, and Slash Pine Swamp Forest. Contamination impacts are generally not expected for this land use category.
- 6300: Wetland Forested Mixed – This category includes mixed wetlands forest communities in which neither hardwoods or conifers achieve a 66 percent dominance of the crown canopy composition. Contamination impacts are generally not expected for this land use category.
- 6400: Vegetated Non-Forested Wetlands – This category includes freshwater marshes and seasonably flooded basins and meadows. These communities are usually confined to relatively level, low-lying areas. When the forest crown cover is less than the threshold for wetland forest or is non-woody, it will be included in this category. Contamination impacts are generally not expected for this land use category.
- 6410: Freshwater Marshes – This category of vegetated non-forested wetlands is characterized by having one or more of the following species predominate: sawgrass, cattail, arrowhead, maidencane, buttonbush, cordgrass, giant cutgrass, switchgrass, bulrush, needlerush, common reed, and arrowroot. This category is used for land that is less than 66% dominate in any single species. Contamination impacts are generally not expected for this land use category.
- 6430: Wet Prairies – This category is composed predominately of grassy vegetation on hydric soils and is usually distinguished from marshes by having less water and shorter herbage. Contamination impacts are generally not expected for this land use category.
- 6440: Emergent Aquatic Vegetation – This category of wetland plant species includes both floating vegetation and vegetation which is found either partially or completely above the surface of water. This includes Water Lettuce, Spatterdock, Water Hyacinth, Duck Weed, and Water Lily. Contamination impacts are generally not expected for this land use category.
- 6530: Intermittent Ponds – This category of wetland is defined as a waterbody which exists for only a portion of the year and may be referred to as a seasonal waterbody. Its existence relies upon water

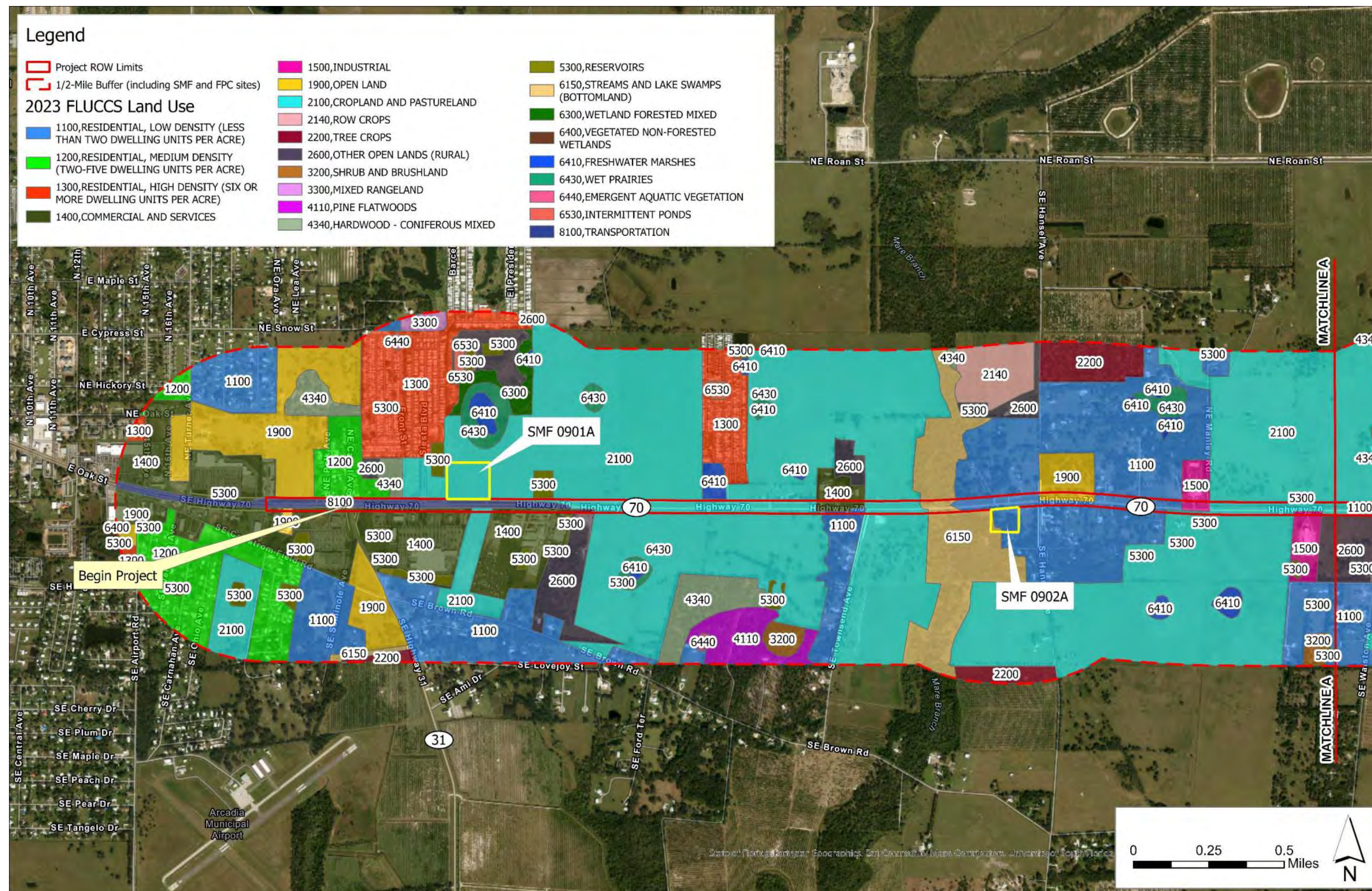


received directly from precipitation, runoff, or spring flow. Contamination impacts are generally not expected for this land use category.

7400: Disturbed Land – This category is reserved for areas which have been changes due primarily to human activities other than mining. In Florida, these areas may be rather extensive and often appear outside of urban areas. Included are rural land in transition without positive indicators of intended activity, borrow areas, spoil areas, fill areas (highways-railways), burned areas, abandoned railways, dikes and levees. Contamination impacts are generally not expected for this land use category.

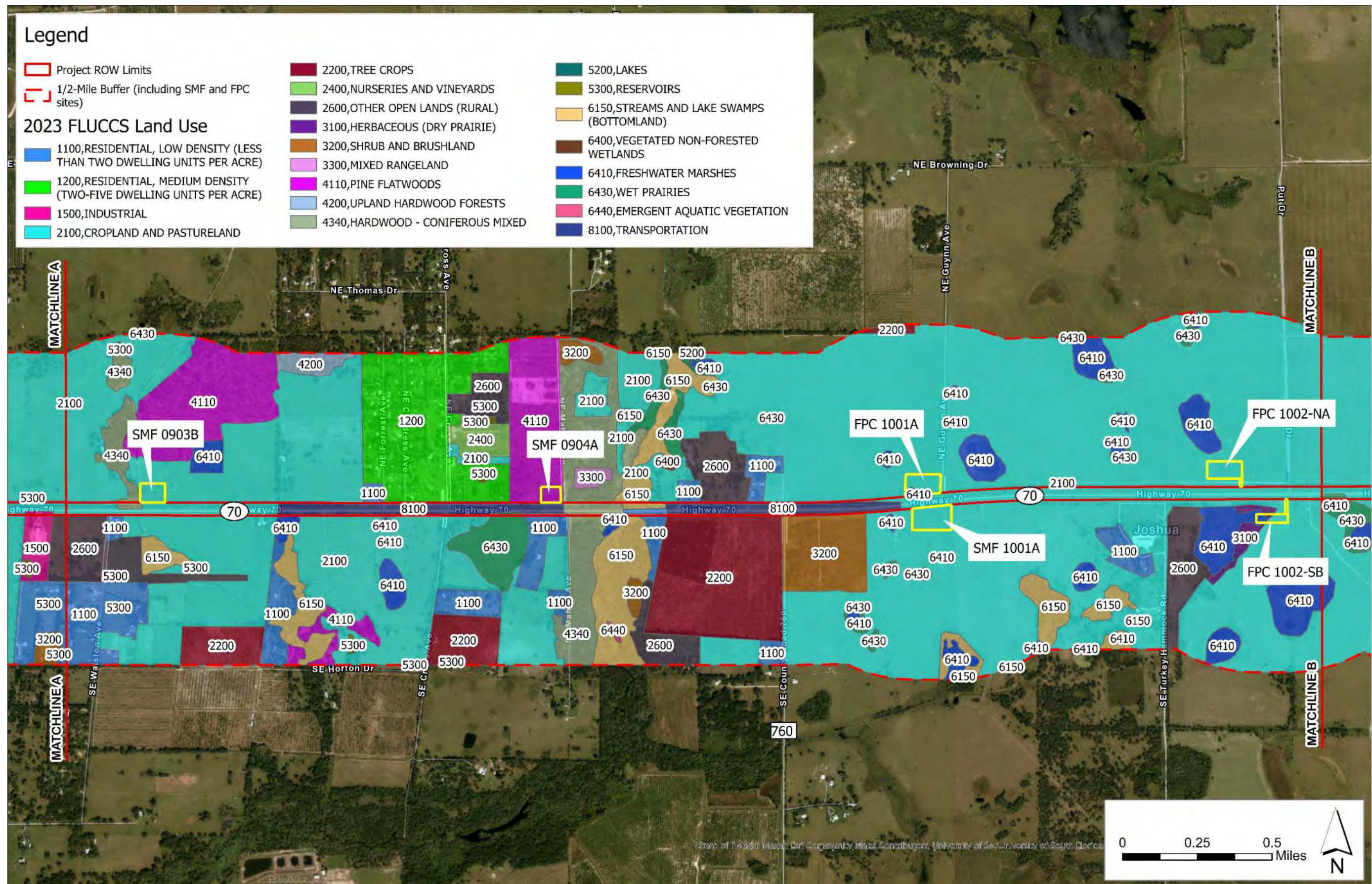
8100: Transportation – This category is reserved for areas used for the movement of people and goods. Included are airports; railroads; bus and truck terminals; roads and highways; port facilities; canals and locks; oil, water, or gas long distance transmission lines; auto parking facilities (when not directly related to other land use); and transportation facilities under construction. There is a potential for contamination impacts for parcels identified under this land use category due to gasoline spills or automotive accidents.





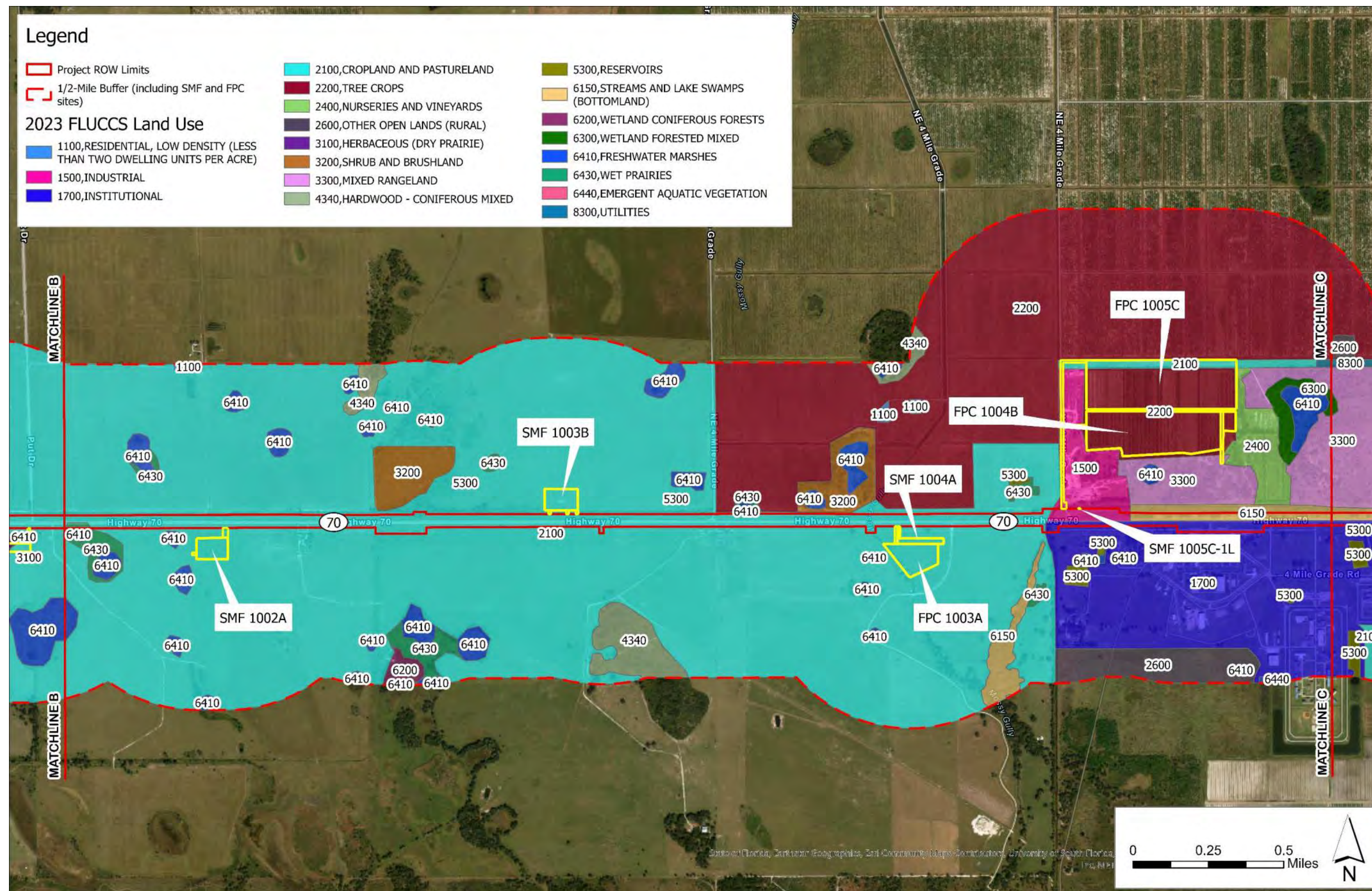
Appendix B – 2023 SWFWMD FLUCCS Land Use





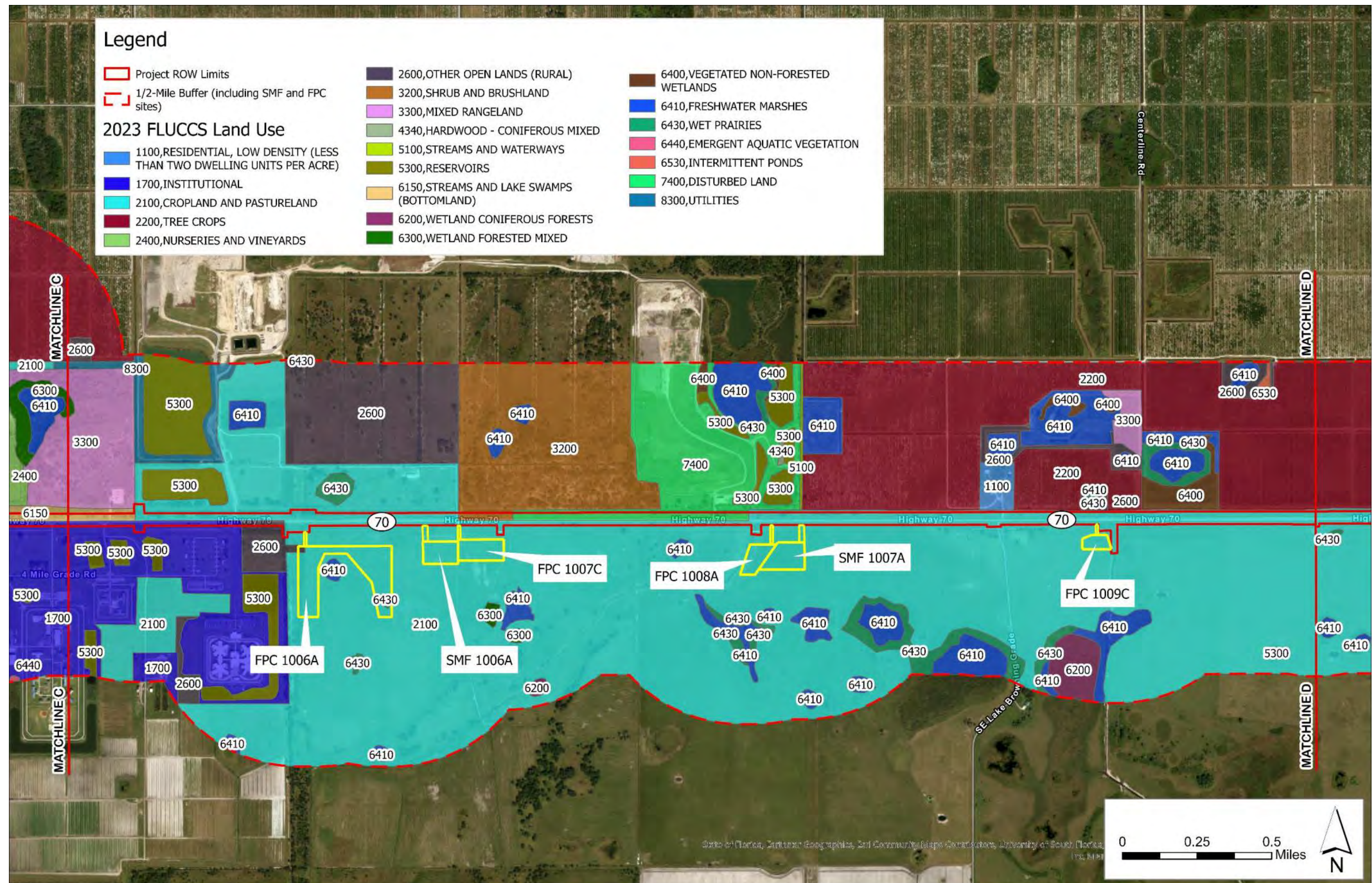
Appendix B – 2023 SWFWMD FLUCCS Land Use





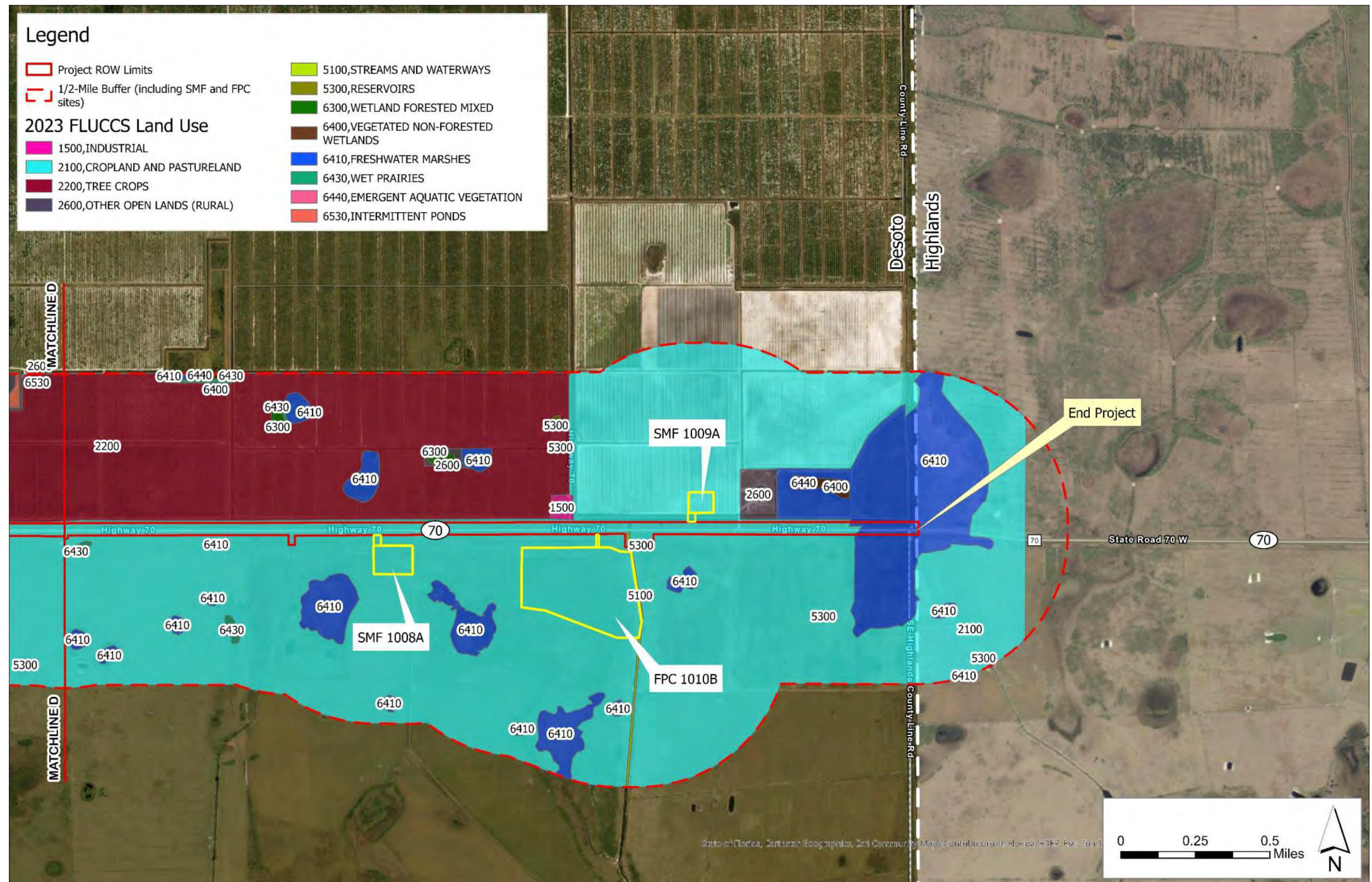
Appendix B – 2023 SWFWMD FLUCCS Land Use





Appendix B – 2023 SWFWMD FLUCCS Land Use



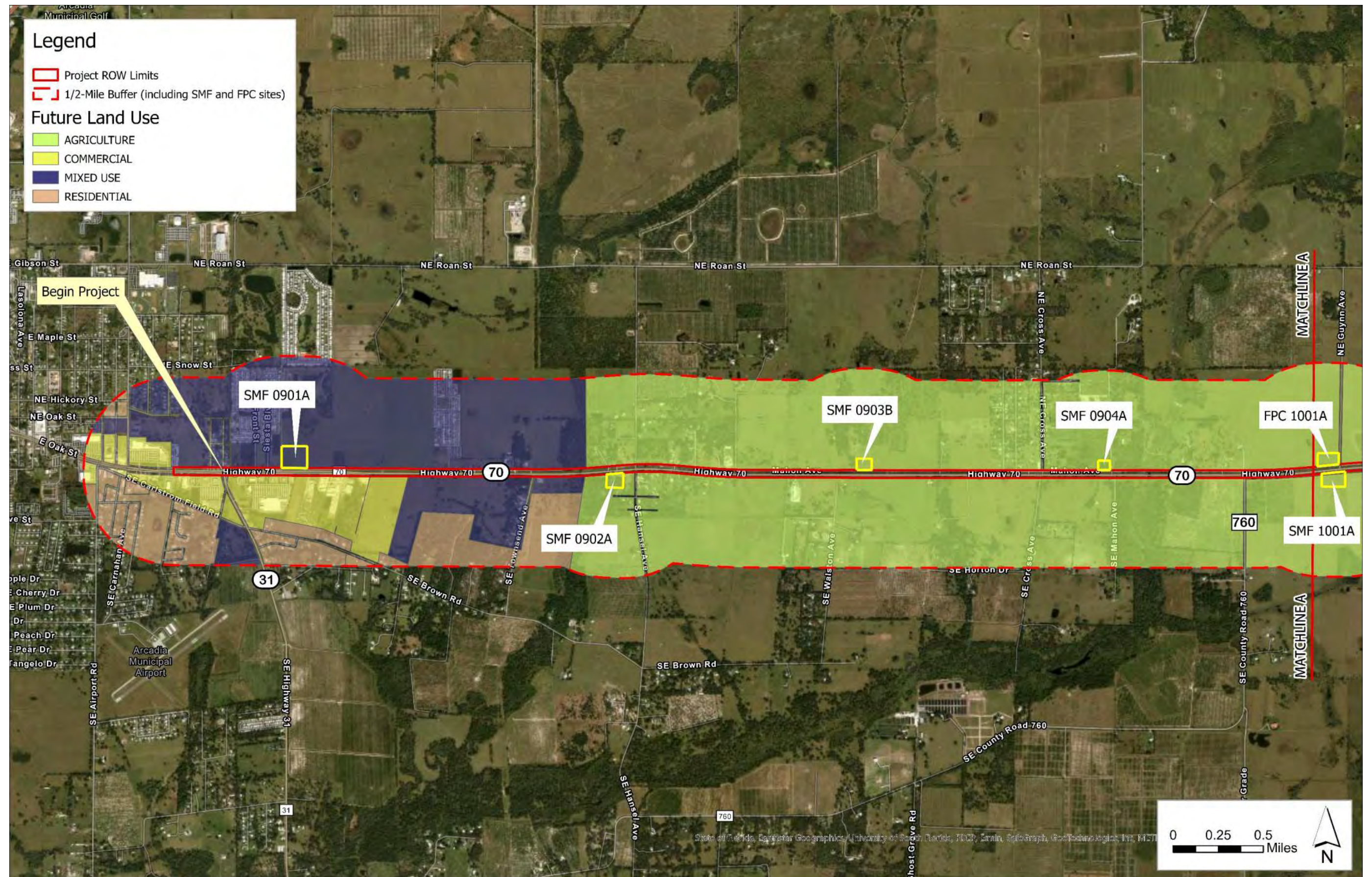


## Appendix B – 2023 SWFWMD FLUCCS Land Use



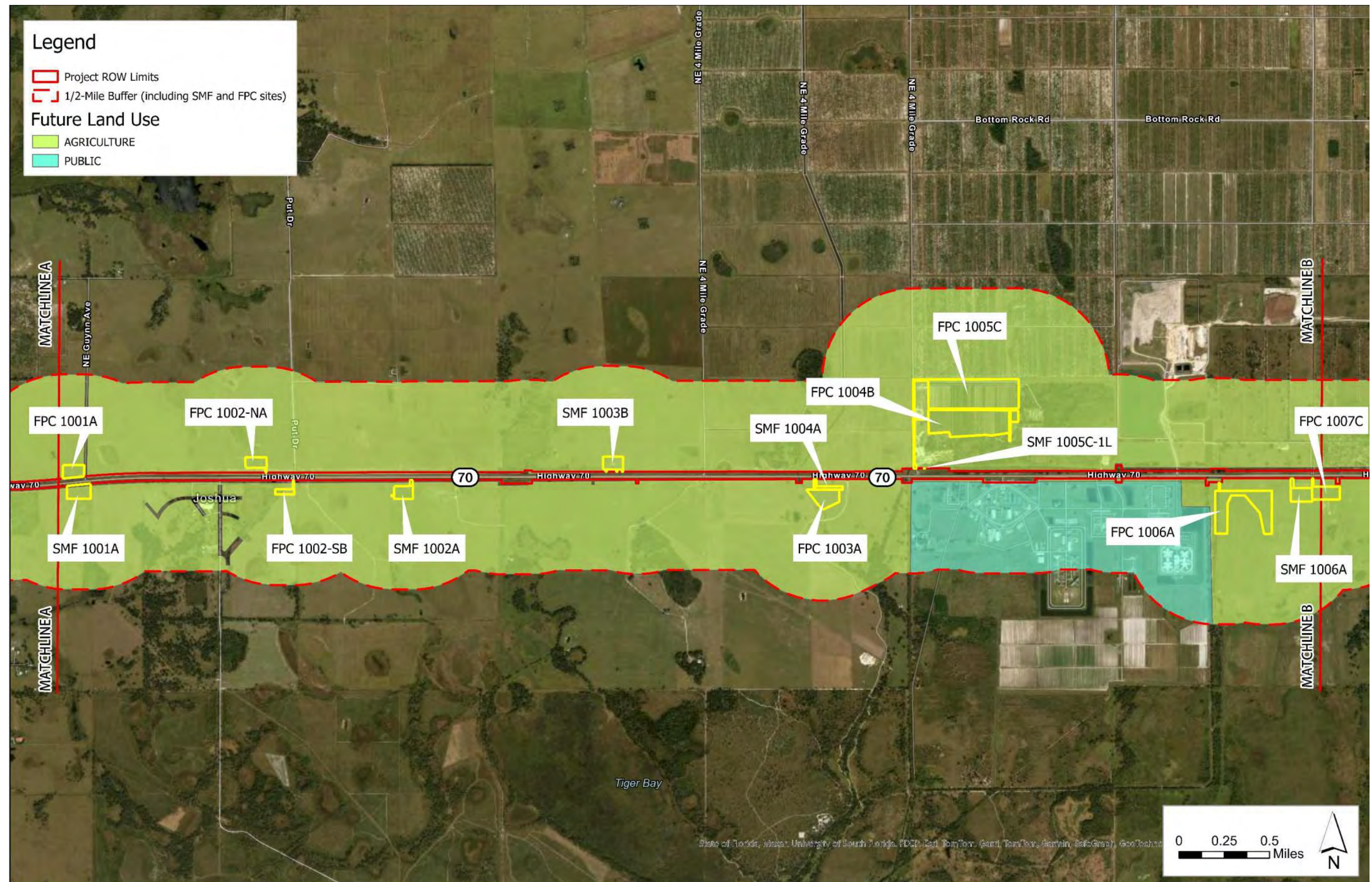
## **Appendix C – Future Land Use Maps**





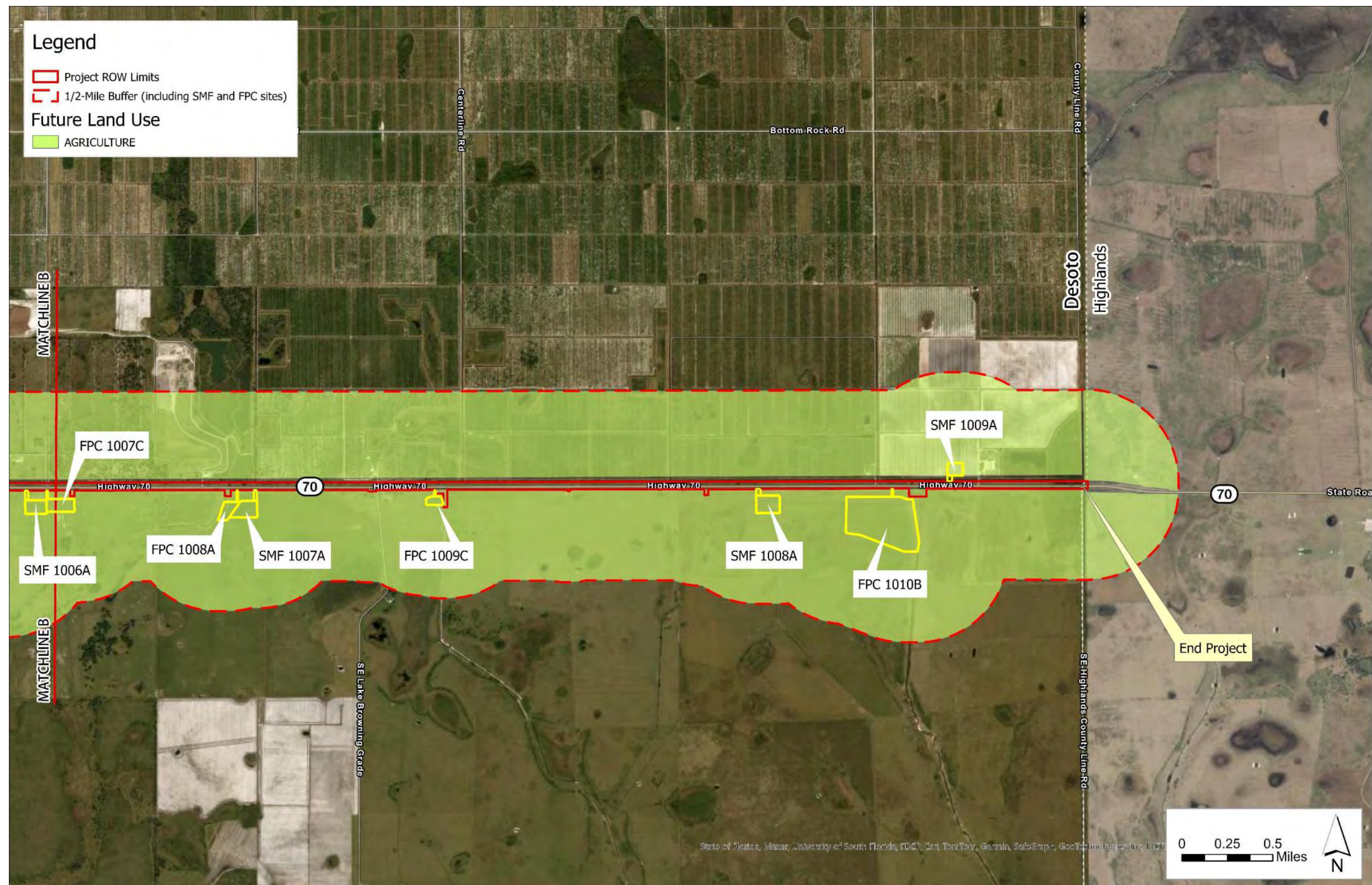
Appendix C – Future Land Use Maps





## Appendix C – Future Land Use Maps



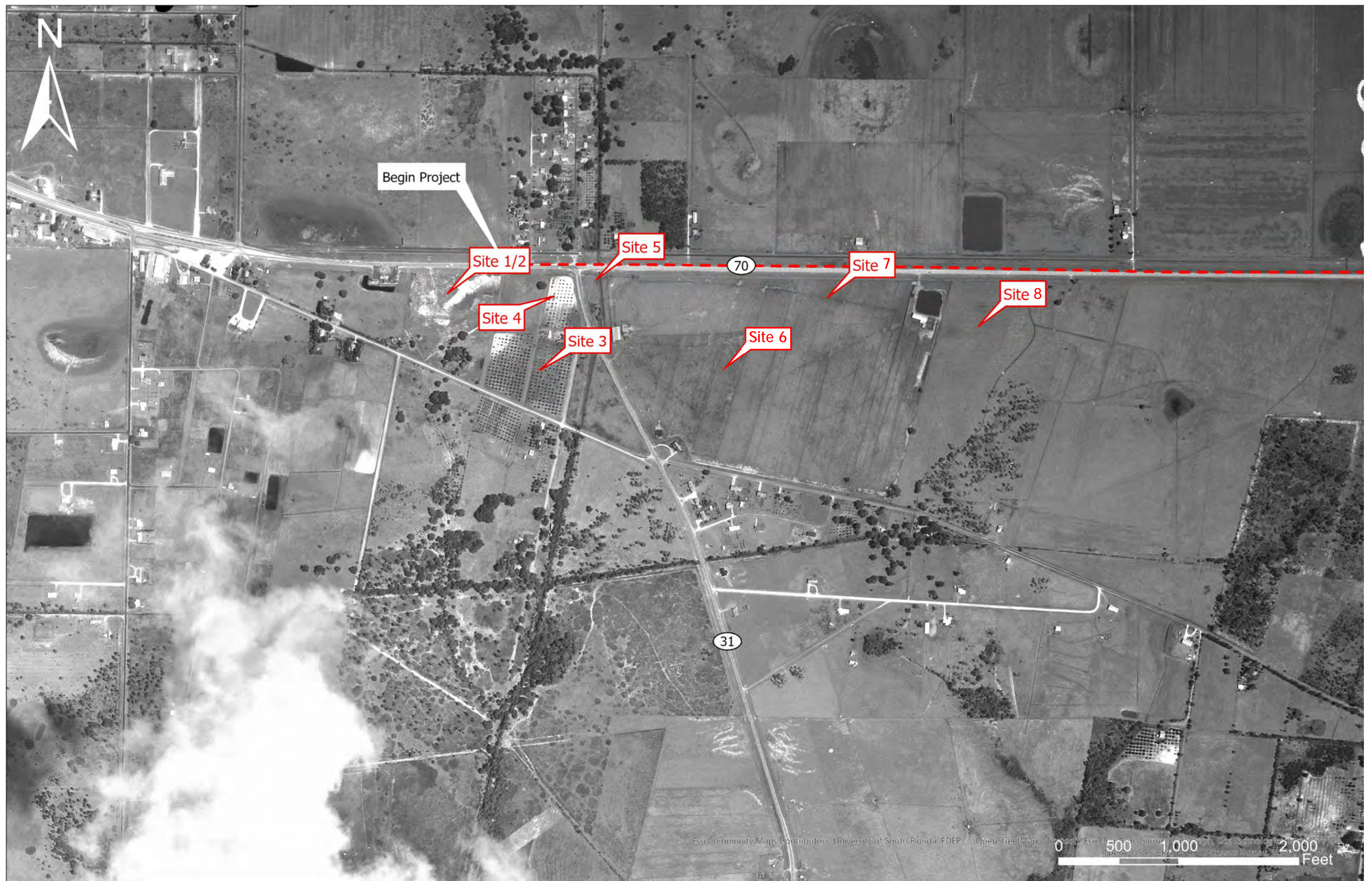


Appendix C – Future Land Use Maps



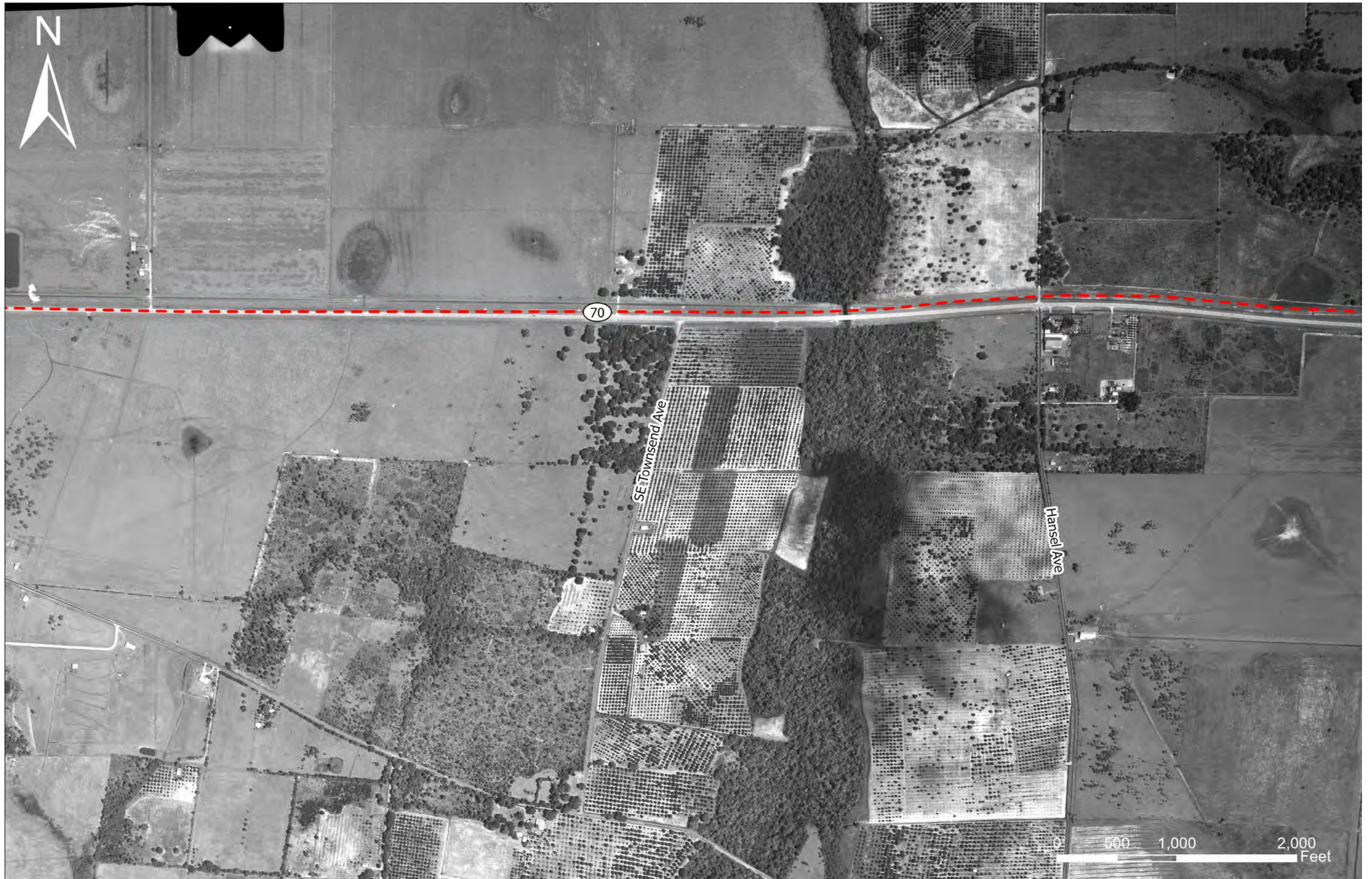
## **Appendix D – Historical Aerials**





1968 Historical Aerial





1968 Historical Aerial





1968 Historical Aerial





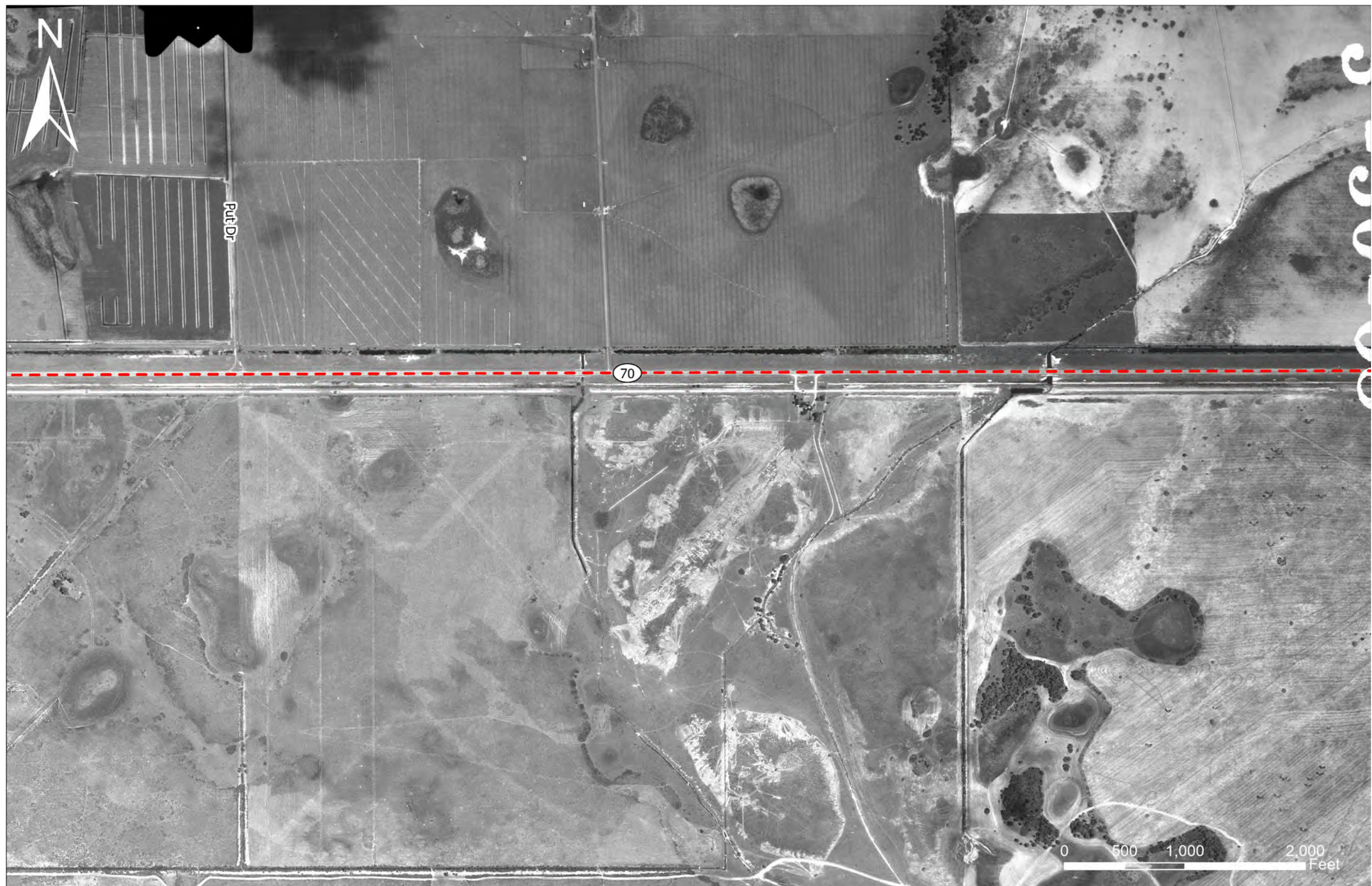
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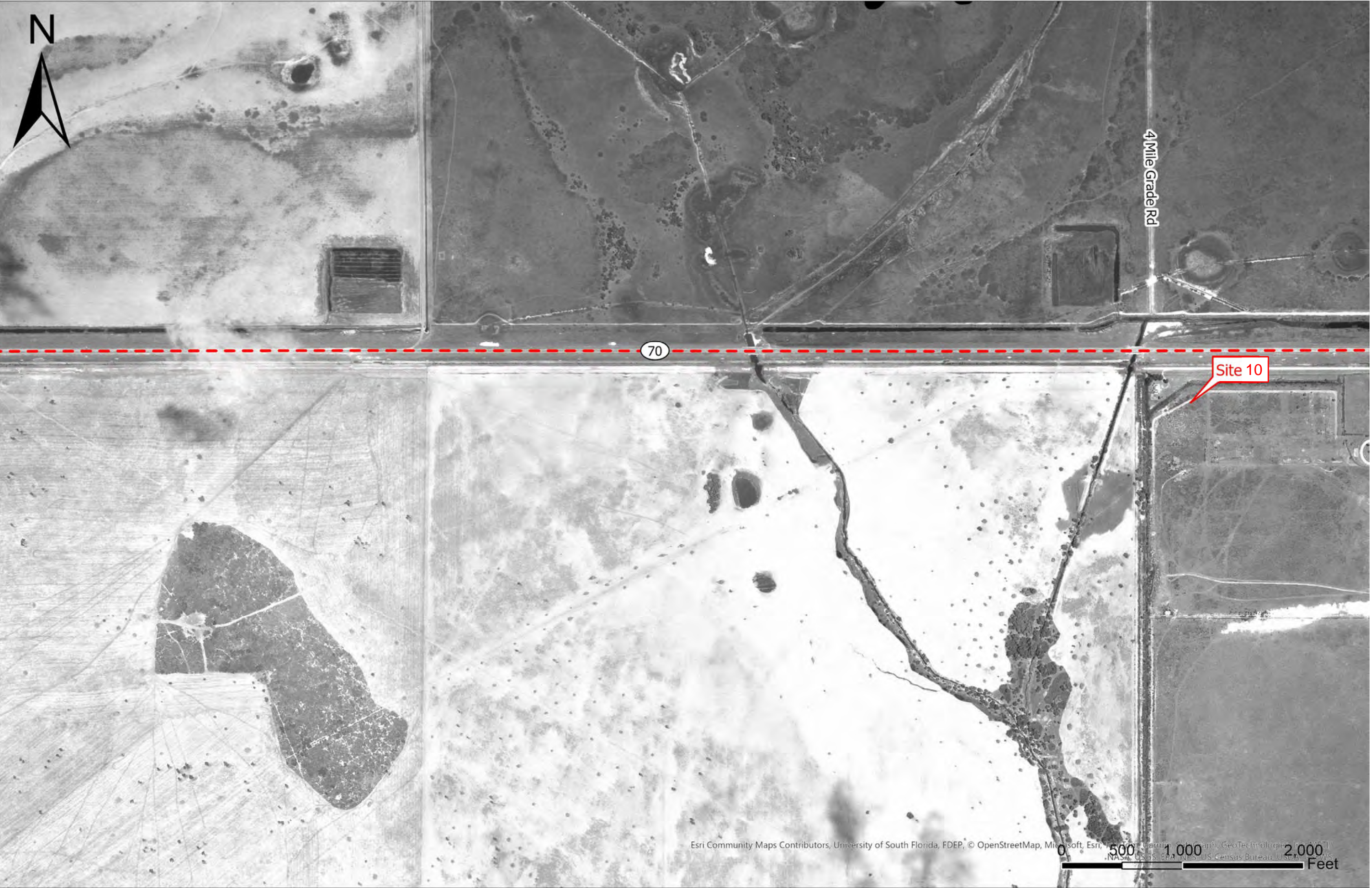
1968 Historical Aerial





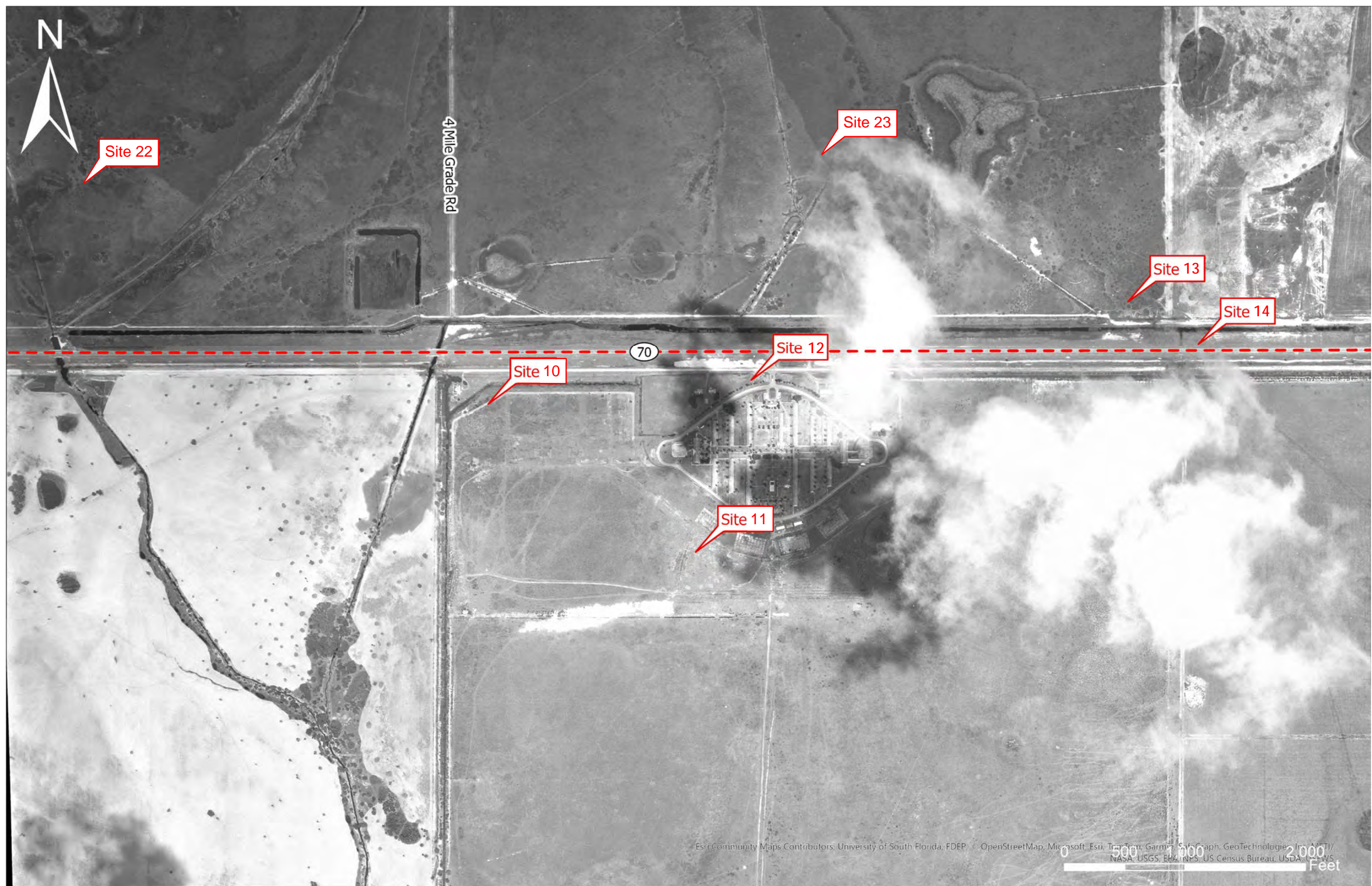
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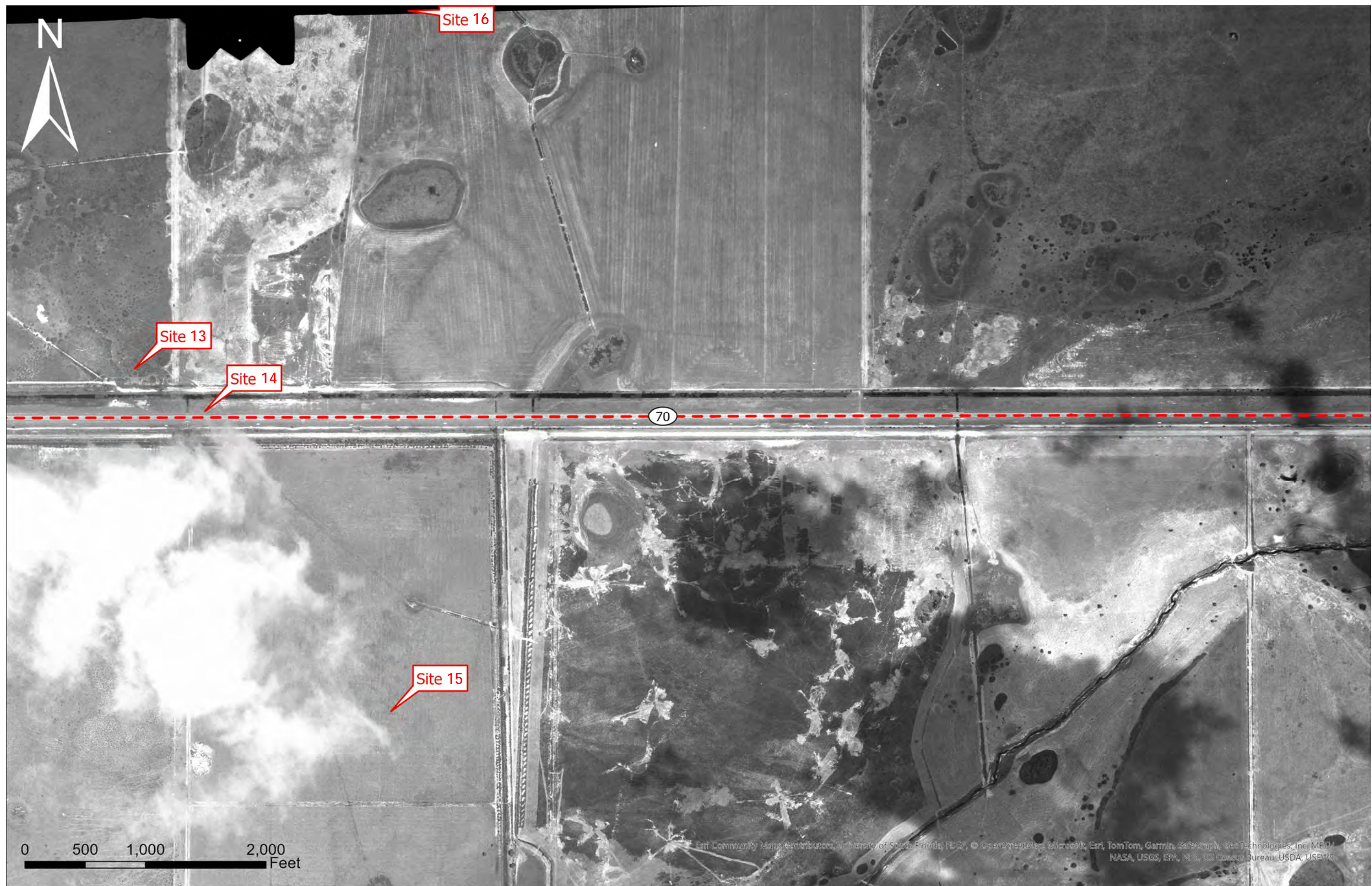
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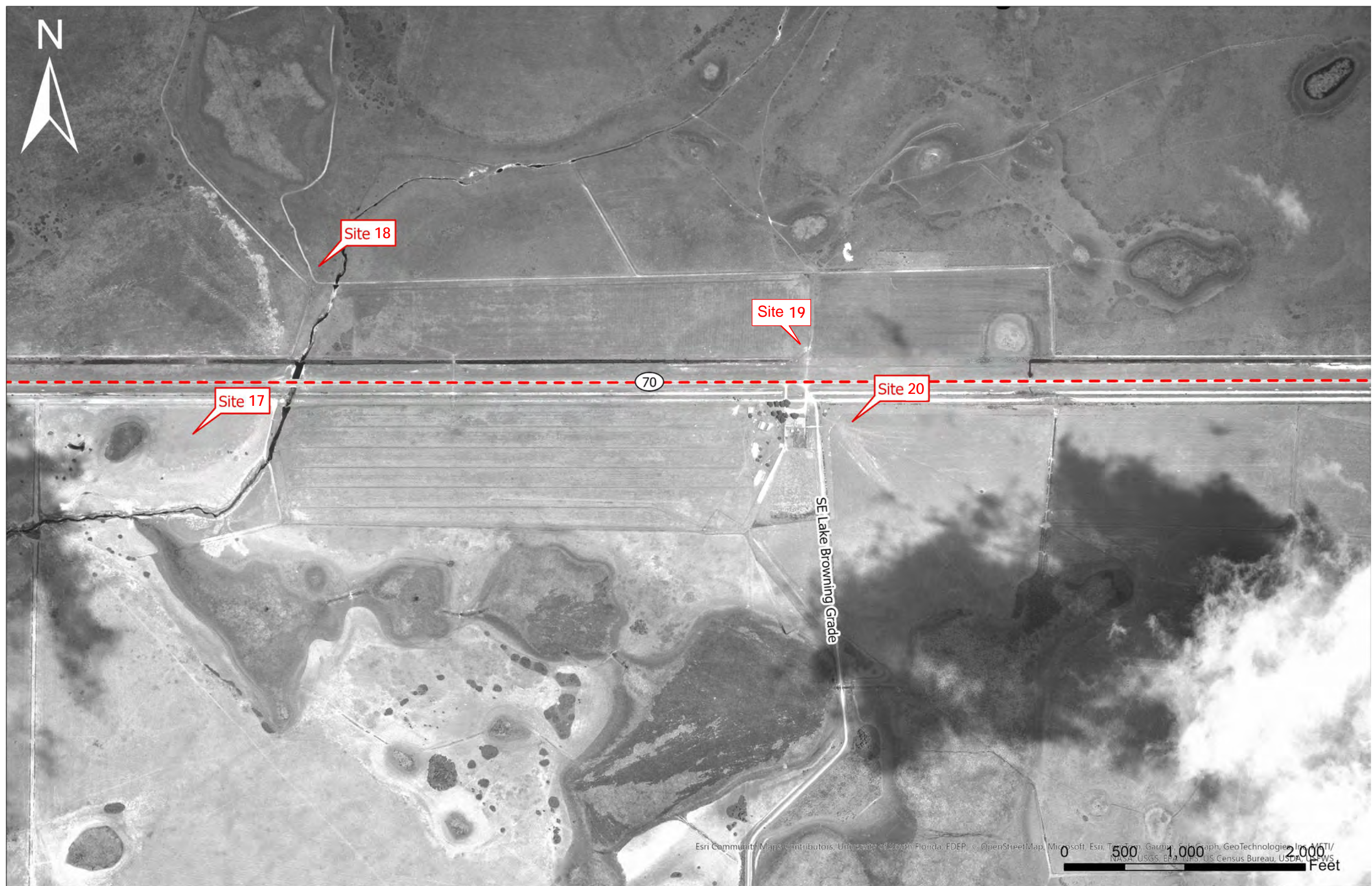
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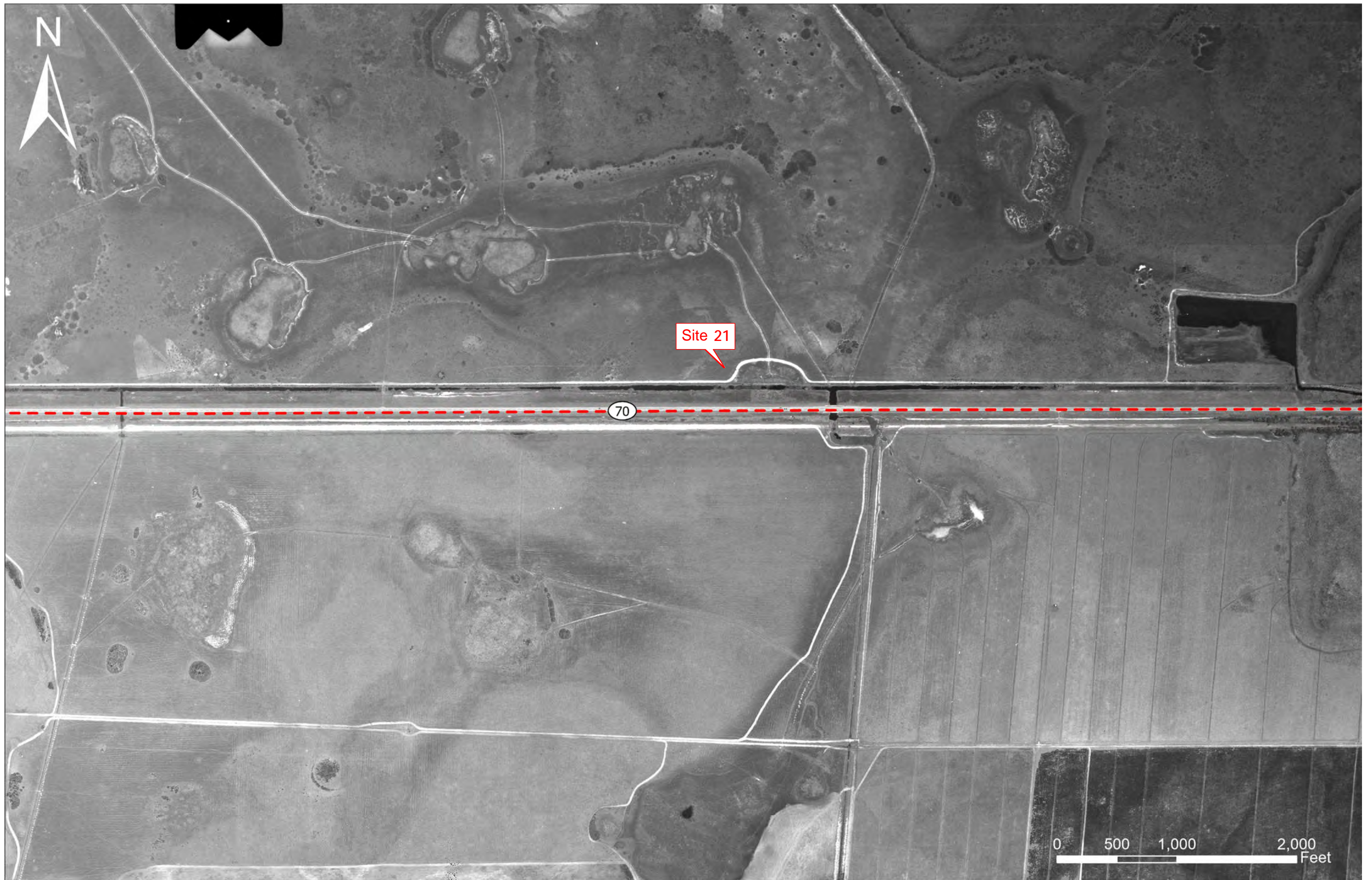
1968 Historical Aerial





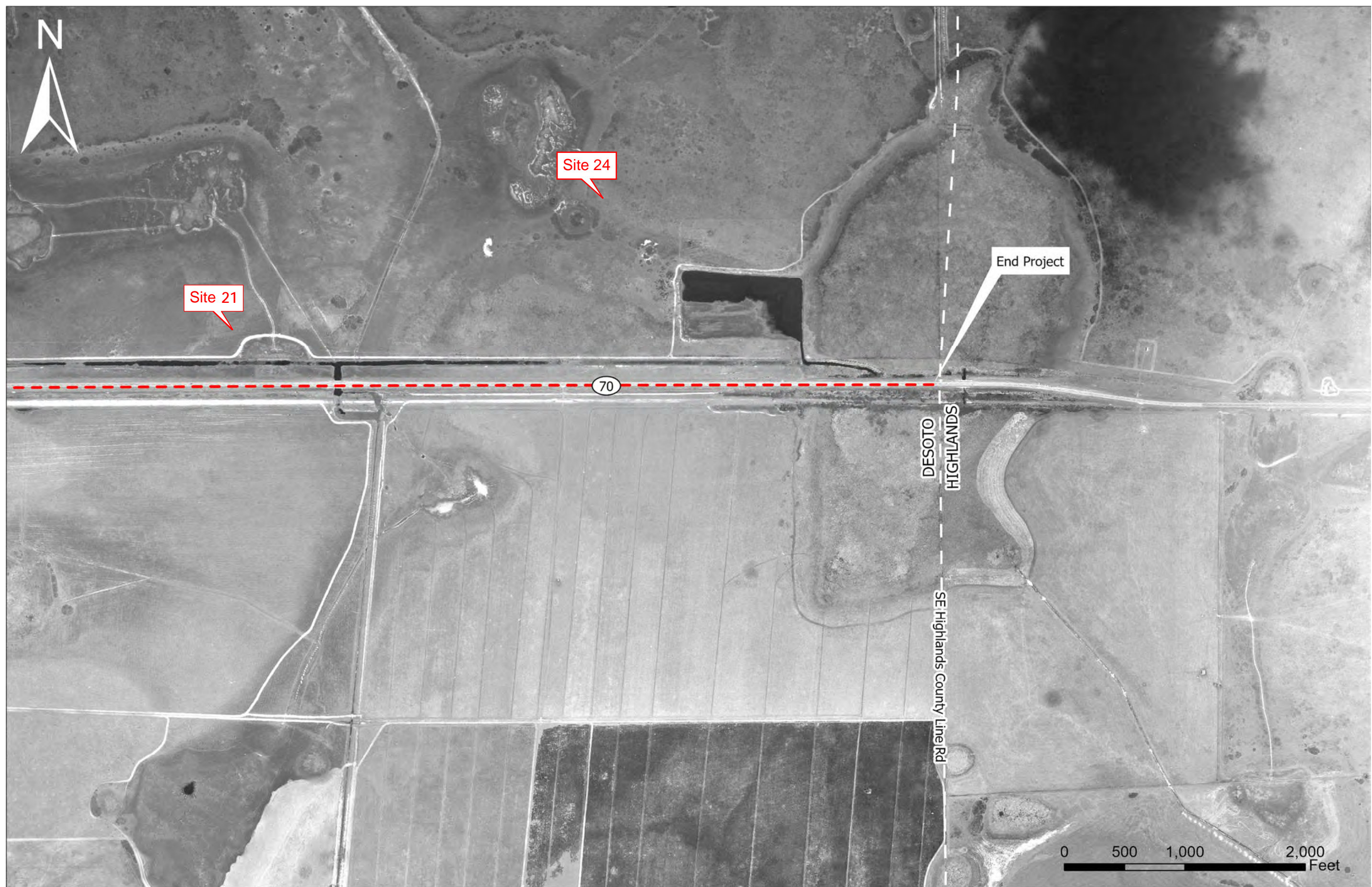
1968 Historical Aerial





1968 Historical Aerial





1968 Historical Aerial





1972 Historical Aerial





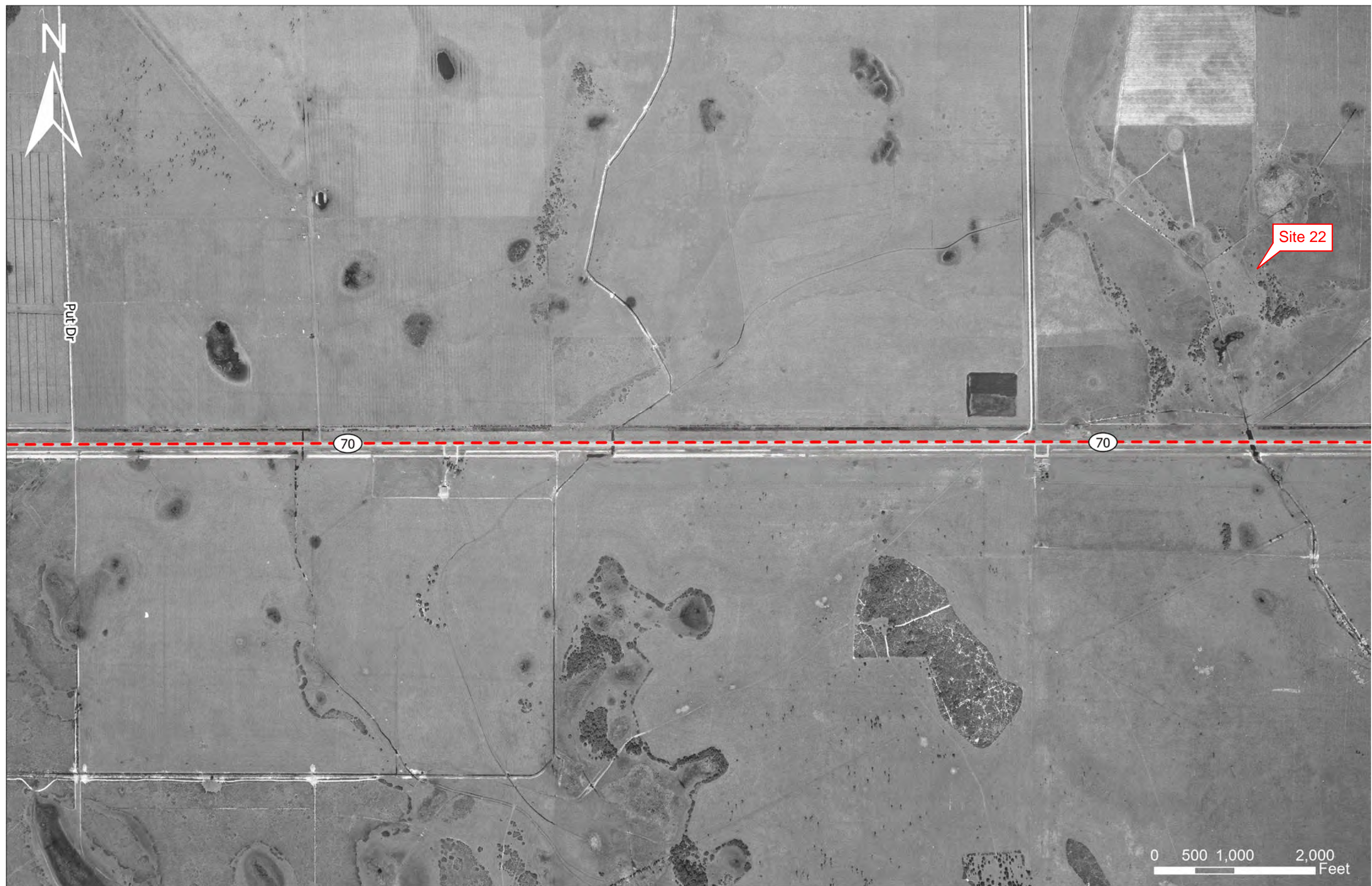
1972 Historical Aerial





1972 Historical Aerial





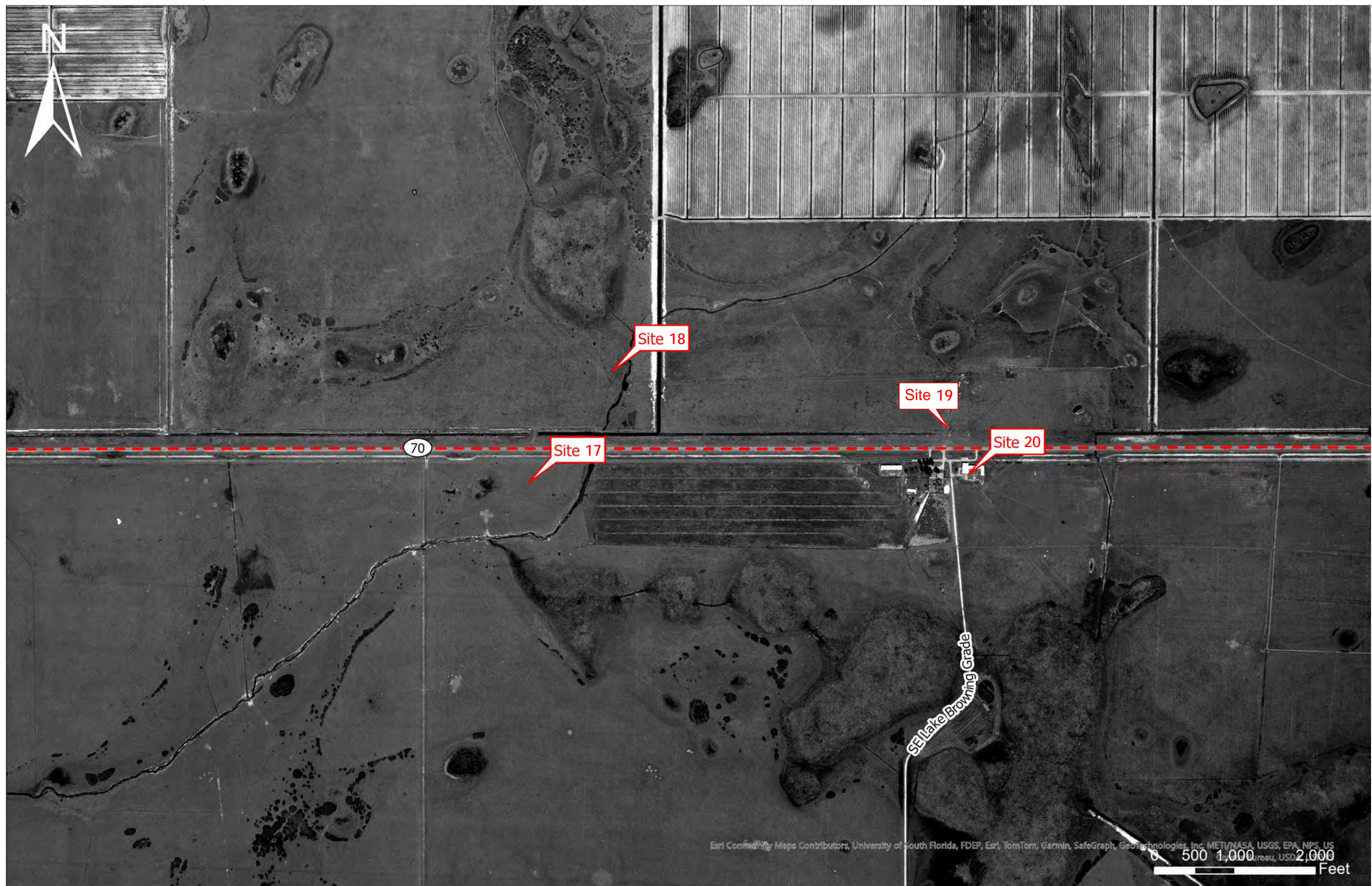
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1972 Historical Aerial





1972 Historical Aerial





1972 Historical Aerial





1985 Historical Aerial





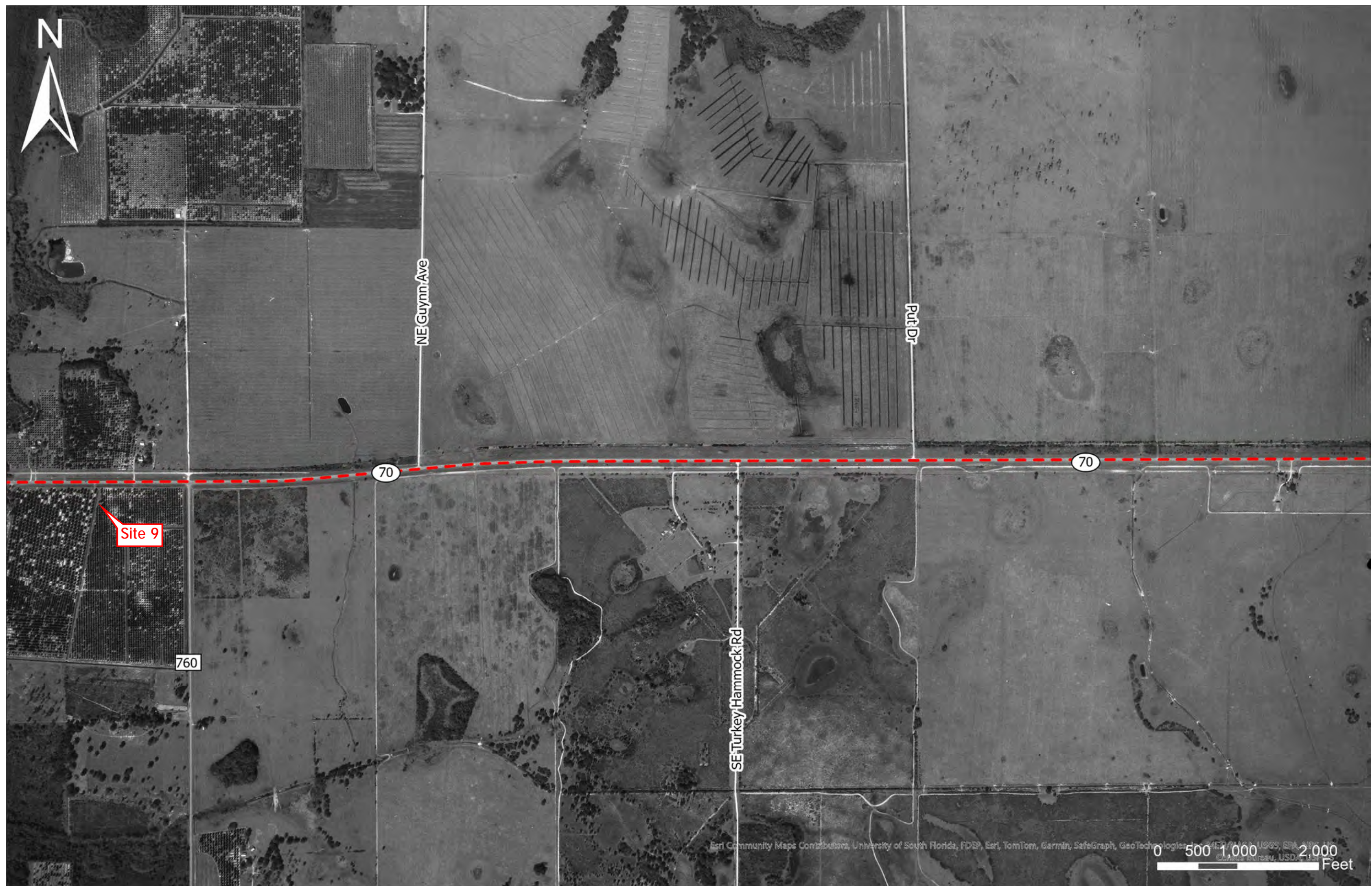
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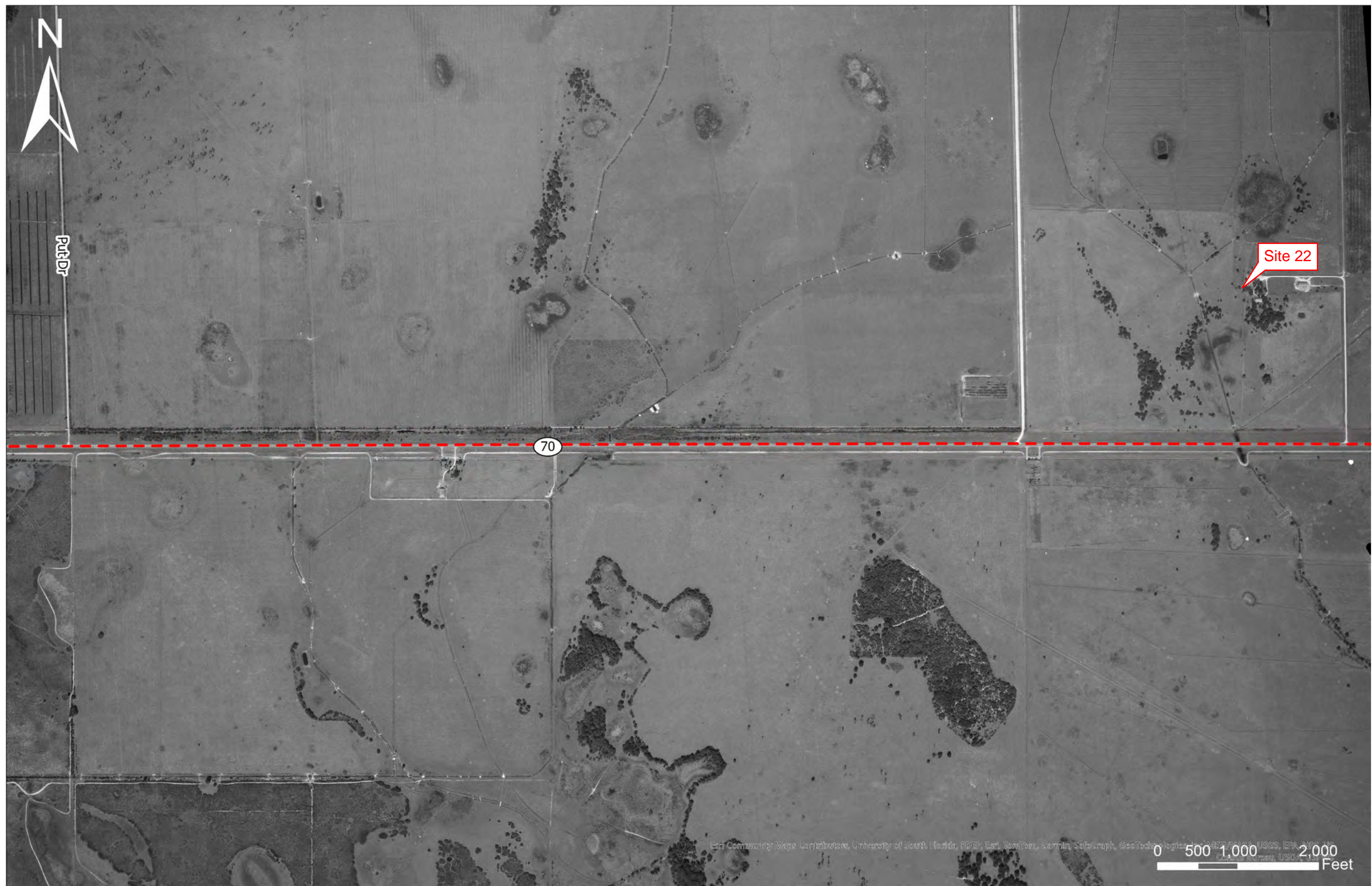
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1985 Historical Aerial



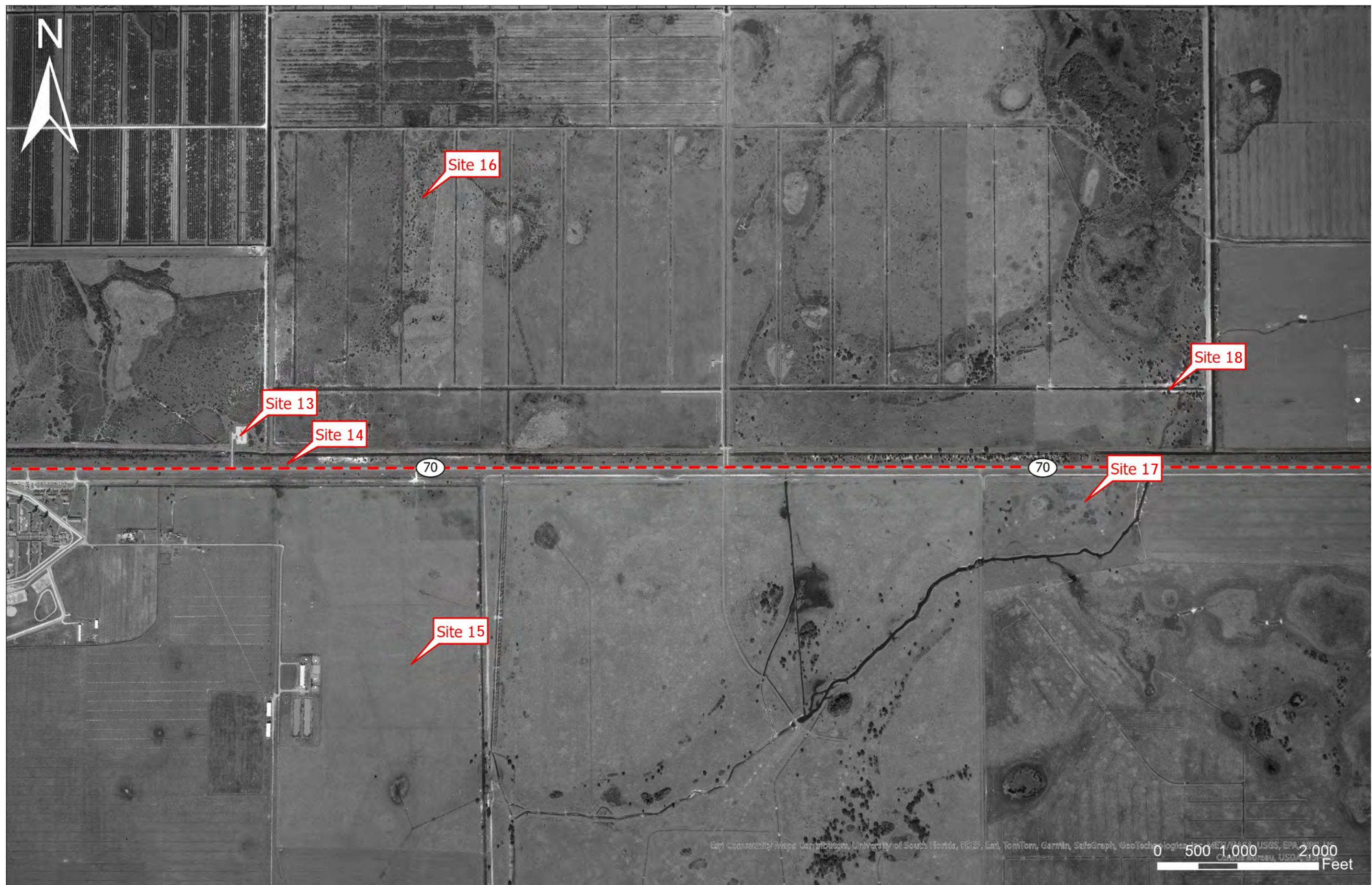


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1985 Historical Aerial





1985 Historical Aerial





1985 Historical Aerial





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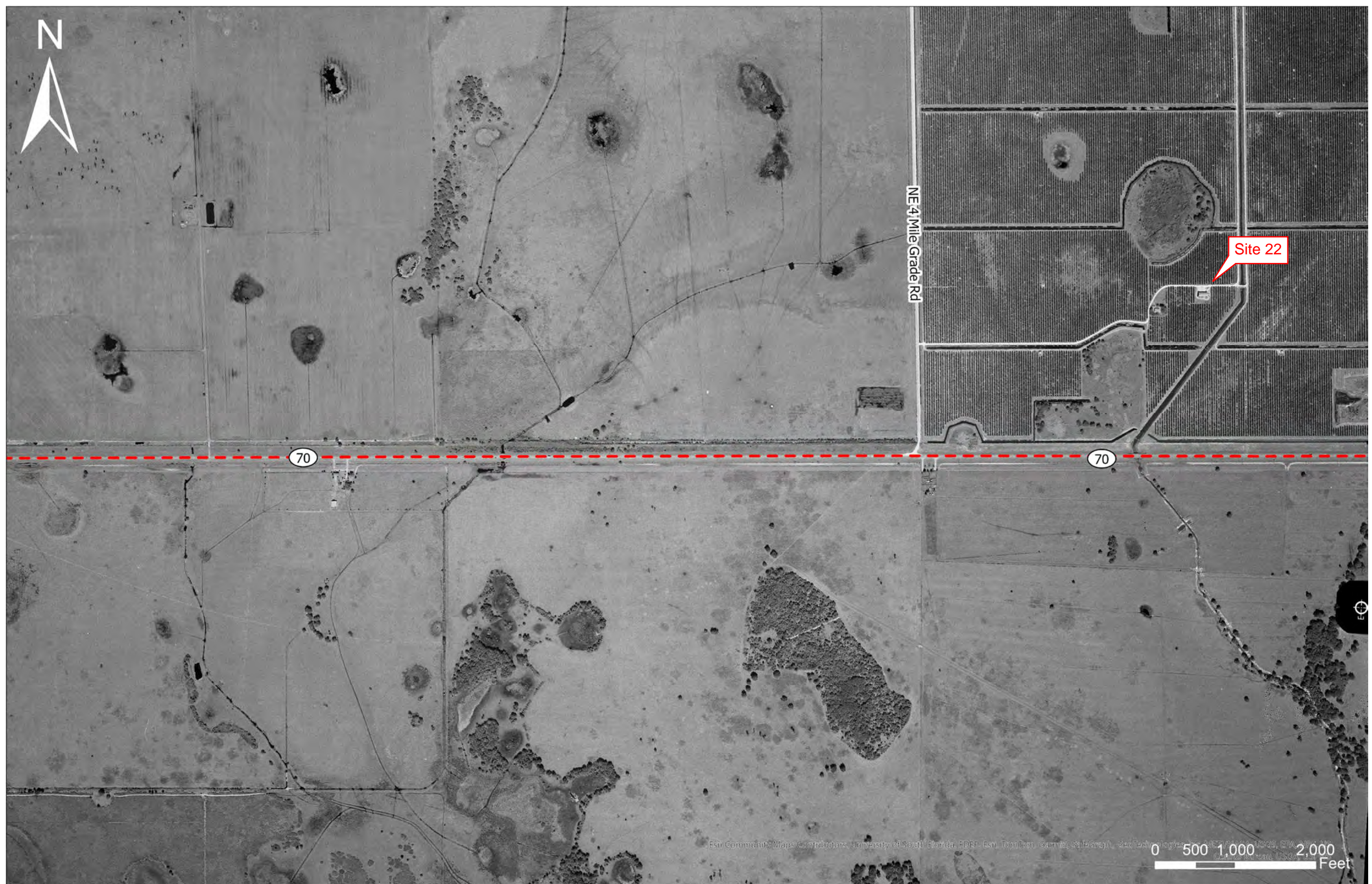
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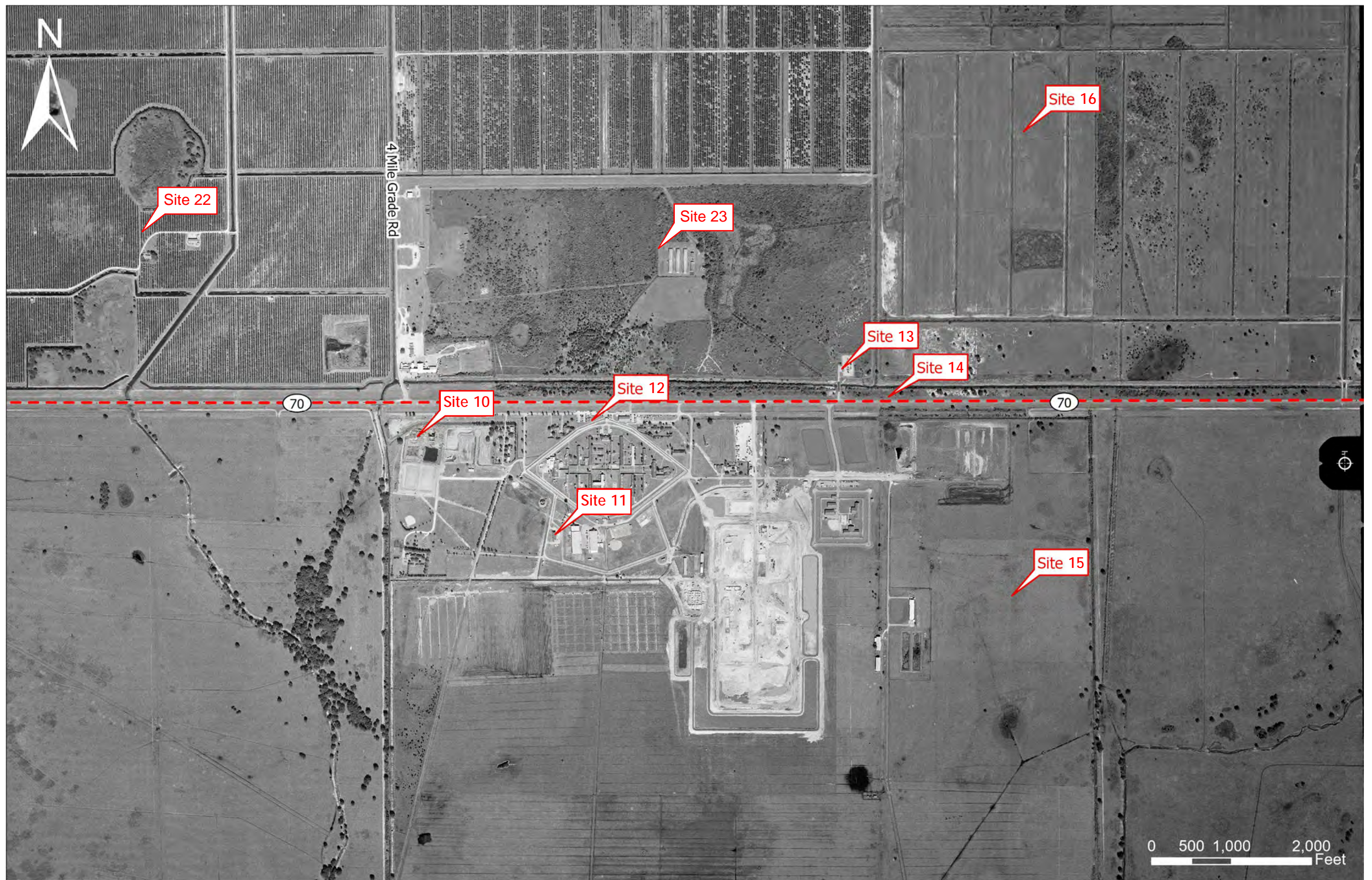
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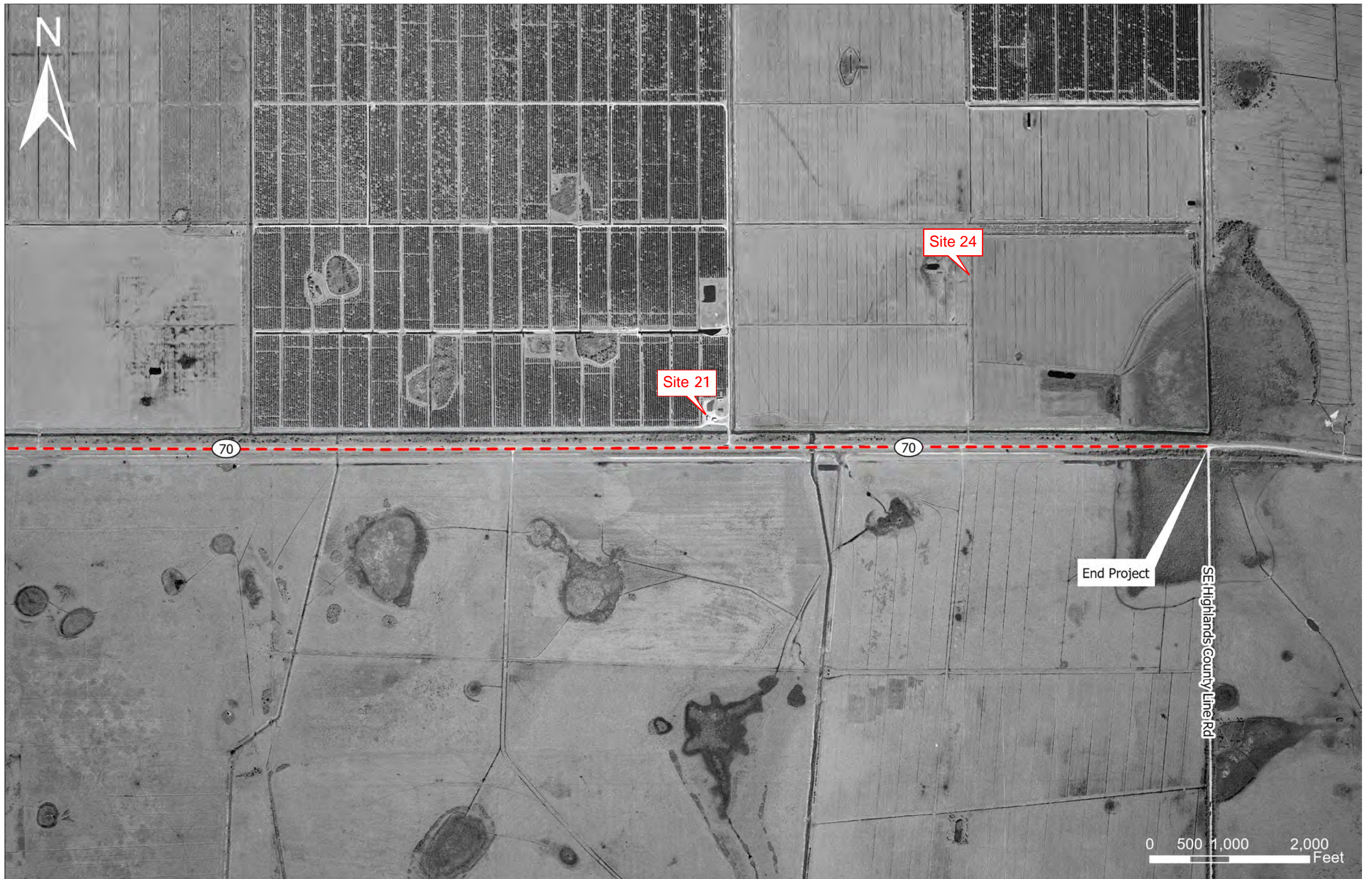
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1995 Historical Aerial





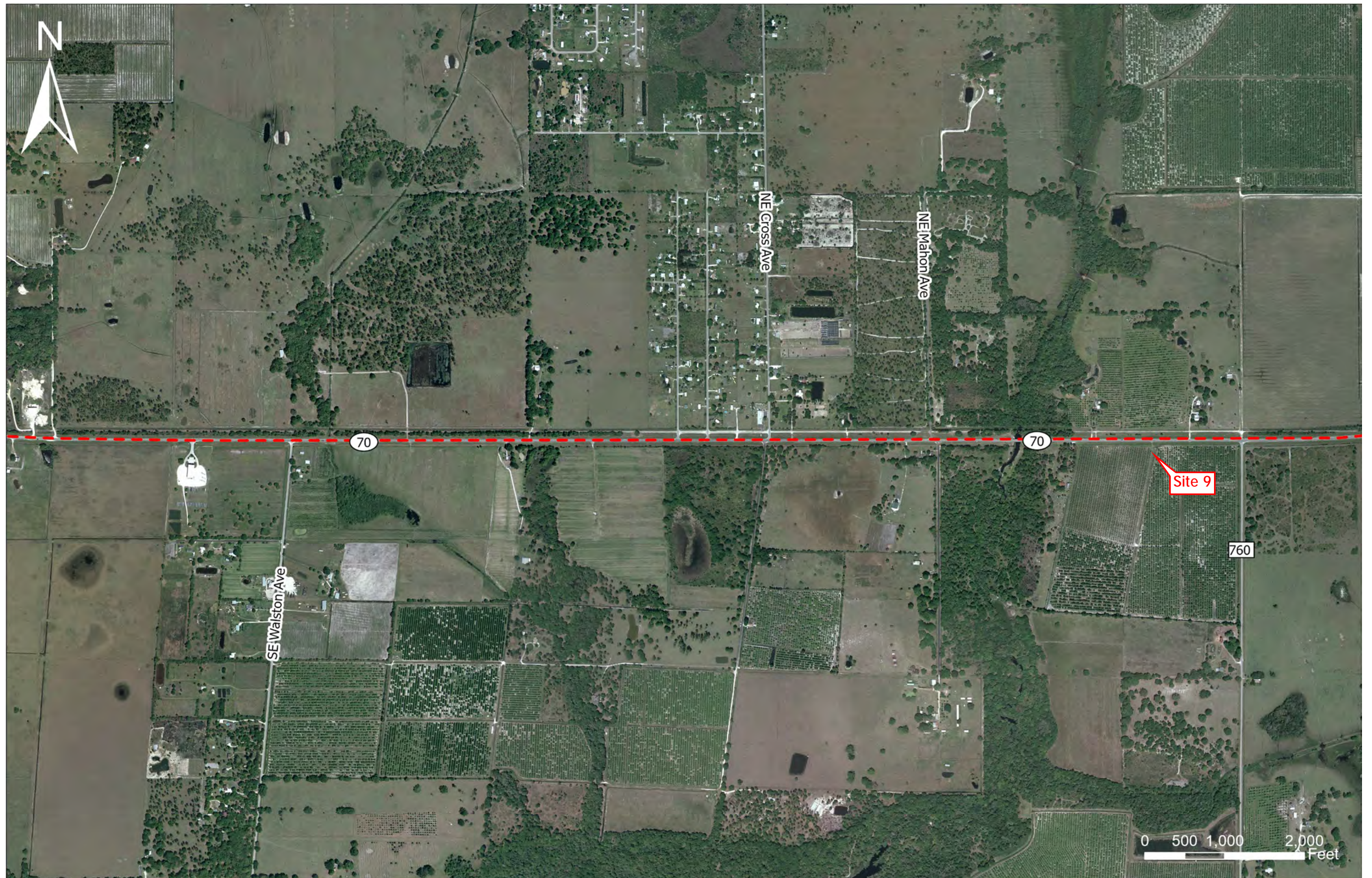
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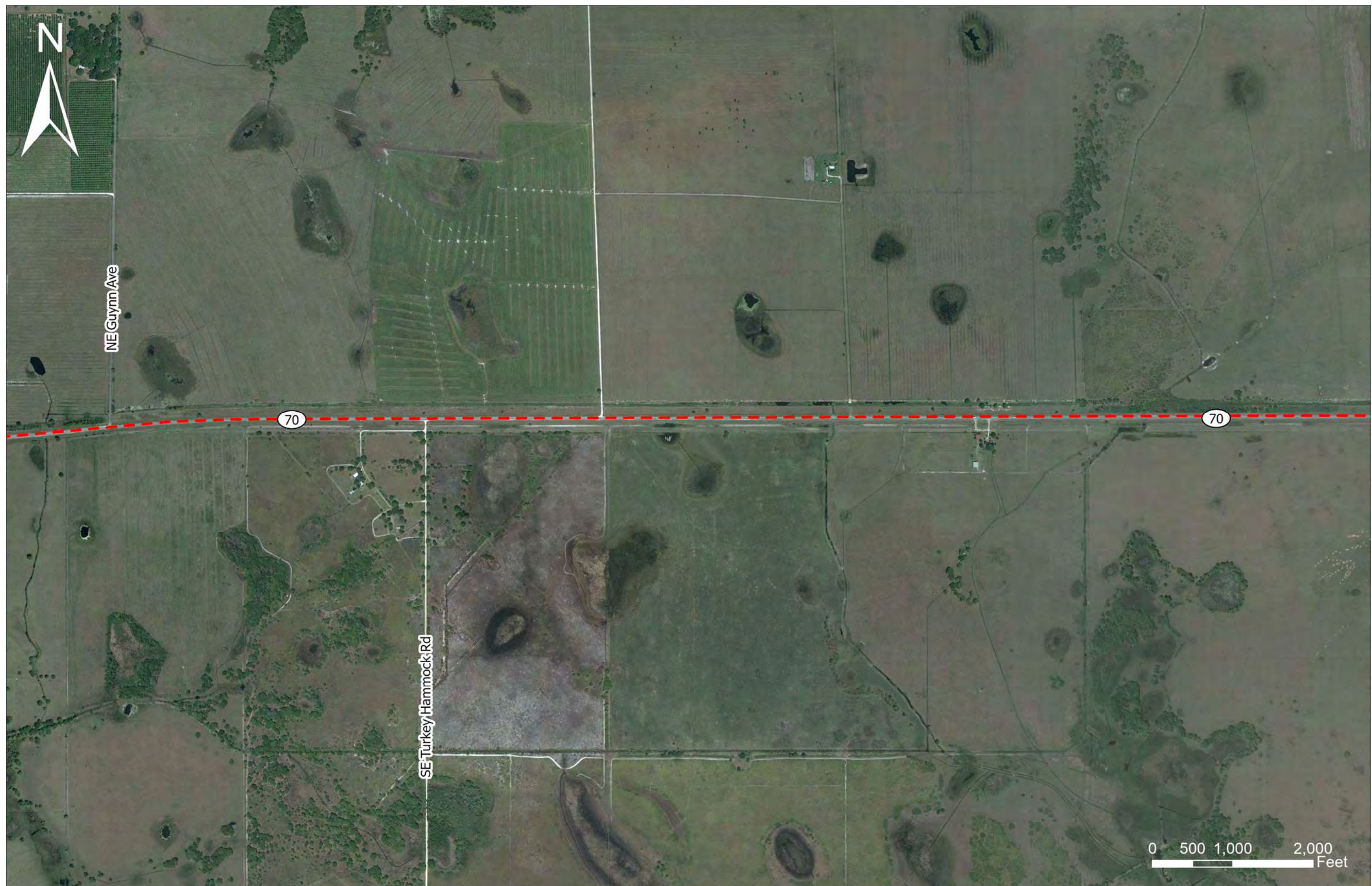
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2004 Historical Aerial





2004 Historical Aerial





2004 Historical Aerial





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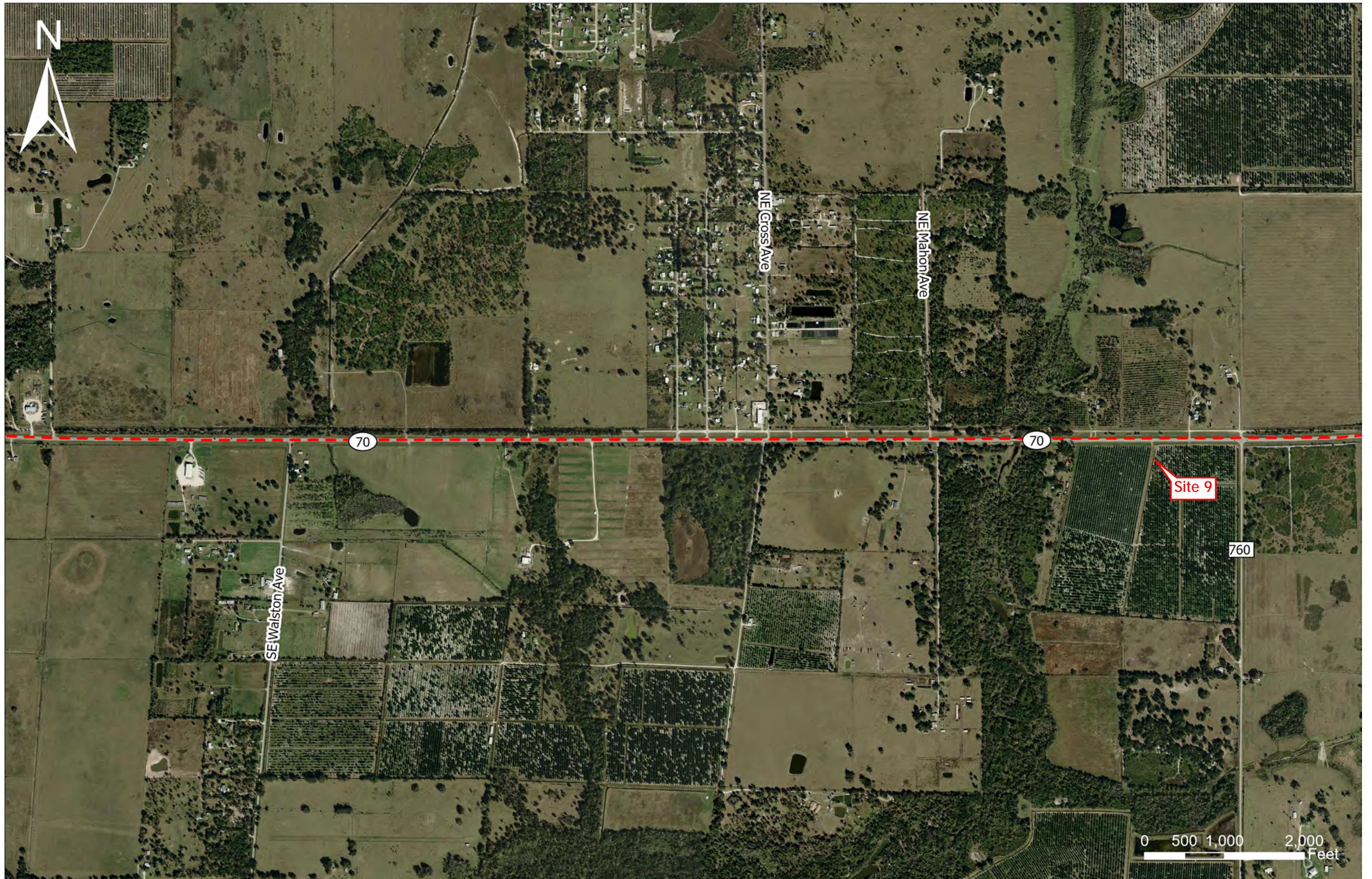
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2009 Historical Aerial





2009 Historical Aerial





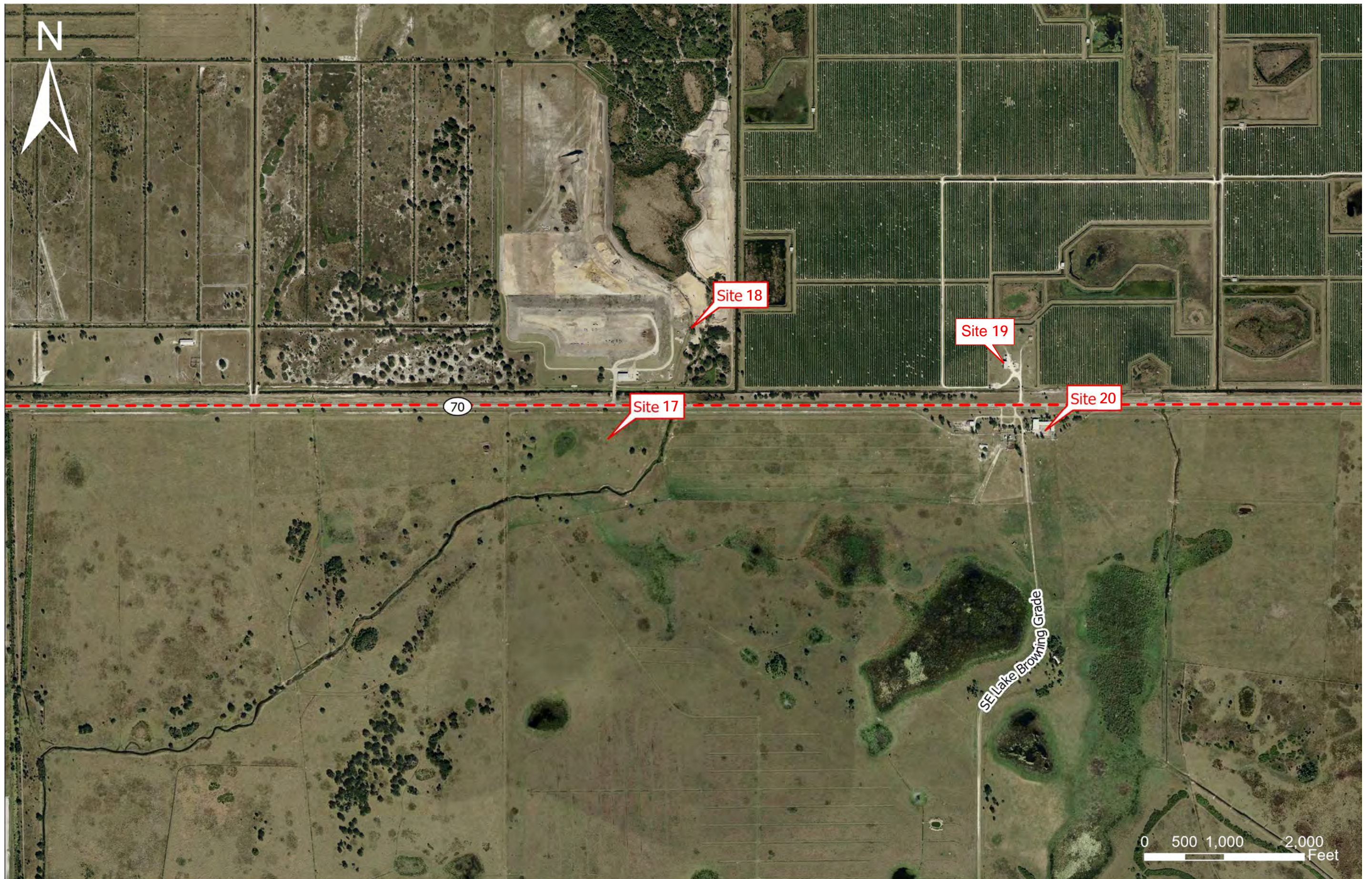
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2009 Historical Aerial





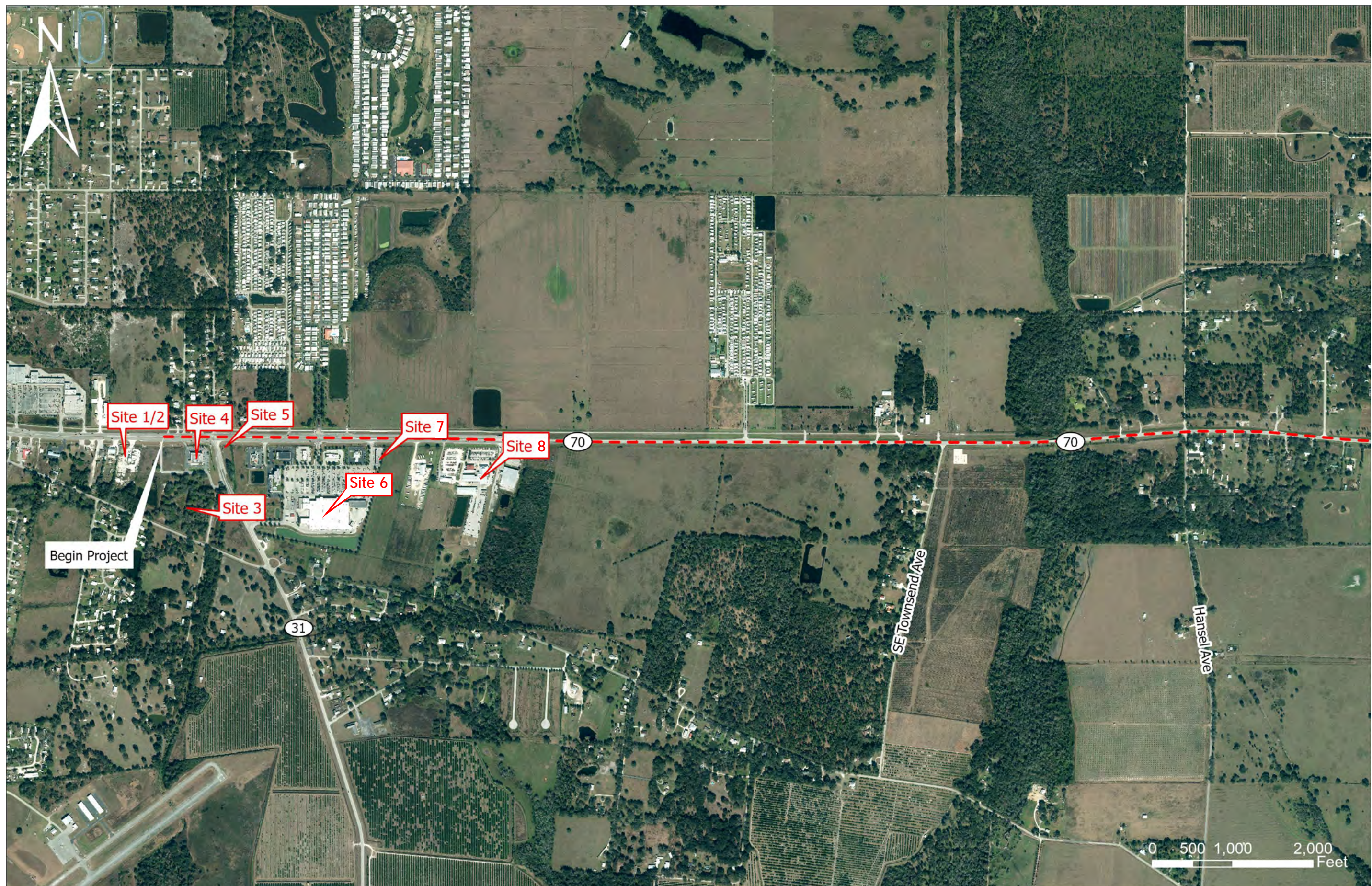
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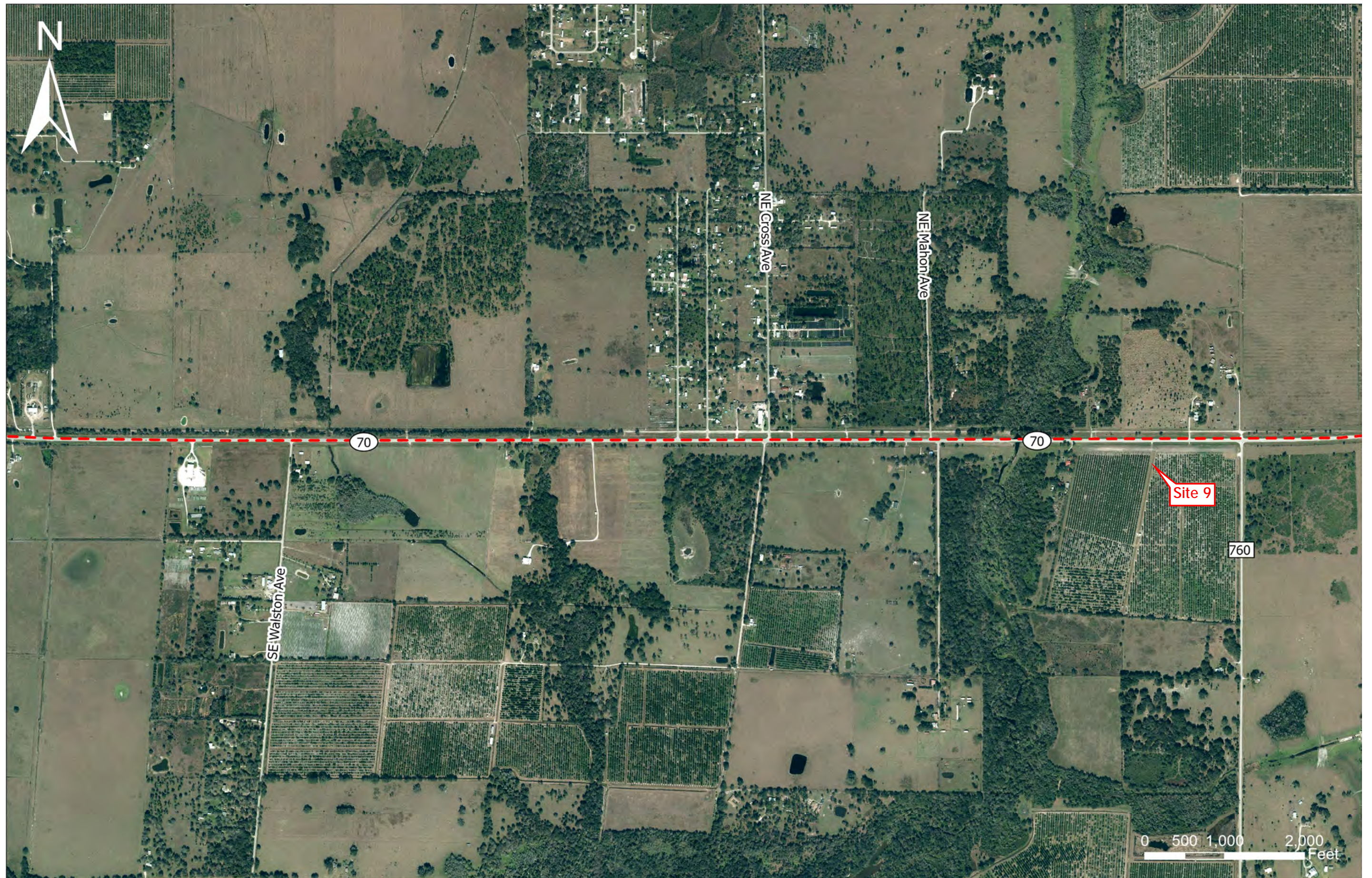
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2014 Historical Aerial





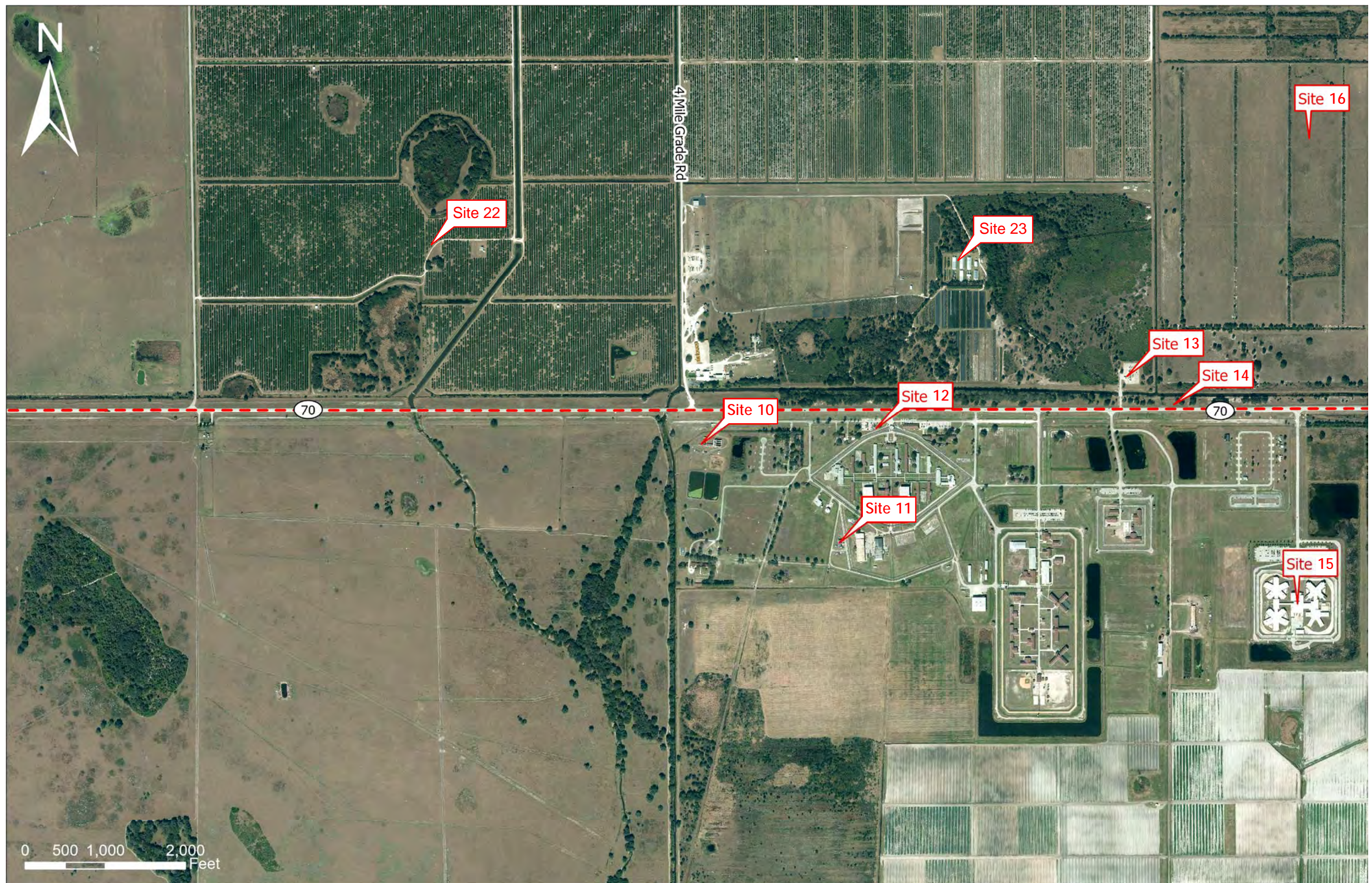
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2014 Historical Aerial





2014 Historical Aerial





2014 Historical Aerial





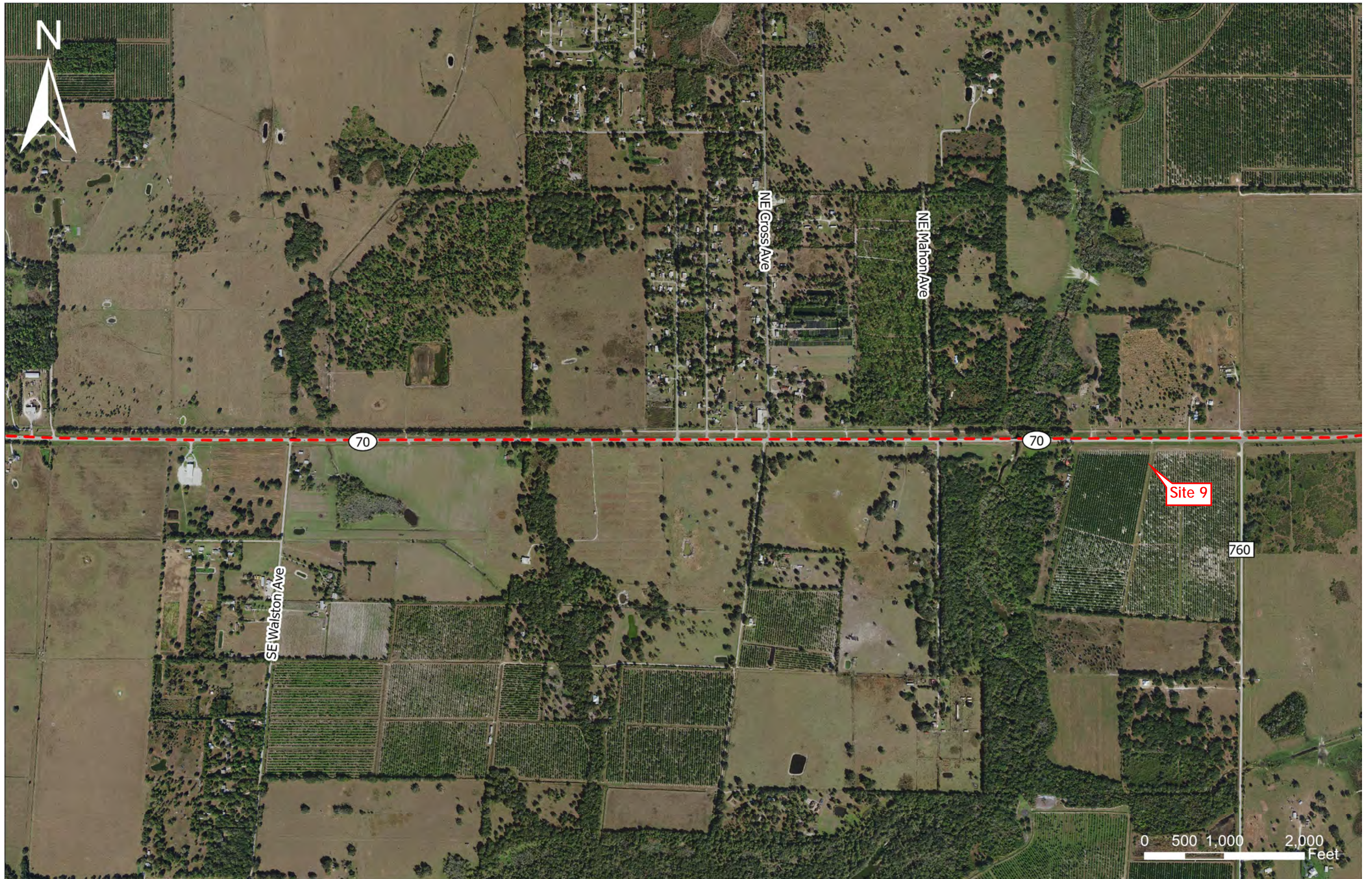
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2017 Historical Aerial





2017 Historical Aerial





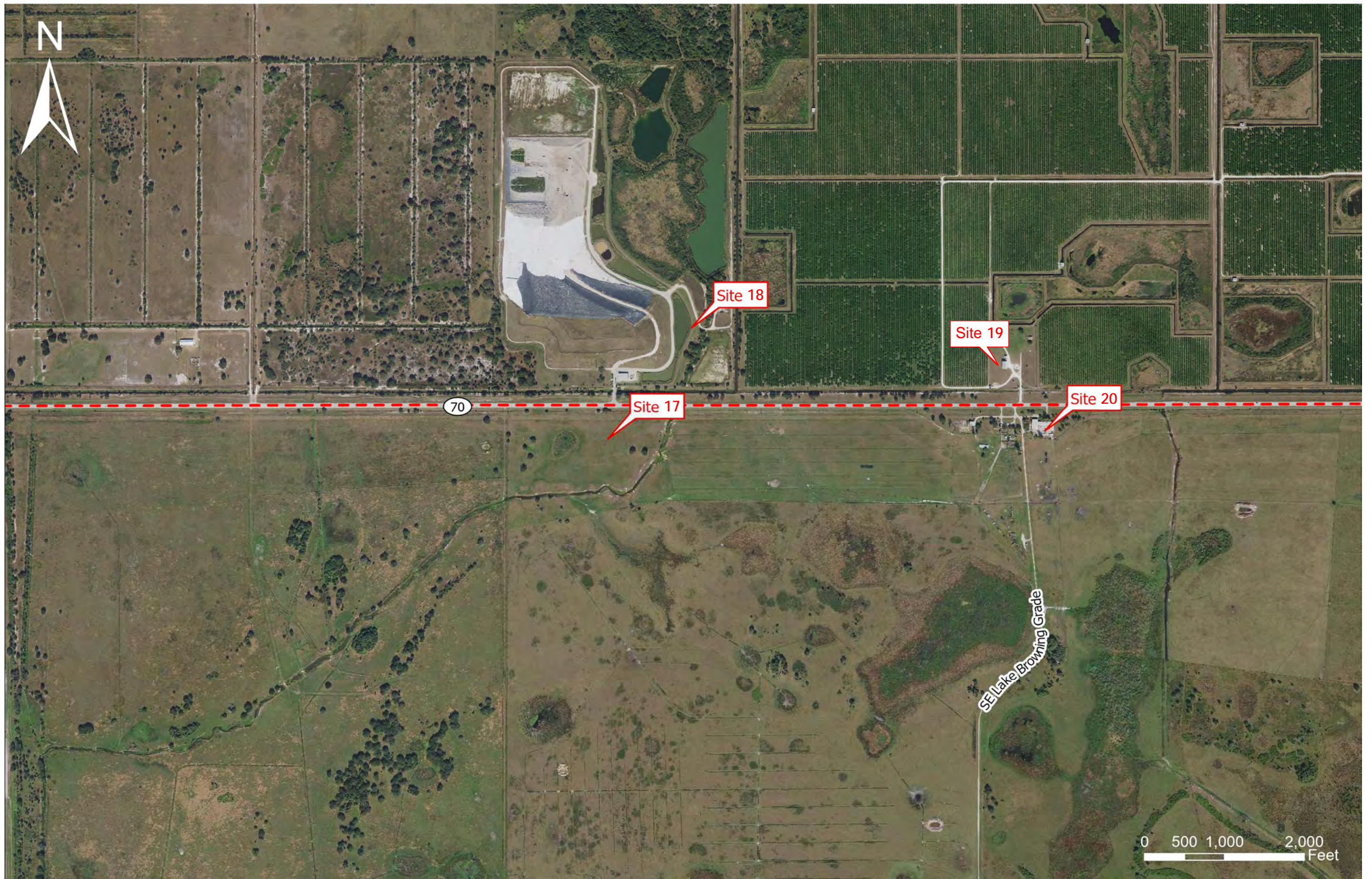
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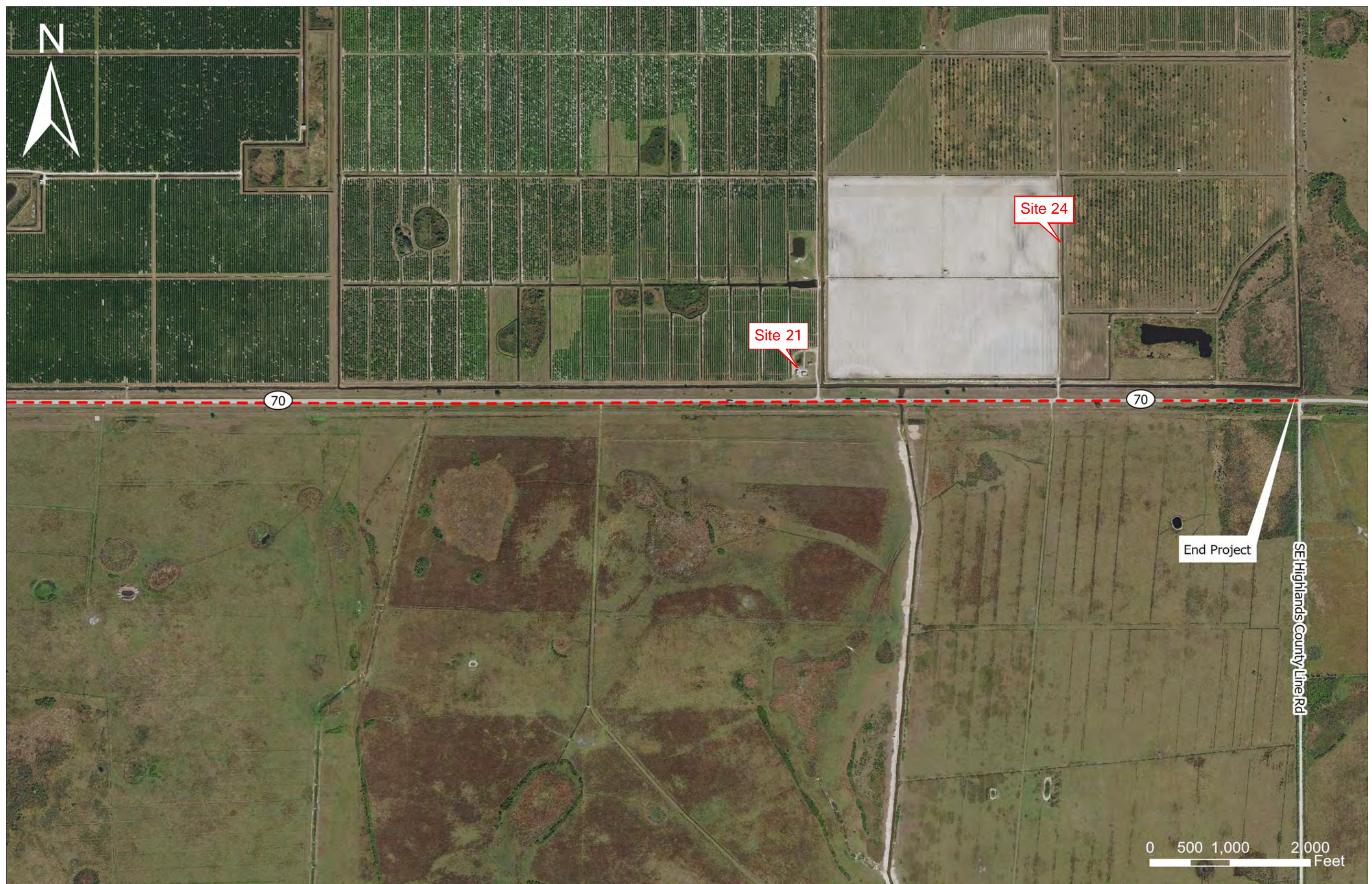
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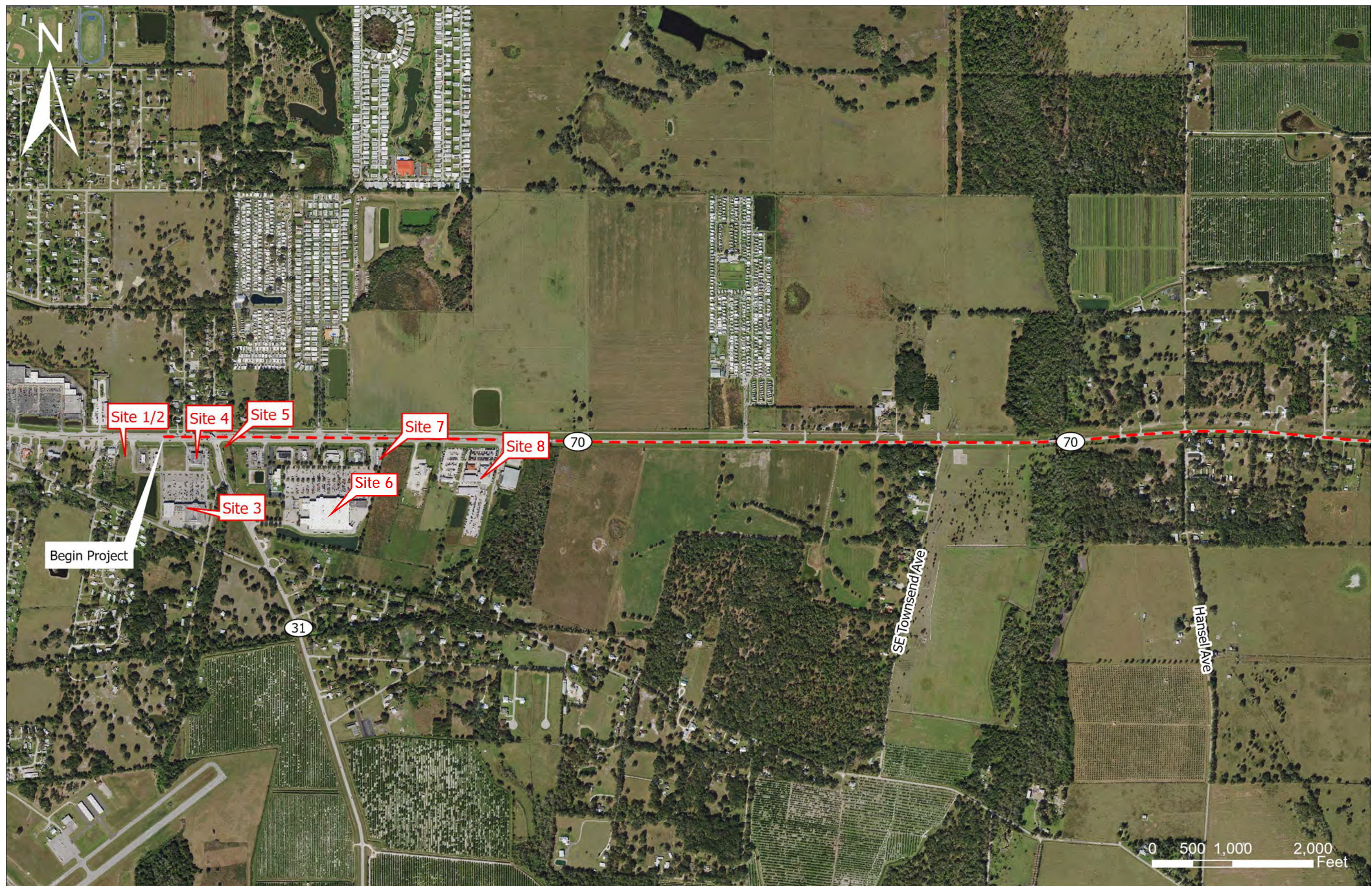
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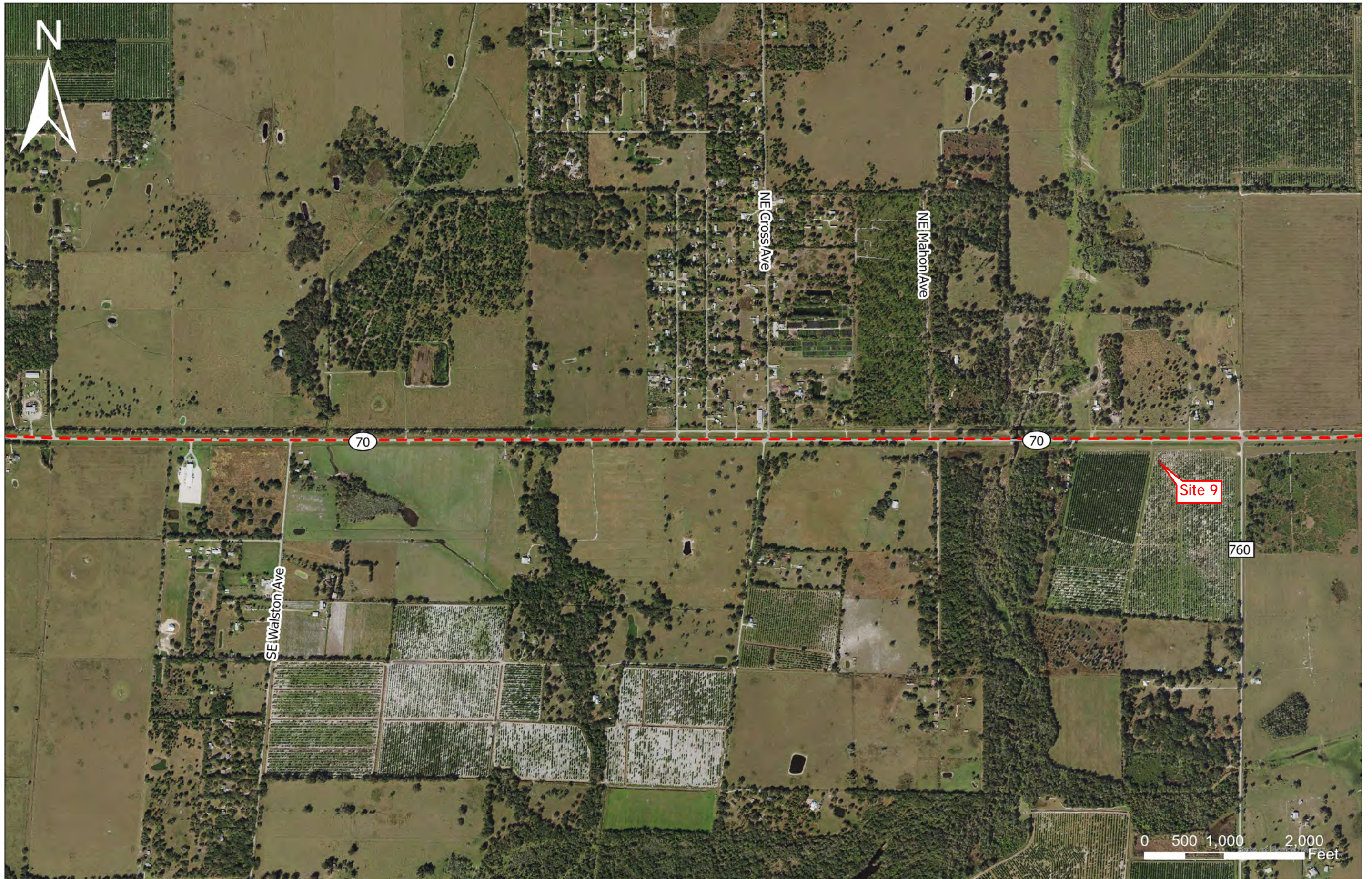
2017 Historical Aerial





2020 Historical Aerial





2020 Historical Aerial





2020 Historical Aerial





2020 Historical Aerial





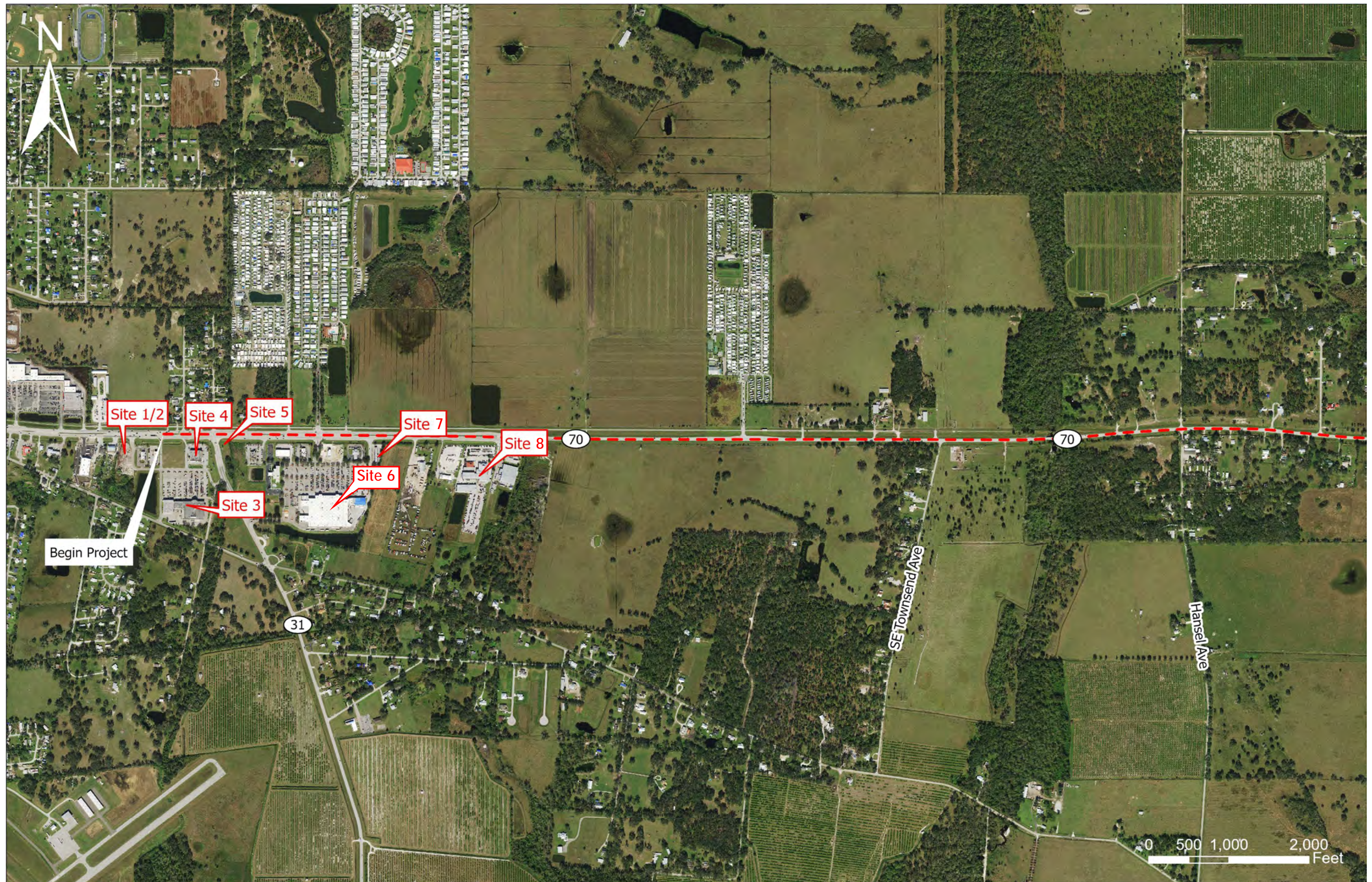
2020 Historical Aerial





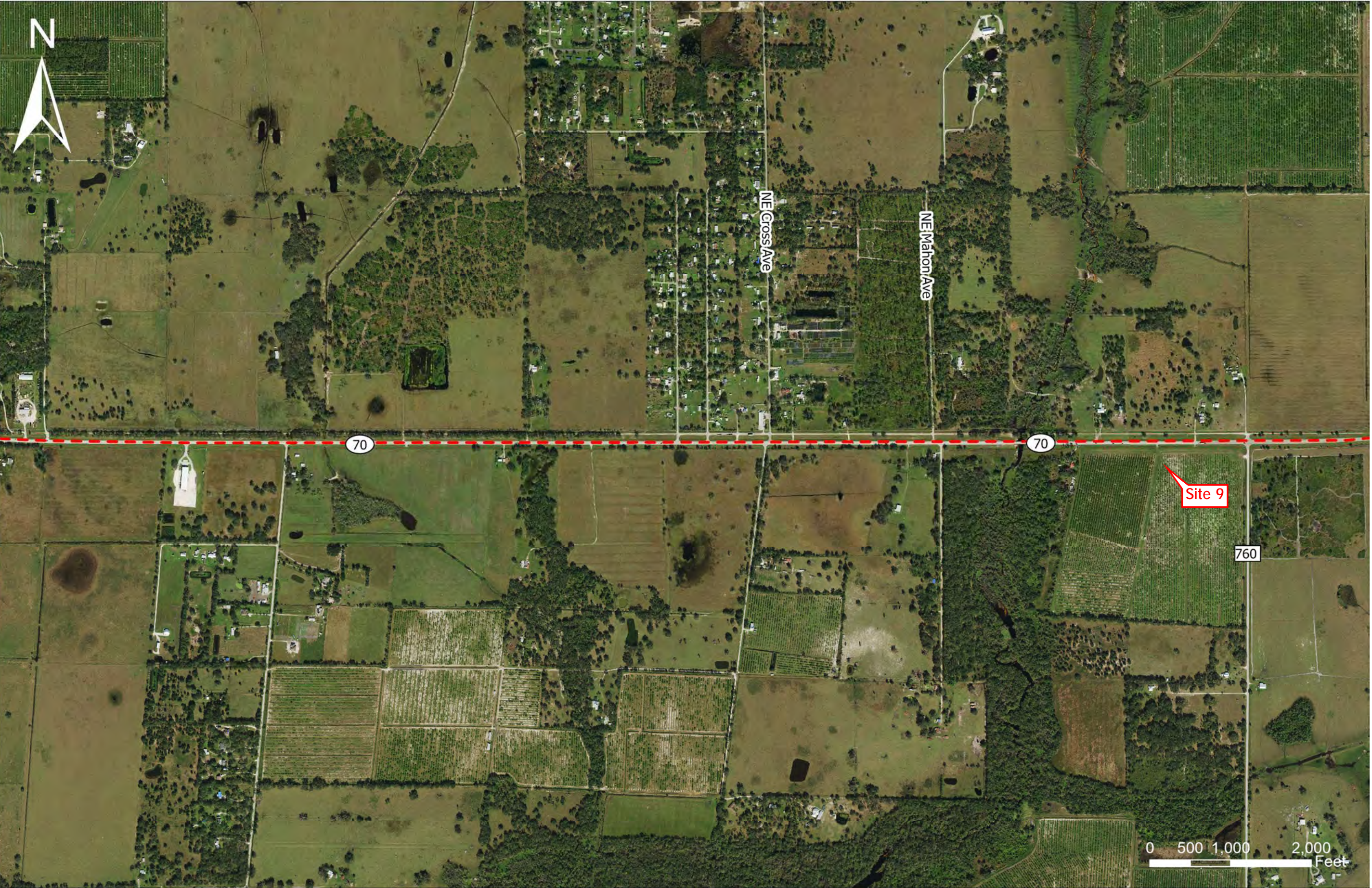
2020 Historical Aerial





2023 Historical Aerial





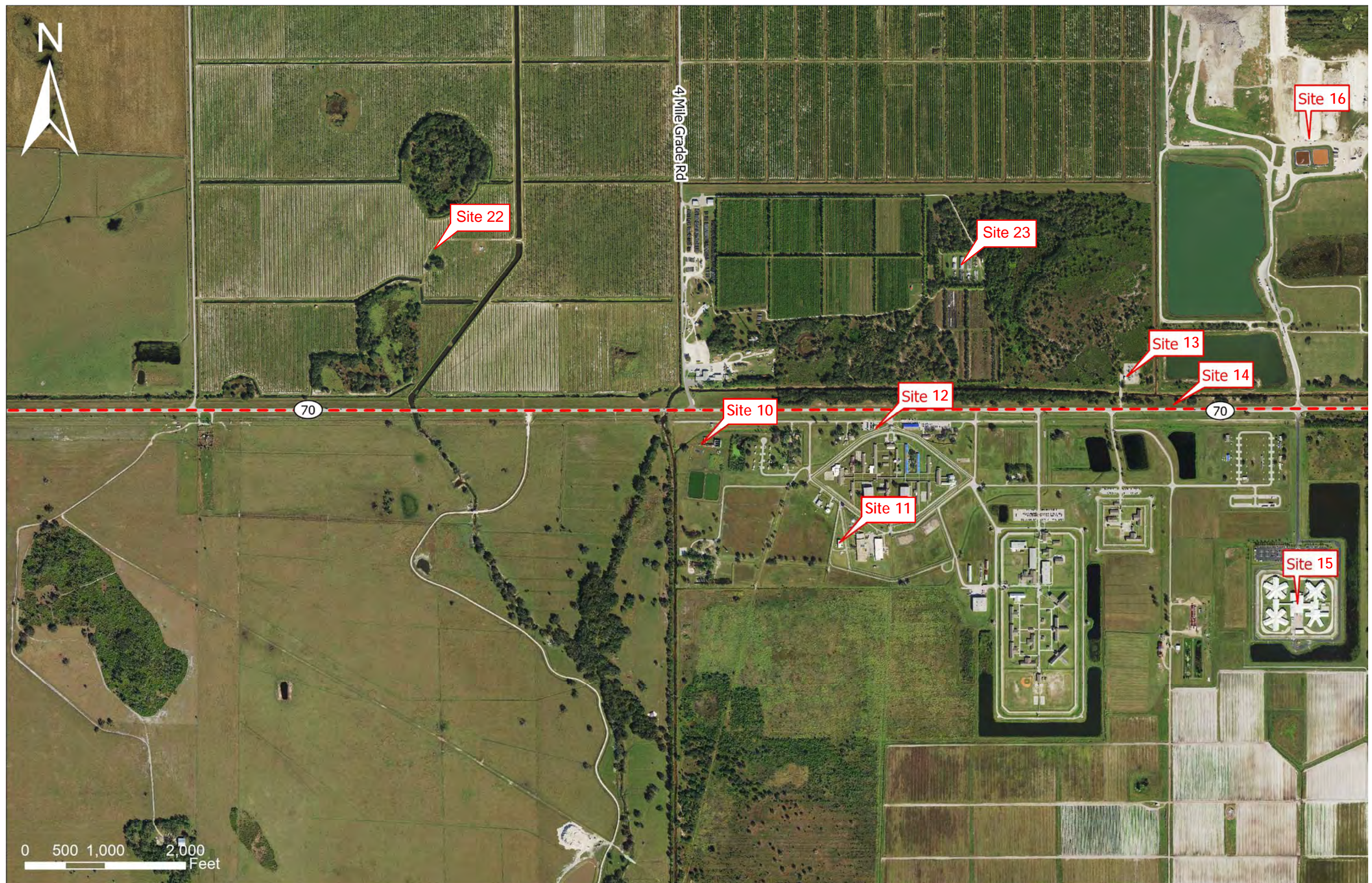
2023 Historical Aerial





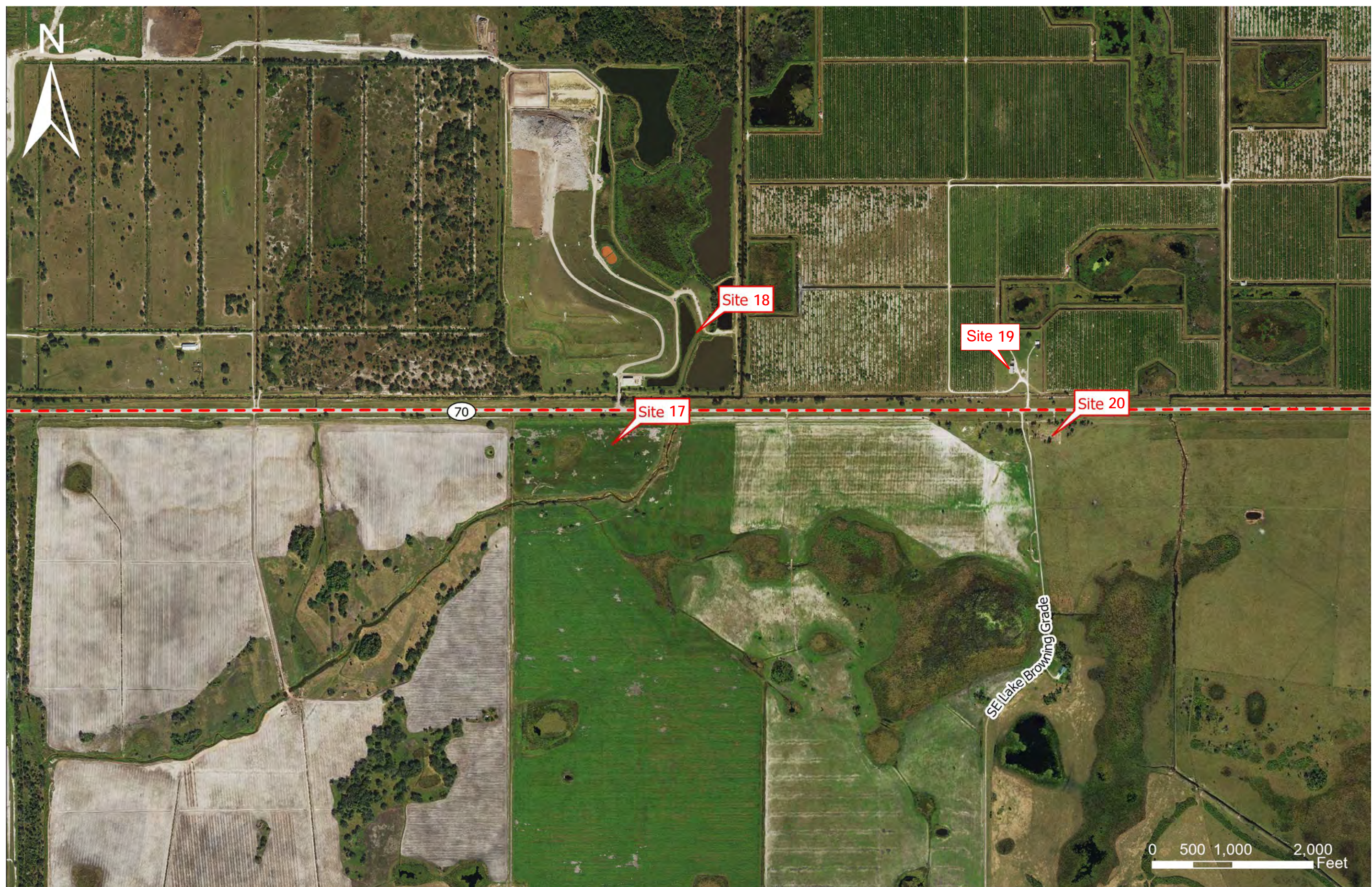
2023 Historical Aerial





2023 Historical Aerial





2023 Historical Aerial



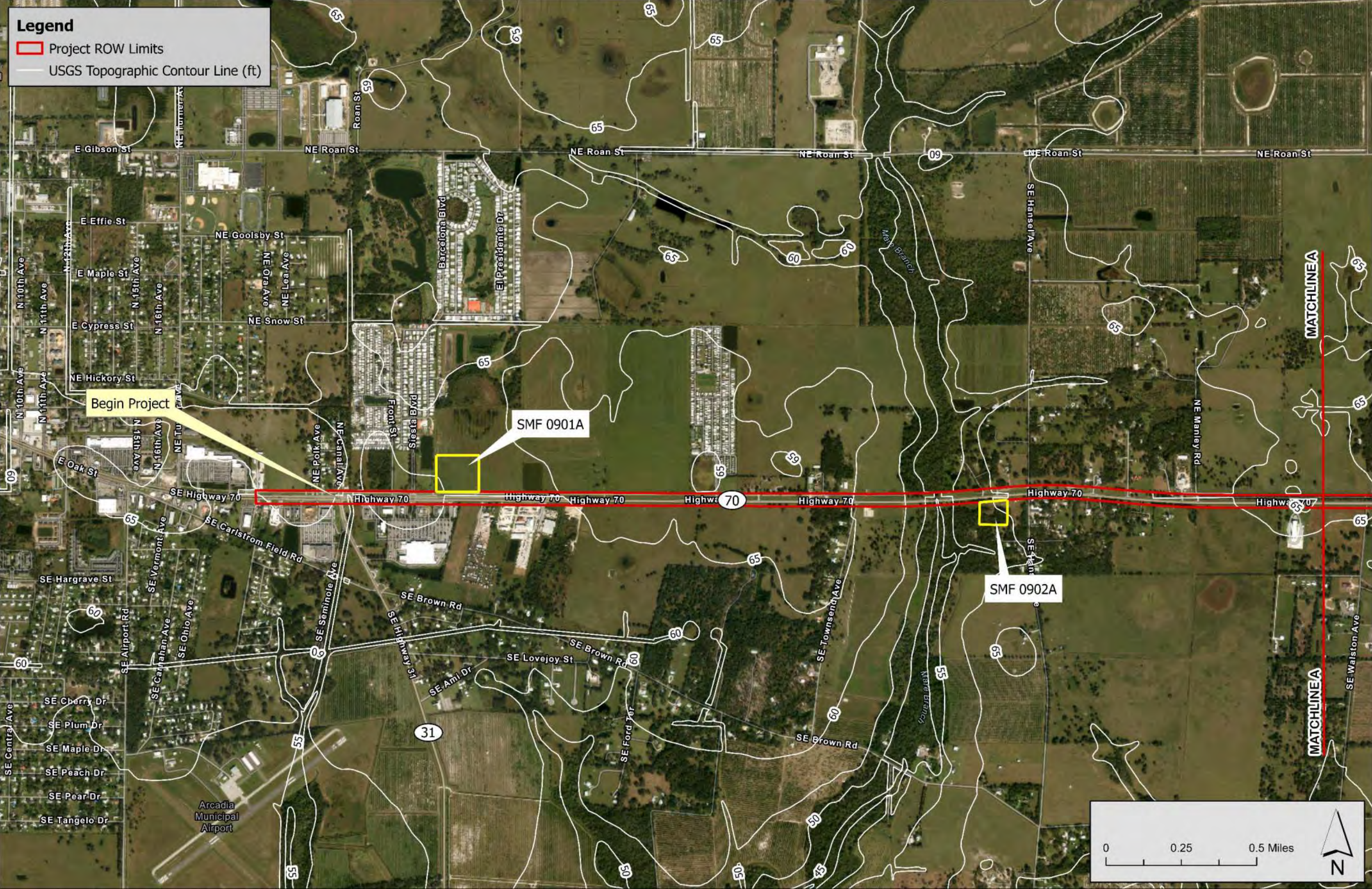


2023 Historical Aerial



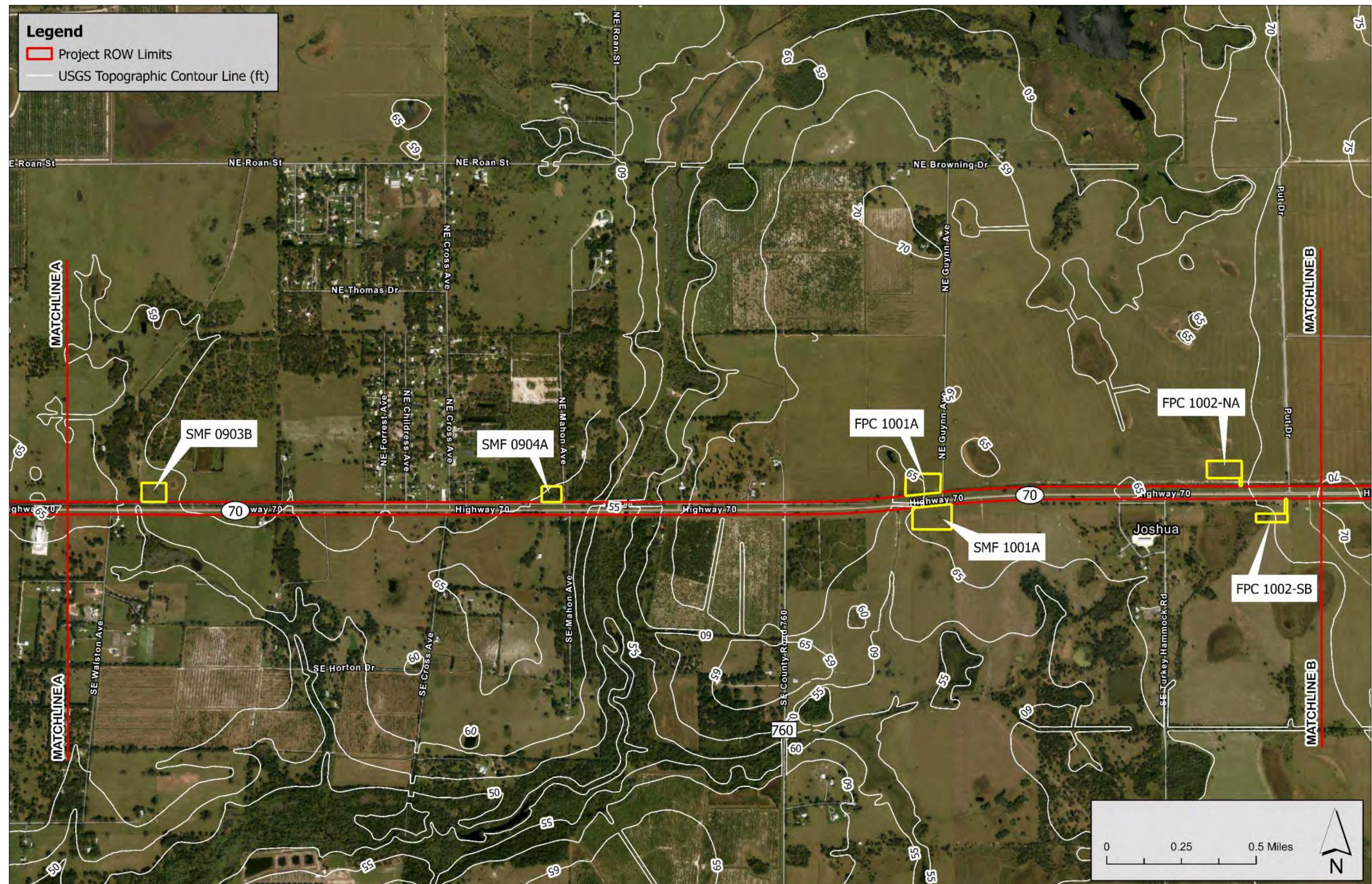
## **Appendix E – USGS Topographic Maps**





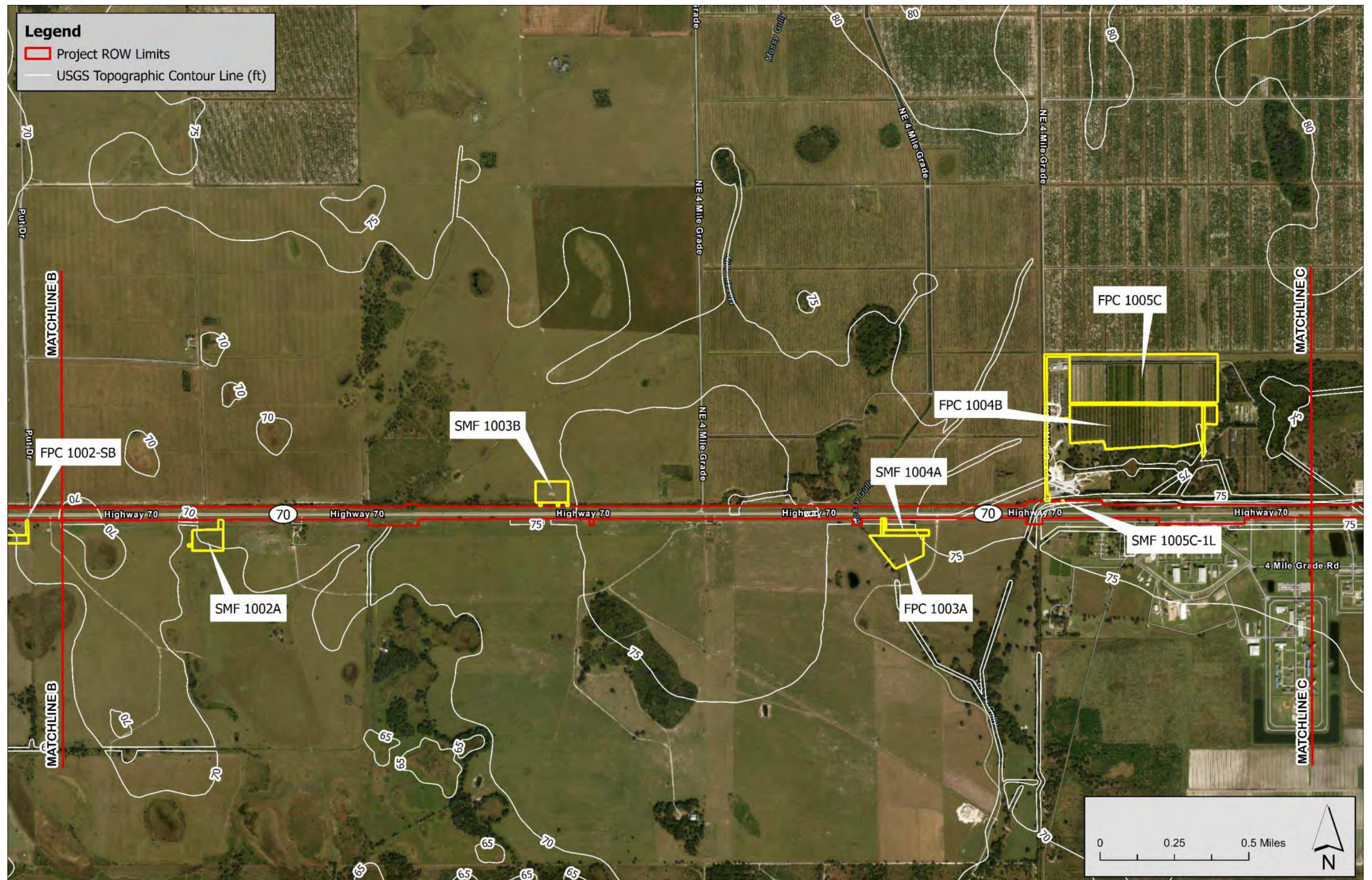
Appendix E – USGS Topographic Map





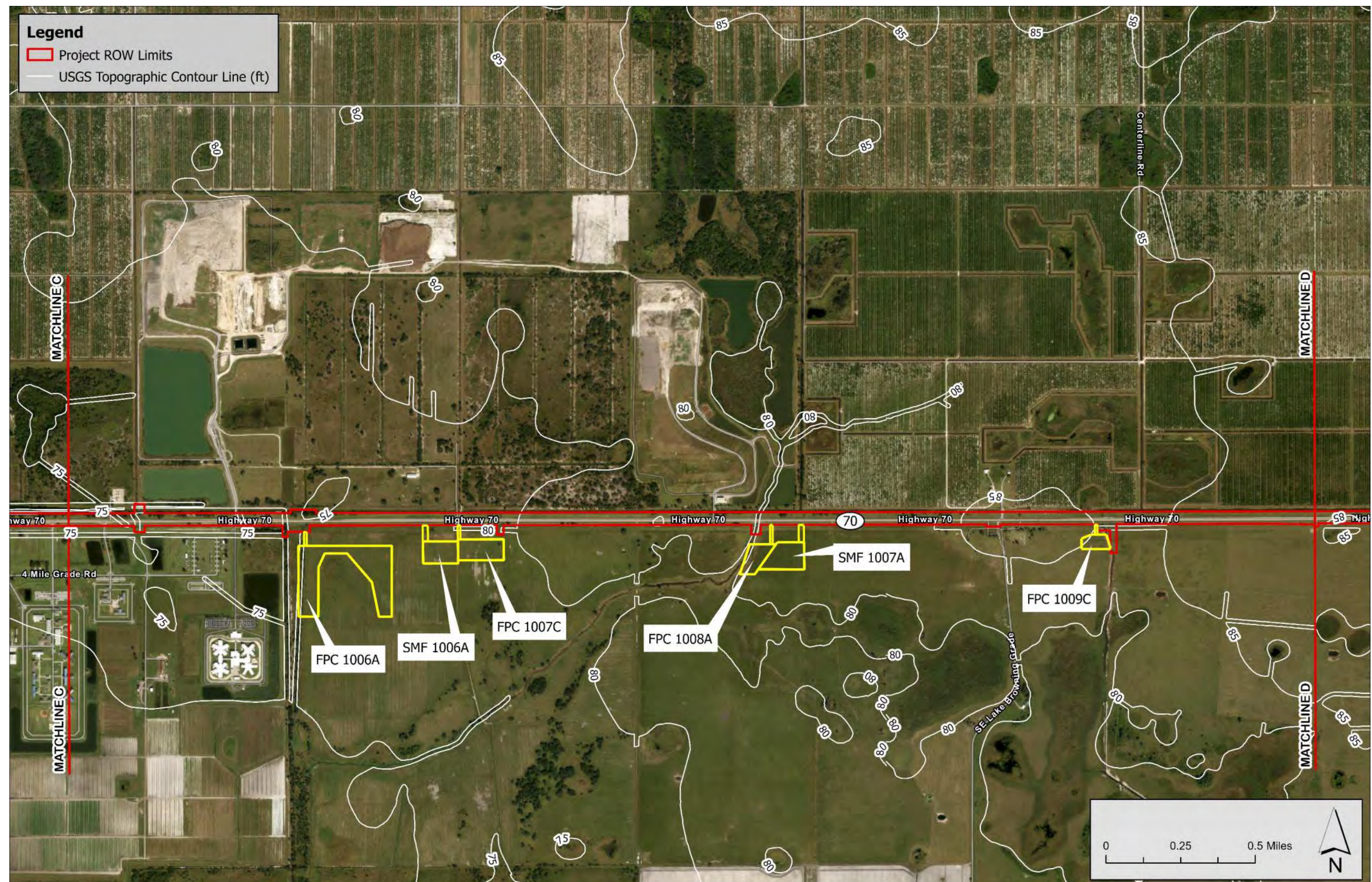
Appendix E – USGS Topographic Map





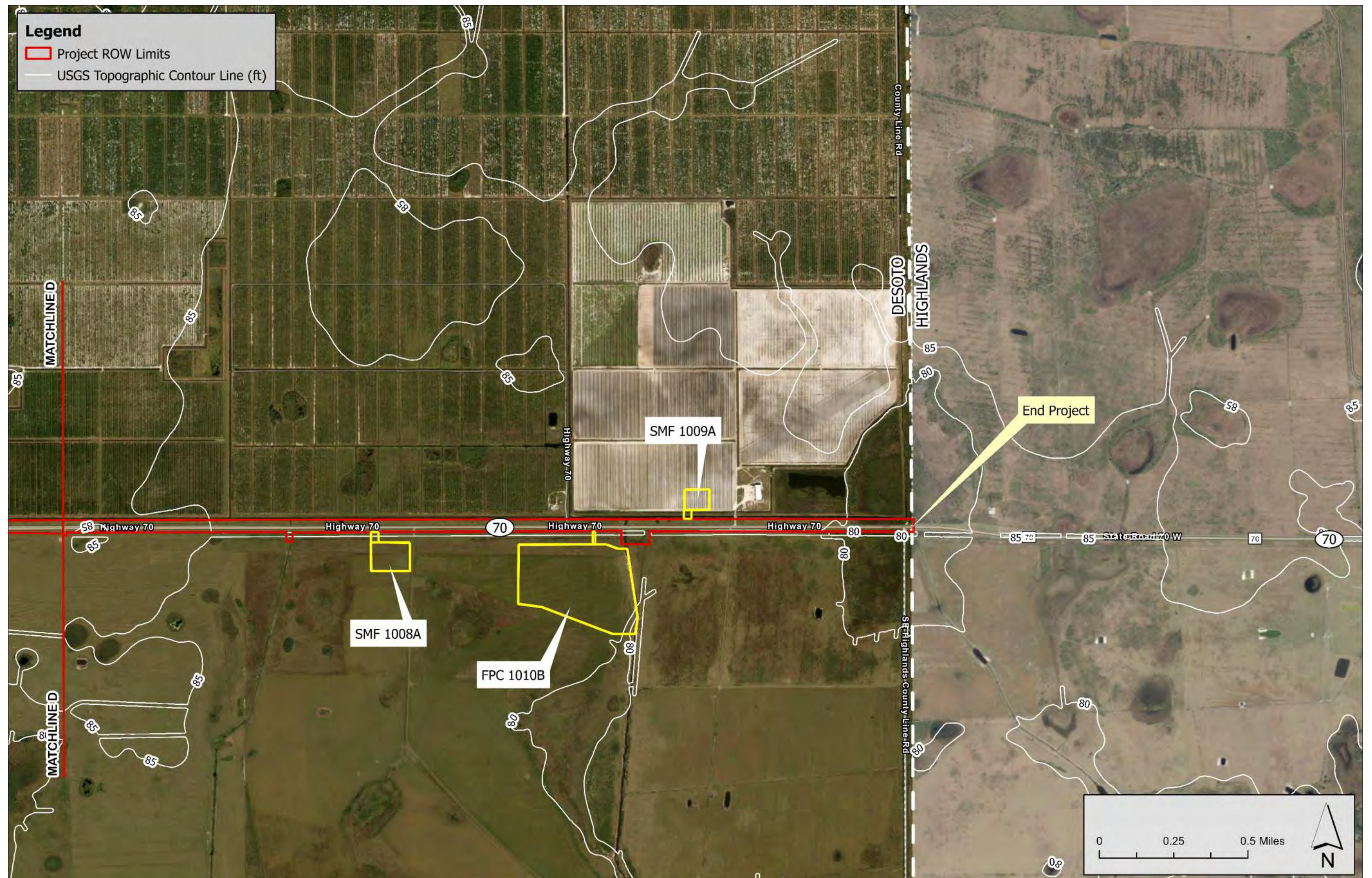
Appendix E – USGS Topographic Map





Appendix E – USGS Topographic Map



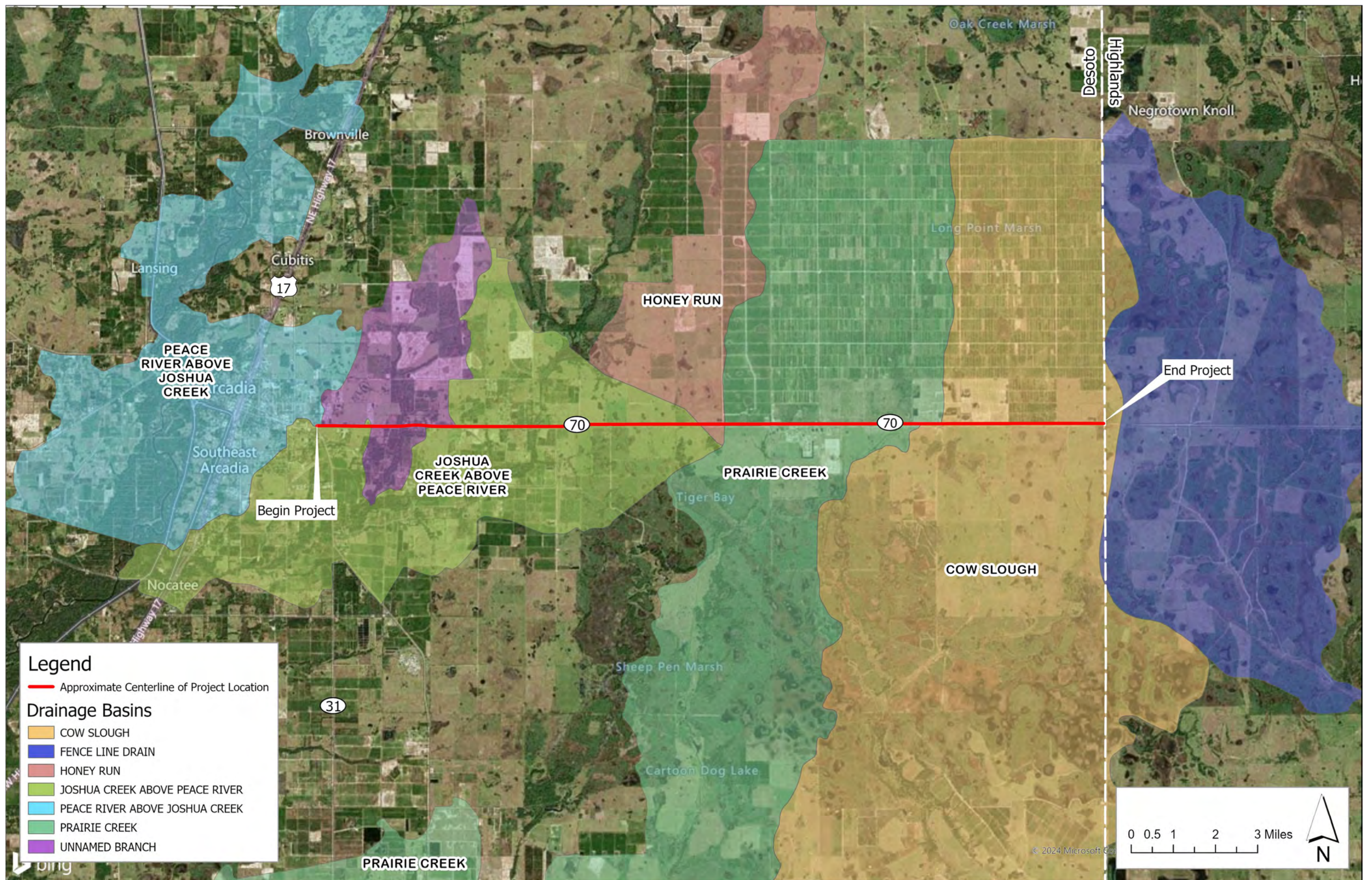


Appendix E – USGS Topographic Map



## **Appendix F – FDEP Drainage Basin Map**



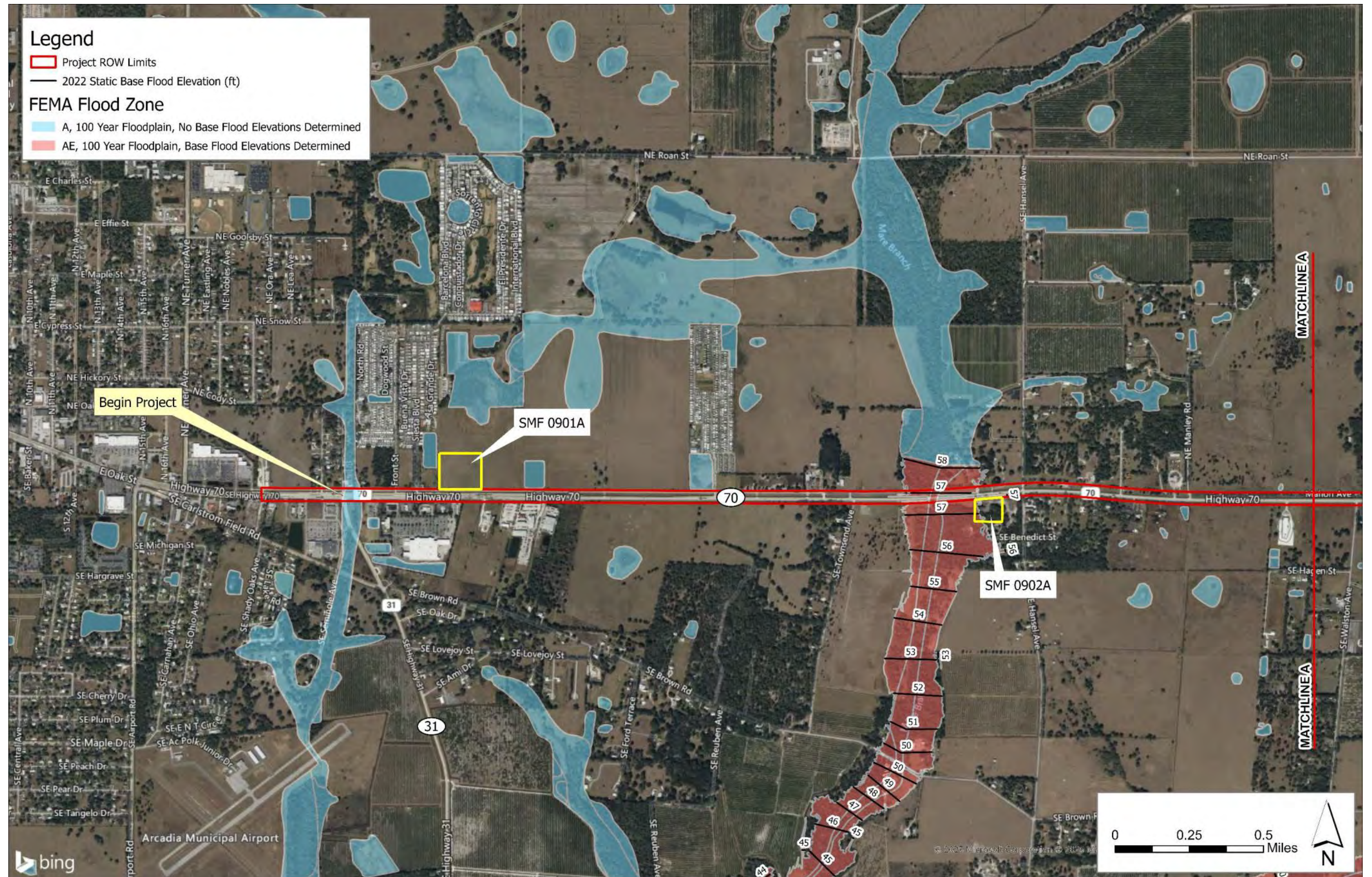


Appendix F – FDEP Drainage Basin Map



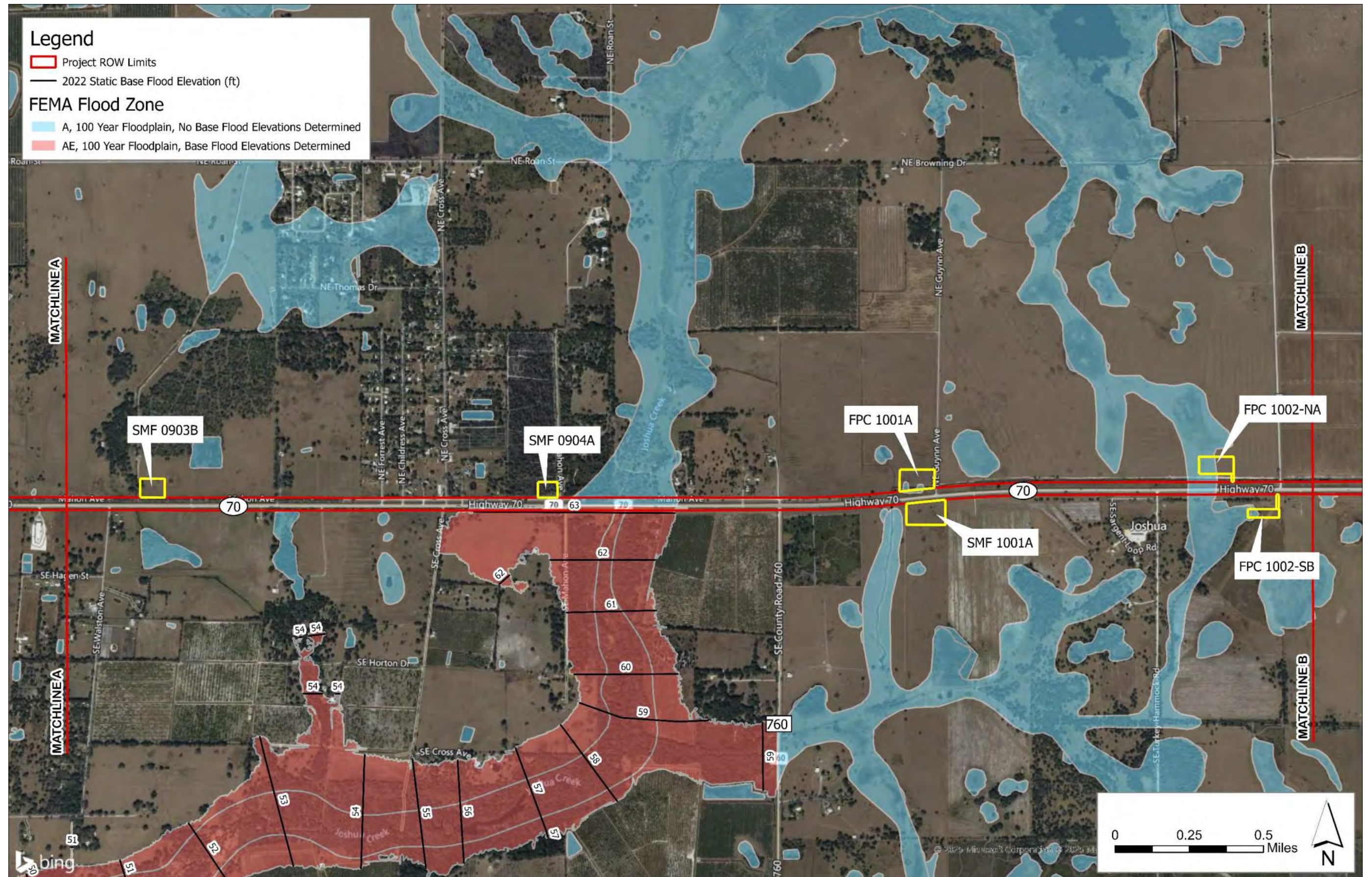
## **Appendix G – FEMA FIRM Floodplain Maps**





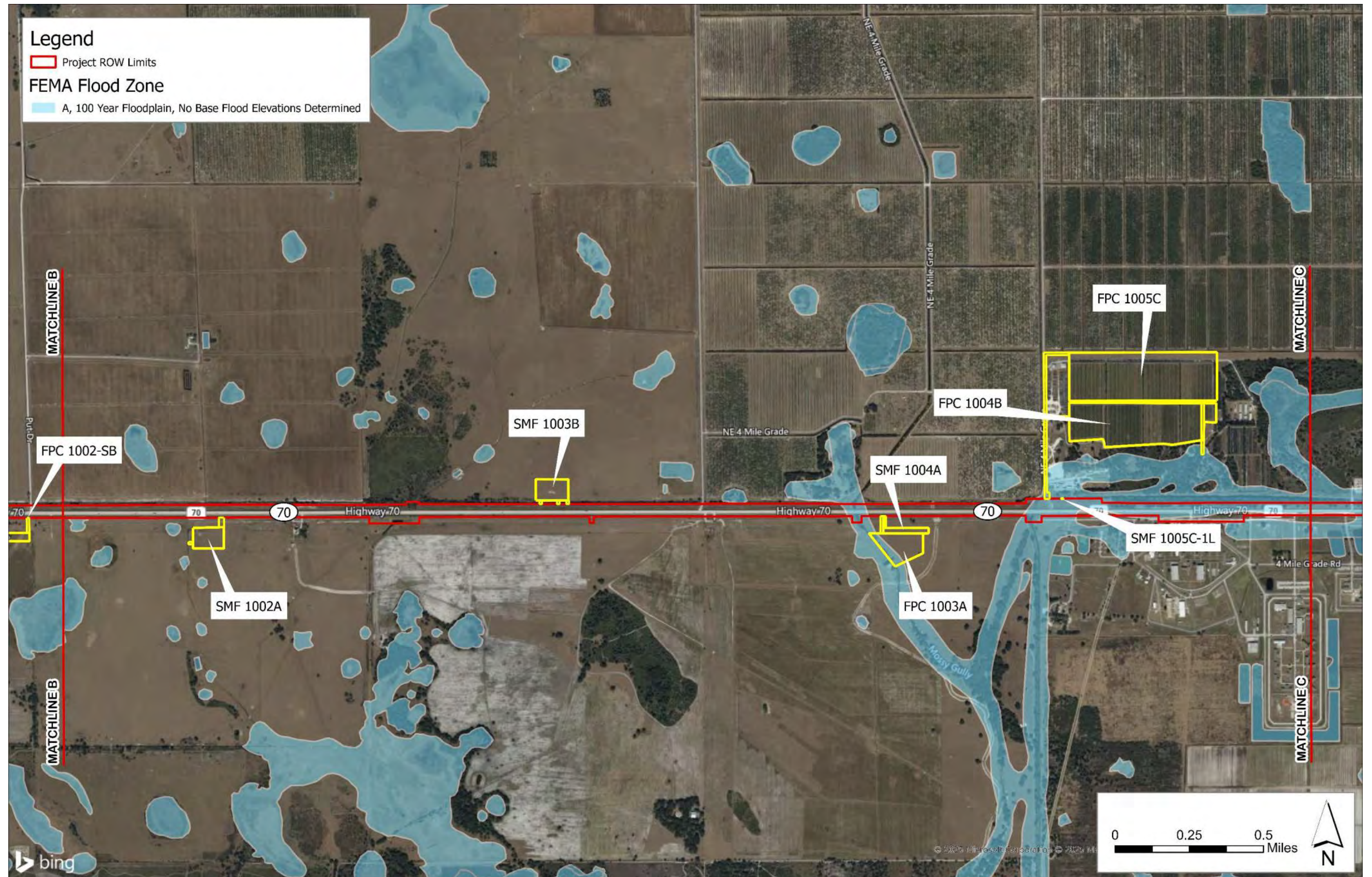
Appendix G – FEMA FIRM Floodplain Maps





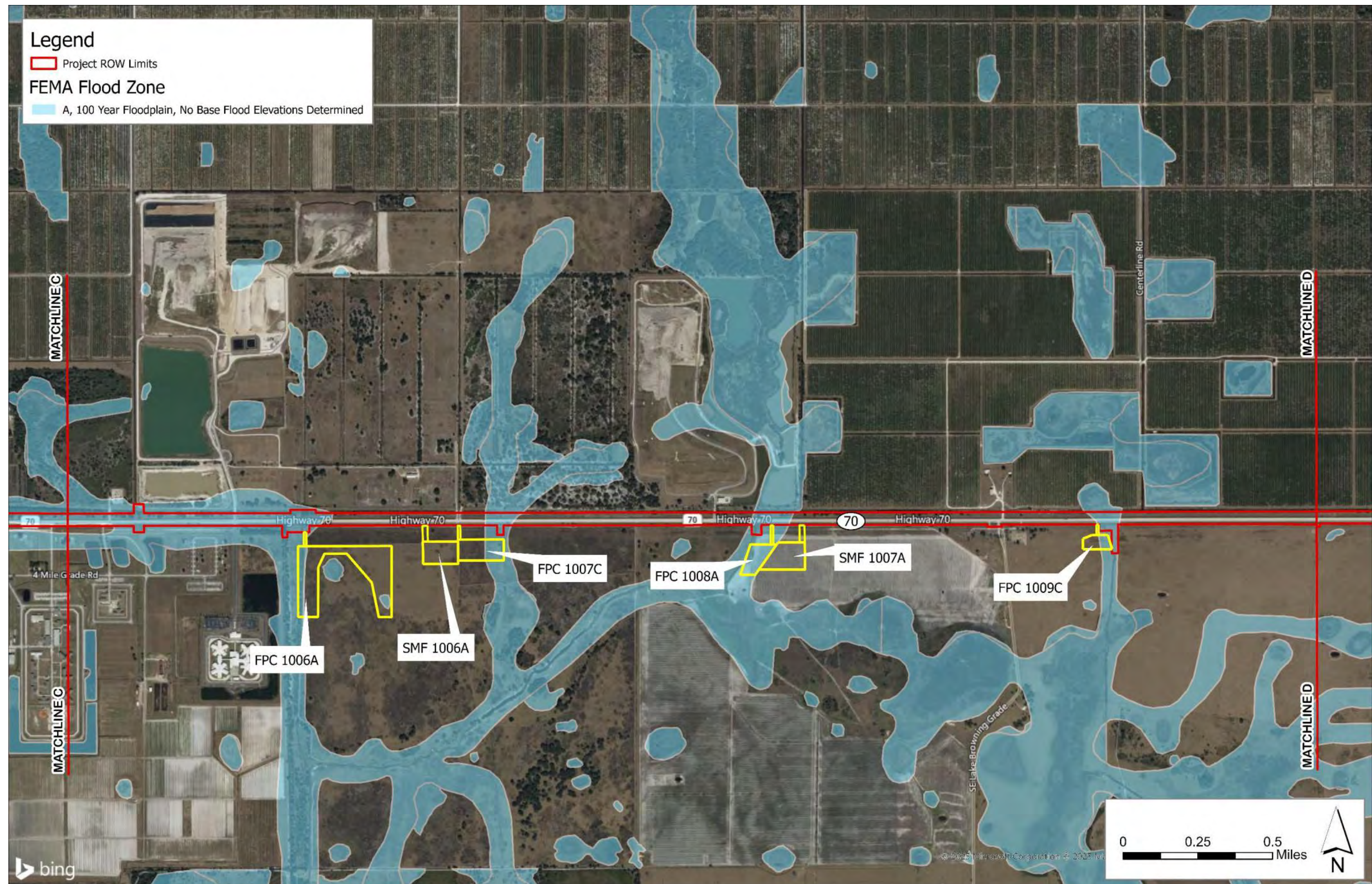
Appendix G – FEMA FIRM Floodplain Maps





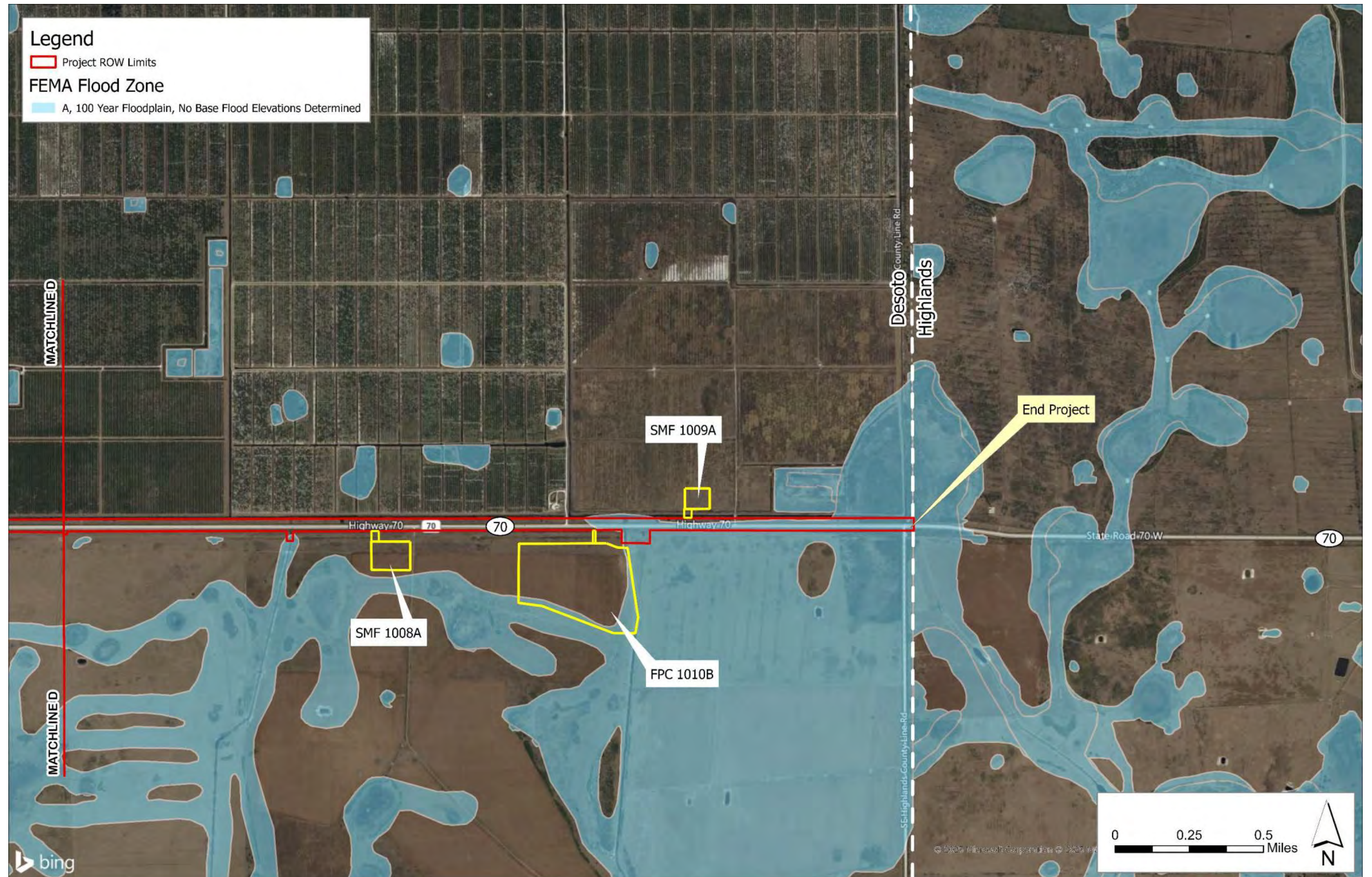
Appendix G – FEMA FIRM Floodplain Maps





Appendix G – FEMA FIRM Floodplain Maps



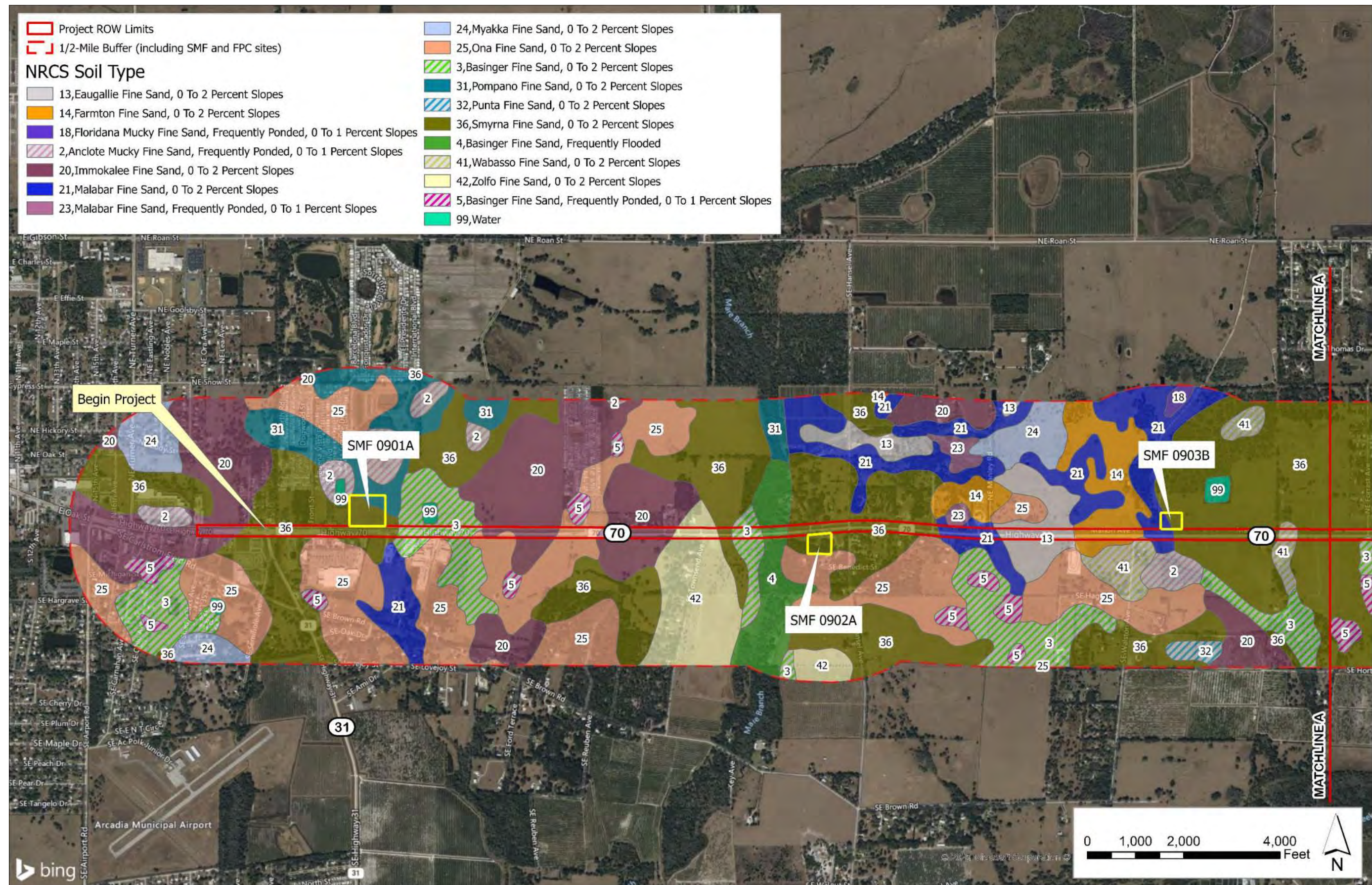


Appendix G – FEMA FIRM Floodplain Maps



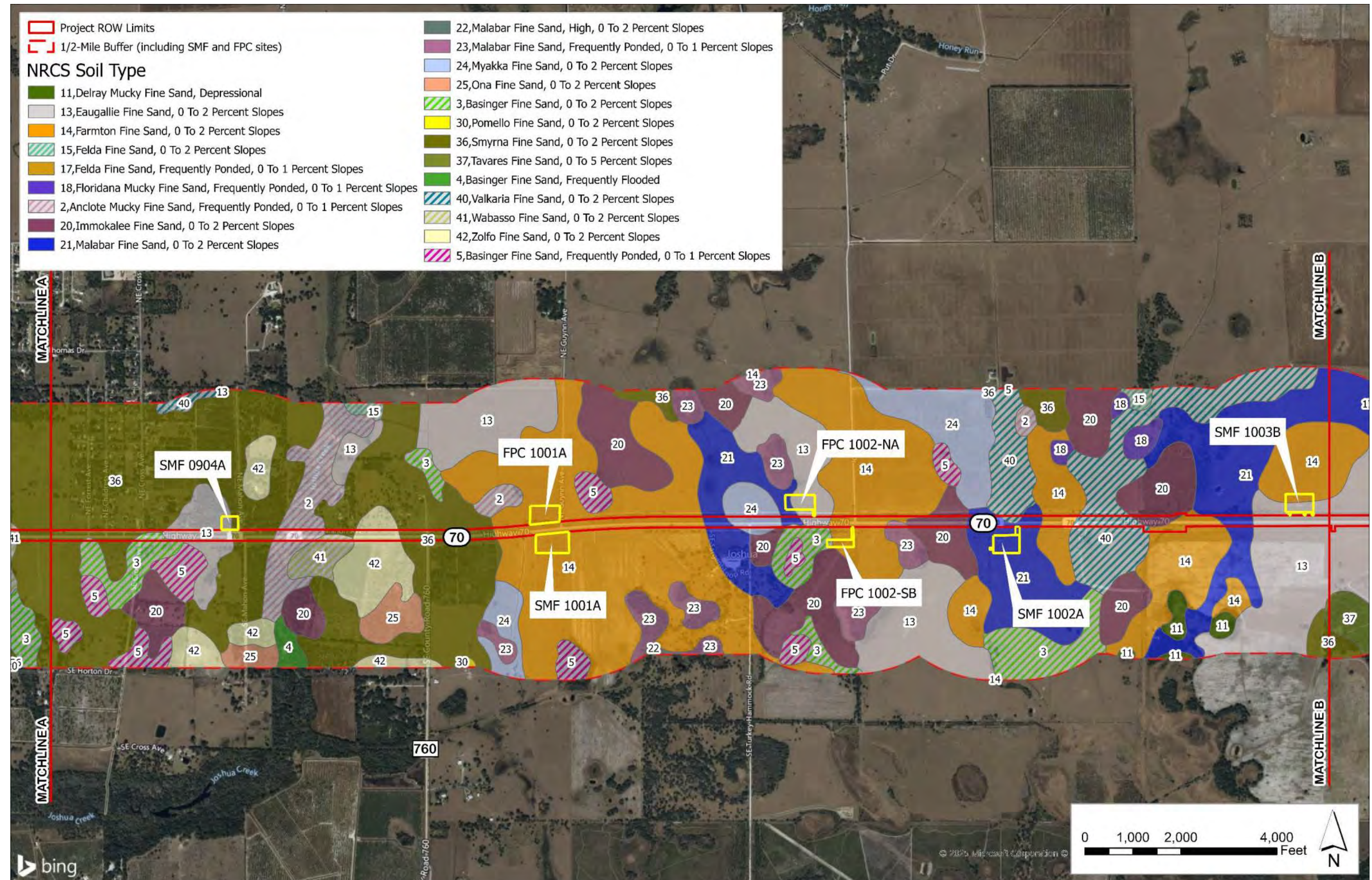
## **Appendix H – USDA Soil Survey Maps**





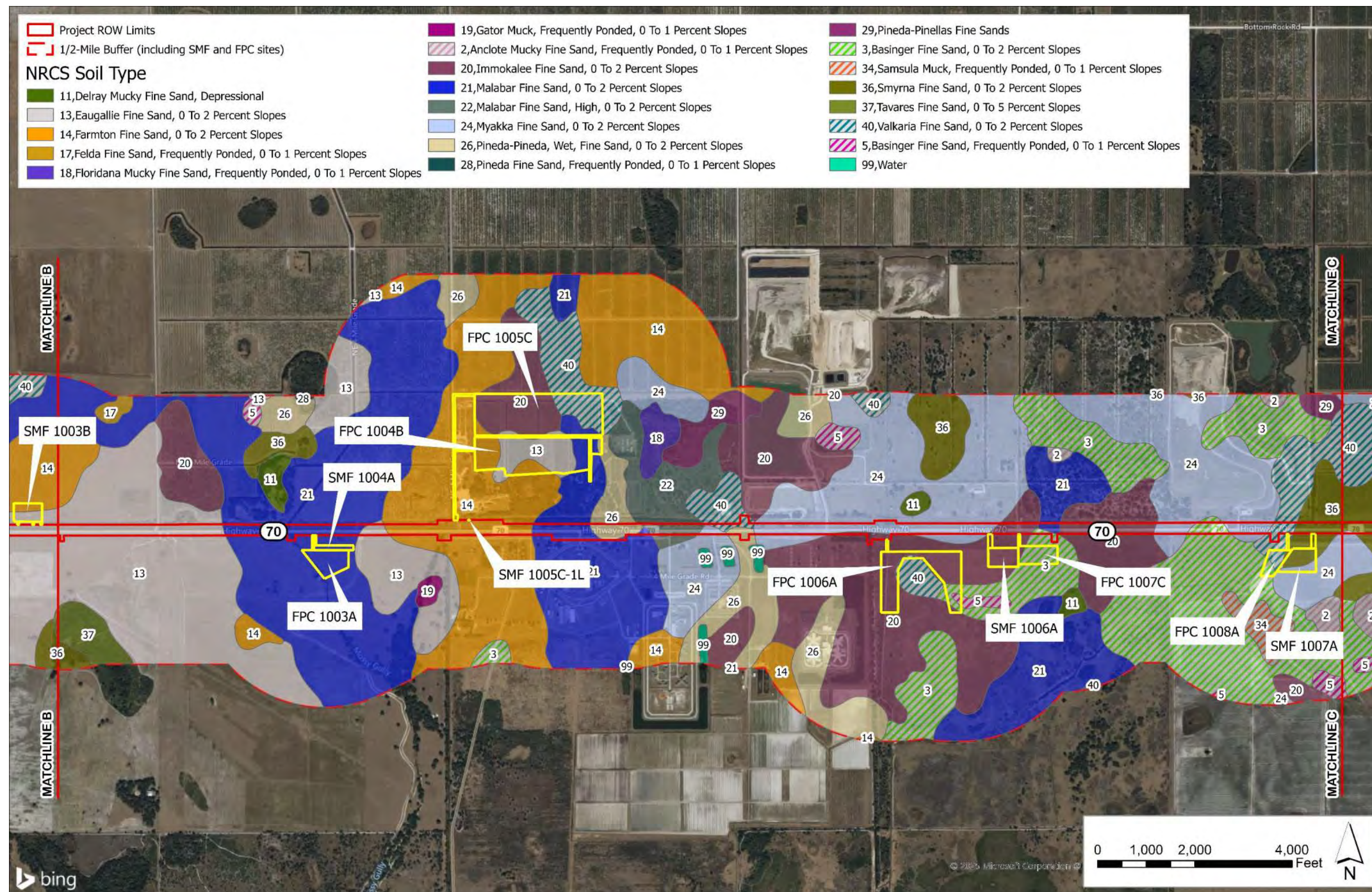
Appendix H – USDA Soil Survey Maps





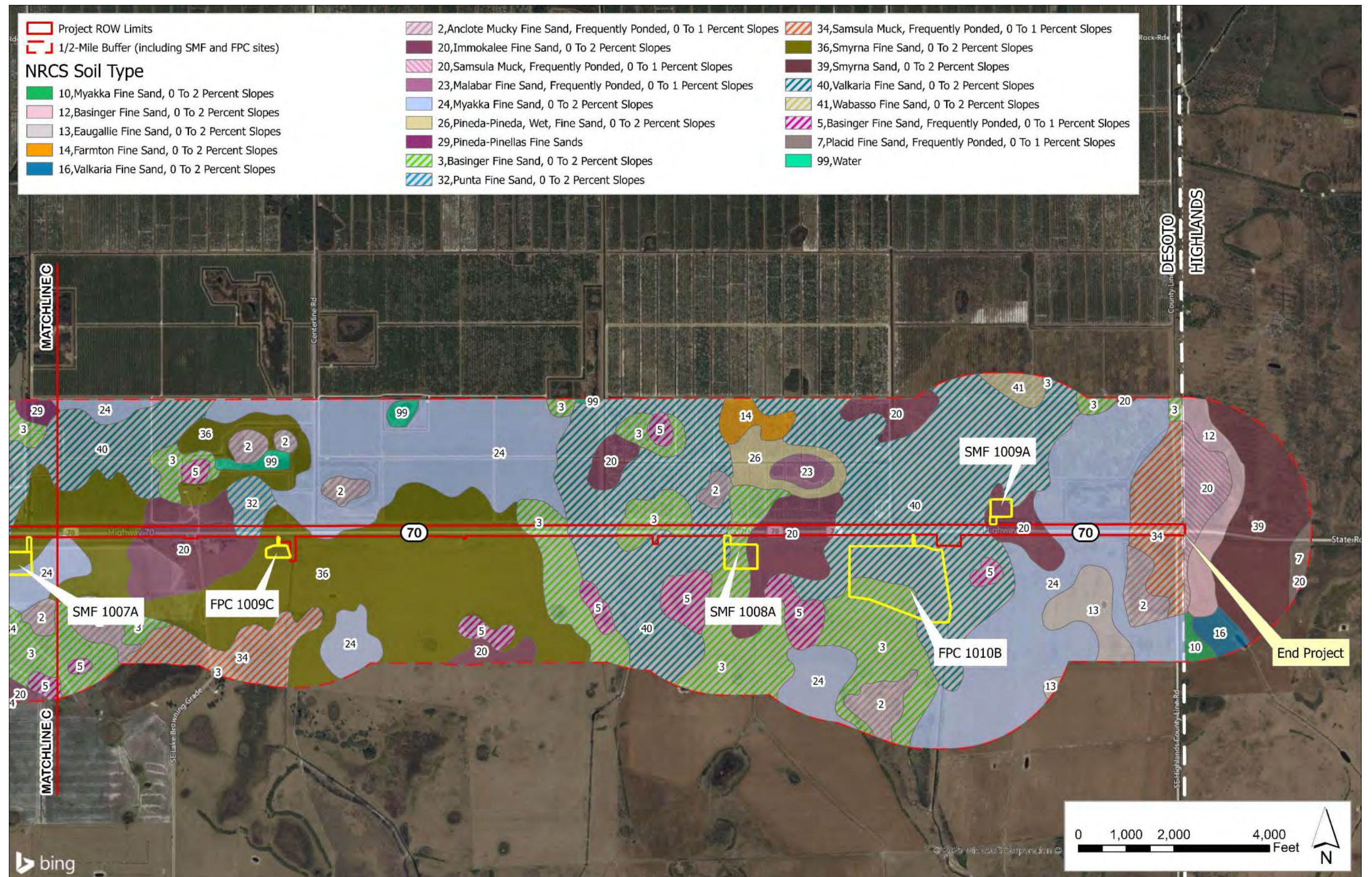
## Appendix H – USDA Soil Survey Maps





Appendix H – USDA Soil Survey Maps





Appendix H – USDA Soil Survey Maps



## **Appendix I – EDR Report Executive Summary**



**SR 70 Arterial Corridors Program PD&E Study**

SR 70 From West of SR 31 To SE Highlands County Rd  
Arcadia, FL 34266

Inquiry Number: 7699408.4s

July 05, 2024

## EDR Area / Corridor Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



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Map Findings .....	25
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Government Records Searched/Data Currency Tracking .....	GR-1

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### SUBJECT PROPERTY INFORMATION

#### ADDRESS

SR 70 FROM WEST OF SR 31 TO SE HIGHLANDS COUNTY RD  
ARCADIA, FL 34266

### TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal ERNS list***

ERNS: Emergency Response Notification System

A review of the ERNS list, as provided by EDR, and dated 03/13/2024 has revealed that there is 1 ERNS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
Not reported NRC Report #: 617189 Incident Date Time: 2002-07-19 14:45:00	13617 SOUTHEAST HWY	D13 / 5	45

#### ***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF: Solid Waste Facility Database

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DESOTO RECYCLING & D Database: SWF/LF, Date of Government Version: 01/09/2024 Facility-Site Id: 95046 Class Status: ACTIVE (A)	13250 NORTHEAST HIGH	B7 / 5	32



## EXECUTIVE SUMMARY

### ***Lists of state and tribal leaking storage tanks***

LUST: Petroleum Contamination Detail Report

A review of the LUST list, as provided by EDR, and dated 01/22/2024 has revealed that there are 2 LUST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>FL DEPT OF CORRECTIO</b> Facility Status: OPEN Facility-Site Id: 8732080 Discharge Cleanup Status: NFA - NFA COMPLETE	<b>13617 SE HWY 70</b>	<b>D17 / 5</b>	<b>58</b>
<b>SUPER STOP PETROLEUM</b> Facility Status: OPEN Facility-Site Id: 8520880 Discharge Cleanup Status: SRCR - SRCR COMPLETE	<b>2829 HWY 70 W</b>	<b>L51 / 1</b>	<b>135</b>

### ***Lists of state and tribal registered storage tanks***

UST: Storage Tank Facility Information

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>FL DEPT OF CORRECTIO</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: OPEN Tank Status: D-Deleted - Data Error Tank Status: B-Removed from Site Facility-Site Id: 8732080	<b>13617 SE HWY 70</b>	<b>D17 / 5</b>	<b>58</b>
<b>SUPER STOP PETROLEUM</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: OPEN Tank Status: U-In Service Tank Status: D-Deleted - Data Error Tank Status: B-Removed from Site Tank Status: A-Closed In Place Facility-Site Id: 8520880	<b>2829 HWY 70 W</b>	<b>L51 / 1</b>	<b>135</b>

AST: Storage Tank Facility Information

A review of the AST list, as provided by EDR, has revealed that there are 3 AST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>DIAMOND D FARMS</b> Database: AST, Date of Government Version: 02/13/2024 Facility Status: OPEN	<b>12511 HWY 70 NW</b>	<b>C11 / 5</b>	<b>36</b>



## EXECUTIVE SUMMARY

Facility-Site Id: 9807834  
Facility Status: OPEN

<b>FL DEPT OF CORRECTIO</b>	<b>13617 SE HWY 70</b>	<b>D17 / 5</b>	<b>58</b>
Database: AST, Date of Government Version: 02/13/2024			
Facility Status: OPEN			
Facility-Site Id: 8732080			
Facility Status: OPEN			
<b>FL CIVIL COMMITMENT</b>	<b>13619 SE HWY 70</b>	<b>D28 / 5</b>	<b>120</b>
Database: AST, Date of Government Version: 02/13/2024			
Facility Status: OPEN			
Facility-Site Id: 9811136			
Facility Status: OPEN			

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Records of Emergency Release Reports**

SPILLS: Oil and Hazardous Materials Incidents

A review of the SPILLS list, as provided by EDR, and dated 03/28/2024 has revealed that there are 6 SPILLS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
Not reported OHMIT Incident Number: 61658 Incident Status: Pending-HQ	13620 NE HWY. 70	A2 / 5	24
Not reported OHMIT Incident Number: 57707 Incident Status: Closed	13620 SR 70	A3 / 5	27
Not reported OHMIT Incident Number: 62223 Incident Status: Saved	13620 SE HWY. 70	A4 / 5	29
Not reported OHMIT Incident Number: 21847 Incident Status: Closed	13617 SE HIGHWAY 70	D18 / 5	97
Not reported OHMIT Incident Number: 42502 Incident Status: Closed	13617 SE HWY 70	D19 / 5	97
Not reported OHMIT Incident Number: 58941 Incident Status: Closed	13617 SE HWY 70	D20 / 5	98



## EXECUTIVE SUMMARY

### Other Ascertainable Records

FINDS: Facility Index System/Facility Registry System

A review of the FINDS list, as provided by EDR, and dated 02/09/2024 has revealed that there are 8 FINDS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DESOTO CORRECTIONAL Registry ID:: 110016520380	13617 S.E. HIGHWAY 7	D16 / 5	57
<b>SVP TREATMENT FACILI</b> Registry ID:: 110032782040	<b>13619 SE HWY-70</b>	<b>D26 / 5</b>	<b>110</b>
WALGREEN S STORE #10 Registry ID:: 110037312413	2450 HWY 70 SE	E29 / 1	122
<b>WALGREEN'S DESOTO CO</b> Registry ID:: 110037470475	<b>2450 HWY 70 SE</b>	<b>E30 / 1</b>	<b>122</b>
BIG TREE OF ARCADIA Registry ID:: 110035581153	2626 NE HIGHWAY 70	40 / 1	127
ARCADIA VILLAGE WWTF Registry ID:: 110027961221	2692 NE HIGHWAY 70	H43 / 1	128
26 FT MYER LAUNCHER Registry ID:: 110039141078	4000-4360 SE HWY-70	K46 / 2	130
TOBYS PLANTATION RV Registry ID:: 110027949442	3550 NE HIGHWAY 70	52 / 2	175

ECHO: Enforcement & Compliance History Information

A review of the ECHO list, as provided by EDR, and dated 12/17/2023 has revealed that there are 4 ECHO sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>SVP TREATMENT FACILI</b> Registry ID: 110032782040	<b>13619 SE HWY-70</b>	<b>D26 / 5</b>	<b>110</b>
<b>WALGREEN'S DESOTO CO</b> Registry ID: 110037470475	<b>2450 HWY 70 SE</b>	<b>E30 / 1</b>	<b>122</b>
26 FT MYER LAUNCHER Registry ID: 110039141078	4000-4360 SE HWY-70	K47 / 2	130
SR 70 DESOTO COUNTY Registry ID: 110064422450	UNKNOWN	M58 / 3	178

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

A review of the PFAS ECHO list, as provided by EDR, and dated 12/28/2023 has revealed that there is 1 PFAS ECHO site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
WCA OF FLORIDA DESOT		10 / 6	34



## EXECUTIVE SUMMARY

### DWM CONTAM: DWM CONTAMINATED SITES

A review of the DWM CONTAM list, as provided by EDR, and dated 07/14/2023 has revealed that there are 3 DWM CONTAM sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>VEHICLE ACCIDENT-OER</b> Program Site Id: ERIC_15303	<b>13620 SE HWY 70</b>	<b>A5 / 5</b>	<b>30</b>
<b>FL DEPT OF CORRECTIO</b> Program Site Id: 8732080	<b>13617 SE HWY 70</b>	<b>D17 / 5</b>	<b>58</b>
<b>SUPER STOP PETROLEUM</b> Program Site Id: 8520880	<b>2829 HWY 70 W</b>	<b>L51 / 1</b>	<b>135</b>

### Financial Assurance: Financial Assurance Information Listing

A review of the Financial Assurance list, as provided by EDR, has revealed that there are 4 Financial Assurance sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DIAMOND D FARMS Database: FIN ASSURANCE 3, Date of Government Version: 02/08/2024 Facility Status: OPEN Facility ID: 9807834	12511 HWY 70 NW	C12 / 5	41
<b>FL DEPT OF CORRECTIO</b> Database: FIN ASSURANCE 3, Date of Government Version: 02/08/2024 Facility Status: OPEN Facility ID: 8732080	<b>13617 SE HWY 70</b>	<b>D17 / 5</b>	<b>58</b>
FL CIVIL COMMITMENT Database: FIN ASSURANCE 3, Date of Government Version: 02/08/2024 Facility Status: OPEN Facility ID: 9811136	13619 SE HWY 70	D25 / 5	108
<b>SUPER STOP PETROLEUM</b> Database: FIN ASSURANCE 3, Date of Government Version: 02/08/2024 Facility Status: OPEN Facility ID: 8520880	<b>2829 HWY 70 W</b>	<b>L51 / 1</b>	<b>135</b>

### HAZ WASTE: Hazardous Waste Information Listing

A review of the HAZ WASTE list, as provided by EDR, and dated 02/12/2024 has revealed that there are 18 HAZ WASTE sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
ALICO, INC	15578 HIGHWAY 70 E	1 / 6	24
ALICO INC	12010 HIGHWAY 70 NE	C9 / 5	34
SARASOTA TRANSMISSIO	4597 HIGHWAY 70 W	F31 / 2	123
SARASOTA TRANSMISSIO	4597 HIGHWAY 70 NW	F32 / 2	123
SARASOTA TRANSMISSIO	4597 HIGHWAY 70 NW	F33 / 2	124
EASY MINI STORAGE	4599 HIGHWAY 70 NW	F34 / 2	124
ARCADIA COMPUTER, IN	4599 HWY 70 NW B	F35 / 2	125
BIG TREE CARE FREE R	2626 HIGHWAY 70 NE	G36 / 1	125
ARCADIA VILLAGE	2692 HWY 70 NE 532	G37 / 1	126
PEACE RIVER CAMPGROU	2998 HWY 70 NW	H38 / 1	126



## EXECUTIVE SUMMARY

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
ENCORE TOBY'S	3550 HIGHWAY 70 NE	41 / 2	128
FC OF ARCADIA	4904 HIGHWAY 70 NE	J42 / 2	128
HAYES MEDICAL TRANSP	3884 HIGHWAY 70 NE	45 / 2	130
WAL-MART SUPERCENTER	2725 HIGHWAY 70 SE	48 / 1	131
DESOTO AUTO MALL	3039 HIGHWAY 70 SE	I53 / 1	175
AGRI SERVICES INTERN	6490 HWY 70 EAST	54 / 3	176
ASAM INC	4925 HWY 70 NW	J55 / 2	176
BARKMAN HONEY	5385 HIGHWAY 70 SE	56 / 2	176

### RESP PARTY: Responsible Party Sites Listing

A review of the RESP PARTY list, as provided by EDR, and dated 03/25/2024 has revealed that there are 2 RESP PARTY sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>VEHICLE ACCIDENT-OER</b> Site Status: OPEN	<b>13620 SE HWY 70</b>	<b>A5 / 5</b>	<b>30</b>
<b>FLORIDA CIVIL COMMIT</b> Site Status: CLOSED	<b>13619 SE HIGHWAY 70</b>	<b>D23 / 5</b>	<b>102</b>

### SOLCP: State-Owned Lands Cleanup Program Listing

A review of the SOLCP list, as provided by EDR, and dated 02/05/2024 has revealed that there is 1 SOLCP site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>DESOTO CORRECTIONAL</b>	<b>13617 SE HIGHWAY 70</b>	<b>D14 / 5</b>	<b>45</b>

### TIER 2: Tier 2 Facility Listing

A review of the TIER 2 list, as provided by EDR, and dated 12/31/2022 has revealed that there are 4 TIER 2 sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>DESOTO CORRECTIONAL</b> Facility Id: 6627697 Facility Id: 4982953 Facility Id: 4495980 Facility Id: 7254793 Facility Id: 6360046 <i>*Additional key fields are available in the Map Findings section</i>	<b>13617 SE HIGHWAY 70</b>	<b>D14 / 5</b>	<b>45</b>
DESOTO CORRECTIONAL Facility Id: 4497206 Facility Id: 5019520 Facility Id: 4037279	13617 S. E. HIGHWAY	D22 / 5	99
FLORIDA CIVIL COMMIT Facility Id: 7278269 Facility Id: 7135657	13619 SE HWY 70	D24 / 5	105



## EXECUTIVE SUMMARY

Facility Id: 6855930

Facility Id: 6653127

FLORIDA CIVIL COMMIT	13619 SOUTHEAST HIGH	D27 / 5	111
Facility Id: 4565499			
Facility Id: 6137149			
Facility Id: 5024765			
Facility Id: 5425703			
Facility Id: 3994249			
<i>*Additional key fields are available in the Map Findings section</i>			

### NPDES: Wastewater Facility Regulation Database

A review of the NPDES list, as provided by EDR, and dated 01/29/2024 has revealed that there are 3 NPDES sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
FDOT PERENNIAL PEANU Status: A Facility ID: FLR10RB40		I39 / 1	127
ARCADIA VILLAGE WWTF Status: A Facility ID: FLA011963	2692 NE HIGHWAY 70	H44 / 1	129
SR 70 DESOTO COUNTY Status: A Facility ID: FLR10OZ07		M57 / 3	177

### UST FINDER RELEASE: UST Finder Releases Database

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there are 2 UST FINDER RELEASE sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
FL DEPT OF CORRECTIO	13617 SE HWY 70	D15 / 5	55
SUPER STOP PETROLEUM	2829 HWY 70 W	L50 / 1	131

### ERIC WASTE CLEANUP: Environmental Restoration Integrated Cleanup Listing

A review of the ERIC WASTE CLEANUP list, as provided by EDR, and dated 06/24/2024 has revealed that there are 3 ERIC WASTE CLEANUP sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
VEHICLE ACCIDENT-OER	13620 SE HWY 70	A5 / 5	30
DESOTO CORRECTIONAL	13617 SE HIGHWAY 70	D14 / 5	45
FLORIDA CIVIL COMMIT	13619 SE HIGHWAY 70	D23 / 5	102



## EXECUTIVE SUMMARY

### UST FINDER: UST Finder Database

A review of the UST FINDER list, as provided by EDR, and dated 06/08/2023 has revealed that there are 2 UST FINDER sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b><i>FL DEPT OF CORRECTIO</i></b>	<b><i>13617 SE HWY 70</i></b>	<b><i>D15 / 5</i></b>	<b><i>55</i></b>
<b><i>SUPER STOP PETROLEUM</i></b>	<b><i>2829 HWY 70 W</i></b>	<b><i>L50 / 1</i></b>	<b><i>131</i></b>

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

A review of the RGA LF list, as provided by EDR, has revealed that there are 2 RGA LF sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DESOTO RECYCLING & D Facility ID: 95046	13250 NORTHEAST HIGH	B6 / 5	32
WSI/FREEDOM DESOTO C Facility ID: 95046	13250 NORTHEAST HIGH	B8 / 5	34

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

A review of the RGA LUST list, as provided by EDR, has revealed that there are 2 RGA LUST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
FL DEPT OF CORRECTIO Facility ID: 8732080	13617 SE HWY 70	D21 / 5	99
A J PETROLEUM LLC #1 Facility ID: 8520880	2829 HWY 70 W	L49 / 1	131

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.



## EXECUTIVE SUMMARY

### STANDARD ENVIRONMENTAL RECORDS

#### ***Lists of Federal RCRA generators***

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/03/2024 has revealed that there are 3 RCRA-VSQG sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
FLORIDA POWER & LIGH EPA ID:: FLR000124859	12942 N E HWY 70	N 0 - 1/8 (0.117 mi.)	71 / 5	198
DESOTO AUTO MALL EPA ID:: FLR000025288	3039 SE HIGHWAY 70	S 1/8 - 1/4 (0.132 mi.)	72 / 1	202
<b>WINN-DIXIE #2491</b> EPA ID:: FLR000211458	<b>1737 E OAK ST</b>	<b>WNW 1/8 - 1/4 (0.196 mi.)</b>	<b>78 / 1</b>	<b>253</b>

#### ***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF: Solid Waste Facility Database

A review of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>DESOTO C&amp;D DISPOSAL</b> Database: SWF/LF, Date of Government Version: 01/09/2024 Facility-Site Id: 92117 Class Status: ACTIVITY NOT PERMITTED/REGISTERED (N) Class Status: ACTIVE (A) Class Status: INACTIVE (I)	<b>14662 NORTHEAST HIGH</b>	<b>N 1/4 - 1/2 (0.385 mi.)</b>	<b>86 / 6</b>	<b>308</b>

#### ***Lists of state and tribal leaking storage tanks***

LUST: Petroleum Contamination Detail Report

A review of the LUST list, as provided by EDR, and dated 01/22/2024 has revealed that there are 2 LUST sites within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>SHAMROCK-BUD'S</b> Facility Status: CLOSED Facility-Site Id: 8943151 Discharge Cleanup Status: SRCR - SRCR COMPLETE	<b>SR 70 E</b>	<b>WSW 1/4 - 1/2 (0.298 mi.)</b>	<b>83 / 1</b>	<b>272</b>
<b>LOS PRIMOS SUNOCO</b> Facility Status: OPEN	<b>2009 SE HIGHWAY 70</b>	<b>W 1/4 - 1/2 (0.364 mi.)</b>	<b>R85 / 1</b>	<b>281</b>



## EXECUTIVE SUMMARY

Facility-Site Id: 8521214  
 Discharge Cleanup Status: RA - RA ONGOING  
 Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED

### ***Lists of state and tribal registered storage tanks***

UST: Storage Tank Facility Information

A review of the UST list, as provided by EDR, has revealed that there are 4 UST sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>MURPHY USA #6902</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: OPEN Tank Status: U-In Service Facility-Site Id: 9805491	<b>2769 SE HWY 70</b>	<b>S 0 - 1/8 (0.037 mi.)</b>	<b>N64 / 1</b>	<b>181</b>
<b>CEMEX - ARCADIA READ</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: CLOSED Tank Status: A-Closed In Place Facility-Site Id: 8520851	<b>E HWY 70</b>	<b>S 0 - 1/8 (0.042 mi.)</b>	<b>65 / 1</b>	<b>191</b>
<b>PRIDE ENTERPRISES -</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: CLOSED Tank Status: B-Removed from Site Facility-Site Id: 8735792	<b>SR 70 11 MIL E OF AR</b>	<b>S 0 - 1/8 (0.088 mi.)</b>	<b>69 / 6</b>	<b>196</b>
<b>761 GROCERY</b> Database: UST, Date of Government Version: 02/13/2024 Facility Status: OPEN Tank Status: B-Removed from Site Tank Status: U-In Service Facility-Site Id: 8943540	<b>HWY 761</b>	<b>S 1/8 - 1/4 (0.219 mi.)</b>	<b>Q79 / 5</b>	<b>260</b>

AST: Storage Tank Facility Information

A review of the AST list, as provided by EDR, has revealed that there are 8 AST sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>CEMEX - ARCADIA READ</b> Database: AST, Date of Government Version: 02/13/2024 Facility Status: CLOSED Facility-Site Id: 8520851 Facility Status: CLOSED	<b>E HWY 70</b>	<b>S 0 - 1/8 (0.042 mi.)</b>	<b>65 / 1</b>	<b>191</b>
<b>WHITMAN DRAINAGE CO</b> Database: AST, Date of Government Version: 02/13/2024 Facility Status: CLOSED Facility-Site Id: 8838642	<b>CORNER SR 70 E &amp; SR</b>	<b>S 0 - 1/8 (0.080 mi.)</b>	<b>68 / 1</b>	<b>195</b>



## EXECUTIVE SUMMARY

Facility Status: CLOSED

<b>PRIDE ENTERPRISES -</b>	<b>SR 70 11 MIL E OF AR</b>	<b>S 0 - 1/8 (0.088 mi.)</b>	<b>69 / 6</b>	<b>196</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: CLOSED				
Facility-Site Id: 8735792				
Facility Status: CLOSED				
<b>WALMART 811 - POWERS</b>	<b>2725 SE HWY 70</b>	<b>S 1/8 - 1/4 (0.145 mi.)</b>	<b>P73 / 1</b>	<b>245</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: OPEN				
Facility-Site Id: 9815778				
Facility Status: OPEN				
<b>WAL-MART SUPERCENTER</b>	<b>2725 SE HWY 70</b>	<b>S 1/8 - 1/4 (0.145 mi.)</b>	<b>P75 / 1</b>	<b>247</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: OPEN				
Facility-Site Id: 9805761				
Facility Status: OPEN				
<b>SOUTH EAST GROVES LL</b>	<b>SECTIONS 26 &amp; 35</b>	<b>N 1/8 - 1/4 (0.190 mi.)</b>	<b>77 / 4</b>	<b>250</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: CLOSED				
Facility-Site Id: 9700568				
Facility Status: CLOSED				
<b>LONG GROVE</b>	<b>HWY 70 7 MI E OF ARC</b>	<b>S 1/8 - 1/4 (0.238 mi.)</b>	<b>Q80 / 5</b>	<b>270</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: OPEN				
Facility-Site Id: 9300330				
Facility Status: OPEN				
<b>SORRELLS GROVE INC</b>	<b>WILLIAMS RD &amp; WILLIA</b>	<b>S 1/8 - 1/4 (0.238 mi.)</b>	<b>Q81 / 5</b>	<b>271</b>
Database: AST, Date of Government Version: 02/13/2024				
Facility Status: CLOSED				
Facility-Site Id: 9101057				
Facility Status: CLOSED				

### ADDITIONAL ENVIRONMENTAL RECORDS

#### ***Other Ascertainable Records***

FUDS: Formerly Used Defense Sites

A review of the FUDS list, as provided by EDR, and dated 01/30/2024 has revealed that there is 1 FUDS site within approximately 1 mile of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
DORR FIELD		S 1/2 - 1 (0.524 mi.)	87 / 5	315



## EXECUTIVE SUMMARY

### DWM CONTAM: DWM CONTAMINATED SITES

A review of the DWM CONTAM list, as provided by EDR, and dated 07/14/2023 has revealed that there are 2 DWM CONTAM sites within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
<b>SHAMROCK-BUD'S</b> Program Site Id: 8943151	<b>SR 70 E</b>	<b>WSW 1/4 - 1/2 (0.298 mi.)</b>	<b>R83 / 1</b>	<b>272</b>
<b>LOS PRIMOS SUNOCO</b> Program Site Id: 8521214	<b>2009 SE HIGHWAY 70</b>	<b>W 1/4 - 1/2 (0.364 mi.)</b>	<b>R85 / 1</b>	<b>281</b>

### HAZ WASTE: Hazardous Waste Information Listing

A review of the HAZ WASTE list, as provided by EDR, and dated 02/12/2024 has revealed that there are 7 HAZ WASTE sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
B & J PRODUCE LLC	1025 POLK AVE NE	N 0 - 1/8 (0.033 mi.)	60 / 1	179
FUTURE MOTORS	1018 CANAL AVE NE	N 0 - 1/8 (0.034 mi.)	61 / 1	179
K & J'S HOMEGROWN PR	2228 HIGHWAY 70 NE	W 0 - 1/8 (0.074 mi.)	O66 / 1	194
MOTT'S AUTO REPAIR	2269 HIGHWAY 70 SE	W 0 - 1/8 (0.078 mi.)	O67 / 1	194
LA COSTENA	2233 HIGHWAY 70 SE	W 0 - 1/8 (0.116 mi.)	70 / 1	198
DESOTO AUTO WASH	2163 HWY 70 EAST	W 1/8 - 1/4 (0.189 mi.)	76 / 1	249
DESOTO VETERINARY SE	1240 HIGHWAY 31 SE	S 1/8 - 1/4 (0.239 mi.)	82 / 1	272

### HW GEN: Hazardous Waste Generators

A review of the HW GEN list, as provided by EDR, and dated 03/19/2024 has revealed that there is 1 HW GEN site within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
WALMART SUPERCENTER	2725 SE HIGHWAY 70	S 1/8 - 1/4 (0.145 mi.)	P74 / 1	247

### UST FINDER RELEASE: UST Finder Releases Database

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there are 2 UST FINDER RELEASE sites within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
SOUTHERN FARMS - SUN	14900 SR 70 W	E 0 - 1/8 (0.028 mi.)	59 / 8	178
<b>A J PETROLEUM LLC #1</b>	<b>2009 SE HWY 70</b>	<b>W 1/4 - 1/2 (0.364 mi.)</b>	<b>R84 / 1</b>	<b>278</b>

### UST FINDER: UST Finder Database

A review of the UST FINDER list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER site within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MURPHY USA #6902	2769 SE HWY 70	S 0 - 1/8 (0.037 mi.)	N63 / 1	180



## EXECUTIVE SUMMARY

### E MANIFEST: Hazardous Waste Electronic Manifest System

A review of the E MANIFEST list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 E MANIFEST site within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
WINN-DIXIE #2491	1737 E OAK ST	WNW 1/8 - 1/4 (0.196 mi.)	78 / 1	253

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MURPHY USA 06902	2769 SE HIGHWAY 70	S 0 - 1/8 (0.037 mi.)	N62 / 1	180



## **Appendix J – Field Review Photos**



Site 1 – Cemex – Arcadia Ready Mix

Facility ID – 8520851

Site 2 – Take 5 Oil Change

Source – Field Review

2307 SE Hwy 70

Arcadia, FL 34266





2024 Field Photo – Facing North





2024 Field Photo – Facing South



Site 3 – Publix Super Market #1528

2551 SE Hwy 70

Facility ID – FLR000257303/9814989





2024 Field Photo – Facing South





2024 Field Photo – Back of building/Facing Northeast





2024 Field Photo – Back of building/Facing Northwest



Site 4 – Walgreens Pharmacy

2575 NE Hwy 70

Source – Field Review





2024 Field Photo – Facing Northwest



Site 5 – Whitman Drainage Co

Corner of SR 70 E & SR 31

Facility ID – 8838642





2024 Field Photo – Vacant property; facing north





2024 Field Photo – Facing east





2024 Field Photo – Drainage area; facing south



Site 7 – Murphy US #6902

Facility ID – 9805491

2769 SE Hwy 70





2024 Field Photo – Front of gas station; facing south





2024 Field Photo – Facing northeast





2024 Field Photo – Monitoring well next to fuel pumps



Site 8 – Desoto Auto Mall

Facility ID – FLR000025288

3039 SE Hwy 70





2024 Field Photo – Showing property and SR 70; facing southeast





2024 Field Photo – Auto shop area; facing southeast



Site 10 – DeSoto Correctional Inst WWTF Lift Station 1

13615 SE Hwy 70

Facility ID – 9813832





2024 Field Photo – West end of Desoto Correctional; facing southeast





2024 Field Photo – Photo of lift station's proximity to SR 70; facing east





Field Photo – East side of lift station area; facing south



Site 11 – Desoto Correctional Inst Work Camp and Annex

13617 SE Hwy 70

Facility ID – ERIC\_6124





2024 Field Photo – Entrance to DeSoto Correctional Institution; facing east





2024 Field Photo – Entrance to DeSoto Correctional Institution; facing southeast





2024 Field Photo – Work Camp annex; facing south



Site 12 – FL Dept of Corrections

13617 SE Hwy 70

Facility ID – 8732080





2024 Field Photo – Generator at entrance of DeSoto Corrections; facing southeast





2024 Field Photo – Generator and tank next to facility entrance; facing southwest



Site 13 – FP&L Company - Dorrfield Substation

Facility ID – FLR000124859

12942 NE Hwy 70





2024 Field Photo – Entrance to substation; facing northwest





2024 Field Photo – Facing north





2024 Field Photo – Facing northeast



Site 14 – Basewide - Dorr Field

13615 SE Hwy 70

Facility ID - ERIC\_17342





2024 Field Photo – Area of road marked as waste cleanup site; facing southeast





2024 Field Photo – Facing southwest



Site 15 – Florida Civil Commitment Center

13619 SE Hwy 70

Facility ID – ERIC\_14896





2024 Field Photo – Entrance to site from SR 70; facing southwest





2024 Field Photo – Civil Commitment Center; facing southeast



Site 16 – Desoto Recycling & Disposal

13250 NE Hwy 70

Facility ID – 95046





2024 Field Photo – Entrance to facility; facing north





2024 Field Photo – Facing northwest





2024 Field Photo – Recycling and disposal site; facing northwest



Site 17 – Pride Enterprises - Desoto Cattle

SR 70 11 mi E of Arcadia

Facility ID – 8735792





2024 Field Photo – Property facing south





2024 Field Photo – Property facing south



Site 18 – Desoto C&D Disposal Facility

14662 NW Hwy 70

Facility ID –92117





2024 Field Photo – Front of property; facing north





2024 Field Photo – Front of property; facing northeast



Site 20 – Rum Creek Ranch

1114 SE Lake Browning Grade (SR 70)

Facility ID – 8520877





2024 Field Photo – Front of property facing southeast





2024 Field Photo – Entrance to property; facing south





2024 Field Photo – Front of property and SR 70; facing east



Site 21 – Rainbow Grove

17992 NE Hwy 70

Arcadia, FL 34266

Source – Field review





2024 Field Photo – Front of property; facing north



Site 22 – Florida Power & Light Company (Formerly Southeast Groves)

1274 NE Four Mile Grade

Arcadia, FL 34266

Source – Field review





2025 Field Review – Facing north from SR 70





2025 Field Review – Facing northeast from NE Four Mile Grade



Site 23 – Alico (Formerly Orange Co)

12010 NE Hwy 70

Arcadia, FL 34266

Facility ID – FLD053957866 / 8521198 / 8520909 / 8520908





2025 Field Review – Entrance to site and storage tanks; facing north





2025 Field Review – Within property, north of FPC sites; facing east; showing pump station and landfill



Site 24 – Arcadia Fruit Co

18500 NE Hwy 70

Source – Field review





2025 Field Photo – Facing north; berm between property and SR 70





2025 Field Photo – Facing northeast





2025 Field Photo – Facing north; storage tank area west of SMF 1009A



## Stormwater Management Facilities and Floodplain Compensation Sites





2025 Field Photo – SMF 0902A; facing south





2025 Field Photo – SMF 0903B; facing north





2025 Field Photo – SMF 0904A; facing north





2025 Field Photo – SMF 0904A; facing northwest from Mahon Ave





2025 Field Photo – FPC 1001A; facing north





2025 Field Photo – SMF 1001A; facing south





2025 Field Photo – FPC 1002-NA; facing north





2025 Field Photo – FPC 1002-SB; facing south





2025 Field Photo – SMF 1002A; facing southeast





2025 Field Photo – SMF 1002A; facing southwest





2025 Field Photo – SMF 1003B; facing north





2025 Field Photo – SMF 1004A and FPC 1003A; facing southwest





2025 Field Photo – FPC 1005C; facing southwest from east side of FPC site





2025 Field Photo – FPC 1004B and pump station; facing west from east side of the FPC site





2025 Field Photo – Pump station located next to east side of FPC 1004B; facing west





2025 Field Photo – FPC 1004B; facing northwest





2025 Field Photo – FPC 1006A; facing southeast





2025 Field Photo – FPC 1006A; facing south





2025 Field Photo – SMF 1006A; facing south





2025 Field Photo – FPC 1007C; facing southwest





2025 Field Photo – FPC 1008A; facing southwest





2025 Field Photo – SMF 1007A; facing southeast





2025 Field Photo – FPC 1009C; facing south





2025 Field Photo – SMF 1008A; facing south





2025 Field Photo – FPC 1010B; facing southeast





2025 Field Photo – SMF 1009A; facing north



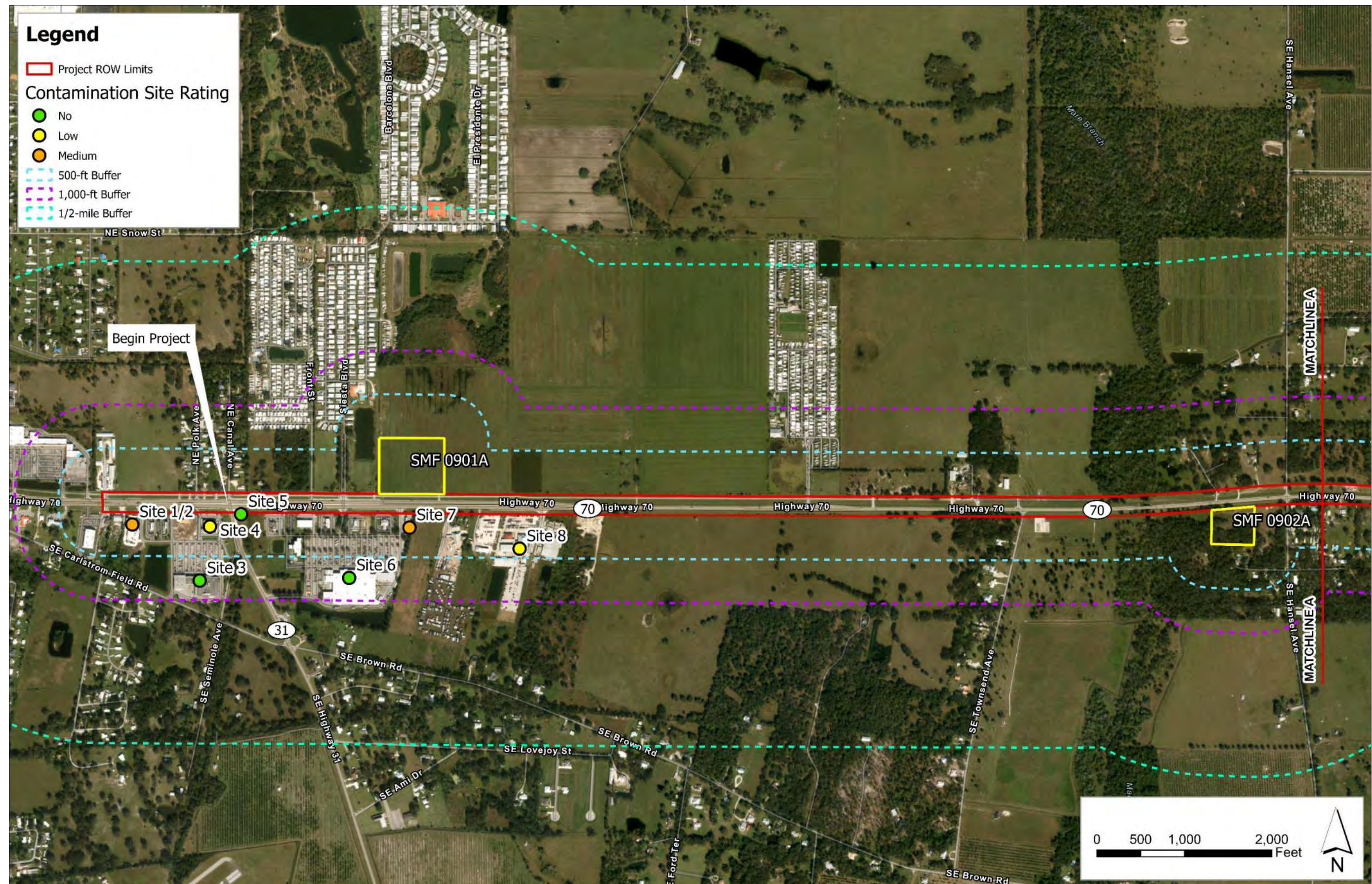


2025 Field Photo – SMF 1009A, berm and canal; facing northeast



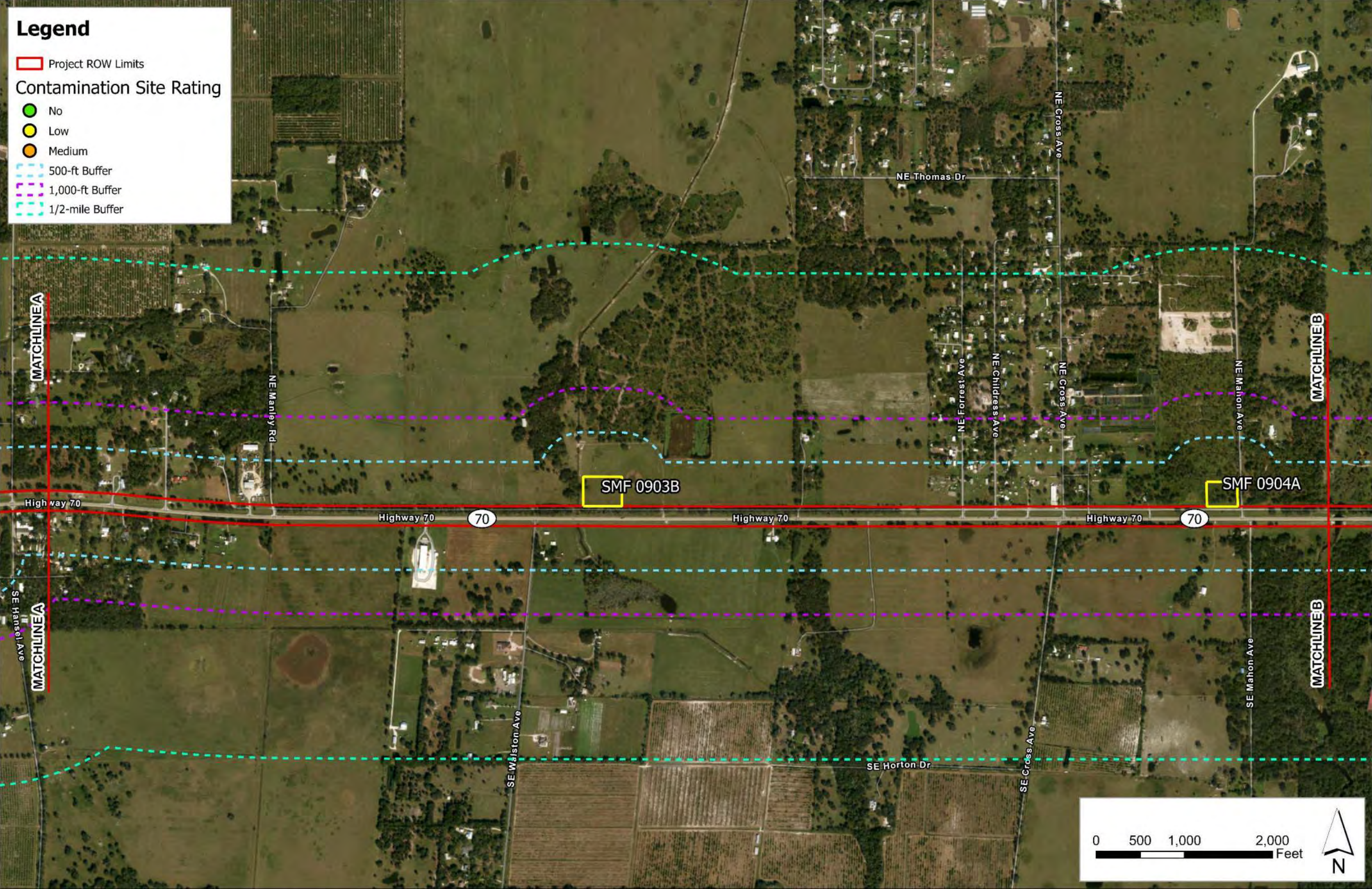
## **Appendix K – Contamination Maps**





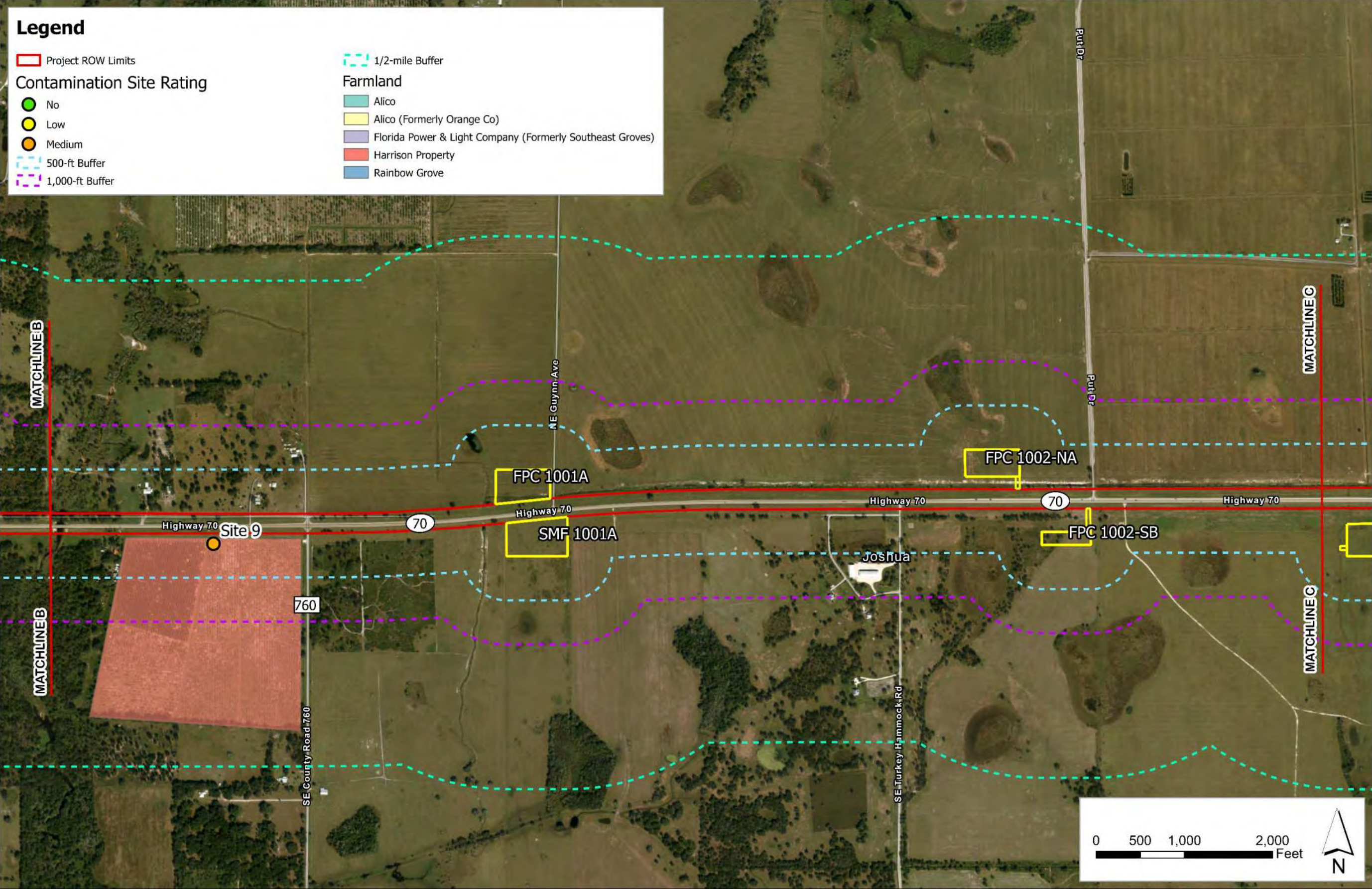
Appendix K – Contamination Maps





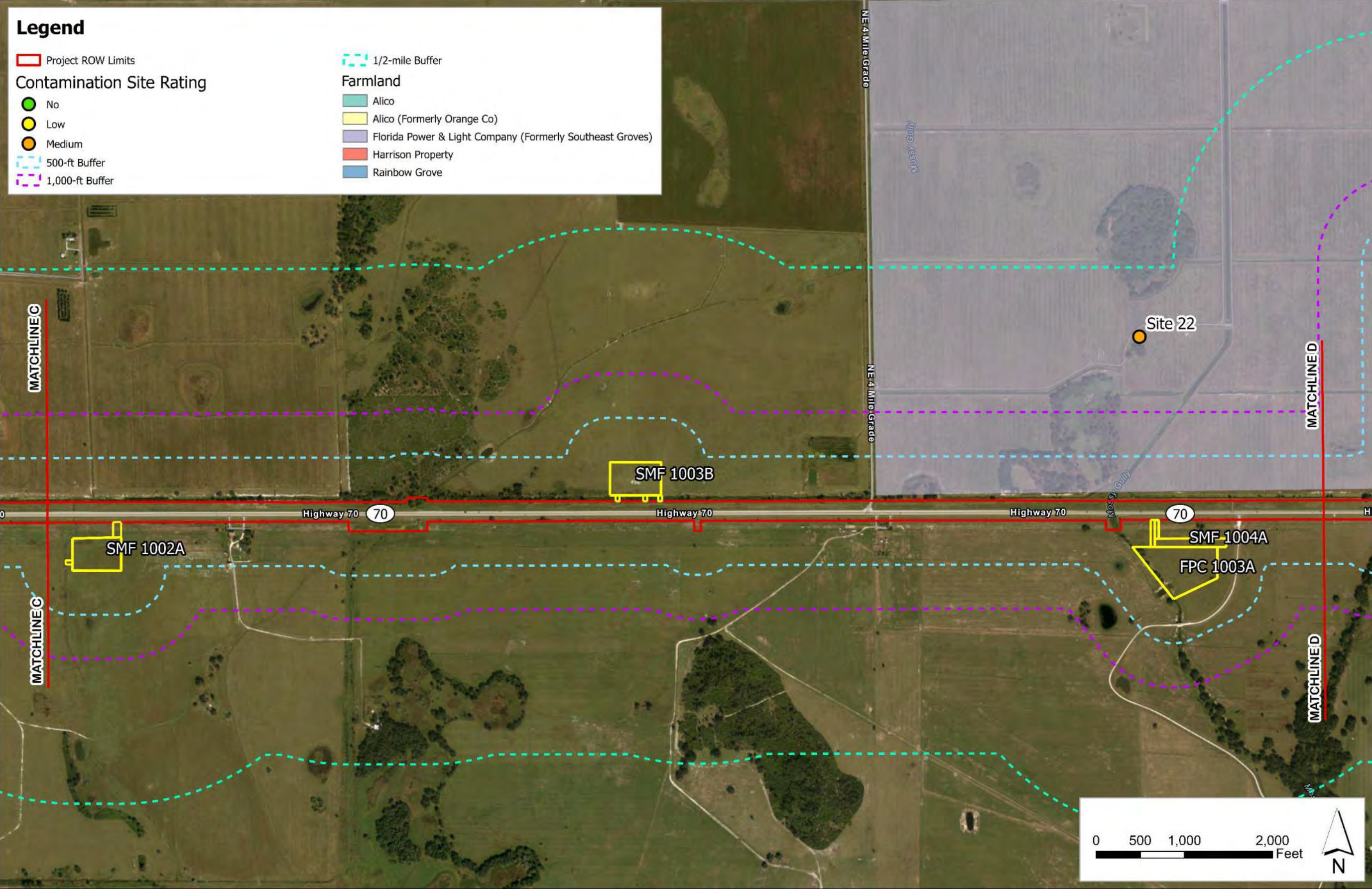
Appendix K – Contamination Maps





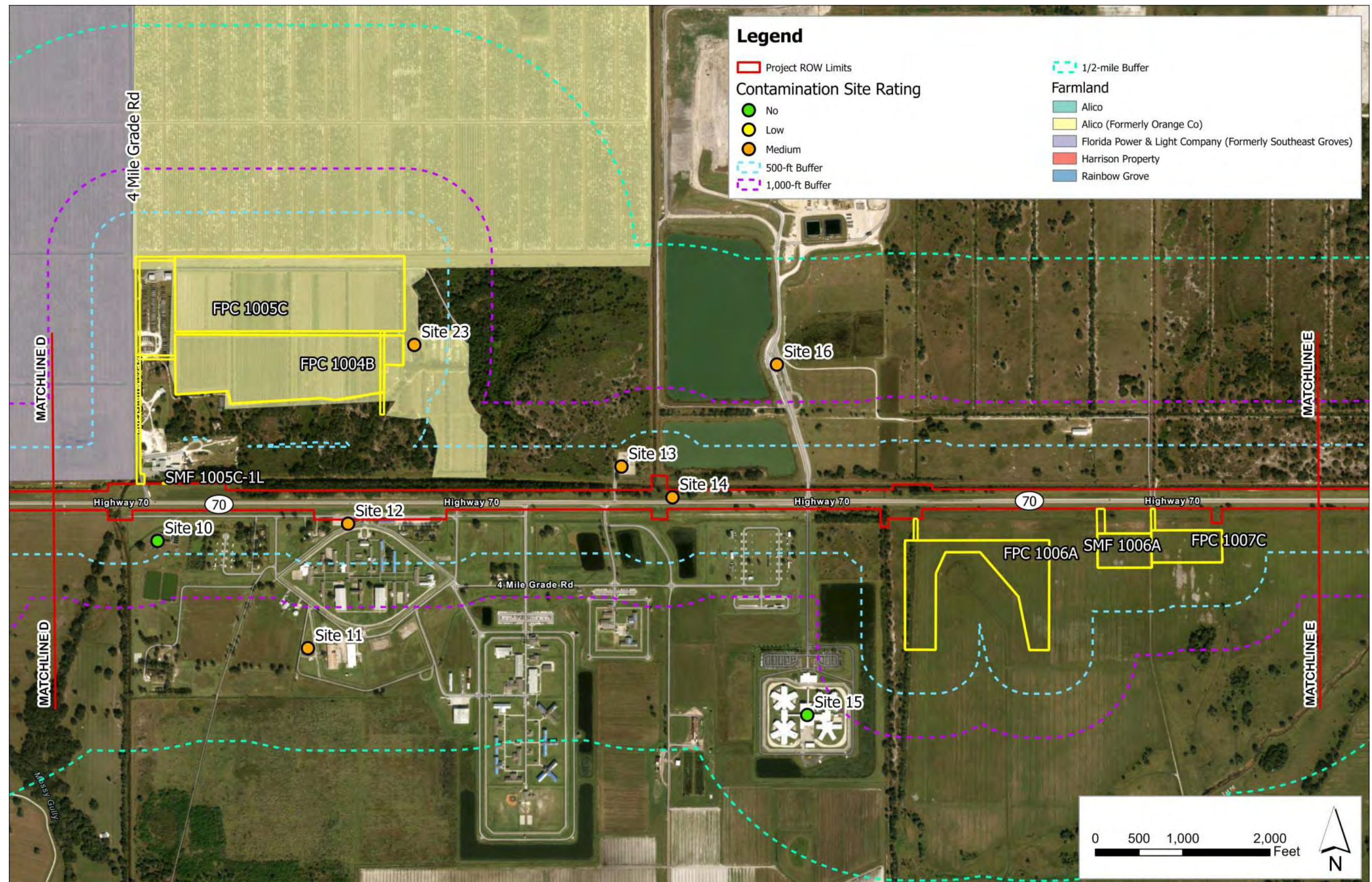
Appendix K – Contamination Maps





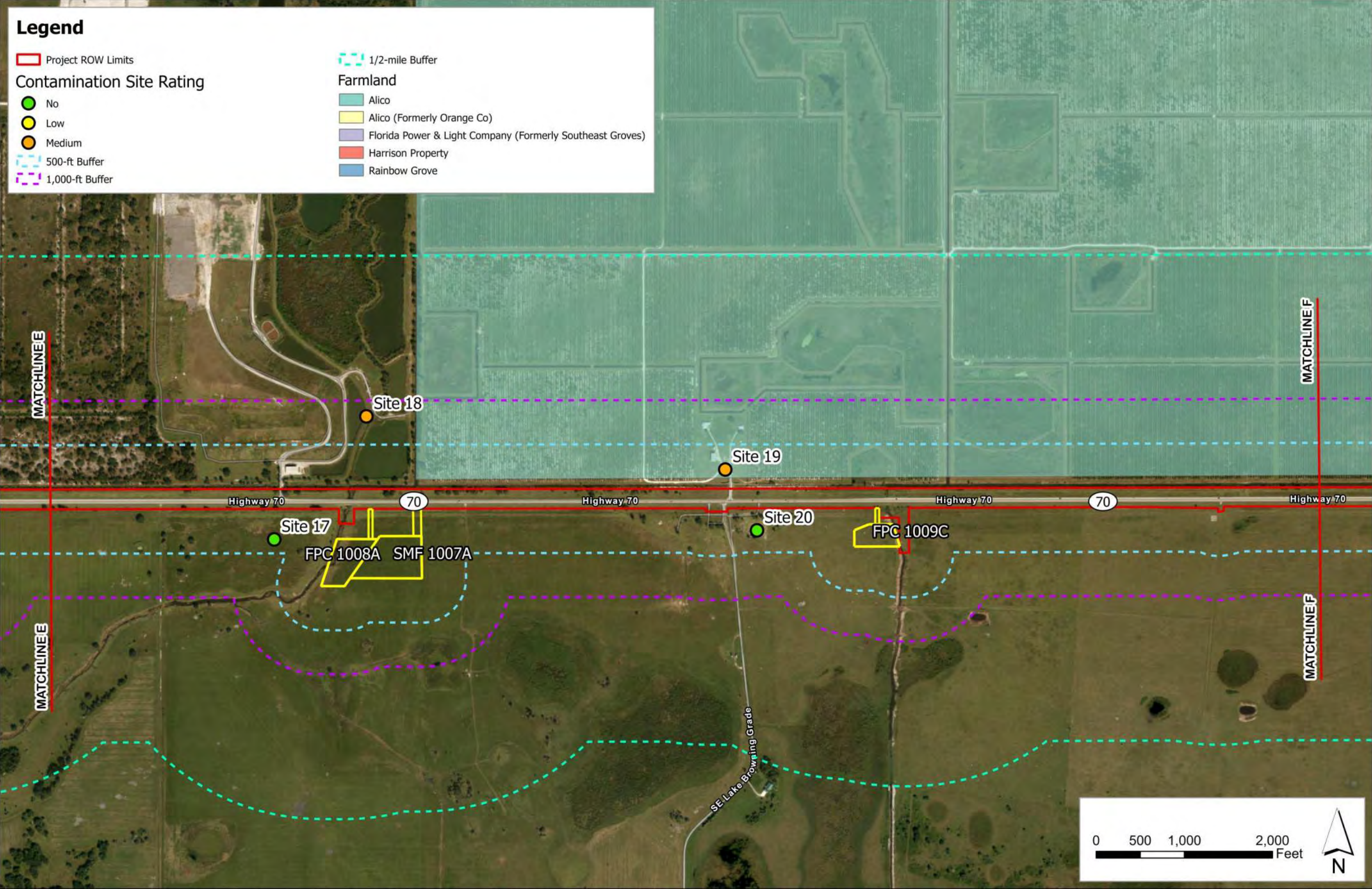
Appendix K – Contamination Maps





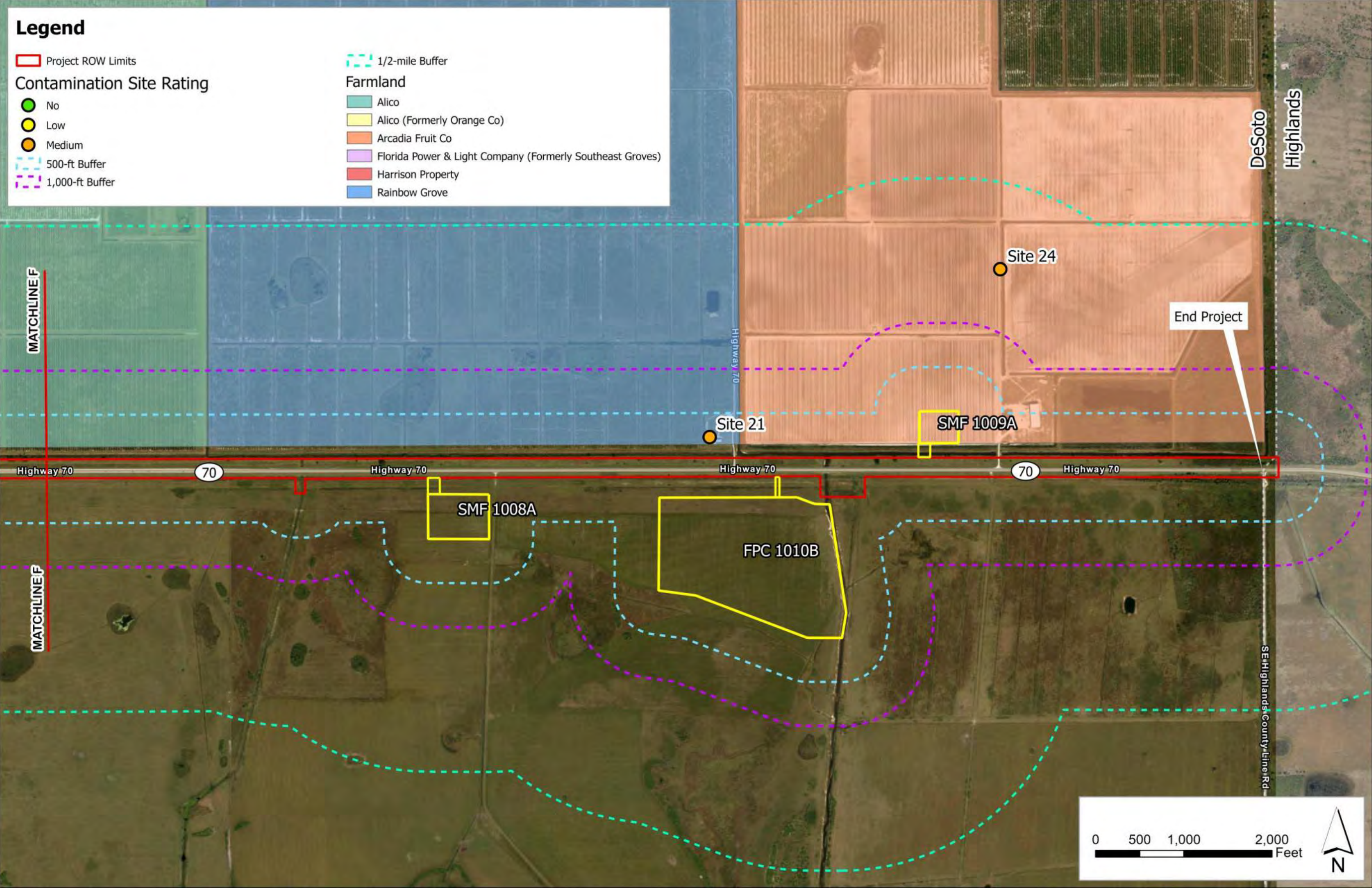
Appendix K – Contamination Maps





Appendix K – Contamination Maps





Appendix K – Contamination Maps



## **Appendix L – Supporting FDEP Database Report Figures**



Site 7 – Murphy US #6902

FDEP Facility ID: 9805491

2769 SE Hwy 70

Arcadia, FL 34266



January 9, 2025

Mr. Philip Wilkerson  
Florida Department of Environmental Protection  
13051 Telecom Parkway North  
Temple Terrace, Florida 33637  
(via email at [SWD\\_WCU@FloridaDEP.gov](mailto:SWD_WCU@FloridaDEP.gov))

**Re: Site Assessment and Interim Source Removal Report**  
Murphy Express No. 6902  
2769 Southeast Highway 70  
Arcadia, DeSoto County, Florida  
FDEP Facility ID No. 14/9805491  
Discharge Date: April 15, 2024  
Non-Program Site  
PPM Project No. 750800111

Dear Mr. Wilkerson:

PPM Consultants, Inc. (PPM) was retained by Murphy Oil USA, Inc. (Murphy) to perform source removal and site assessment activities in connection with the April 15, 2024, discharge and subsequent discovery of free product in compliance well CW-2.

A copy of the April 15, 2024, Discharge Reporting Form (DRF), the Florida Department of Environmental Protection (FDEP) Storage Tank and Contamination Monitoring cover page report, and storage tank printout are included in **Attachment A, Regulatory Documentation**. The site location is shown in **Figure 1, Site Location Map**, in **Figures**. Site features are shown in **Figure 2, Site Map, Figures**.

## 1.0 SITE BACKGROUND

### 1.1 Site Description

The site is located at 2769 Southeast Highway 70, in Arcadia, Florida. The property is bordered to the west by a bank, to the southwest by a Walmart Plaza, to the east by a vacant lot, and to the north by US Highway 70. There is a large retention pond directly south of the Walmart Plaza.



The site is an active Murphy Express gasoline station and convenience store that was originally constructed in 2003. The storage tank system consists of one 20,000-gallon regular unleaded (RUL) gasoline underground storage tank (UST) and one 20,000-gallon compartmentalized UST containing diesel (DSL) fuel and premium unleaded (PUL) gasoline. There are six pump islands, each with two fuel dispensers. The tank pit area is located at the south side of the site. There are two tank pit compliance wells (CW-1 and CW-2, which have also been referred to as MW-1 and MW-2 in previous reports) that are 4-inch in diameter and constructed of 10 feet of 4-inch diameter polyvinylchloride (PVC) 0.010-inch slotted well screen and 5 feet of 4-inch diameter PVC casing. Well construction details are shown in **Table 1, Groundwater Elevation Table**, in **Tables**. There are no known contaminated petroleum or non-petroleum contaminated sites within a one-half mile radius of the site.

No Florida Department of Health (FDOH) potable wells surveys were found in Oculus for the subject site. The FDOH Geographical Information Systems (GIS) mapping tool (data from October 2, 2024) produced a map that indicated no small private or public wells within a one-quarter mile radius and no large public well systems within a one-half mile radius of the subject site. PPM also conducted a field reconnaissance to locate any potable wells. The search area was an approximate 1,000-foot radius and, to the best extent possible given the lack of access into some of the properties, no potable wells were observed.

## **1.2 Petroleum Discharge**

During an April 15, 2024, fuel drop, a vehicle ran over the fueling truck drop tube at the RUL UST, causing a discharge into the storm drain vault box to the southeast of the UST pit. Approximately 70 gallons of product was recovered from the drain and 10 gallons absorbed off the pavement. A DRF was submitted to FDEP Southeast District office on April 15, 2024.

A groundwater gauging event conducted by PPM on June 3, 2024, showed that CW-2 contained 0.72 inches of free product. An Incident Notification Form (INF) was submitted to the FDEP Southwest District office on June 3, 2024 and is provided in **Attachment A**.

## **1.3 Interim Source Removal/Vacuum Extraction Events**

On June 11, 2024, PPM mobilized to the site to oversee a vacuum extraction event at CW-2. The vacuum extraction activities were conducted by Hull's Environmental of Lakeland, Florida. Upon arrival at the site, free product was not present in CW-2. The



pump was operated for a total of 3 hours, after which a total of 3,000 gallons of petroleum contact water was recovered. The petroleum contact water was transported off-site and disposed at the Aqua Clean Waste Management (Aqua Clean) facility in Lakeland, Florida.

On July 2, 2024, PPM mobilized to the site to oversee a second vacuum extraction at CW-2. The vacuum extraction activities were conducted by Hull's Environmental of Lakeland, Florida. Upon arrival at the site, 0.14 feet of free product was detected at CW-2. The pump was operated for a total of 8 hours, after which a total of 1,500 gallons of petroleum contact water was recovered. The petroleum contact water was transported off site to the Aqua Clean facility in Lakeland, Florida. The waste disposal documentation for both extraction events is provided in **Attachment B, Waste Disposal Documentation**. Copies of the field notes are provided in **Attachment C, Field Documentation**.

## **2.0 SCOPE OF WORK**

The field scope of work for the site assessment included the following:

- Installation of one monitoring well for delineation purposes.
- Collection of groundwater samples from the new monitoring well and existing compliance wells for laboratory analyses.

## **3.0 FIELD METHODOLOGY**

The field activities were performed in general accordance with the FDEP guidelines, including Chapter 62-780, Florida Administrative Code (FAC) and FDEP Standard Operating Procedure (SOP) for Field Sampling (FDEP-SOP-001/01). Field methodologies are described in the following sections.

### **3.1 Monitoring Well Installation**

On July 31, 2024, monitoring well MW-3 was installed by Preferred Drilling Solutions (PDS) under the supervision of PPM personnel. Monitoring well MW-3 was installed south of the tank pit for horizontal delineation purposes. Prior to installation of the well, soil samples were collected at 1- to 2-foot intervals for screening using an organic vapor analyzer (OVA) with a photoionization detector (PID). Based on soil moisture content, the water table was encountered at approximately 3 feet below ground surface (BGS). OVA readings in the vadose zone did not exceed 10 parts per million (ppm). OVA readings in the saturated zone exceeded 10 ppm in the 3-foot sample (20.1 ppm).



Monitoring well MW-3 was installed with a truck mounted hollow-stem drilling rig by PDS to a depth of 12 feet BGS and constructed of 10 feet of 2-inch diameter schedule 40 PVC slotted (0.010-inch) well screen and 2 feet of 2-inch diameter schedule 40 PVC casing. The monitoring well was sanded and grouted to FDEP specifications. The well was completed in an 8-inch steel manhole set in the cored concrete. The well was developed until the purged groundwater was clear. After installation of the well, the top of casing (TOC) elevations of the three site wells were surveyed using a Nikon AP-8 automatic Level.

Well construction details are shown in **Table 1, Tables**. Soil boring logs, well construction logs, equipment calibration logs, and well completion reports are included in **Attachment C**.

### **3.2 Groundwater Sampling**

Sample collection techniques were implemented in general accordance with the FDEP-SOP-001/01 and Chapter 62-780 FAC. Groundwater was purged until pH, temperature, conductivity, dissolved oxygen, and turbidity parameters stabilized. Per FDEP guidance documents, the purge water extracted from the wells was discharged onto a paved area where it was allowed to evaporate.

On August 5, 2024, groundwater samples were collected from MW-1 (CW-1), MW-2 (CW-2), and MW-3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by Environmental Protection Agency (EPA) Method 8260, polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270, and total recoverable petroleum hydrocarbons (TRPH) by the Florida Petroleum Residual Organic (FL-PRO) method.

The groundwater samples were properly containerized and shipped to SGS North America Inc. (SGS) in Orlando, Florida for laboratory analyses. Groundwater sampling and equipment calibration logs from the August 5, 2024 sampling event are included in **Attachment C**.

## **4.0 ASSESSMENT RESULTS**

### **4.1 Groundwater Elevation Data**

On August 5, 2024, depth to groundwater measurements were obtained from wells MW-1 (CW-1), MW-2 (CW-2), and MW-3. No free product was detected. Depth to groundwater ranged from 2.27 feet below top of casing (BTOC) in MW-3 to 2.51 feet BTOC in MW-1. Based on the groundwater elevation data, groundwater flow was to the east-southeast.



A **Groundwater Elevation Contour Map (August 5, 2024)** is provided as **Figure 3, Figures**. Depth to water and corresponding elevation measurements are presented in **Table 1, Tables**.

## **4.2 Groundwater Results**

Laboratory analysis of the samples collected on August 5, 2024, indicated that petroleum hydrocarbons were not detected in any of the groundwater samples collected from the site, therefore, there were no GCTL exceedances for BTEX, MTBE, PAHs or TRPH.

Laboratory analytical results are included in **Figure 4, Groundwater Concentration Map, Figures**. Laboratory analytical data is provided in **Table 2A, Groundwater Analytical Data – BTEX, MTBE, and TRPH** and **Table 2B, Groundwater Analytical Data – PAHs, Tables**. The **Laboratory Analytical Report** is included in **Attachment D**.

## **5.0 SUMMARY**

The results of the site assessment activities conducted between June 2024 and August 2024 indicated the following:

- On June 3, 2024, CW-2 contained 0.72 inches of free product.
- On June 11 and July 2, 2024, a total of 4,500 gallons of petroleum contact water was extracted from CW-2.
- On July 31, 2024, monitoring well MW-3 was installed south of the tank pit in a lithology consisting of fine sand from 1 foot to 12 feet BGS

On August 5, 2024, free product was not detected in CW-2 and laboratory analysis of samples collected from wells MW-1 (CW-1), MW-2 (CW-2), and MW-3 were non-detect and revealed no GCTL exceedances for BTEX, MTBE, PAHs, and TRPH.

## **6.0 CONCLUSIONS**

During an April 15, 2024 fuel drop, a vehicle ran over the fueling truck drop tube at the RUL UST, causing a discharge into the storm drain vault box to the southeast of the UST pit. Approximately 70 gallons of product was recovered from the drain and 10 gallons absorbed off the pavement. Free product (0.72 inches) was discovered in CW-2 on June 3, 2024, during a routine groundwater sampling event.



Following the discovery of free product, PPM oversaw two vacuum extraction events and recovered a total of 4,500 gallons of petroleum contact water from CW-2. Laboratory analytical data from the August 5, 2024, groundwater sampling event revealed no petroleum hydrocarbon concentrations above GCTLs.

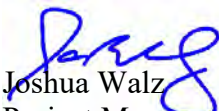
In response to the discovery of free product in CW-2, Spatco Energy Solutions (Spatco) performed compliance testing of all UST components on June 14, 2024. Results of the testing revealed that the DSL, PUL, and RUL submersible turbine pump (STP) sumps required repair. A sump closure assessment was conducted on September 25, 2024. Closure assessment activities at the DSL, PUL, and RUL sumps indicated no significant organic vapor readings and laboratory analyses samples collected from the 3-foot depth at each sump revealed no Chapter 52-777, FAC, Table II, leachability-based Soil Cleanup Target Level (SCTL) exceedances. A Submersible Turbine Pump Sump Closure Assessment Report was submitted to the Lee County Division of Natural Resources on November 22, 2024.

Based upon laboratory analytical data from the August 5, 2024 groundwater sampling event and the September 25, 2024 closure assessment, PPM concludes that the free product discovered in CW-2 is from the April 15, 2024, discharge. The surficial discharge traversed on top of CW-2, likely entered the well due to a loose well cap, and was recovered during the June 11 and July 2, 2024, vacuum events.

## 7.0 RECOMMENDATIONS

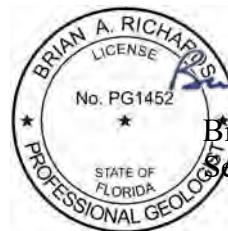
Based on the site assessment information presented in this report, there are currently no dissolved hydrocarbon impacts at the site in relation to the April 15, 2024 discharge incident, therefore PPM recommends No Further Action. If you have any questions or comments regarding this report, please contact either of the undersigned at (251) 266-7923.

Sincerely,  
PPM Consultants, Inc.

  
Joshua Walz  
Project Manager

JW:BR:kdw

PG Certification



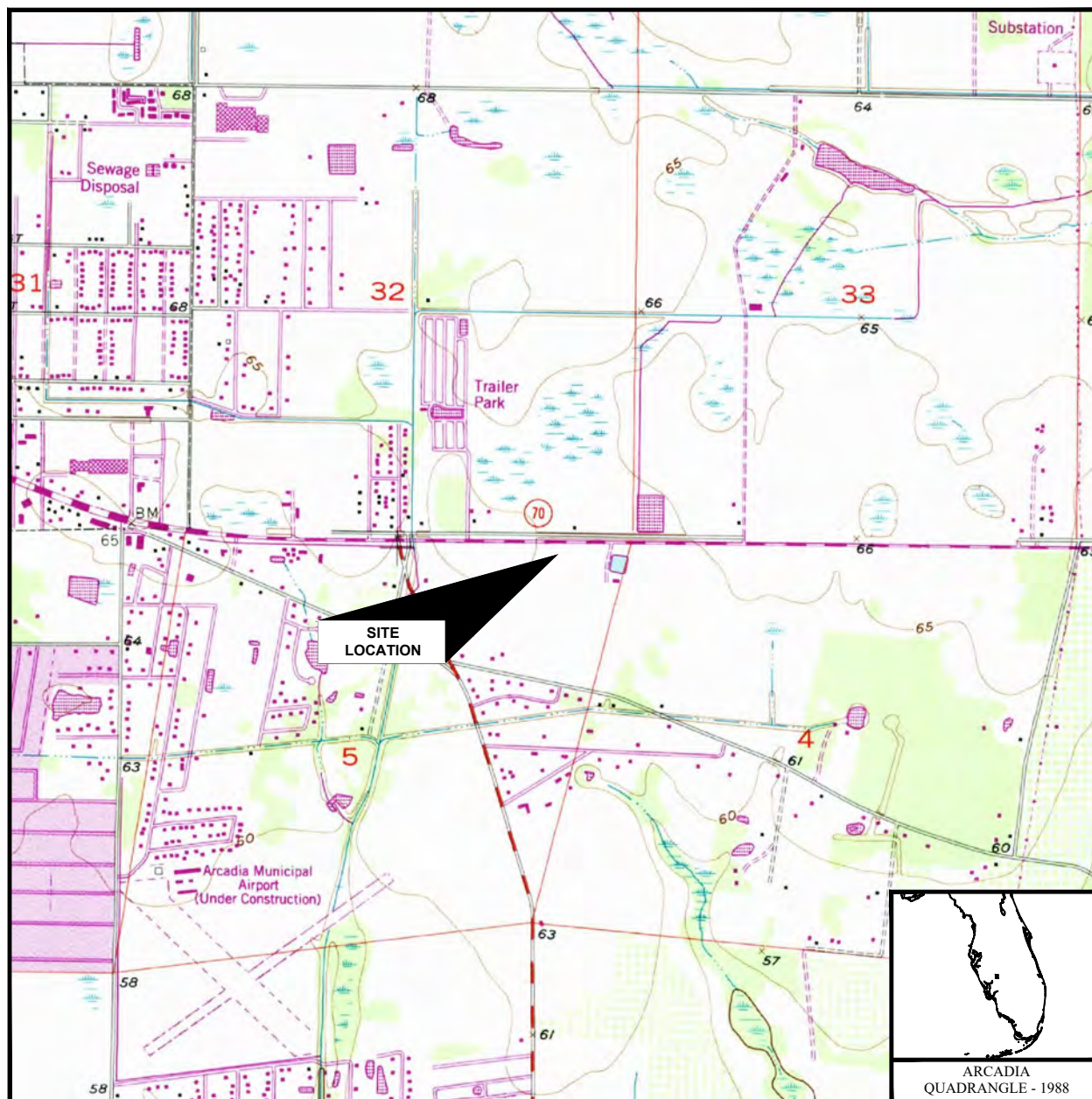
Brian Richards, P.G.  
Senior Geologist

cc: Mr. Ryan Pederson, PG, PMP, Maintenance Department / Remediation and Environmental Risk Manager, [Ryan.Pederson@murphyusa.com](mailto:Ryan.Pederson@murphyusa.com), Murphy Oil USA, Inc., 200 East Peach Street, El Dorado, Arkansas 71731

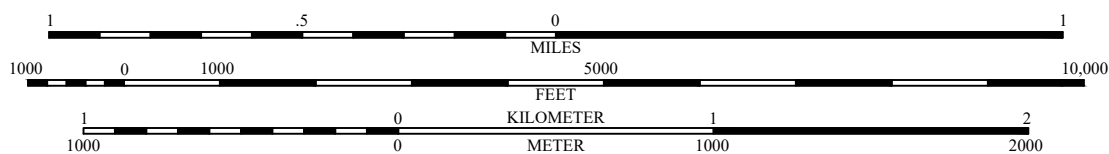


## FIGURES





SCALE: 1 : 24,000



PPM CONSULTANTS, INC.  
www.ppmco.com

DRAWN BY:

JCP

DRAWN DATE:

08/02/24

PROJECT NUMBER:

750800111

PHASE:

SA1

MURPHY OIL USA, INC.  
**MURPHY USA STORE NO. 6902**  
2769 SOUTHEAST HIGHWAY 70  
ARCADIA, FLORIDA  
FDEP FACILITY ID. NO. 14/9805491

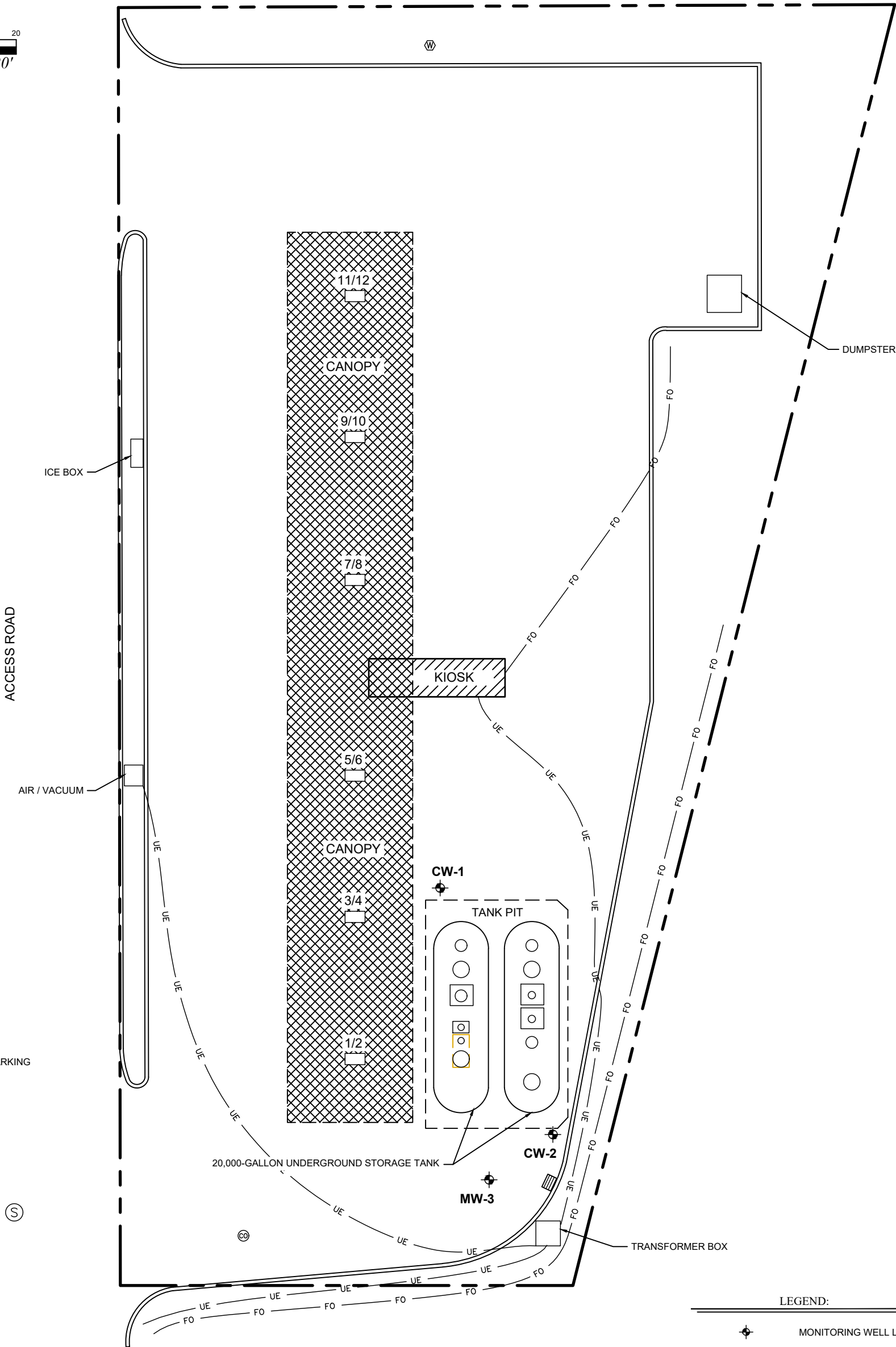
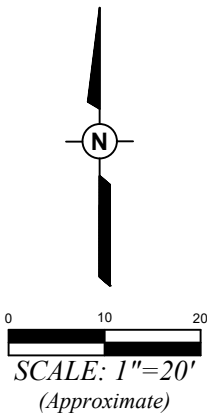
SITE LOCATION MAP

FIGURE  
NUMBER

1



SOUTHEAST HIGHWAY 70



LEGEND:

- MONITORING WELL LOCATION
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND FIBER OPTIC LINE
- STORM DRAIN
- SEWER MANHOLE
- SEWER CLEANOUT
- WATER MAIN

PPM PPM CONSULTANTS, INC. www.ppmco.com	
DRAWN BY: JCP	DRAWN DATE: 08/02/24
PROJECT NUMBER: 750800111	PHASE: SA1

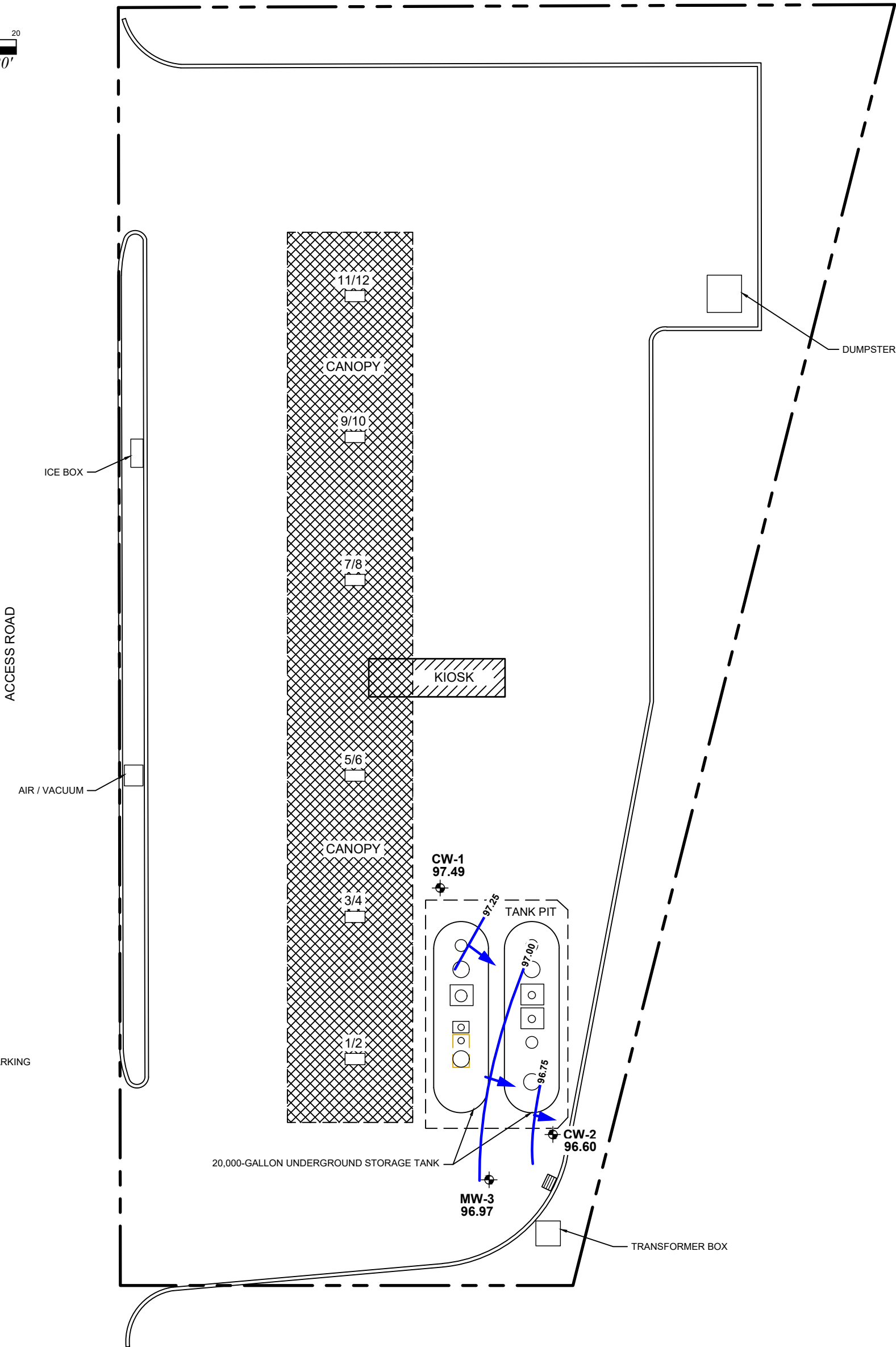
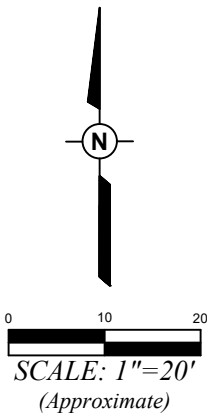
MURPHY OIL USA, INC.  
MURPHY USA STORE NO. 6902  
2769 SOUTHEAST HIGHWAY 70  
ARCADIA, FLORIDA  
FDEP FACILITY ID. NO. 14/9805491

SITE MAP

FIGURE  
NUMBER  
2



SOUTHEAST HIGHWAY 70



LEGEND:

- MONITORING WELL LOCATION
- 97.49 GROUNDWATER ELEVATION (ft.)
- 97.25 GROUNDWATER ELEVATION CONTOUR (ft.)
- GROUNDWATER FLOW DIRECTION

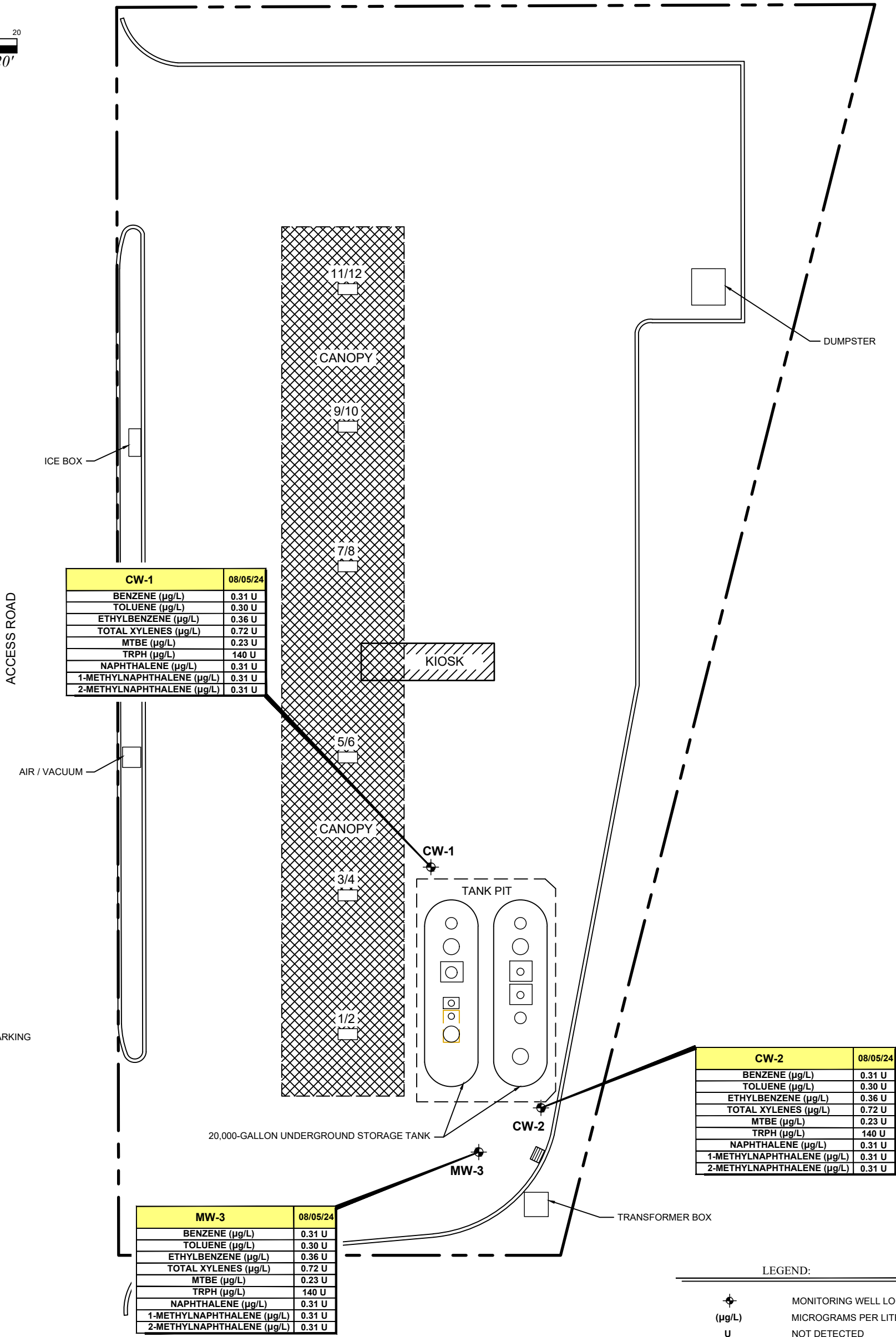
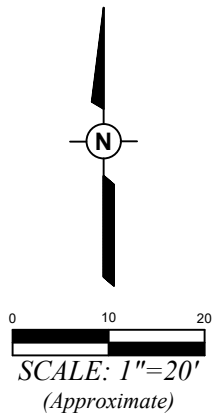
PPM PPM CONSULTANTS, INC. www.ppmco.com	
DRAWN BY: JCP	DRAWN DATE: 08/02/24
PROJECT NUMBER: 750800111	PHASE: SA1

MURPHY OIL USA, INC.  
MURPHY USA STORE NO. 6902  
2769 SOUTHEAST HIGHWAY 70  
ARCADIA, FLORIDA  
FDEP FACILITY ID. NO. 14/9805491

GROUNDWATER ELEVATION  
CONTOUR MAP  
(AUGUST 5, 2024)

FIGURE  
NUMBER  
3







## TABLES



**TABLE 1: GROUNDWATER ELEVATION TABLE**

**Facility Name: Murphy USA No. 6902**

**FDEP Facility ID No: 14/9805491**

WELL ID	CW-1/MW-1			CW-2/MW-2			MW-3		
DIAMETER (inches)	4			4			2		
WELL DEPTH (feet BGS)	15			15			12		
SCREEN INTERVAL (feet BGS)	5 - 15			5 - 15			2 - 12		
TOP OF CASING ELEVATION (feet)	100.00			98.94			99.24		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
08/09/22		NM			3.85	0.00		NI	
08/05/24	97.49	2.51		96.60	2.34		96.97	2.27	

**Notes:**

*DTW = Depth to water in feet below top of casing.*

*FP = Thickness of free product measured in feet*

*BGS = below ground surface*

*NS = Not surveyed*

*NM = Not measured*

*ELEV = Elevation*

*NI = Not Installed*



**TABLE 2A: GROUNDWATER ANALYTICAL DATA - BTEX, MTBE, and TRPH**

Facility Name: Murphy USA No. 6902

FDEP Facility ID No: 14/9805491

SAMPLE		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	MTBE	TRPH
WELL	DATE	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FDEP GCTL		<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>20</b>	5,000
FDEP NADC		<b>100</b>	<b>400</b>	<b>300</b>	<b>200</b>	<b>200</b>	50,000
CW-1/MW-1	08/05/24	0.31 U	0.30 U	0.36 U	0.72 U	0.23 U	140 U
CW-2/MW-2	08/05/24	0.31 U	0.30 U	0.36 U	0.72 U	0.23 U	140 U
MW-3	08/05/24	0.31 U	0.30 U	0.36 U	0.72 U	0.23 U	140 U

**Notes:**

µg/L = micrograms per Liter

I = Value between laboratory practical quantitation and laboratory method detection limits

J = Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination.

U = Not Detected

MTBE = Methyl tertiary butyl ether

TRPH = Total recoverable petroleum hydrocarbons

GCTL = FDEP Groundwater Cleanup Target Level per Chapter 62-777, Table I of the Florida Administrative Code (F.A.C.)

NADC = FDEP Natural Attenuation Default Concentration per Chapter 62-777, Table V of the F.A.C.

Concentrations in **bold/red type** exceed FDEP GCTLs.

NA = Not Applicable



TABLE 2B: GROUNDWATER ANALYTICAL DATA - PAHs

Facility Name: Murphy USA No. 6902  
FDEP Facility ID No: 14/9805491

SAMPLE		NAPH- THALENE (µg/L)	1-METHYL- NAPH- THALENE (µg/L)	2-METHYL- NAPH- THALENE (µg/L)	ANTH- RACENE (µg/L)	ACENAPH- THENE (µg/L)	ACENAPH- THYLENE (µg/L)	BENZO (a) ANTHRA- CENE (µg/L)	BENZO (a) PYRENE (µg/L)	BENZO (b) FLUOR- ANTHENE (µg/L)	BENZO (g, h, i) PERYLENE (µg/L)	BENZO (k) FLUOR- ANTHENE (µg/L)	CHRYSEN E (µg/L)	DIBENZ (a,h) ANTH- RACENE (µg/L)	FLUOR- ANTHENE (µg/L)	FLUORENE (µg/L)	INDENO (1,2,3-cd) PYRENE (µg/L)	PHEN- ANTHRENE (µg/L)	PYRENE (µg/L)
LOCATION	DATE																		
FDEP GCTL		14	28	28	2100	20	210	0.05	0.2	0.05	210	0.5	4.8	0.005	280	280	0.05	210	210
FDEP NADC		140	280	280	21,000	200	2,100	5	20	5	2,100	50	480	0.5	2,800	2,800	5	2,100	2,100
CW-1/MW-1	08/05/24	0.31 U	0.31 U	0.31 U	0.19 U	0.31 U	0.31 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.19 U	0.19 U	0.031 U	0.19 U	0.19 U
CW-2/MW-2	08/05/24	0.31 U	0.31 U	0.31 U	0.19 U	0.31 U	0.31 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.19 U	0.19 U	0.031 U	0.19 U	0.19 U
MW-3	08/05/24	0.31 U	0.31 U	0.31 U	0.19 U	0.31 U	0.31 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.19 U	0.19 U	0.031 U	0.19 U	0.19 U

**Notes:** µg/L = micrograms per Liter  
GCTL = FDEP Groundwater Cleanup Target Level per Chapter 62-777, Table I of the Florida Administrative Code (F.A.C.)  
NADC = FDEP Natural Attenuation Default Concentration per Chapter 62-777, Table V of the F.A.C.  
Numbers in **bold/red type** exceed FDEP GCTLs.  
PAHs = Polynuclear Aromatic Hydrocarbons  
U = Not Detected



## **ATTACHMENTS**



## **ATTACHMENT A – REGULATORY DOCUMENTATION**





# Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

## DISCHARGE REPORT FORM

DEP Form: 62-761.900(1)

Form Title: Discharge Report Form

Effective Date: June 2023

Incorporated in Rule 62-761.405, F.A.C.

Complete all applicable blanks, and submit copies of any analytical or field test results confirming contamination to soils, surface water, or groundwater to the County via email or mail.

Facility ID Number (If Registered): 14/9805491 Date of Form Completion: 4/15/2024 Date of Discovery: 4/15/2024

Facility Name: Murphy USA #6902 County: DeSoto

Facility (Property) Owner: Murphy Oil USA Inc. Telephone Number: 863-491-5065

Owner Mailing Address: 200 E Peach Street, El Dorado, AR 71730

Location of Discharge (Facility Street Address): 2769 SE Highway 70, Arcadia, FL 34266 Lat/Long: \_\_\_\_\_

Date of receipt of any test or analytical results confirming a discharge: n/a Estimated number of gallons discharged: 80 gallons

### Discharge affected: (Check all that apply)

☐ Soil ☐ Groundwater ☐ Surface water (water body name) \_\_\_\_\_  
☐ Drinking water well(s) ☐ Shoreline ☒ Other (specify) Storm Drains

### Evidence of discharge: (Check all that apply)

☐ Visual observation of sheen ☐ Results or receipt of results of analytical tests ☐ Stained soils  
☐ Visual observation of free product ☒ Spill or vehicle overfill > 25 gallons to a pervious surface ☐ Other (explain in comments)

### Method of discovery and confirmation of discharge: (Check all that apply, see rule language explanation on instructions for this form)

☒ Visual observation ☐ Closure/Closure sampling assessment ☐ Surface water analytical results  
☐ Groundwater analytical results ☐ Soil analytical results ☐ Other (specify) \_\_\_\_\_

### Type of regulated substance discharged: (Check all that apply)

☒ Gasoline ☐ Jet fuel ☐ Mineral acids (ASTs)  
☐ Diesel ☐ Used/waste oil ☐ Ammonia compound ☐ Chlorine compound  
☐ Heating oil ☐ New motor/lube oil ☐ Biofuel blends  
☐ Kerosene ☐ Pesticide ☐ Unknown  
☐ Aviation gas ☐ Grade 5 & 6 residual oils ☐ Other (specify) \_\_\_\_\_  
☐ Hazardous substance (USTs) – write name or Chemical Abstract Service (CAS) #: \_\_\_\_\_

### Discharge originated from a: (Check all that apply)

☐ Tank ☐ Other secondary containment ☐ Railroad tankcar  
☐ Piping ☐ Fitting or pipe connection ☐ Barge, tanker ship, or other vessel  
☐ Spill bucket ☐ Valve ☐ Pipeline  
☐ Dispenser ☒ Tank truck ☐ Drum  
☐ Piping sump ☒ Vehicle or customer vehicle ☐ Unknown  
☐ Dispenser sump ☐ Aircraft ☐ Other (specify) \_\_\_\_\_

### Cause of the discharge: (Check all that apply)

☐ Spill ☐ Material failure (crack, split, etc.) ☐ Collision ☐ Weather  
☐ Overfill ☐ Material incompatibility ☒ Vehicle accident ☐ Human error  
☐ Corrosion ☐ Improper installation ☐ Fire/explosion ☐ Unknown  
☐ Puncture ☐ Loose connection ☐ Vandalism ☐ Other (specify) \_\_\_\_\_

### Actions taken in response to the discharge and additional comments:

Carrier driver was delivering fuel during a standard fuel drop at the RUL UST when a customer ran over the drop tube with their vehicle. The DeSoto County Fire Department was dispatched to the site along with the emergency responder (ACT Environmental). Initially approximately 30-40 gallons of regular unleaded gasoline was discharged into the storm drain vault box, impacting 2 of the drains to the south and west of the tank pit. The emergency responder was able to vacuum the drains prior to the fuel entering the retention pond. Approximately 70 gallons were removed from the drain and another 10 gallons removed topside, totaling to 80 gallons of fuel discharged at the site.

Financial Responsibility Mechanism: \_\_\_\_\_ For Insurance - Name of Insurance Company: \_\_\_\_\_

### Agencies notified (as applicable):

☒ Fire Department ☐ County Program \_\_\_\_\_ ☐ District Office \_\_\_\_\_ ☒ State Watch Office ☐ National Response Center  
800-320-0519 800-424-8802

To the best of my knowledge and belief, all information submitted on this form is true, accurate and complete.

Ryan Pederson

Printed Name of Owner, Operator or Authorized Representative

Signature of Owner, Operator or Authorized Representative





# Department of Environmental Protection

2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(6)  
Form Title: Incident Notification Form  
Effective Date: January 2017  
Incorporated in Rule 62-761.405, F.A.C.

## Incident Notification Form

Complete all applicable blanks

Facility ID Number (if registered): 14/9805491

Facility Name: Murphy USA #6902

Telephone Number: 863-491-5065

Facility Owner or Operator: Murphy Oil USA, Inc.

Mailing Address: 200 E Peach Street, El Dorado, AR 71730

Location of Incident (facility street address): 2769 SE Highway 70, Arcadia, FL 34266

Date of Form Completion: 6/3/2024

Date of Discovery of Incident: 6/3/2024

County: DeSoto

Monitoring method or activity that indicates an incident: (Check all that apply)

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Visual Observation | <input type="checkbox"/> Electronic sensors, probes or cables | <input type="checkbox"/> Closure                |
| <input type="checkbox"/> Primary integrity test        | <input type="checkbox"/> Interstitial monitoring              | <input type="checkbox"/> Line leak detectors    |
| <input type="checkbox"/> Interstitial integrity test   | <input type="checkbox"/> Closure integrity evaluation         | <input type="checkbox"/> Automatic tank gauging |
| <input type="checkbox"/> Containment integrity test    | <input type="checkbox"/> Tracer or helium testing             | <input type="checkbox"/> Other (specify): _____ |

Type of regulated substance stored in the storage system: (Check all that apply)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Gasoline  | <input type="checkbox"/> Jet fuel                   | <input type="checkbox"/> Mineral acid (ASTs)   |
| <input type="checkbox"/> Diesel  | <input type="checkbox"/> Used/waste oil             | <input type="checkbox"/> Ammonia compound <input type="checkbox"/> Chlorine compound |
| <input type="checkbox"/> Heating oil   | <input type="checkbox"/> New motor/lube oil         | <input type="checkbox"/> Biofuel blends  |
| <input type="checkbox"/> Kerosene  | <input type="checkbox"/> Pesticide                  | <input checked="" type="checkbox"/> Unknown  |
| <input type="checkbox"/> Aviation gas  | <input type="checkbox"/> Grades 5 & 6 residual oils | <input type="checkbox"/> Other (specify): _____                                      |
| <input type="checkbox"/> Hazardous substance (USTs) – write name or Chemical Abstract Service (CAS) #: _____ |   |  |

Incident involves or originated from: (Check all that apply)

A positive response of release detection device:

- |   |
|---|
| <input type="checkbox"/> 1. Visual observation                                |
| <input type="checkbox"/> 2. Alarm   |
| <input type="checkbox"/> 3. Vacuum or pressure change                         |
| <input type="checkbox"/> 4. MLLD restricting flow                             |
| <input type="checkbox"/> 5. ELLD/other device shutting power off to pump      |
| <input type="checkbox"/> 6. Liquid > 1 inch in out-of-service tank (UST only) |

A failed integrity test:

- |  |
|--|
| <input type="checkbox"/> 1. Double-walled tank       |
| <input type="checkbox"/> 2. Double-walled piping     |
| <input type="checkbox"/> 3. Containment sump         |
| <input type="checkbox"/> 4. Spill containment system |
| <input type="checkbox"/> 5. Double bottom AST        |

Or:

- |  |
|--|
| <input checked="" type="checkbox"/> 1. Odors in the vicinity         |
| <input type="checkbox"/> 2. Loss > 100 gallons on impervious surface |
| <input type="checkbox"/> 3. Loss > 500 gallons in AST dike field     |
| <input type="checkbox"/> 4. Unusual operating conditions             |
| <input type="checkbox"/> Other (specify): _____                      |

Cause of the incident, if known: (Check all that apply)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Improper installation                 | <input type="checkbox"/> Spill/Overfill > 100 gallons on impervious surface | <input type="checkbox"/> Human error            |
| <input type="checkbox"/> Material failure (crack, split, etc.) | <input type="checkbox"/> Spill/Overfill > 500 gallons in AST dike field     | <input type="checkbox"/> Vandalism or theft     |
| <input type="checkbox"/> Material incompatibility              | <input type="checkbox"/> Corrosion  | <input checked="" type="checkbox"/> Unknown     |
| <input type="checkbox"/> Faulty probe or sensor                | <input type="checkbox"/> Weather  | <input type="checkbox"/> Other (specify): _____ |

Actions taken in response to the incident:

Approximately 0.72-inches of free product discovered in monitoring well MW-2 when preparing for groundwater sampling. Murphy to complete tank tightness testing for initial investigation.

Comments:

Agencies notified (as applicable):

- |  |   |   |   |   |
|--|---|---|---|---|
| <input type="checkbox"/> Fire Department | <input type="checkbox"/> County Program _____ | <input checked="" type="checkbox"/> District Office, SD | <input type="checkbox"/> State Watch Office<br>800-320-0519 | <input type="checkbox"/> National Response Center<br>800-424-8802 |
|--|---|---|---|---|

To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.

Ryan Pederson, Murphy Oil USA, Inc.

Printed name of Owner, Operator or Authorized Representative

Ryan Pederson

Signature of Owner, Operator and Authorized Representative

Digitally signed by Ryan Pederson  
Date: 2024.06.03 14:14:40 -0600





**Florida Department of  
Environmental Protection**

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Storage Tanks &  
Contamination  
Monitoring Information

## Cover Page Report

Report Run Date: 10/02/2024

Last Data Refresh: 10/01/2024

Report Generated from DOPPLER

<b>District</b>	South	<b>Type</b>	Retail Station
<b>County</b>	Desoto	<b>Status</b>	OPEN
<b>ID</b>	9805491	<b>Latitude</b>	27° 12' 29.2314
<b>Name</b>	MURPHY USA #6902 2769 SE HWY 70 ARCADIA, FL 34266	<b>Longitude</b>	81° 49' 38.8271
		<b>LL Method</b>	DGPS
<b>Contact</b>	STORE MGR	<b>LL Status</b>	REVIEWED
<b>Phone</b>	(863) 491-5065	<b>Status Date</b>	10/15/2003

## Account Owner Information

<b>Name</b>	MURPHY OIL USA INC 200 PEACH ST El Dorado, AR 71730	<b>Effective Date</b>	02/17/2003
<b>Contact</b>	KRYSTAL TERRELL / JENNIFER BRIDGES		
<b>Phone</b>	(870) 677-6116		
<b>Email</b>	KRYSTAL.TERRELL@MURPHYUSA.COM		
	<b>Placard # / Date</b>	679958 - 06/05/2024	

## Property Owner Information

<b>Name</b>	MURPHY OIL USA INC 200 PEACH ST El Dorado, AR 71730	<b>Effective Date</b>	02/17/2003
<b>Contact</b>	KRYSTAL TERRELL / JENNIFER BRIDGES		
<b>Phone</b>	(870) 677-6116		
<b>Email</b>	KRYSTAL.TERRELL@MURPHYUSA.COM		



Tank	Tank Size	Content	Installed	Placement	Status
1	20000	Unleaded Gas (B)	01/01/2003	UNDERGROUND	In Service (U)

#### Constructions

(A) Ball check valve  
(E) Fiberglass  
(I) Double wall  
(M) Spill containment bucket  
(N) Flow shut-Off  
(O) Tight fill  
(P) Level gauges/alarms

#### Pipings

(F) Double wall  
(J) Pressurized piping system  
(K) Dispenser liners  
(Z) DEP approved piping

#### Monitorings

(3) Electronic monitor pipe sumps  
(5) Electronic monitor dispenser liners  
(A) Site Suitability Plan  
(F) Monitor dbl wall tank space  
(H) Mechanical line leak detector  
(K) Monitor dbl wall pipe space

Tank	Tank Size	Content	Installed	Placement	Status
2	20000	Unleaded Gas (B)	01/01/2003	UNDERGROUND	In Service (U)

#### Constructions

(A) Ball check valve  
(E) Fiberglass  
(I) Double wall  
(L) Compartmented  
(M) Spill containment bucket  
(N) Flow shut-Off  
(O) Tight fill  
(P) Level gauges/alarms

#### Pipings

(F) Double wall  
(J) Pressurized piping system  
(K) Dispenser liners  
(Z) DEP approved piping

#### Monitorings

(3) Electronic monitor pipe sumps  
(5) Electronic monitor dispenser liners  
(A) Site Suitability Plan  
(F) Monitor dbl wall tank space  
(H) Mechanical line leak detector  
(K) Monitor dbl wall pipe space

## Insurance Documents

FR Type	Effective Date	Expiration Date	Company Name
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2022	04/30/2023	
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2020	04/30/2021	



SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2019	04/30/2020
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2018	04/30/2019
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2017	04/30/2018
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	04/30/2016	04/30/2017
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2014	04/30/2015
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2011	04/30/2012
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2010	04/30/2011
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	04/30/2009	04/30/2010
SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER	05/01/2002	04/30/2009

## Legacy Compliance Activity Information

Activity Code	Date Initiated	Date Completed	Results	Inspector	AST/UST Count	Description
TCQA	03/09/2006	04/12/2006	MINOR OUT-OF-COMPLIANCE	RANDOLPH_L	0/0	COMPLIANCE ASSURANCE
TCI	01/31/2006	02/02/2006	IN-COMPLIANCE	DURRANCE_W	0/2	COMPLIANCE ASSURANCE
TIN	02/16/2005	03/07/2005	IN-COMPLIANCE	HARRISON_BL	0/2	COMPLIANCE ASSURANCE
TCI	02/16/2005	03/07/2005	IN-COMPLIANCE	HARRISON_BL	0/2	COMPLIANCE ASSURANCE



TCR	03/15/2004	03/19/2004	IN-COMPLIANCE	HARRISON_BL	0/2	COMPLIANCE ASSURANCE
TCI	12/08/2003	12/23/2003	SIGNIFICANT OUT-OF-COMPLIANCE	HARRISON_B	0/2	COMPLIANCE ASSURANCE
TIN	03/03/2003	04/03/2003	IN-COMPLIANCE	KEENE_K	0/2	COMPLIANCE ASSURANCE

## Compliance Activity Information

Activity Code	Date Completed	Results	Inspector	AST/UST Count	Description
Letter	06/07/2024	Satisfied	KLEINMANN_K_1		Compliance Assistance
Site Inspection	06/07/2024	In Compliance	KLEINMANN_K_1	0/2	Compliance Assistance
Discharge Reporting	06/07/2024	Satisfied	KLEINMANN_K_1		Discharge
Letter	01/05/2023	Satisfied	KLEINMANN_K_1		Compliance Assistance
Letter	01/05/2023	Satisfied	KLEINMANN_K_1		Compliance Assistance
Phone Conversation	01/05/2023	Satisfied	KLEINMANN_K_1		Routine Compliance
Site Inspection	08/30/2022	Minor Out of Compliance	KLEINMANN_K_1	0/2	Routine Compliance
Electronic Communication	08/30/2022	Satisfied	KLEINMANN_K_1		Routine Compliance
Letter	08/28/2020	Satisfied	SAUTTER_MA_2		Routine Compliance
Site Inspection	08/28/2020	In Compliance	SAUTTER_MA_2	0/2	Routine Compliance
Site Inspection	07/17/2018	In Compliance	SAUTTER_MA_2	0/2	Routine Compliance
Letter	07/17/2018	Satisfied	SAUTTER_MA_2		Routine Compliance
Site Inspection	08/15/2016	In Compliance	ZIMMERMAN_CA_1	0/2	Routine Compliance
Site Inspection	09/03/2014	In Compliance	ZIMMERMAN_CA_1	0/2	Non-Compliance



Site Inspection	08/12/2014	Minor Out of Compliance	ZIMMERMAN_CA_1	0/2	Routine Compliance
Letter	08/12/2014	Satisfied	ZIMMERMAN_CA_1		Non-Compliance
Document Management	10/04/2013	Complete	JOHNSON_SG_1		Incident
Incident	10/04/2013	Has not led to Discharge	JOHNSON_SG_1		Incident
Site Inspection	06/22/2012	In Compliance	DURRANCE_WK_1	0/2	Non-Compliance
Letter	02/14/2012	Satisfied	DURRANCE_WK_1		Non-Compliance
Site Inspection	02/08/2012	Major Out of Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Site Inspection	04/21/2011	In Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Site Inspection	02/23/2010	Minor Out of Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Letter	02/23/2010	Satisfied	DURRANCE_WK_1		Non-Compliance
Letter	01/21/2009	Satisfied	DURRANCE_WK_1		Non-Compliance
Site Inspection	01/21/2009	Minor Out of Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Letter	12/21/2007	Satisfied	DURRANCE_WK_1		Non-Compliance
Emergency Preparedness Information	12/21/2007	Satisfied	DURRANCE_WK_1		Routine Compliance
Site Inspection	12/21/2007	Minor Out of Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Emergency Preparedness Information	05/22/2007	Satisfied	DURRANCE_WK_1		Routine Compliance



Emergency Preparedness Information	02/12/2007	Satisfied	DURRANCE_WK_1		Routine Compliance
Letter	01/24/2007	Satisfied	DURRANCE_WK_1		Non-Compliance
Site Inspection	01/24/2007	Minor Out of Compliance	DURRANCE_WK_1	0/2	Routine Compliance
Emergency Preparedness Information	09/25/2006	Satisfied	DURRANCE_WK_1		Routine Compliance

**No Open AOCs Found**

**No Open Violations Found**

## Discharge Information

Discharge Date	Clean Up Status	Score	Eligibility Info	Site Manager	Phone
04/15/2024	INACTIVE			HILL_CW	





# STORAGE TANKS & CONTAMINATION MONITORING

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Petroleum Restoration Program

## Storage Tank Contaminated Facility Name & Address Search

**Facility ID#:** 9805491

**District:** SD

**Name:** Murphy Usa #6902  
2769 Se Hwy 70  
Arcadia, FL 34266

**County:** 14 - Desoto  
**Type:** A - Retail Station

**Contact:** Store Mgr

**Status:** Open

**Phone:** 863-491-5065

**Latitude:** 27:12:29.2314

**Longitude:** 81:49:38.8271

**LL Method:** DGPS

**Account Owner:** Murphy Oil Usa Inc

Tank#	Size	Content	Installed	Placement	Status	Construction	Piping	Monitoring
1	20000	Unleaded Gas	01/01/2003	UNDER	In Service	A - Ball Check Valve E - Fiberglass I - Double Wall M - Spill Containment Bucket N - Flow Shut-Off O - Tight Fill P - Level Gauges/Alarms	F - Double Wall J - Pressurized Piping System K - Dispenser Liners Z - Dep Approved Piping	3 - Electronic Monitor Pipe Sumps 5 - Electronic Monitor Dispenser Liners A - Site Suitability Plan F - Monitor DbI Wall Tank Space H - Mechanical Line Leak Detector K - Monitor DbI Wall Pipe Space
2	20000	Unleaded Gas	01/01/2003	UNDER	In Service	A - Ball Check Valve E - Fiberglass I - Double Wall L - Compartmented M - Spill Containment Bucket N - Flow Shut-Off O - Tight Fill	F - Double Wall J - Pressurized Piping System K - Dispenser Liners Z - Dep Approved Piping	3 - Electronic Monitor Pipe Sumps 5 - Electronic Monitor Dispenser Liners A - Site Suitability Plan F - Monitor DbI Wall Tank Space H - Mechanical Line Leak



**P** - Level  
Gauges/Alarms

Detector  
**K** - Monitor Dbl  
Wall Pipe Space

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**\*\*\*Note:**

**Construction, Piping, and Monitoring Info not shown for CLOSED tanks  
(Status A: Closed in Place, B: Removed from the site).**

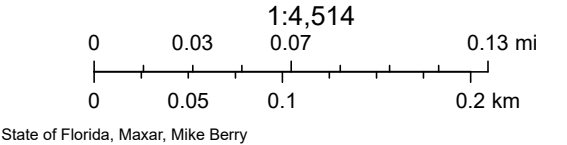


FL DOH EH Water Printout



October 2, 2024

 Counties

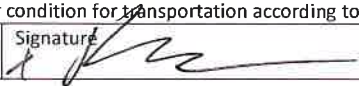
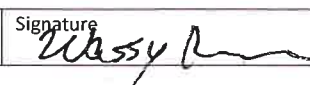
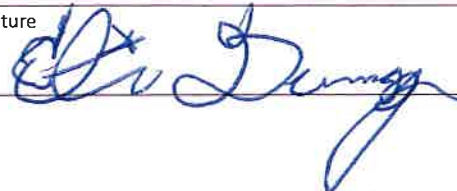




**ATTACHMENT B – WASTE DISPOSAL DOCUMENTATION**



# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No. FDEP Facility ID No.		Manifest Doc No. 0 0 0 1		2. Page 1 of 1		WH106241778	
3. Generator's Mailing Address: Murphy No.6902 2769 Southeast Highway 70 Arcadia, FL 34266  4. Generator's Phone 863-491-5065				Generator's Site Address (if different than mailing):		A. Manifest Number 0001		B. State Generator's ID	
5. Transporter 1 Company Name Hull's Environmental Services				6. US EPA ID Number FLR000260315		C. State Transporter's ID		D. Transporter's Phone 866-450-9077	
7. Transporter 2 Company Name				8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address:  Aquaclean 3210 Whitten Rd. Lakeland, FL 33811				10. US EPA ID Number  FLR000034033		G. State Facility ID		H. State Facility Phone 863-644-0665	
11. Description of Waste Materials				12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments	
				No.	Type				
a. Petroleum Contact Water (PCW) Virgin Diesel and Water Mix				1	TT	3000	Gallons		
b.									
c.									
J. Additional Descriptions for Materials Listed Above				K. Disposal Location					
				Cell			Level		
				Grid					
15. Special Handling Instructions and Additional Information									
Purchase Order # WH106241778				EMERGENCY CONTACT / PHONE NO.: 866-450-9077					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified, and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name X Kyle Wilson				Signature 			Month 6	Day 11	Year 24
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed Name Massily Rivora				Signature 			Month 6	Day 11	Year 24
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed Name				Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal									
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.									
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.									
Printed Name Etienne D...				Signature 			Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY



# NON-HAZARDOUS MANIFEST

8.09  
981

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. FDEP Facility ID No.		Manifest Doc No. 0001		2. Page 1 of 1		WH106241778	
3. Generator's Mailing Address Murphy no. 6902 2769 Southeast highway 70 Arcadia, fl 34266 4. Generator's Phone 863-491-5065				Generator's Site Address (if different than mailing): 705 MAIN STREET AUBURNDALE, FL 33823				A. Manifest Number 0001	
								B. State Generator's ID	
5. Transporter 1 Company Name Hull's Environmental Services				6. US EPA ID Number FLR000260315				C. State Transporter's ID	
7. Transporter 2 Company Name				8. US EPA ID Number				D. Transporter's Phone 866-450-9077	
								E. State Transporter's ID	
								F. Transporter's Phone	
9. Designated Facility Name and Site Address Aqua Clean 3210 Whitten rd. Lakeland fl, 33811				10. US EPA ID Number				G. State Facility ID	
								H. State Facility Phone 863-425-4884	
11. Description of Waste Materials				12. Containers		13. Total Quantity		14. Unit Wt./Vol	
				No. Type					
a. Petroleum contact water (PCW) Virgin Deisel and Water				1		cm		1500 gallons	
b.									
c.									
J. Additional Descriptions for Materials Listed Above				K. Disposal Location					
				Cell		Level			
				Grid					
15. Special Handling Instructions and Additional Information									
<div style="display: flex; justify-content: space-between;"> <div> <p>Purchase Order # WH106241778</p> <p>EMERGENCY CONTACT / PHONE NO.: 866-450-9077</p> </div> <div> <p>HM01B 292 989</p> <p>20211918 HWD0240051</p> </div> </div>									
16. GENERATOR'S CERTIFICATE: <i>[Signature]</i>									
I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified, and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name <i>Cody ice</i>				Signature <i>Cody ice</i>				Month Day Year 7 2 24	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature				Month Day Year	
Printed Name									
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature				Month Day Year	
Printed Name									
19. Certificate of Final Treatment/Disposal									
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.									
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.									
Printed Name <i>J Robinson</i>				Signature <i>[Signature]</i>				Month Day Year 7 2 24	

GENERATOR

TRANSPORTER

FACILITY



## **ATTACHMENT C – FIELD DOCUMENTATION**



## FIELD DATA

**SITE INFORMATION:**

<b>Client:</b>	Murphy Oil USA
<b>Location:</b>	Murphy Express No. 6902
<b>City, State:</b>	Arcadia, FL
<b>Project Number:</b>	750800104

<b>Date:</b>	6/11/2024
<b>Start Time (military):</b>	7:30
<b>Technician:</b>	Kyle Wilson

**AMBIENT CONDITIONS:**

**Weather Conditions Throughout** \_\_\_\_\_  
**Pilot Test:** \_\_\_\_\_  
 \_\_\_\_\_

**EXTRACTION POINT INFORMATION:**

<i>Extraction Well ID:</i>	<i>Diameter (in):</i>	<i>Depth (ft):</i>	<i>Screen Length (ft):</i>	<i>TOC (ft):</i>	<i>Depth to Water (ft):</i>	<i>Depth to FP (ft):</i>
CW-1	2.00	14.00	10.00	100.17	5.80	0.00
CW-2	2.00	14.00	10.00	100.00	6.71	0.00

**MONITORING WELL INFORMATION:**

[illegible]



## FIELD DATA

**INSTRUMENT INFORMATION:**

Model:	Tiger ION	Priming Tube Flow Instrument:	Manometer
Calibration Gas:	Isobutylene	Truck Bleed Air Flow Instrument:	Manometer
Correction Factor:	2.6	Exhaust Air Flow Instrument:	Manometer

**PIPING DIAMETER AT PITOT TUBE LOCATIONS INFORMATION:**

Effluent Stack (in):	4.0
Truck Bleed Air (in):	1.0
Priming Tube (in):	1.0

**TRUCK INFORMATION:**

<b>Model:</b>	Peterbuilt
<b>Horsepower:</b>	375
<b>Holding Capacity (gal):</b>	3,000
<b>Number of Stacks:</b>	1

**FREE PRODUCT INFORMATION:**

<b>Calculated Mass in Subsurface (lb):</b>	1,000
<b>Main Product found at the Site:</b>	Fresh Gasoline
<b>Molecular Weight (g/gmol):</b>	102.2
<b>Specific Gravity:</b>	0.720

- <-- If using the Model, then this is a required field.
- <-- Select the main type of product encountered at the site.

**AMBIENT/EXTRACTION WELL/VAPOR/PUMP INFORMATION:**

[illegible]



[illegible]



[illegible]



**TABLE A-1B**  
**AMBIENT AND STATIC CONDITIONS**

<b>ELAPSED TIME (min)</b>	<b>BAROMETRIC PRESSURE (inHg)</b>	<b>RELATIVE HUMIDITY (%)</b>	<b>TEMP. (°F)</b>
1	29.89	93%	78
15	29.89	93%	78
30	29.89	93%	78
45	29.89	93%	78
60	29.90	93%	78
90	29.89	93%	78
120	29.89	93%	78
180	29.89	93%	78
AVERAGE:	29.89	93.0%	78

[illegible]



**TABLE C-2**  
**HYDRAULIC RESPONSE SUMMARY**

[illegible][illegible]

\* NOTE: A negative drawdown indicates upwelling of the water table.



## VAPOR FLOW SUMMARY

<b>ELAPSED TIME (min)</b>	<b>TRUCK BLEED AIR STANDARD FLOW RATE (scfm)</b>	<b>PRIMING TUBE STANDARD FLOW RATE (scfm)</b>	<b>TOTAL EFFLUENT AIR FLOW (scfm)</b>	<b>INFLUENT AIR FLOW FROM EXTRACTION WELL (scfm)</b>	<b>SUBSURFACE AIR FLOW RATE (scfm)</b>	<b>VACUUM AT EXTRACTION WELL (inHg)</b>
1	0.0	0.0	746.0	746.0	746.0	-22.0
15	0.0	0.0	746.0	746.0	746.0	-22.0
30	0.0	0.0	746.0	746.0	746.0	-22.0
45	0.0	0.0	746.0	746.0	746.0	-22.0
60	0.0	0.0	745.8	745.8	745.8	-30.0
90	0.0	0.0	746.0	746.0	746.0	-30.0
120	0.0	0.0	746.0	746.0	746.0	-30.0
180	0.0	0.0	746.0	746.0	746.0	-30.0
AVERAGES	0.0	0.0	745.9	745.9	745.9	-26.0



**MASS REMOVED**

[illegible]





## Field Notes

Date: 7/2/2024

Page 1 of 1

Site Name: MUSA 6902

PPM Project No.: 750800111-SAR

Site Address: 2769 SE Hwy 70, Arcadia, FL

FDEP Facility I.D. No.: 14/9805491

Initial Mobilization Time: 7:55

PPM Staff: Julian Carman

Time of Arrival Onsite: 8:00

Time of Departure Offsite: 16:30

Final Mobilization Time: 18:40

Vehicle # and Ownership: Truck 708 / PPM

Vehicle Make/Model: RAM 1500

Weather: Cloudy and sunny, 84°F

Purpose of Site Visit: Vacuum Event

### Site Notes:

8:00 - Arrive on site

8:05 - Check in with station manager and vacuum truck driver

8:10 - Set up and calibrate equipment

WELL CHECK (through bailer-grab)

WELL.	DTP (ft).	DTW (ft).	COMMENTS
MW-1.	N/A.	3.10.	Clear, no sheen/odor
MW-2.	2.74.	2.88.	Faint sheen, strong odor, and Dark color

8:20 - Begin vacuum on MW-2

16:20 - End vacuum on MW-2

16:25 - Check out with station manager and vacuum truck

TOTAL TRUCK VOLUME IS 1400 Gallons

16:30 - Leave site.

These field notes were recorded directly into the iPad while in the field, are original, and have not been modified after the stated date and time of the last entry.

Signature: 

Signature: \_\_\_\_\_







## FIELD DATA

**SITE INFORMATION:**

<b>Client:</b>	Murphy Oil USA
<b>Location:</b>	Murphy Express No. 6902
<b>City, State:</b>	Arcadia, FL
<b>Project Number:</b>	750800104

<b>Date:</b>	7/2/2024
<b>Start Time (military):</b>	8:20
<b>Technician:</b>	Julian Carman

**AMBIENT CONDITIONS:**

**Weather Conditions Throughout** \_\_\_\_\_  
**Pilot Test:** \_\_\_\_\_  
 \_\_\_\_\_

**EXTRACTION POINT INFORMATION:**

<i>Extraction Well ID:</i>	<i>Diameter (in):</i>	<i>Depth (ft):</i>	<i>Screen Length (ft):</i>	<i>TOC (ft):</i>	<i>Depth to Water (ft):</i>	<i>Depth to FP (ft):</i>
CW-1	2.00	N/A	10.00	100.17	3.10	0.00
CW-2	2.00	14.00	10.00	100.00	2.88	2.74

**MONITORING WELL INFORMATION:**

[illegible]



# FIELD DATA

## INSTRUMENT INFORMATION:

Model:	Tiger ION
Calibration Gas:	Isobutylene
Correction Factor:	2.6

Priming Tube Flow Instrument:	Manometer
Truck Bleed Air Flow Instrument:	Manometer
Exhaust Air Flow Instrument:	Manometer

## PIPING DIAMETER AT PITOT TUBE LOCATIONS INFORMATION:

Effluent Stack (in):	4.0
Truck Bleed Air (in):	1.0
Priming Tube (in):	1.0

## TRUCK INFORMATION:

Model:	Peterbilt
Horsepower:	375
Holding Capacity (gal):	3,000
Number of Stacks:	1

## FREE PRODUCT INFORMATION:

Calculated Mass in Subsurface (lb):	1,000
Main Product found at the Site:	Fresh Gasoline
Molecular Weight (g/gmol):	102.2
Specific Gravity:	0.720

<-- If using the Model, then this is a required field.  
<-- Select the main type of product encountered at the site.

## AMBIENT/EXTRACTION WELL/VAPOR/PUMP INFORMATION:

ACTUAL DATE (mm/dd/yy)	ACTUAL TIME (military)	ELAPSED TIME (min)	ATMOSPHERIC CONDITIONS			INFLUENT VAPOR DATA (@ WELL)			PUMP DATA		EFFLUENT VAPOR DATA (@ TRUCK)							LIQUID RECOVERED	
			Bar. Press. (inHg)	Relative Humidity (%)	Ambient Temp (°F)	Vacuum (inHg)	Priming Tube Air Flow (inch w.c.)	Air Temp (°F)	Speed (rpm)	Bleed Air @ Truck (inch w.c.)	Air Temp (°F)	Relative Humidity (%)	Exhaust Air Flow (inch w.c.)	Dilution Probe? (Y or N)	O <sub>2</sub> (%)	(%) LEL	(ppm)	Total GW Recovered (gal)	Total FP Recovered (gal)
07/02/24	8:20	1	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	15.6	0.0	0.0
07/02/24	8:35	15	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	16.3		
07/02/24	8:50	30	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	17.2		
07/02/24	9:05	45	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	8.2		
07/02/24	9:20	60	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	19.8		
07/02/24	9:35	75	28.60	71.00%	84	-32.0	0.0	66	850	0.0	126	100.0%	10	N	20.0	0	21.3		
07/02/24	9:50	90	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	14.8		
07/02/24	10:05	105	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	9.5		
07/02/24	10:20	120	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	8.4		
07/02/24	10:35	135	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	9.0		
07/02/24	10:50	150	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	7.6		
07/02/24	11:05	165	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	14.0		
07/02/24	11:20	180	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	10.6		
07/02/24	11:35	195	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	9.6		
07/02/24	11:50	210	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	12.3		
07/02/24	12:05	225	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	4.8		
07/02/24	12:20	250	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	7.0		
07/02/24	12:35	265	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	4.0		
07/02/24	12:50	280	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	5.8		
07/02/24	13:00	290	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	4.9		
07/02/24	13:30	320	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	7.2		
07/02/24	14:00	350	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	6.5		
07/02/24	14:30	380	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	3.9		
07/02/24	15:00	410	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	2.8		
07/02/24	15:30	440	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	4.6		
07/02/24	16:00	470	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	5.7		
07/02/24	16:20	490	28.60	71.00%	84	-32.0	0.0	65	850	0.0	126	100.0%	10	N	20.0	0	1.8	1,365.0	35.0



HYDRAULIC RESPONSE																					
Depth to Water Table (ft) - NOTE: If using a drop tube, then record actual reading at the top of drop tube.																					
Date/Time	Select Well	CW-1	CW-2																		
7/2/2024	8:20	3.10	2.88																		
7/2/2024	8:35		3.00																		
7/2/2024	8:50		3.15																		
7/2/2024	9:05		3.23																		
7/2/2024	9:20		3.26																		
7/2/2024	9:35		3.30																		
7/2/2024	9:50		3.37																		
7/2/2024	10:05		3.40																		
7/2/2024	10:20		3.42																		
7/2/2024	13:01		3.42																		
7/2/2024	13:15		3.42																		
7/2/2024	13:30		3.42																		
7/2/2024	13:45		3.42																		
7/2/2024	14:00		3.42																		
7/2/2024	14:30		3.42																		
7/2/2024	15:00		3.42																		
7/2/2024	16:00		3.42																		
7/2/2024	17:00		3.42																		
7/2/2024	12:50		3.42																		
7/2/2024	13:00		3.42																		
7/2/2024	13:30		3.42																		
7/2/2024	14:00		3.42																		
7/2/2024	14:30		3.42																		
7/2/2024	15:00		3.42																		
7/2/2024	15:30		3.42																		
7/2/2024	16:00		3.42																		
7/2/2024	16:20		3.42																		



PNEUMATIC RESPONSE																				
NOTE: Vacuum should be denoted by a negative sign																				
Date/Time	Select Well	CW-1	CW-2																	
7/2/2024	8:20		0.00																	
7/2/2024	8:35		0.00																	
7/2/2024	8:50		0.00																	
7/2/2024	9:05		0.00																	
7/2/2024	9:20		0.00																	
7/2/2024	9:35		0.00																	
7/2/2024	9:50		0.00																	
7/2/2024	10:05		0.00																	
7/2/2024	10:20		0.00																	
7/2/2024	13:01		0.00																	
7/2/2024	13:15		0.00																	
7/2/2024	13:30		0.00																	
7/2/2024	13:45		0.00																	
7/2/2024	14:00		0.00																	
7/2/2024	14:30		0.00																	
7/2/2024	15:00		0.00																	
7/2/2024	16:00		0.00																	
7/2/2024	17:00		0.00																	
7/2/2024	12:50		0.00																	
7/2/2024	13:00		0.00																	
7/2/2024	13:30		0.00																	
7/2/2024	14:00		0.00																	
7/2/2024	14:30		0.00																	
7/2/2024	15:00		0.00																	
7/2/2024	15:30		0.00																	
7/2/2024	16:00		0.00																	
7/2/2024	16:20		0.00																	



**TABLE A-1B**  
**AMBIENT AND STATIC CONDITIONS**

ELAPSED TIME (min)	BAROMETRIC PRESSURE (inHg)	RELATIVE HUMIDITY (%)	TEMP. (°F)
1	28.60	71%	84
15	28.60	71%	84
30	28.60	71%	84
45	28.60	71%	84
60	28.60	71%	84
75	28.60	71%	84
90	28.60	71%	84
105	28.60	71%	84
120	28.60	71%	84
135	28.60	71%	84
150	28.60	71%	84
165	28.60	71%	84
180	28.60	71%	84
195	28.60	71%	84
210	28.60	71%	84
225	28.60	71%	84
250	28.60	71%	84
265	28.60	71%	84
280	28.60	71%	84
290	28.60	71%	84
320	28.60	71%	84
350	28.60	71%	84
380	28.60	71%	84
410	28.60	71%	84
440	28.60	71%	84
470	28.60	71%	84
490	28.60	71%	84
AVERAGE:	28.60	71.0%	84

[illegible]



**TABLE C-2**  
**HYDRAULIC RESPONSE SUMMARY**

[illegible][illegible]

\* NOTE: A negative drawdown indicates upwelling of the water table.



## VAPOR FLOW SUMMARY

ELAPSED TIME (min)	TRUCK BLEED AIR STANDARD FLOW RATE (scfm)	PRIMING TUBE STANDARD FLOW RATE (scfm)	TOTAL EFFLUENT AIR FLOW (scfm)	INFLUENT AIR FLOW FROM EXTRACTION WELL (scfm)	SUBSURFACE AIR FLOW RATE (scfm)	VACUUM AT EXTRACTION WELL (inHg)
1	0.0	0.0	765.5	765.5	765.5	-32.0
15	0.0	0.0	765.5	765.5	765.5	-32.0
30	0.0	0.0	765.5	765.5	765.5	-32.0
45	0.0	0.0	765.5	765.5	765.5	-32.0
60	0.0	0.0	765.5	765.5	765.5	-32.0
75	0.0	0.0	765.5	765.5	765.5	-32.0
90	0.0	0.0	765.5	765.5	765.5	-32.0
105	0.0	0.0	765.5	765.5	765.5	-32.0
120	0.0	0.0	765.5	765.5	765.5	-32.0
135	0.0	0.0	697.4	697.4	697.4	-32.0
150	0.0	0.0	697.4	697.4	697.4	-32.0
165	0.0	0.0	697.4	697.4	697.4	-32.0
180	0.0	0.0	697.4	697.4	697.4	-32.0
195	0.0	0.0	697.4	697.4	697.4	-32.0
210	0.0	0.0	697.4	697.4	697.4	-32.0
225	0.0	0.0	697.4	697.4	697.4	-32.0
250	0.0	0.0	697.4	697.4	697.4	-32.0
265	0.0	0.0	697.4	697.4	697.4	-32.0
280	0.0	0.0	697.4	697.4	697.4	-32.0
290	0.0	0.0	697.4	697.4	697.4	-32.0
320	0.0	0.0	697.4	697.4	697.4	-32.0
350	0.0	0.0	697.4	697.4	697.4	-32.0
380	0.0	0.0	697.4	697.4	697.4	-32.0
410	0.0	0.0	697.4	697.4	697.4	-32.0
440	0.0	0.0	697.4	697.4	697.4	-32.0
470	0.0	0.0	697.4	697.4	697.4	-32.0
490	0.0	0.0	697.4	697.4	697.4	-32.0
<b>AVERAGES</b>	<b>0.0</b>	<b>0.0</b>	<b>720.1</b>	<b>720.1</b>	<b>720.1</b>	<b>-32.0</b>



## MASS REMOVED

RUN TIME (min)	AIR OUTLET FLOW RATE (scfm)	FIELD INSTRUMENT READING (ppm)	CORRECTED OXYGEN READING (%)	VOC CONC. (mg/L)	VOC CONC. (pcf)	REMOVAL RATE BETWEEN CHECKS (lbs/hr)	AVERAGE HCs MASS REMOVAL RATE (lbs/hr)	REMOVED BETWEEN CHECKS (lb)	TOTAL HCs MASS REMOVED (lb)	EQUIVALENT VOLUME OF HCs REMOVED (gal)
1	765.5	6	20.0	0.03	1.57E-06	0.07	0.07	0.00	0.0	0.00
15	765.5	6	20.0	0.03	1.64E-06	0.08	0.08	0.02	0.0	0.00
30	765.5	7	20.0	0.03	1.73E-06	0.08	0.08	0.04	0.0	0.01
45	765.5	3	20.0	0.01	8.23E-07	0.04	0.04	0.03	0.0	0.00
60	765.5	8	20.0	0.03	1.99E-06	0.09	0.09	0.09	0.1	0.02
75	765.5	8	20.0	0.03	2.14E-06	0.10	0.10	0.12	0.1	0.02
90	765.5	6	20.0	0.02	1.49E-06	0.07	0.07	0.10	0.1	0.02
105	765.5	4	20.0	0.02	9.54E-07	0.04	0.04	0.08	0.1	0.01
120	765.5	3	20.0	0.01	8.43E-07	0.04	0.04	0.08	0.1	0.01
135	697.4	3	20.0	0.01	9.04E-07	0.04	0.04	0.09	0.1	0.01
150	697.4	3	20.0	0.01	7.63E-07	0.03	0.03	0.08	0.1	0.01
165	697.4	5	20.0	0.02	1.41E-06	0.06	0.06	0.16	0.2	0.03
180	697.4	4	20.0	0.02	1.06E-06	0.04	0.04	0.13	0.1	0.02
195	697.4	4	20.0	0.02	9.64E-07	0.04	0.04	0.13	0.1	0.02
210	697.4	5	20.0	0.02	1.23E-06	0.05	0.05	0.18	0.2	0.03
225	697.4	2	20.0	0.01	4.82E-07	0.02	0.02	0.08	0.1	0.01
250	697.4	3	20.0	0.01	7.03E-07	0.03	0.03	0.12	0.1	0.02
265	697.4	2	20.0	0.01	4.02E-07	0.02	0.02	0.07	0.1	0.01
280	697.4	2	20.0	0.01	5.82E-07	0.02	0.02	0.11	0.1	0.02
290	697.4	2	20.0	0.01	4.92E-07	0.02	0.02	0.10	0.1	0.02
320	697.4	3	20.0	0.01	7.23E-07	0.03	0.03	0.16	0.2	0.03
350	697.4	3	20.0	0.01	6.53E-07	0.03	0.03	0.16	0.2	0.03
380	697.4	2	20.0	0.01	3.92E-07	0.02	0.02	0.10	0.1	0.02
410	697.4	1	20.0	0.00	2.81E-07	0.01	0.01	0.08	0.1	0.01
440	697.4	2	20.0	0.01	4.62E-07	0.02	0.02	0.14	0.1	0.02
470	697.4	2	20.0	0.01	5.72E-07	0.02	0.02	0.19	0.2	0.03
490	697.4	1	20.0	0.00	1.81E-07	0.01	0.01	0.06	0.1	0.01





## Field Notes

Date: 7/31/24

Page 1 of 1

Site Name: MUSA 6902

PPM Project No.: 750800111-SAR

Site Address: 2769 SE Hwy 70, Arcadia, FL

FDEP Facility I.D. No.: 14/9805491

Initial Mobilization Time: 8:00

PPM Staff: Julian Carman

Time of Arrival Onsite: 11:00

Time of Departure Offsite:

Final Mobilization Time:

Vehicle # and Ownership: 708 PPM

Vehicle Make/Model: Ford F-150

Weather: Sunny, 91°F

Purpose of Site Visit: Well Installation, TOC Elevations, and Well Development

### Site Notes:

11:00 - Arrive at site  
11:05 - Mark out well locations  
11:10 - Check in with station manager  
11:15 - Called PDS and notified they will arrive at 11:35

11:20 - Called PM, Valerie Laroche, to explain and document that the two proposed monitoring wells that are east in the grass were directly above the electric and fiber optic lines. Advised that wells will be moved more east, however, we will need a Site Access Agreement since it is no longer inside Murphy's property line. Only one well will be installed today, MW-3.

11:35 - Drill crew arrived, checked in, and went over and completed HASP, set up equipment.

12:10 - Began clearing MW-3

12:50 - Finished drilling MW-3 down to 12 feet

12:55 - Began setting well for MW-3

13:28 - Began developing MW-3

13:58 - Finished developing MW-3

14:05 - Began grouting and creating circle pad for MW-3

14:10 - Shoot TOC Elevations amongst all existing and new wells:

MW-1: 3.62'

MW-2: 4.68'

MW-3: 4.38

14:20 - Pack up equipment

14:35 - Check out with PDS and station manager

14:40 - Finish up notes

15:00 - Leave site

These field notes were recorded directly into the iPad while in the field, are original, and have not been modified after the stated date and time of the last entry.

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_



## BORING LOG

Page 1 of 1

Boring/Well Number: <b>MW-3</b>		Permit Number: <b>N/A</b>		FDEP Facility Identification Number: <b>14/9805491</b>	
Site Name: <b>MUSA-6902</b>		Borehole Start Date: <b>7/31/24</b>		Borehole Start Time: <b>12:10</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: <b>7/31/24</b>		End Time: <b>12:50</b> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor: <b>PPM Consultants</b>		Geologist's Name: <b>Julian Carman</b>		Environmental Technician's Name: <b>Julian Carman</b>	
Drilling Company: <b>PDS</b>		Pavement Thickness (inches): <b>8</b>		Borehole Diameter (inches): <b>6</b>	
				Borehole Depth (feet): <b>12</b>	
Drilling Method(s): <b>PH &amp; DP</b>		Apparent Borehole DTW (in feet from soil moisture content): <b>3</b>		Measured Well DTW (in feet after water recharges in well): <b>2.47</b>	
				OVA (list model and check type): <input type="checkbox"/> FID <input checked="" type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)] <input checked="" type="checkbox"/> Drum <input type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one) <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
PH	1	12				1.2	1	Tan Fine Sand (No Odor)	FS	D	
	2	12				3.6	2	Brown/Black Fine Sand		M	
	3	12				20.1	3	(2'-5') (Low Odor)		W	
	4	12				3.9	4			S	
DP	5'						5	Tan White Sand			
							6	(5'-12')			
							7				
							8				
							9				
							10				
							11				
	12'						12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated



## WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: <u>MW-3</u>	Site Name: <u>MUSA 6902</u>	FDEP Facility ID Number: <u>14/9805491</u>	Well Install Date(s): <u>7/31/24</u>		
Well Location and Type (check appropriate boxes) <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input checked="" type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: <u>PH&amp;DP</u>	
				Surface Casing Install Method: <u>DP</u>	
If AG, list feet of riser above land surface					
Borehole Depth (feet): <u>12</u>	Well Depth (feet): <u>12</u>	Borehole Diameter (inches): <u>6</u>	Manhole Diameter (inches): <u>8</u>	Well Pad Size: <u>Circle Pad (8")</u>	
Riser Diameter and Material: <u>2" PVC</u>		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)		Riser Length: <u>2</u> feet from <u>0</u> feet to <u>2</u> feet	
Screen Diameter and Material: <u>2" PVC</u>		Screen Slot Size: <u>0.01</u>		Screen Length: <u>10</u> feet from <u>2</u> feet to <u>12</u> feet	
1 <sup>st</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		1 <sup>st</sup> Surface Casing I.D. (inches): <u>6</u>		1 <sup>st</sup> Surface Casing Length: <u>2</u> feet from <u>0</u> feet to <u>2</u> feet	
2 <sup>nd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input checked="" type="checkbox"/> Temporary		2 <sup>nd</sup> Surface Casing I.D. (inches): <u>3</u>		2 <sup>nd</sup> Surface Casing Length: <u>12</u> feet from <u>0</u> feet to <u>12</u> feet	
3 <sup>rd</sup> Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 <sup>rd</sup> Surface Casing I.D. (inches): —		3 <sup>rd</sup> Surface Casing Length: — feet from <u>0</u> feet to — feet	
Filter Pack Material and Size: <u>30/60 Sand</u>		Prepacked Filter Around Screen (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Filter Pack Length: <u>10.5</u> feet from <u>1.5</u> feet to <u>12</u> feet	
Filter Pack Seal Material and Size: <u>20/30 Sand</u>				Filter Pack Seal Length: <u>1.0</u> feet from <u>0.5</u> feet to <u>1.5</u> feet	
Surface Seal Material: <u>Grout</u>				Surface Seal Length: <u>0.5</u> feet from <u>0</u> feet to <u>0.5</u> feet	

WELL DEVELOPMENT DATA			
Well Development Date: <u>7/31/24</u>		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pu <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): <u>2.47</u>	
Pumping Rate (gallons per minute): <u>1.6</u>	Maximum Drawdown of Groundwater During Development (feet): <u>N/A</u>	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): <u>40</u>	Development Duration (minutes): <u>25</u>	Development Water Drummed (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: <u>Dark Brown &amp; Faint Odor</u>		Water Appearance (color and odor) At End of Development: <u>Clear &amp; Faint Odor</u>	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS









# STATE OF FLORIDA WELL COMPLETION REPORT

- ☒ Southwest  
☐ Northwest  
☐ St. Johns River  
☐ South Florida  
☐ Suwannee River  
☐ DEP  
☐ Delegated Authority (If Applicable) \_\_\_\_\_

PLEASE, FILL OUT ALL APPLICABLE FIELDS  
(\*Denotes Required Fields Where Applicable)

Date Stamp  
Received:  
Sep 12, 2024 4:58 pm

Official Use Only

1. *Permit Number <b>945238</b>		*CUP/WUP Number _____		*DID Number _____		62-524 Delineation No. _____	
2. *Number of permitted wells constructed, repaired, or abandoned <b>1</b>		*Number of permitted wells not constructed, repaired, or abandoned <b>5</b>					
3. *Owner's Name <b>MURPHY OIL USA IN</b>		4. *Completion Date <b>07/31/2024</b>		5. Florida Unique ID _____			
6. <b>2769 SE HWY 70</b>		<b>ARCADIA</b>					
*Well Location - Address, Road Name or Number, City, ZIP							
7. *County <b>DeSoto</b>		*Section <b>5</b>		Land Grant _____		*Township <b>38</b> *Range <b>25</b>	
8. Latitude <b>27 12 29.05</b>		Longitude <b>81 49 38.76</b>					
9. Data Obtained From: <input type="checkbox"/> GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/> Survey Datum: <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> WGS 84							
10. *Type of Work: <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Repair <input type="checkbox"/> Modification <input type="checkbox"/> Abandonment							
11. *Specify Intended Use(s) of Well(s):							
<input type="checkbox"/> Domestic		<input type="checkbox"/> Landscape Irrigation		<input type="checkbox"/> Agricultural Irrigation		<input type="checkbox"/> Site Investigation	
<input type="checkbox"/> Bottled Water Supply		<input type="checkbox"/> Recreation Area Irrigation		<input type="checkbox"/> Livestock		<input checked="" type="checkbox"/> Monitoring	
<input type="checkbox"/> Public Water Supply (Limited Use/DOH)		<input type="checkbox"/> Commercial/Industrial		<input type="checkbox"/> Nursery Irrigation		<input type="checkbox"/> Test	
<input type="checkbox"/> Public Water Supply (Community or Non-Community/DEP)		<input type="checkbox"/> Golf Course Irrigation		<input type="checkbox"/> Earth-Coupled Geothermal		<input type="checkbox"/> HVAC Supply	
<input type="checkbox"/> Class I Injection		<input type="checkbox"/> HVAC Return					
Class V Injection: <input type="checkbox"/> Recharge <input type="checkbox"/> Commercial/Industrial Disposal <input type="checkbox"/> Aquifer Storage and Recovery <input type="checkbox"/> Drainage							
Remediation: <input type="checkbox"/> Recovery <input type="checkbox"/> Air Sparge <input type="checkbox"/> Other (Describe) _____							
Other (Describe) _____							
12. *Drill Method: <input checked="" type="checkbox"/> Auger <input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary <input type="checkbox"/> Combination (Two or More Methods) <input type="checkbox"/> Jetted <input type="checkbox"/> Sonic							
<input type="checkbox"/> Horizontal Drilling <input type="checkbox"/> Hydraulic Point (Direct Push) <input type="checkbox"/> Other _____							
13. *Measured Static Water Level <b>4.0</b> ft. Measured Pumping Water Level _____ ft. After _____ Hours at _____ GPM							
14. *Measuring Point (Describe) _____ Which is _____ ft. Above _____ Below Land Surface *Flowing: <input type="checkbox"/> Yes <input type="checkbox"/> No							
15. *Casing Material: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Not Cased <input type="checkbox"/> Other _____							
16. *Total Well Depth <b>12.0</b> ft. Cased Depth <b>2.0</b> ft. *Open Hole: From _____ To _____ ft. *Screen: From _____ To _____ ft. Slot Size _____							
17. *Abandonment: <input type="checkbox"/> Other (Explain) _____							
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
18. *Surface Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
19. *Primary Casing Diameter and Depth:							
Dia <b>2.00</b> in. From <b>0.00</b> ft. To <b>2.00</b> ft.		No. of Bags <b>0.17</b>		Seal Material (Check One): <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
20. *Liner Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
21. *Telescope Casing Diameter and Depth:							
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
Dia _____ in. From _____ ft. To _____ ft.		No. of Bags _____		Seal Material (Check One): <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Other _____			
22. Pump Type (If Known):							
<input type="checkbox"/> Centrifugal <input type="checkbox"/> Jet <input type="checkbox"/> Submersible <input type="checkbox"/> Turbine		23. Chemical Analysis (When Required):					
Horsepower _____ Pump Capacity (GPM) _____		Iron _____ ppm Sulfate _____ ppm Chloride _____ ppm					
Pump Depth _____ ft. Intake Depth _____ ft.		<input type="checkbox"/> Laboratory Test <input type="checkbox"/> Field Test Kit					
24. Water Well Contractor:							
*Contractor Name <b>Gregory W Campbell</b>		*License Number <b>2613</b>		E-mail Address <b>shannon@pdsflorida.com</b>			
*Contractor's Signature <b>Digitally Signed</b>		*Driller's Name (Print or Type) <b>DJ Penny</b>					
I certify that the information provided in this report is accurate and true.							



**NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT**  
152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712  
(U.S. Highway 90, 10 miles west of Tallahassee)  
PHONE: (850) 539-5999  
[WWW.NWFWMD.STATE.FL.US](http://WWW.NWFWMD.STATE.FL.US)

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT**  
P.O. BOX 24680  
3301 GUN CLUB ROAD  
WEST PALM BEACH, FL 33416-4680  
PHONE: (561) 686-8800  
[WWW.SFWMD.GOV](http://WWW.SFWMD.GOV)

**SUWANNEE RIVER WATER MANAGEMENT DISTRICT**  
9225 CR 49  
LIVE OAK, FL 32060  
PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)  
[WWW.MYSUWANNEERIVER.COM](http://WWW.MYSUWANNEERIVER.COM)

\*DRILL CUTTINGS LOG (Examine cuttings every 20 ft. or at formation changes. Note cavities and depth to producing zone. Grain Size: F=Fine, M=Medium, and C=Coarse)

[illegible]

Comments: Finish: SCREENED OR SANDPOINT

1-2"x12' Well

**\*Detailed Site Map of Well Location**



Give distances from all reference points or structures, septic systems, sanitary hazards, and contamination sources within 500 ft. of well.





## Field Notes

Date: 8/5/24

Page 1 of 1

Site Name: MUSA 6902

PPM Project No.: 750800111-SAR

Site Address: 2769 SE Hwy 70, Arcadia, FL

FDEP Facility I.D. No.: 14/9805491

Initial Mobilization Time: 8:00

PPM Staff: Julian Carman

Time of Arrival Onsite: 11:00

Time of Departure Offsite: 14:30

Final Mobilization Time: 17:30

Vehicle # and Ownership: Personal Vehicle

Vehicle Make/Model: Honda Civic Sport

Weather: Cloudy/ Light rain, 81°F

Purpose of Site Visit: Groundwater Sampling

### Site Notes:

11:00 - Arrive at site

11:05 - Check in with station manager

11:10 - Unpack equipment and measure DTW on all 3 wells:

MW-1 - 2.51'

MW-2 - 2.34'

MW-3 - 2.27'

12:00 - Lab sample MW-1

13:05 - Lab sample MW-2

14:00 - Lab sample MW-3

14:10 - Pack up equipment, finish notes, and check out with station manager

14:30 - Leave site

These field notes were recorded directly into the iPad while in the field, are original, and have not been modified after the stated date and time of the last entry.

Signature: 

Signature: \_\_\_\_\_



# DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: <b>MUSA 6902</b>	SITE LOCATION: <b>Arcadia, FL</b>
WELL NO: <b>MW-1</b>	SAMPLE ID: <b>MW-1</b> DATE: <b>8/5/24</b>

## PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.125</b>	WELL SCREEN INTERVAL DEPTH: <b>5</b> feet to <b>15</b> feet	STATIC DEPTH TO WATER (feet): <b>2.51</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE: 1 WELL VOLUME</b> = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>15</b> feet – <b>2.51</b> feet ) X <b>0.16</b> gallons/foot = <b>2.00</b> gallons				
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL.</b> = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) =                      gallons + (                      gallons/foot X                      feet ) +                      gallons = <b>0.0</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>4</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>6</b>	PURGING INITIATED AT: <b>11:31</b>	PURGING ENDED AT: <b>11:55</b>	TOTAL VOLUME PURGED (gallons): <b>3.9</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> μmhos/cm or <input checked="" type="checkbox"/> μS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:46	3.0	3.0	0.2	5.10	6.32	28.7	411	0.34	13.23	Clear	None
11:49	0.3	3.3	0.1	5.12	6.30	28.6	415	0.35	12.59	Clear	None
11:52	0.3	3.6	0.1	5.12	6.31	28.6	416	0.35	12.33	Clear	None
11:55	0.3	3.9	0.1	5.12	6.30	28.6	412	0.33	10.44	Clear	None

**WELL CAPACITY** (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016  
**PURGING EQUIPMENT CODES:** **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>Julian Carman</b>	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: <b>12:00</b>	SAMPLING ENDED AT: <b>12:10</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>6</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/> TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>		DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-1	3	CG	40 mL	HCL	N/A	N/A	8260	APP	276+/-
MW-1	1	AG	250 mL	None	N/A	N/A	8270	APP	276+/-
MW-1	1	AG	250 mL	HCL	N/A	N/A	FL PRO	APP	276+/-

REMARKS: **Dropped DTW down to 5.10' to collect groundwater in screen interval**

**MATERIAL CODES:** **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

**SAMPLING EQUIPMENT CODES:** **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



# DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: <b>MUSA 6902</b>	SITE LOCATION: <b>Arcadia, FL</b>
WELL NO: <b>MW-2</b>	SAMPLE ID: <b>MW-2</b> DATE: <b>8/5/24</b>

## PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.125</b>	WELL SCREEN INTERVAL DEPTH: <b>5</b> feet to <b>15</b> feet	STATIC DEPTH TO WATER (feet): <b>2.34</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>15</b> feet – <b>2.34</b> feet ) X <b>0.16</b> gallons/foot = <b>2.03</b> gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) =                      gallons + (                      gallons/foot X                      feet ) +                      gallons = <b>0.0</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>3.5</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>6</b>	PURGING INITIATED AT: <b>12:36</b>	PURGING ENDED AT: <b>13:00</b>	TOTAL VOLUME PURGED (gallons): <b>2.5</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> μmhos/cm or <input checked="" type="checkbox"/> μS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:51	3.0	3.0	0.2	5.11	6.09	28.5	535	0.40	11.45	Clear	Light
12:54	0.3	3.3	0.1	5.11	6.10	28.5	536	0.41	12.03	Clear	Light
12:57	0.3	3.6	0.1	5.11	6.12	28.6	532	0.44	10.89	Clear	Light
13:00	0.3	3.9	0.1	5.11	6.10	28.5	535	0.41	10.68	Clear	Light

**WELL CAPACITY** (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016  
**PURGING EQUIPMENT CODES:** **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>Julian Carman</b>				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT: <b>13:05</b>		SAMPLING ENDED AT: <b>13:15</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>6</b>				TUBING MATERIAL CODE: <b>HDPE</b>			FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/>				TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>			DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-2	3	CG	40 mL	HCL	N/A	N/A	8260	APP	276+/-
MW-2	1	AG	250 mL	None	N/A	N/A	8270	APP	276+/-
MW-2	1	AG	250 mL	HCL	N/A	N/A	FL PRO	APP	276+/-

REMARKS: **Dropped DTW down to 5.11' to collect groundwater in screen interval**

**MATERIAL CODES:** **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

**SAMPLING EQUIPMENT CODES:** **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

**NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

**2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**

**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



# DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: <b>MUSA 6902</b>	SITE LOCATION: <b>Arcadia, FL</b>
WELL NO: <b>MW-3</b>	SAMPLE ID: <b>MW-3</b> DATE: <b>8/5/24</b>

## PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.125</b>	WELL SCREEN INTERVAL DEPTH: <b>2</b> feet to <b>12</b> feet	STATIC DEPTH TO WATER (feet): <b>2.27</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>12</b> feet – <b>2.27</b> feet ) X <b>0.16</b> gallons/foot = <b>1.56</b> gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) =                      gallons + (                      gallons/foot X                      feet ) +                      gallons = <b>0.0</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>3.5</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>4</b>	PURGING INITIATED AT: <b>13:31</b>	PURGING ENDED AT: <b>13:55</b>	TOTAL VOLUME PURGED (gallons): <b>2.4</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <input type="checkbox"/> μmhos/cm or <input checked="" type="checkbox"/> μS/cm	DISSOLVED OXYGEN (circle units) <input checked="" type="checkbox"/> mg/L or <input type="checkbox"/> % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
13:47	1.6	1.6	0.1	2.55	6.53	28.7	392	0.28	8.67	Clear	Faint
13:49	0.3	1.9	0.1	2.57	6.55	28.7	395	0.30	7.61	Clear	Faint
13:52	0.3	2.1	0.1	2.59	6.55	28.7	390	0.27	7.32	Clear	Faint
13:55	0.3	2.4	0.1	2.60	6.54	28.7	394	0.29	7.99	Clear	Faint

**WELL CAPACITY** (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88  
**TUBING INSIDE DIA. CAPACITY** (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016  
**PURGING EQUIPMENT CODES:** **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>Julian Carman</b>				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT: <b>14:00</b>		SAMPLING ENDED AT: <b>14:10</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>4</b>				TUBING MATERIAL CODE: <b>HDPE</b>			FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y N <input checked="" type="checkbox"/>				TUBING Y <input type="checkbox"/> N (replaced) <input checked="" type="checkbox"/>			DUPLICATE: <input type="checkbox"/> Y N <input checked="" type="checkbox"/>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-3	3	CG	40 mL	HCL	N/A	N/A	8260	APP	276+/-
MW-3	1	AG	250 mL	None	N/A	N/A	8270	APP	276+/-
MW-3	1	AG	250 mL	HCL	N/A	N/A	FL PRO	APP	276+/-

REMARKS:

**MATERIAL CODES:** **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

**SAMPLING EQUIPMENT CODES:** **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

**NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

**2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**

**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**FIELD INSTRUMENT CALIBRATION RECORDS - CALIBRATION LOG - PRP**

Project Site/FacID: **MUSA 6902**

Calibrated by (Print)/Affiliation: **Julian Carman / PPM**

*Boldly "X" this box if there is qualified data on this page.*

**Temperature (Quarterly)**

Date of Last Temp Verification:

See log book:

**DISSOLVED OXYGEN (DO) (REFERENCE: DEP SOP FT 1500)**

**Acceptance Criteria +/-0.3 mg DO/L**

Meter/Instrument Name and Unique ID: **YSI Pro Quatro # JC077508**

CAL	ICV	CCV	Initials	Date	Time	Standard (DO %)	Temp °C	DO Saturation mg/L (100%)**	Response DO (%)	Response mg DO/L	Deviation mg DO/L	Pass or Fail
CAL	ICV	CCV	JC	8/5/24	11:25	100%	22.2	9.20	100	9.24	<5%	P F
CAL	ICV	CCV	JC	8/5/24	14:20	100%	22.8	9.20	100	9.22	<5%	P F
CAL	ICV	CCV				100%						P F
CAL	ICV	CCV				100%						P F
CAL	ICV	CCV				100%						P F
CAL	ICV	CCV				100%						P F

\*\* See Table FS 2200-2 and/or Table FT 1500-1 for Dissolved Oxygen 100% Saturation (mg/L) corresponding to Temperature.

**SPECIFIC CONDUCTANCE (REFERENCE: DEP SOP FT 1200)**

**Acceptance Criteria +/-5% the standard**

Meter/Instrument Name and Unique ID: **YSI Pro Quatro # JC077508**

CAL	ICV	CCV	Initials	Date	Time	Standard (µmho/cm)	Exp. Date	Lot #	Response (µmho/cm)	Deviation (%)	Pass or Fail
CAL	ICV	CCV	JC	8/5/24	11:25	1000	1/25	4GA0218	1000	0	P F
CAL	ICV	CCV	JC	8/5/24	11:25	1413	9/25	23H100616	1415	< 5%	P F
CAL	ICV	CCV	JC	8/5/24	14:20	1413	9/25	23H100616	1412	< 5%	P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F

**OXIDATION-REDUCTION POTENTIAL (ORP)**

**Acceptance Criteria +/-10 mV**

**REFERENCE: EPA Region 4, Operating Procedure, Field Measurement of Oxidation-Reduction Potential (ORP)**

Meter/Instrument Name and Unique ID: **YSI Pro Quatro # JC077508**

CAL	ICV	CCV	Initials	Date	Time	Standard (mV)	Exp. Date	Lot #	Response (mV)	Deviation (mV)	Pass or Fail
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F
CAL	ICV	CCV									P F

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

Deviation (%) = 100-{|(Response/Standard)\*100}



**FIELD INSTRUMENT CALIBRATION RECORDS - CALIBRATION LOG - PRP**

Project Site/FacID: **MUSA 6902**

Calibrated by (Print)/Affiliation: **Julian Carman/ PPM**

*Boldly "X" this box if there is qualified data on this page.*

**TURBIDITY (REFERENCE: DEP SOP FT 1600)**

Meter/Instrument Name and Unique ID: **Extech TB400**

Std=0.1-10 NTU +/-10%						Std=11-40 NTU +/-8%		Std=41-100 NTU +/-6.5%		Std>100 NTU +/-5%			
CAL	ICV	CCV	Initials	Date	Time	Standard (NTU)	Exp. Date	Lot #	Response (NTU)	Deviation (%)	Pass or Fail		
CAL	ICV	CCV	JC	8/5/24	11:25	0	None	N/A	0	0	P	F	
CAL	ICV	CCV	JC	8/5/24	11:25	10	None	N/A	10.0	0	P	F	
CAL	ICV	CCV	JC	8/5/24	11:25	100	None	N/A	100	0	P	F	
CAL	ICV	CCV	JC	8/5/24	14:20	0	None	N/A	0	0	P	F	
CAL	ICV	CCV	JC	8/5/24	14:20	10	None	N/A	10.0	0	P	F	
CAL	ICV	CCV	JC	8/5/24	14:20	100	None	N/A	100	0	P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	

**pH (REFERENCE: DEP SOP FT 1100)**

**Acceptance Criteria +/-0.2 SU**

Meter/Instrument Name and Unique ID: **YSI Pro Quatro # JC077508**

CAL	ICV	CCV	Initials	Date	Time	Standard (SU)	Exp. Date	Lot #	Response (SU)	Deviation (SU)	Pass or Fail		
CAL	ICV	CCV	JC	8/5/24	11:25	4	12/25	3GL0108	4	0	P	F	
CAL	ICV	CCV	JC	8/5/24	11:25	7	11/25	3GK13E2	7	0	P	F	
CAL	ICV	CCV	JC	8/5/24	11:25	10	12/25	3GL0168	10	0	P	F	
CAL	ICV	CCV	JC	8/5/24	14:20	7	11/25	3GK13E2	7	0	P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	
CAL	ICV	CCV									P	F	

Perform ICVs and CCVs only in "READ/RUN" mode.

CAL - Calibration; ICV - Initial Calibration Verification; and, CCV - Continuing Calibration Verification.

Deviation (%) = 100-{|(Response/Standard)\*100|}



**ATTACHMENT D – LABORATORY ANALYTICAL REPORT**



The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

**Murphy Oil USA**

**PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL**

**750800111.SA1**

**SGS Job Number: FC17713**

**Sampling Date: 08/05/24**



**Report to:**

**PPM Consulting**  
**750 S Northlake Blvd Suite 1012**  
**Altamonte Springs, FL 32701**  
**roy.therrien@ppmco.com; valerie.laroche@ppmco.com**

**ATTN: Roy Therrien**

**Total number of pages in report: 48**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.



**Norm Farmer**  
**Technical Director**

**Client Service contact: Muna Mohammed 407-425-6700**

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001)

DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),

AL, AK, AR, CT, IA, KY, MA, MI, MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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Test results relate only to samples analyzed.



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Sample Summary

Murphy Oil USA

Job No: FC17713

PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL  
Project No: 750800111.SA1

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FC17713-1	08/05/24	13:05 JC	08/06/24	AQ	Ground Water	MW-2
FC17713-2	08/05/24	12:00 JC	08/06/24	AQ	Ground Water	MW-1
FC17713-3	08/05/24	14:00 JC	08/06/24	AQ	Ground Water	MW-3



Summary of Hits

Job Number: FC17713  
Account: Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL  
Collected: 08/05/24

Lab Sample ID	Client Sample ID	Result/ Qual	PQL	MDL	Units	Method
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FC17713-1 MW-2

Cadmium	0.50 I	5.0	0.20	ug/l	SW846 6010D
Calcium	49400	1000	50	ug/l	SW846 6010D
Chromium	16.8	10	1.0	ug/l	SW846 6010D
Magnesium	4930 I	5000	35	ug/l	SW846 6010D
Mercury	0.063 I	0.50	0.030	ug/l	SW846 7470A
Zinc	32.4	20	4.4	ug/l	SW846 6010D
Chromium, Hexavalent	0.017	0.010	0.0080	mg/l	SW846 7196A
Hardness, Total as CaCO3 <sup>a</sup>	144	23	0.27	mg/l	SM19 2340B

FC17713-2 MW-1

No hits reported in this sample.

FC17713-3 MW-3

No hits reported in this sample.

(a) Calculated as: (Calcium \* 2.497) + (Magnesium \* 4.118)





Orlando, FL

Section 3



Sample Results

Report of Analysis



## Report of Analysis

<b>Client Sample ID:</b>	MW-2	
<b>Lab Sample ID:</b>	FC17713-1	<b>Date Sampled:</b> 08/05/24
<b>Matrix:</b>	AQ - Ground Water	<b>Date Received:</b> 08/06/24
<b>Method:</b>	SW846 8260D	<b>Percent Solids:</b> n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1O86583.D	1	08/07/24 18:11	JW	n/a	n/a	V1O4034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.31 U	1.0	0.31	ug/l	
108-88-3	Toluene	0.30 U	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.36 U	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	0.72 U	3.0	0.72	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.23 U	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-1	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270E BY SIM SW846 3510C		
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T071851.D	1	08/13/24 09:40	EM	08/12/24 07:55	OP4699	ST2479
Run #2							

Run #	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

## BN PAH List

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.31 U	0.77	0.31	ug/l	
208-96-8	Acenaphthylene	0.31 U	0.77	0.31	ug/l	
120-12-7	Anthracene	0.19 U	0.77	0.19	ug/l	
56-55-3	Benzo(a)anthracene	0.031 U	0.15	0.031	ug/l	
50-32-8	Benzo(a)pyrene	0.031 U	0.15	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	0.031 U	0.077	0.031	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.031 U	0.15	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	0.031 U	0.077	0.031	ug/l	
218-01-9	Chrysene	0.031 U	0.15	0.031	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.031 U	0.15	0.031	ug/l	
206-44-0	Fluoranthene	0.19 U	0.77	0.19	ug/l	
86-73-7	Fluorene	0.19 U	0.77	0.19	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.031 U	0.15	0.031	ug/l	
90-12-0	1-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-57-6	2-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-20-3	Naphthalene	0.31 U	0.77	0.31	ug/l	
85-01-8	Phenanthrene	0.19 U	0.77	0.19	ug/l	
129-00-0	Pyrene	0.19 U	0.77	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	72%		50-150%
93951-69-0	Fluoranthene-d10	93%		50-150%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



Report of Analysis

<b>Client Sample ID:</b>	MW-2	
<b>Lab Sample ID:</b>	FC17713-1	<b>Date Sampled:</b> 08/05/24
<b>Matrix:</b>	AQ - Ground Water	<b>Date Received:</b> 08/06/24
<b>Method:</b>	FLORIDA-PRO 2018 SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR00952627.D	1	08/12/24 19:31	EG	08/12/24 07:58	OP4700	GJR912
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.14 U	0.27	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		66-139%
7194-86-7	Nonatriacontane	119%		40-129%

U = Not detected      MDL = Method Detection Limit      I = Result > = MDL but < PQL    J = Estimated value  
PQL = Practical Quantitation Limit      V = Indicates analyte found in associated method blank  
L = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-1	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

Total Metals Analysis

Analyte	Result	PQL	MDL	Units	DF	Prep	Analized By	Method	Prep Method	
Cadmium	0.50 I	5.0	0.20	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Calcium	49400	1000	50	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Chromium	16.8	10	1.0	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Lead	1.1 U	5.0	1.1	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Magnesium	4930 I	5000	35	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Mercury	0.063 I	0.50	0.030	ug/l	1	08/09/24	08/09/24	AK	SW846 7470A <sup>1</sup>	SW846 7470A <sup>3</sup>
Zinc	32.4	20	4.4	ug/l	1	08/15/24	08/15/24	LM	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>

- (1) Instrument QC Batch: MA20435
- (2) Instrument QC Batch: MA20450
- (3) Prep QC Batch: MP44420
- (4) Prep QC Batch: MP44455

PQL = Practical Quantitation Limit  
MDL = Method Detection Limit  
U = Indicates a result < MDL  
I = Indicates a result > = MDL but < PQL



Report of Analysis

<b>Client Sample ID:</b>	MW-2	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-1	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

General Chemistry

Analyte	Result	PQL	MDL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	0.017	0.010	0.0080	mg/l	1	08/06/24 10:52	JR	SW846 7196A
Hardness, Total as CaCO3 <sup>a</sup>	144	23	0.27	mg/l	1	08/15/24 22:17	LM	SM19 2340B

(a) Calculated as: (Calcium \* 2.497) + (Magnesium \* 4.118)

PQL = Practical Quantitation Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
I = Indicates a result > = MDL but < PQL



## Report of Analysis

<b>Client Sample ID:</b>	MW-1		
<b>Lab Sample ID:</b>	FC17713-2	<b>Date Sampled:</b>	08/05/24
<b>Matrix:</b>	AQ - Ground Water	<b>Date Received:</b>	08/06/24
<b>Method:</b>	SW846 8260D	<b>Percent Solids:</b>	n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1O86584.D	1	08/07/24 18:36	JW	n/a	n/a	V1O4034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.31 U	1.0	0.31	ug/l	
108-88-3	Toluene	0.30 U	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.36 U	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	0.72 U	3.0	0.72	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.23 U	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-1	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-2	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270E BY SIM SW846 3510C		
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T071852.D	1	08/13/24 10:07	EM	08/12/24 07:55	OP4699	ST2479
Run #2							

Run #	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

## BN PAH List

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.31 U	0.77	0.31	ug/l	
208-96-8	Acenaphthylene	0.31 U	0.77	0.31	ug/l	
120-12-7	Anthracene	0.19 U	0.77	0.19	ug/l	
56-55-3	Benzo(a)anthracene	0.031 U	0.15	0.031	ug/l	
50-32-8	Benzo(a)pyrene	0.031 U	0.15	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	0.031 U	0.077	0.031	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.031 U	0.15	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	0.031 U	0.077	0.031	ug/l	
218-01-9	Chrysene	0.031 U	0.15	0.031	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.031 U	0.15	0.031	ug/l	
206-44-0	Fluoranthene	0.19 U	0.77	0.19	ug/l	
86-73-7	Fluorene	0.19 U	0.77	0.19	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.031 U	0.15	0.031	ug/l	
90-12-0	1-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-57-6	2-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-20-3	Naphthalene	0.31 U	0.77	0.31	ug/l	
85-01-8	Phenanthrene	0.19 U	0.77	0.19	ug/l	
129-00-0	Pyrene	0.19 U	0.77	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	79%		50-150%
93951-69-0	Fluoranthene-d10	99%		50-150%

U = Not detected MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



Report of Analysis

<b>Client Sample ID:</b>	MW-1	
<b>Lab Sample ID:</b>	FC17713-2	<b>Date Sampled:</b> 08/05/24
<b>Matrix:</b>	AQ - Ground Water	<b>Date Received:</b> 08/06/24
<b>Method:</b>	FLORIDA-PRO 2018 SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR00952628.D	1	08/12/24 19:52	EG	08/12/24 07:58	OP4700	GJR912
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.14 U	0.27	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		66-139%
7194-86-7	Nonatriacontane	121%		40-129%

U = Not detected

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result > = MDL but < PQL

J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-3	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260D		
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1O86585.D	1	08/07/24 19:02	JW	n/a	n/a	V1O4034
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## Purgeable Aromatics, MTBE

CAS No.	Compound	Result	PQL	MDL	Units	Q
71-43-2	Benzene	0.31 U	1.0	0.31	ug/l	
108-88-3	Toluene	0.30 U	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.36 U	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	0.72 U	3.0	0.72	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.23 U	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	97%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-3	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270E BY SIM SW846 3510C		
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T071853.D	1	08/13/24 10:33	EM	08/12/24 07:55	OP4699	ST2479
Run #2							

Run #	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

## BN PAH List

CAS No.	Compound	Result	PQL	MDL	Units	Q
83-32-9	Acenaphthene	0.31 U	0.77	0.31	ug/l	
208-96-8	Acenaphthylene	0.31 U	0.77	0.31	ug/l	
120-12-7	Anthracene	0.19 U	0.77	0.19	ug/l	
56-55-3	Benzo(a)anthracene	0.031 U	0.15	0.031	ug/l	
50-32-8	Benzo(a)pyrene	0.031 U	0.15	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	0.031 U	0.077	0.031	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.031 U	0.15	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	0.031 U	0.077	0.031	ug/l	
218-01-9	Chrysene	0.031 U	0.15	0.031	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.031 U	0.15	0.031	ug/l	
206-44-0	Fluoranthene	0.19 U	0.77	0.19	ug/l	
86-73-7	Fluorene	0.19 U	0.77	0.19	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.031 U	0.15	0.031	ug/l	
90-12-0	1-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-57-6	2-Methylnaphthalene	0.31 U	0.77	0.31	ug/l	
91-20-3	Naphthalene	0.31 U	0.77	0.31	ug/l	
85-01-8	Phenanthrene	0.19 U	0.77	0.19	ug/l	
129-00-0	Pyrene	0.19 U	0.77	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	67%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result >= MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	MW-3	<b>Date Sampled:</b>	08/05/24
<b>Lab Sample ID:</b>	FC17713-3	<b>Date Received:</b>	08/06/24
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	FLORIDA-PRO 2018 SW846 3510C		
<b>Project:</b>	PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR00952629.D	1	08/12/24 20:12	EG	08/12/24 07:58	OP4700	GJR912
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.14 U	0.27	0.14	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		66-139%
7194-86-7	Nonatriacontane	116%		40-129%

U = Not detected      MDL = Method Detection Limit  
PQL = Practical Quantitation Limit  
L = Indicates value exceeds calibration range

I = Result > = MDL but < PQL    J = Estimated value  
V = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody





FC17713

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		<div style="border: 1px solid black; padding: 2px;"> Page: 1 of 1 </div>	
Company: PPM Consultants, Inc.		Report To: Valerie Laroche		Attention: <a href="mailto:an.corp@ppmco.com">an.corp@ppmco.com</a>		Murphy USA (Please Circle One)	
Address: 750 South Northlake Boulevard Suite 1012 Altamonte Springs, FL 32701		Project Address: 2769 SOUTHEAST HIGHWAY 70  Arcadia, FL		Company Name: PPM  Address: 5555 Bankhead Highway Birmingham, AL, 35210			
Email To: <a href="mailto:valerie.laroche@ppmco.com">valerie.laroche@ppmco.com</a>		PPM Project Number: 750800111-SA1		BGS Quote Reference: BGS Project Manager: Dwayne Foster/ Dwayne.Foster@sigs.com; Suzanne Junkin Suzanne.Junkin@sigs.com BGS Prolis #:		Categories: <u>STATE TRUOFFUND-RATES</u> PPM RATES MURPHY RATES	
Phone: 407-240-1127 Fax: 407-240-1300		Murphy Store # / Terminal: MUSA 6902		Site Location STATE: FL		<div style="background-color: #cccccc; width: 100px; height: 100px;"></div>	
Requested Due Date/AT:		Store Address(City, State) Arcadia, FL					

[illegible]

<http://www.sgs.com/en/terms-and-conditions>

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Container (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER: Julian Corman					
SIGNATURE OF SAMPLER: [Signature]					

3.6 IR#1

## FC17713: Chain of Custody

Page 1 of 3



## SGS Sample Receipt Summary

Job Number: fc17713

Client: PPM CONSULTANTS

Project: MUSA 6902

Date / Time Received: 8/6/2024 9:19:00 AM

Delivery Method: DROP OFF

Airbill #s: N/A

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.4);

### Cooler Information

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification: |                                     | IR Gun                   |
| 5. Cooler media:             |                                     | Ice (Bag)                |

### Trip Blank Information

Y or N N/A

- |                                 |                          |                                     |                          |
|---------------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

3. Type of TB Received

W or S N/A

☐ ☐ ☒

### Sample Information

Y or N N/A

- |  |                                     |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles:               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Samples presented properly                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 3. Sufficient volume/containers rec'd for analysis | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Condition of sample:                            |                                     | Intact                              |                                     |
| 5. Sample rec'd within HT                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 6. Dates/Times/IDs on COC match sample label       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 7. VOCs have headspace                             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 8. Bottles received for unspecified tests          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 9. Compositing instructions clear                  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs?        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 11. % Solids Jar Received?                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present?                     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422

pH 10-12: \_\_\_\_\_

Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot # \_\_\_\_\_

Comments RECEIVED XCR AND METAL BOTTLE FOR SAMPLE #2-3 NOT NOTED ON COC.

SM089-03  
Rev. Date 12/7/17

FC17713: Chain of Custody

Page 2 of 3



Per Valerie Laroche - PPM, only MW-2 requires metals and hex chrome analysis. Please disregard additional containers.

4.1

4

**FC17713: Chain of Custody**

**Page 3 of 3**



## MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

Page 1 of 1

**Job Number:** FC17713

**Account:** MURPHY Murphy Oil USA

**Project:** PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V104034-MB <sup>a</sup>	1086565.D	1	08/07/24	JW	n/a	n/a	V104034

**The QC reported here applies to the following samples:**

**Method:** SW846 8260D

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.31	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 83-118%
17060-07-0	1,2-Dichloroethane-D4	95% 79-125%
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	105% 83-118%

(a) Sample was treated with an anti-foaming agent.



## Blank Spike Summary

Page 1 of 1

**Job Number:** FC17713

**Account:** MURPHY Murphy Oil USA

**Project:** PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V104034-BS	1086563.D	1	08/07/24	JW	n/a	n/a	V104034

The QC reported here applies to the following samples:

Method: SW846 8260D

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	25.4	102	81-122
100-41-4	Ethylbenzene	25	25.3	101	81-121
1634-04-4	Methyl Tert Butyl Ether	25	24.4	98	72-117
108-88-3	Toluene	25	25.3	101	80-120
1330-20-7	Xylene (total)	75	77.6	103	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

\* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC17713  
Account: MURPHY Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC17671-1MS	1O86586.D	10	08/07/24	JW	n/a	n/a	V1O4034
FC17671-1MSD	1O86587.D	10	08/07/24	JW	n/a	n/a	V1O4034
FC17671-1 <sup>a</sup>	1O86569.D	10	08/07/24	JW	n/a	n/a	V1O4034

The QC reported here applies to the following samples: Method: SW846 8260D

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	FC17671-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	10 U	250	248	99	250	246	98	1	81-122/14
100-41-4	Ethylbenzene	10 U	250	238	95	250	237	95	0	81-121/14
1634-04-4	Methyl Tert Butyl Ether	10 U	250	228	91	250	234	94	3	72-117/14
108-88-3	Toluene	10 U	250	239	96	250	237	95	1	80-120/14
1330-20-7	Xylene (total)	30 U	750	728	97	750	727	97	0	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FC17671-1	Limits
1868-53-7	Dibromofluoromethane	101%	100%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	101%	98%	79-125%
2037-26-5	Toluene-D8	96%	96%	96%	85-112%
460-00-4	4-Bromofluorobenzene	98%	99%	102%	83-118%

(a) Sample was treated with an anti-foaming agent.

\* = Outside of Control Limits.



## MS Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

Page 1 of 1

**Job Number:** FC17713

**Account:** MURPHY Murphy Oil USA

**Project:** PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4699-MB	T071844.D	1	08/13/24	EM	08/12/24	OP4699	ST2479

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.80	0.32	ug/l	
208-96-8	Acenaphthylene	ND	0.80	0.32	ug/l	
120-12-7	Anthracene	ND	0.80	0.20	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.16	0.032	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.16	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.080	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.16	0.032	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.032	ug/l	
218-01-9	Chrysene	ND	0.16	0.032	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.16	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.80	0.20	ug/l	
86-73-7	Fluorene	ND	0.80	0.20	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.16	0.032	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.80	0.32	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.80	0.32	ug/l	
91-20-3	Naphthalene	ND	0.80	0.32	ug/l	
85-01-8	Phenanthrene	ND	0.80	0.20	ug/l	
129-00-0	Pyrene	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Limits
7297-45-2	2-Methylnaphthalene-d10	96% 50-150%
93951-69-0	Fluoranthene-d10	109% 50-150%



## Blank Spike Summary

Page 1 of 1

**Job Number:** FC17713**Account:** MURPHY Murphy Oil USA**Project:** PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4699-BS	T071843.D	1	08/13/24	EM	08/12/24	OP4699	ST2479

**The QC reported here applies to the following samples:****Method:** SW846 8270E BY SIM

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	8	6.4	80	54-128
208-96-8	Acenaphthylene	8	7.7	96	55-128
120-12-7	Anthracene	4	3.1	78	57-129
56-55-3	Benzo(a)anthracene	4	3.4	85	60-134
50-32-8	Benzo(a)pyrene	4	3.6	90	58-131
205-99-2	Benzo(b)fluoranthene	4	3.8	95	62-139
191-24-2	Benzo(g,h,i)perylene	4	3.7	93	48-136
207-08-9	Benzo(k)fluoranthene	4	3.8	95	60-139
218-01-9	Chrysene	4	3.3	83	64-136
53-70-3	Dibenzo(a,h)anthracene	4	3.9	98	46-131
206-44-0	Fluoranthene	8	6.9	86	59-140
86-73-7	Fluorene	8	6.6	83	55-129
193-39-5	Indeno(1,2,3-cd)pyrene	4	3.6	90	46-139
90-12-0	1-Methylnaphthalene	8	5.1	64	52-128
91-57-6	2-Methylnaphthalene	8	6.2	78	50-117
91-20-3	Naphthalene	8	6.2	78	52-124
85-01-8	Phenanthrene	8	6.6	83	60-130
129-00-0	Pyrene	8	7.0	88	53-134

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	80%	50-150%
93951-69-0	Fluoranthene-d10	89%	50-150%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** FC17713

**Account:** MURPHY Murphy Oil USA

**Project:** PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4699-MS	T071845.D	1	08/13/24	EM	08/12/24	OP4699	ST2479
OP4699-MSD	T071846.D	1	08/13/24	EM	08/12/24	OP4699	ST2479
FC17866-1	T071847.D	1	08/13/24	EM	08/12/24	OP4699	ST2479

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	FC17866-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.80 U	8	6.5	81	8	6.1	76	6	54-128/23
208-96-8	Acenaphthylene	0.80 U	8	7.7	96	8	7.2	90	7	55-128/23
120-12-7	Anthracene	0.80 U	4	3.3	83	4	2.9	73	13	57-129/22
56-55-3	Benzo(a)anthracene	0.16 U	4	3.8	95	4	3.3	83	14	60-134/18
50-32-8	Benzo(a)pyrene	0.16 U	4	4.1	103	4	3.6	90	13	58-131/20
205-99-2	Benzo(b)fluoranthene	0.080 U	4	4.3	108	4	3.9	98	10	62-139/21
191-24-2	Benzo(g,h,i)perylene	0.16 U	4	4.0	100	4	3.8	95	5	48-136/23
207-08-9	Benzo(k)fluoranthene	0.080 U	4	4.2	105	4	3.8	95	10	60-139/19
218-01-9	Chrysene	0.16 U	4	3.7	93	4	3.3	83	11	64-136/19
53-70-3	Dibenzo(a,h)anthracene	0.16 U	4	4.2	105	4	3.9	98	7	46-131/25
206-44-0	Fluoranthene	0.80 U	8	7.6	95	8	6.8	85	11	59-140/18
86-73-7	Fluorene	0.80 U	8	6.7	84	8	6.2	78	8	55-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	0.16 U	4	4.0	100	4	3.6	90	11	46-139/24
90-12-0	1-Methylnaphthalene	0.80 U	8	5.1	64	8	4.9	61	4	52-128/22
91-57-6	2-Methylnaphthalene	0.80 U	8	6.2	78	8	6.0	75	3	50-117/23
91-20-3	Naphthalene	0.80 U	8	6.2	78	8	5.7	71	8	52-124/23
85-01-8	Phenanthrene	0.80 U	8	7.0	88	8	6.4	80	9	60-130/22
129-00-0	Pyrene	0.80 U	8	7.9	99	8	7.0	88	12	53-134/18

CAS No.	Surrogate Recoveries	MS	MSD	FC17866-1	Limits
7297-45-2	2-Methylnaphthalene-d10	81%	76%	82%	50-150%
93951-69-0	Fluoranthene-d10	100%	90%	103%	50-150%

\* = Outside of Control Limits.



## GC/LC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Job Number: FC17713  
Account: MURPHY Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4700-MB	JR00952625.D	1	08/12/24	EG	08/12/24	OP4700	GJR912

The QC reported here applies to the following samples: Method: FLORIDA-PRO 2018

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.27	0.14	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	106% 66-139%
7194-86-7	Nonatriacontane	120% 40-129%



Blank Spike Summary

Job Number: FC17713  
Account: MURPHY Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4700-BS	JR00952626.D	1	08/12/24	EG	08/12/24	OP4700	GJR912

The QC reported here applies to the following samples: Method: FLORIDA-PRO 2018

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)	2.72	2.89	106	66-119

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	117%	66-139%
7194-86-7	Nonatriacontane	121%	40-129%

\* = Outside of Control Limits.



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC17713  
Account: MURPHY Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4700-MS	JR00952643.D	1	08/13/24	EG	08/12/24	OP4700	GJR912
OP4700-MSD	JR00952644.D	1	08/13/24	EG	08/12/24	OP4700	GJR912
FC17821-5	JR00952642.D	1	08/13/24	EG	08/12/24	OP4700	GJR912

The QC reported here applies to the following samples: Method: FLORIDA-PRO 2018

FC17713-1, FC17713-2, FC17713-3

CAS No.	Compound	FC17821-5 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	0.827	5.23	5.97	98	5.23	6.10	101	2	66-119/20

CAS No.	Surrogate Recoveries	MS	MSD	FC17821-5	Limits
84-15-1	o-Terphenyl	111%	108%	110%	66-139%
7194-86-7	Nonatriacontane	127%	123%	125%	40-129%

\* = Outside of Control Limits.



## Metals Analysis

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries



BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44420  
Matrix Type: AQUEOUS

Methods: SW846 7470A  
Units: ug/l

Prep Date: 08/09/24

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.50	.03	.03	0.0020	<0.50

Associated samples MP44420: FC17713-1

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44420  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 08/09/24 08/09/24

Metal	FC17667-2F		QC	Limits	FC17667-2F		Spikelot	HGFLWS1	% Rec	QC
	Original	DUP			Original	MS				
Mercury	0.0	0.0	NC	0-20	0.0	2.8	3		93.3	80-120

Associated samples MP44420: FC17713-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44420  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 08/09/24

Metal	FC17667-2F Original MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.0	3	100.0	6.9 20

Associated samples MP44420: FC17713-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44420  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 08/09/24

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	3.2	3	106.7	80-120

Associated samples MP44420: FC17713-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.3

8



SERIAL DILUTION RESULTS SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44420  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 08/09/24

Metal	FC17667-2F		QC	
	Original	SDL 1:5	%DIF	Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP44420: FC17713-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.4

8



BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 08/15/24

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	.5	1		
Beryllium	4.0	.1	.2		
Boron	100	5	10		
Cadmium	5.0	.1	.2	0.0	<5.0
Calcium	1000	50	50	8.9	<1000
Chromium	10	.5	1	0.0	<10
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	15	17		
Lead	5.0	1	1.1	0.90	<5.0
Lithium	10	.5	1.3		
Magnesium	5000	35	35	7.5	<5000
Manganese	15	.25	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	100	200		
Selenium	10	2	2.9		
Silver	10	.5	.7		
Sodium	10000	250	500		
Strontium	10	.25	.5		
Thallium	10	1	1.4		
Tin	50	.5	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4	0.60	<20

Associated samples MP44455: FC17713-1

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 08/15/24 08/15/24

Metal	FC17658-17 Original DUP		RPD	QC Limits	FC17658-17 Original MS		Spikelot MPFLICP5	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	0.0	0.0	NC	0-20	0.0	197	200	98.5	80-120
Calcium	555	559	0.7	0-20	555	45600	45000	100.1	80-120
Chromium	0.50	0.50	0.0	0-20	0.50	213	200	106.3	80-120
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	1.0	0.0	200.0(a)	0-20	1.0	193	200	96.0	80-120
Lithium									
Magnesium	0.00	0.00	NC	0-20	0.00	47600	45000	105.8	80-120
Manganese									
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	15.3	15.6	1.9	0-20	15.3	218	200	101.4	80-120

Associated samples MP44455: FC17713-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC17713  
 Account: MURPHY - Murphy Oil USA  
 Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 08/15/24

Metal	FC17658-17 Original	MSD	SpikeLot MPFLICP5	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.0	191	200	95.5	3.1	20
Calcium	555	44600	45000	97.9	2.2	20
Chromium	0.50	208	200	103.8	2.4	20
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	1.0	187	200	93.0	3.2	20
Lithium						
Magnesium	0.00	46500	45000	103.3	2.3	20
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	15.3	213	200	98.9	2.3	20

Associated samples MP44455: FC17713-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FC17713

Account: MURPHY - Murphy Oil USA

Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455

Methods: SW846 6010D

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 08/15/24

Metal	BSP Result	Spikelot MPFLICP5	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	198	200	99.0	80-120
Calcium	45100	45000	100.2	80-120
Chromium	211	200	105.5	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	194	200	97.0	80-120
Lithium				
Magnesium	47400	45000	105.3	80-120
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	205	200	102.5	80-120

Associated samples MP44455: FC17713-1

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

8.2.3

8



# SERIAL DILUTION RESULTS SUMMARY

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 08/15/24

Metal	FC17658-17 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	555	790	42.3 (a)	0-10
Chromium	0.500	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	1.00	0.00	100.0(a)	0-10
Lithium				
Magnesium	0.00	0.00	NC	0-10
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	15.3	0.00	100.0(a)	0-10

Associated samples MP44455: FC17713-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).



## POST DIGESTATE SPIKE SUMMARY

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

QC Batch ID: MP44455  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date:

08/15/24

Metal	Sample ml	Final ml	FC17658-17 Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium	9.8	10			47.4	0.2	2.5	50	94.8	80-120
Calcium	9.8	10	555.4	544.292	5275	0.2	250	5000	94.6	80-120
Chromium	9.8	10	.5	.49	50.7	0.2	2.5	50	100.4	80-120
Cobalt										
Copper										
Iron										
Lead	9.8	10	1	.98	46.7	0.2	2.5	50	91.4	80-120
Lithium										
Magnesium	9.8	10			5449	0.2	250	5000	109.0	80-120
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	15.3	14.994	256.2	0.2	12.5	250	96.5	80-120

Associated samples MP44455: FC17713-1

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(\*\*) Corr. sample result = Raw \* (sample volume / final volume)  
(anr) Analyte not requested





## General Chemistry

### QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries



METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GN98119	0.010	0.0	mg/l	.1	0.096	95.5	85-115%

Associated Samples:  
Batch GN98119: FC17713-1  
(\*) Outside of QC limits



MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GN98119	FC17713-1	mg/l	0.017	.1	0.031	14.2*(a)	85-115%

Associated Samples:

Batch GN98119: FC17713-1

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.



MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: FC17713  
Account: MURPHY - Murphy Oil USA  
Project: PPMFLO: Murphy USA 6902; 2769 SE Hwy 70, Arcadia, FL

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chromium, Hexavalent	GN98119	FC17713-1	mg/l	0.017	.1	0.030	3.6	20%

Associated Samples:  
Batch GN98119: FC17713-1  
(\*) Outside of QC limits  
(N) Matrix Spike Rec. outside of QC limits



Site 18 – Desoto C&D Disposal Facility

FDEP Facility ID: 92117

14662 NW Hwy 70

Arcadia, FL 34266



**DESOTO LANDFILL, LLC  
DESOTO C&D DISPOSAL FACILITY  
FIRST SEMIANNUAL COMPLIANCE MONITORING REPORT 2024  
DEP PERMIT NO. 231674-005-SO/22 and 231674-008-SO/MM,  
WACS No. 92117**

**Prepared by:**

**LOCKLEAR AND ASSOCIATES, INC.  
210 Southwest 4<sup>th</sup> Avenue  
Gainesville, Florida 32601**

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Walker Wrenn  
P.G. No. 2792





# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(31), F.A.C

Form Title: Water Quality Monitoring Certification

Effective Date: January 6, 2010

Incorporated in Rule 62-701.510(9), F.A.C.

## WATER QUALITY MONITORING CERTIFICATION

### PART I GENERAL INFORMATION

(1) Facility Name DeSoto C&D Disposal Facility

Address 14662 SR 70 NE

City Arcadia, Florida

Zip 34266

County DeSoto

Telephone Number ( )

(2) WACS Facility ID 92117

(3) DEP Permit Number 231674-005-SO/22 and 231674-008-SO/MM

(4) Authorized Representative's Name Walker Wrenn, P.G.

Title Environmental Director

Address 210 Southwest 4th Avenue

City Gainesville, Florida

Zip 32601

County Alachua

Telephone Number (352 ) 672-6867

Email address (if available) walker@locklearconsulting.com

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

(Date)

(Owner or Authorized Representative's Signature)

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Locklear & Associates, Inc.

Analytical Lab NELAC / HRS Certification # E83018

Lab Name Eurofins Orlando

Address 481 Newburyport Avenue, Altamonte Springs, FL 32701

Phone Number (407 ) 826-5314

Email address (if available) \_\_\_\_\_



March 26, 2024

Ms. Katie O’Gara  
Florida Department of Environmental Protection – South District  
2295 Victoria Avenue, Suite 364  
Fort Myers, FL 33901

RE: **Compliance Monitoring Report – First Semiannual 2024  
DeSoto C&D Disposal Facility  
14662 State Road 70 Northeast, Arcadia, DeSoto County, Florida  
Permit No. 231674-005-SO/22 and 231674-008-SO/MM  
WACS No. 92117**

Dear Ms. O’Gara:

This report presents data from the First Semiannual – 2024 sampling event at the DeSoto C&D Disposal Facility performed on February 6 and 7, 2024.

All groundwater wells which require semiannual sampling were sampled and analyzed for the parameters listed in Appendix 3, Part II.3 of the facility permit. Surface water stations SW-2 and SW-3 were analyzed for the parameters listed in Appendix 3, Part III.2 of the facility permit. Quality Assurance/Quality Control samples were also collected. All sampling was performed by Locklear & Associates, Inc. in accordance with FDEP’s Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Samples were submitted to Eurofins Orlando, Florida.

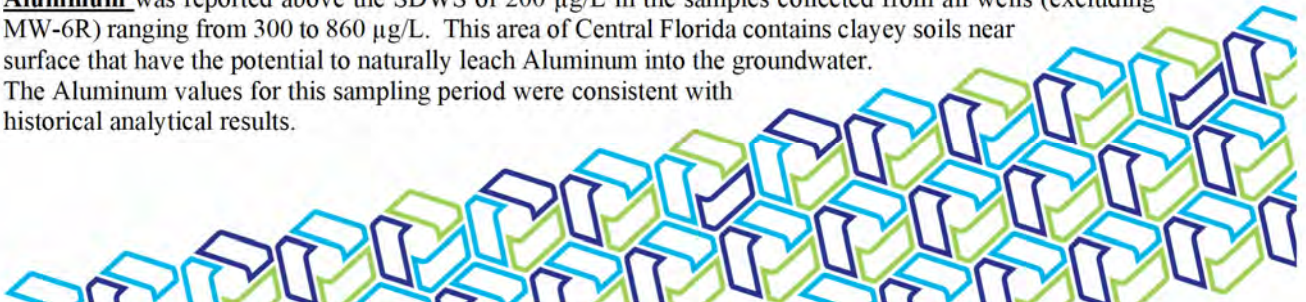
The monitoring well network is comprised of nine monitoring wells: background well MW-1, detection wells MW-3, MW-4, MW-5, MW-6R, MW-7 and MW-8, and compliance wells CW-1 and CW-2. Additionally, the monitoring well network includes five piezometer wells: MW-2, PZ-2, P-2, P-3, and WL-6. The surficial groundwater flow direction was established by subtracting the continuous round depth-to-water values from the surveyed top-of-casing values. As shown in Attachment 1, the surficial groundwater flow beneath the site during the sampling event trended south beneath the site. This groundwater flow is consistent with historic groundwater flow results.

All monitoring wells were sampled for the following field parameters: pH, Turbidity, Temperature, Specific Conductivity, Dissolved Oxygen, Depth to Water and Colors and Sheens. Field forms from the sampling event are provided in Attachment 6.

The following is a synopsis of Attachment 2, Detected Parameter Exceedances Compared to Groundwater Standards:

Secondary Drinking Water Standard (SDWS) and Groundwater Cleanup Target Level (GCTL) Exceedances:

- The field **pH** values for all wells were reported below or slightly above the lower limit of the SDWS of 6.5 – 8.5 S.U., ranging from 5.27 to 6.78 S.U. pH values below the SDWS are common in the surficial aquifer in this area of Central Florida, and these values are consistent with historic analytical results.
- **Sulfate** was reported above the SDWS of 250 mg/L in the samples collected from detection wells MW-6R, MW-7 and MW-8 ranging from 290 to 700 mg/L. The remaining Sulfate results were below the SDWS.
- **Total Dissolved Solids (TDS)** was reported at or above the SDWS of 500 mg/L in the samples collected from monitoring wells MW-3, MW-4, MW-6R, MW-7, MW-8, and compliance well CW-2 ranging from 580 to 1300 mg/L.
- **Aluminum** was reported above the SDWS of 200 µg/L in the samples collected from all wells (excluding MW-6R) ranging from 300 to 860 µg/L. This area of Central Florida contains clayey soils near surface that have the potential to naturally leach Aluminum into the groundwater. The Aluminum values for this sampling period were consistent with historical analytical results.





- **Iron** was reported above the SDWS of 300 µg/L in the samples collected from all monitoring wells, ranging from 330 to 30000 µg/L. Iron concentrations have been elevated in the past in samples collected from these wells and are considered to be naturally occurring.

#### Primary Drinking Water Standard (PDWS) Exceedances:

- **Arsenic** was reported above the PDWS of 10 µg/L in the samples collected from detection wells MW-3, MW-4 and MW-6R and compliance well CW-1 ranging from 16 to 58 µg/L. The Arsenic values for this sampling event were comparable to historical analytical results.
- **Benzene** was reported above the PDWS of 1 µg/L in the sample collected from detection well MW-3 at 1.2 µg/L.

All remaining parameters were reported below their respective groundwater standards as shown in Attachment 3.

#### Conclusion

Sampling will continue to be performed semiannually as required by the permit. PDWS Exceedances: Arsenic exceedances observed in detection wells MW-3 and MW-4 show reduced concentrations in downgradient compliance wells CW-1 and CW-2. Benzene observed in MW-3 showed reduced concentration in downgradient compliance well CW-2. SDWS Exceedances: Aluminum and Iron were reported at elevated numbers in the background well, which indicates that these constituents are naturally occurring and not a result from landfill activities. Sulfate and TDS will continue to be closely monitored to identify elevating trends.

Laboratory analysis for the quality assurance and quality control (QAQC) blanks (Equipment and Trip) is presented in Attachment 4. All parameters analyzed in the QAQC samples were below the Method Detection Level (MDL). Automated Data Processing Tool (ADaPT) and Electronic Data Deliverable (EDDs) delivered electronically in accordance with the facility permit. Semiannual compliance monitoring should be continued in accordance with the facility permit.

If you have any questions regarding this report, please contact me or John Locklear at (352) 672-6867.

Sincerely,

C. Walker Wrenn, P.G.  
Environmental Services Division Director

P:\P Drive Files\Civil Design\CD DeSoto\Compliance Monitoring\2024\24S1\Figures\24S1 Text.docx

xc: Tony Bishop, Eco South Services, Vice President of Post Collection  
Michael Guy, Eco South Services, EP Manager  
Jason Harris, Eco South Services, Landfill Manager  
Joe O'Neill, Civil Design Services, Vice President

Attachment 1: Groundwater Elevation Data, and Groundwater Contour Map  
Attachment 2: Detected Parameter Exceedances Compared to Groundwater Standards  
Attachment 3: Groundwater Parameters At or Above the Laboratory Detection Limit  
Attachment 4: Quality Assurance/Quality Control Summary  
Attachment 5: Surface Water Comparison – Class III (Fresh) Standards  
Attachment 6: Field Forms  
Attachment 7: Laboratory Reports



## **Attachment 1**

### **Groundwater Elevation Data, and Groundwater Contour Map**

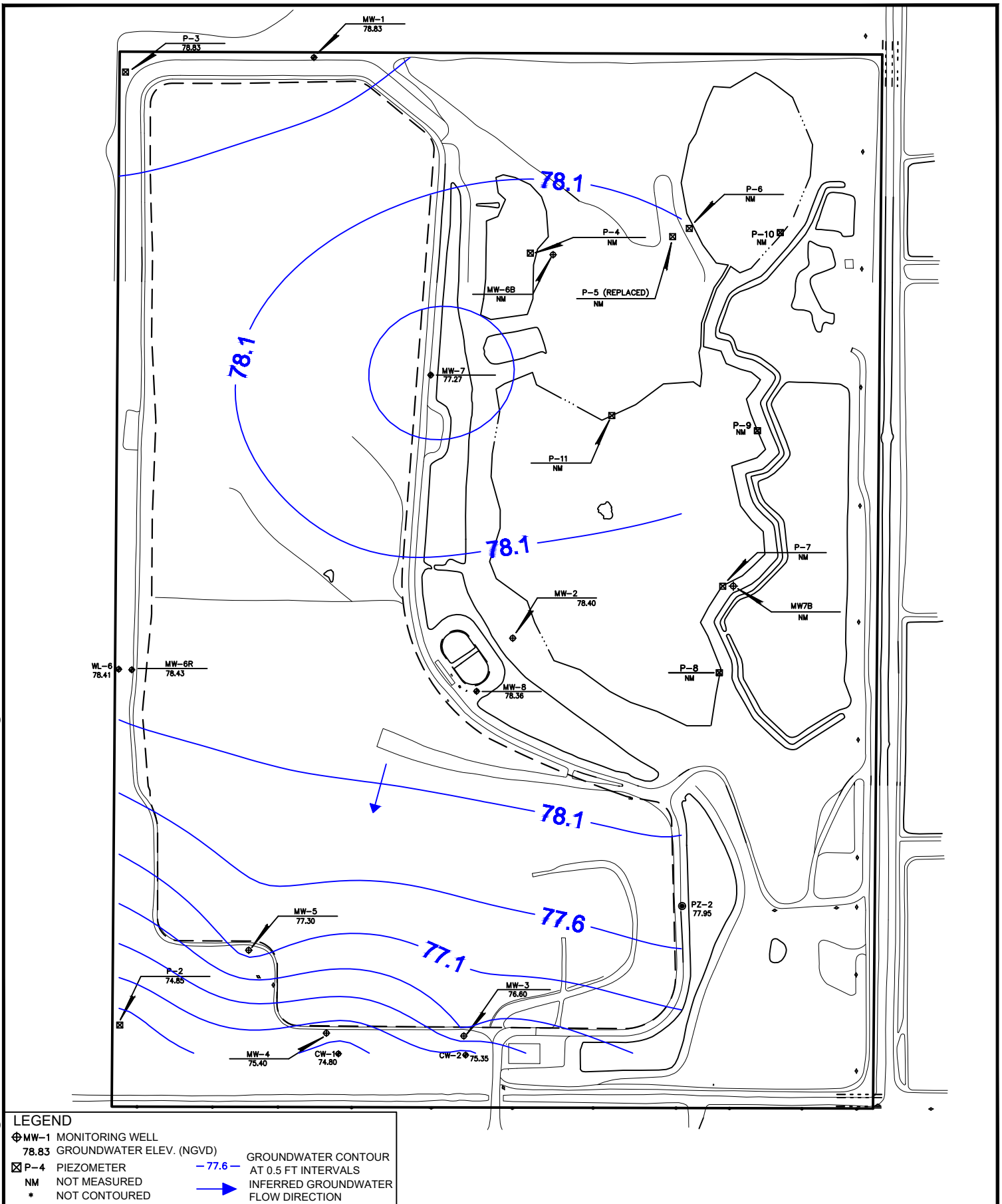


## GROUNDWATER ELEVATION DATA

### DeSoto C&D Disposal Facility 2024 - First Semiannual Compliance Monitoring Event

WELL NAME	TOP OF CASING	CONTOUR MAP	
		DEPTH TO WATER	GROUDWATER ELEVATION
	(NGVD,FT)	(FT)	(NGVD,FT)
MW-1	88.81	9.98	78.83
MW-2	82.50	4.10	78.40
MW-3	83.85	7.25	76.60
MW-4	83.05	7.65	75.40
MW-5	83.28	5.98	77.30
MW-6R	87.21	8.78	78.43
MW-7	87.79	10.52	77.27
MW-8	87.53	9.17	78.36
CW-1	83.62	8.82	74.80
CW-2	83.65	8.30	75.35
PZ-2	85.79	7.84	77.95
P-2	82.47	7.62	74.85
P-3	85.32	6.49	78.83
WL-6	86.99	8.58	78.41







## **Attachment 2**

### **Detected Parameter Exceedances Compared to Groundwater Standards**



**DeSoto C&D Disposal Facility****Detected Parameter Exceedances Compared to Groundwater Standards****Compliance Monitoring Report – First Semiannual 2024**

PARAMETER	COLLECTION	pH (FIELD)	SULFATE	TOTAL DISSOLVED SOLIDS	ALUMINUM	ARSENIC	IRON	BENZENE
STANDARD	DATE	6.5-8.5 s.u.**	250 mg/L**	500 mg/L**	200 µg/L**	10 µg/L*	300 µg/L**	1 µg/L*
UNITS	M/D/Y	S.U.	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L
Background								
MW-1	2/6/2024	5.27	-	-	600	-	2600	-
Detection								
MW-3	2/6/2024	-	-	860	450	26	2400	1.2
MW-4	2/6/2024	6.38	-	900	700	58	1600	-
MW-5	2/6/2024	-	-	-	570	-	1200	-
MW-6R	2/6/2024	6.40	700	1300	-	16	2200	-
MW-7	2/6/2024	5.57	670	1100	450	-	30000	-
MW-8	2/6/2024	6.07	290	580	860	-	1900	-
Compliance								
CW-1	2/6/2024	-	-	-	300	24	1600	-
CW-2	2/6/2024	-	-	700	300	-	330	-
Surface Water								
SW-2	2/7/2024	6.21	-	-	-	-	580	-
SW-3	2/7/2024	6.41	-	-	-	-	3600	-
QAQC								
EQBGW	2/6/2024	NM	-	-	-	-	-	-
EQBSW	2/7/2024	NM	-	-	-	-	-	-
TRIPGW1	2/6/2024	NM	NM	NM	NM	NM	NM	-
TRIPGW2	2/7/2024	NM	NM	NM	NM	NM	NM	-
TRIPSW	2/7/2024	NM	NM	NM	NM	NM	NM	-

**LEGEND**

\* = primary drinking water standard

\*\* = secondary drinking water standard

\*\*\* = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

- = Analysis Result is not at or outside Groundwater Standard

V = Indicates that the analyte was detected in both the sample and the associated method blank.

NS = Not Sampled

NM = Not Measured

Note: Analysis results which were reported above the laboratory detection limit, but not at or above the Groundwater Standard are not displayed in this table.



## **Attachment 3**

### **Groundwater Parameters At or Above the Laboratory Detection Limit**



**DeSoto C&D Disposal Facility****Groundwater Parameters At or Above Laboratory Detection Limit****Compliance Monitoring Report – First Semiannual 2024**

PARAMETER		SPECIFIC CONDUCTANCE	DISSOLVED OXYGEN	pH	TEMPERATURE	TURBIDITY	AMMONIA as NITROGEN	CHLORIDE	NITRATE (as N)
STANDARD	COLLECTION	1	1	6.5-8.5 s.u.**	1	1	1	250 mg/L**	10 mg/L*
UNITS	DATE	umhos/cm	mg/L	S.U.	deg C	NTU	mg/L	mg/L	mg/L
Background									
MW-1	2/6/2024	327	0.50	5.27	8.77	2.18	1.0	23	<0.20
Detection									
MW-3	2/6/2024	1045	0.40	6.78	10.12	17.3	18	69	<0.20
MW-4	2/6/2024	741	0.20	6.38	10.54	4.08	15	110	<0.20
MW-5	2/6/2024	470	4.04	6.75	9.16	9.18	0.070	6.8	1.5
MW-6R	2/6/2024	985	0.45	6.40	8.19	2.26	2.3	12	1.6
MW-7	2/6/2024	911	0.34	5.57	9.30	6.21	0.53	13	<0.20
MW-8	2/6/2024	586	0.89	6.07	9.00	17.0	0.078	8.4	1.1
Compliance									
CW-1	2/6/2024	701	0.31	6.73	8.51	5.26	17	52	<0.20
CW-2	2/6/2024	502	0.26	6.76	9.28	3.00	3.8	5.2	<0.20
Surface Water									
SW-2	2/7/2024	390	10.62	6.21	6.02	3.48	0.043	68	3.0
SW-3	2/7/2024	368	10.26	6.41	6.32	15.7	1.0	31	0.83

**LEGEND**

\* = primary drinking water standard

\*\* = secondary drinking water standard

\*\*\* = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

1 = No Standard

- = Not analyzed

&lt; = Below stated Laboratory Detection Limit

I = Value is between the Method Detection Level (MDL) and the Reporting Detection Level (RDL)

J = Estimated value

V = Analyte found in associated method blank

Q = Estimated value; analyte analyzed after acceptable holding time

U = Indicates that the compound was analyzed for but not detected



**DeSoto C&D Disposal Facility****Groundwater Parameters At or Above Laboratory Detection Limit****Compliance Monitoring Report – First Semiannual 2024**

PARAMETER	SULFATE	TOTAL DISSOLVED SOLIDS	ALUMINUM	ARSENIC	CADMIUM	CHROMIUM	IRON	LEAD
STANDARD UNITS	250 mg/L**	500 mg/L**	200 µg/L**	10 µg/L*	5 µg/L*	100 µg/L*	300 µg/L**	15 µg/L*
	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background								
MW-1	97	210	600	1.1 I	0.38 I	3.7	2600	0.58 I
Detection								
MW-3	96	860	450	26	<0.27	14	2400	0.30 I
MW-4	76	900	700	58	<0.27	17	1600	0.29 I
MW-5	98	400	570	3.3 I	<0.27	1.1 I	1200	0.43 I
MW-6R	700	1300	98	16	<0.27	1.1 I	2200	0.35 I
MW-7	670	1100	450	1.5 I	<0.27	5.0	30000	<0.27
MW-8	290	580	860	0.68 I	<0.27	1.5 I	1900	0.28 I
Compliance								
CW-1	96	480	300	24	<0.27	8.6	1600	<0.27
CW-2	63	700	300	3.7 I	<0.27	3.9	330	<0.27
Surface Water								
SW-2	180	400	63	<0.43	<0.27	0.76 I	580	<0.27
SW-3	99	310	110	3.4 I	<0.27	3.7	3600	<0.27

**LEGEND**

\* = primary drinking water standard

\*\* = secondary drinking water standard

\*\*\* = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

1 = No Standard

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&lt; = Below stated Laboratory Detection Limit

I = Value is between the Method Detection Level (MDL) and the Reporting Detection Level (RDL)

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V = Analyte found in associated method blank

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**DeSoto C&D Disposal Facility****Groundwater Parameters At or Above Laboratory Detection Limit****Compliance Monitoring Report – First Semiannual 2024**

PARAMETER	SODIUM	ETHYLBENZENE	o-XYLENE	m,p-XYLENE	XYLENES (TOTAL)	TOLUENE	BENZENE
STANDARD	160 mg/L*	30 µg/L**	20 µg/L**	20 µg/L**	20 µg/L**	40 µg/L**	1 µg/L*
UNITS	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Background							
MW-1	16	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
Detection							
MW-3	67	<0.69	<0.53	<1.3	<1.3	0.99 I	1.2
MW-4	71	0.99 I	1.1	2.1	3.2	7.9	0.90 I
MW-5	5.4	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
MW-6R	14	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
MW-7	27	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
MW-8	8.0	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
Compliance							
CW-1	35	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
CW-2	6.6	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
Surface Water							
SW-2	25	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71
SW-3	22	<0.69	<0.53	<1.3	<1.3	<0.72	<0.71

**LEGEND**

\* = primary drinking water standard

\*\* = secondary drinking water standard

\*\*\* = Chapter 62-777-Groundwater Cleanup Target Level (GCTL)

1 = No Standard

- = Not analyzed

&lt; = Below stated Laboratory Detection Limit

I = Value is between the Method Detection Level (MDL) and the Reporting Detection Level (RDL)

J = Estimated value

V = Analyte found in associated method blank

Q = Estimated value; analyte analyzed after acceptable holding time

U = Indicates that the compound was analyzed for but not detected



## **Attachment 4**

### **Quality Assurance and Control Summary**



Field Quality Control Sample Review

Site:	DeSoto C&D Disposal Facility
Sampling Period:	First Semiannual 2024

Trip Blanks:

Chain-of-Custody Identifier	Final Report Identifier	Date	Analysis	Parameters Detected / Comment
TRIPGW	TRIPGW	2/6/2024	VOCs	None
TRIPSW1	TRIPSW1	2/7/2024	VOCs	None
TRIPSW2	TRIPSW2	2/7/2024	VOCs	None

Equipment Blanks:

Chain-of-Custody Identifier	Final Report Identifier	Date	Analysis	Equipment	Parameters Detected / Comment
24S1D-EQBGW	EQBGW	2/6/2024	Groundwater Parameters	Submersible Pump and Tubing	Ammonia as N, Total Dissolved Solids
24S1D-EQBSW	EQBSW	2/7/2024	Surface Water Parameters	Bottle and Pole	Chloride, Total Dissolved Solids

Field Sampling Procedures:

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Laboratory Procedures:

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## **Attachment 5**

### **Surface Water Comparison – Class III (Fresh) Standards**



# SURFACE WATER PARAMETER COMPARISON - CLASS III (FRESH) STANDARDS

## DeSoto C&D Disposal Facility

### FIRST SEMIANNUAL - 2024

#### SW-2

	AUGUST 2022	MARCH 2023	JULY 2023	FEBRUARY 2023	COMMENTS
pH (field) (Standard Units) ≤NB ± 1 Unit 6.0 Min. 8.5 Max.	6.8	6.34	NS	6.21	
SPECIFIC CONDUCTANCE (field) (umhos/cm) ≤50% Increase 1275 umhos/cm Max.	533	863	NS	390	
TEMPERATURE ( degrees Centigrade)	24.97	15.98	NS	6.02	
DISSOLVED OXYGEN (mg/L) ≥ 5 mg/L	5.01	5.12	NS	10.62	
TURBIDITY (NTUs) ≤29 NTUs above Natural Background	11.5	12.8	NS	3.48	
FECAL COLIFORM (col/100 ml) See Rule	28	60.9	NS	29.5	
UN-IONIZED AMMONIA ≤0.02 mg/L	<0.0073	<0.00010	NS	<0.00010	
BIOCHEMICAL OXYGEN DEMAND (mg/L) See Rule	2.0	1.2 I	NS	<2.0	
ARSENIC (µg/L) ≤ 50 µg/L	0.774 I	<2.2	NS	<0.43	
CADMIUM (µg/L) ≤ e(0.7852[lnH] - 3.49)	<0.200	<1.1	NS	<0.27	
CHROMIUM (µg/L) ≤ e(0.819[lnH] + 1.561)	1.27	<1.1	NS	0.76 I	
CHEMICAL OXYGEN DEMAND (mg/L)	62	59	NS	62	
TOTAL HARDNESS (CaCO3) (mg/L)	153	290	NS	250	
TOTAL NITROGEN (mg/L) Cause no Imbalance	2.6	1.1	NS	3.5	
TOTAL PHOSPHORUS (mg/L) Cause no Imbalance	0.31	0.12	NS	0.036	
IRON (µg/L) ≤ 1000 µg/L	1320	1900	NS	580	
LEAD (µg/L) < e(1.273[lnH] - 4.705)	<0.250	<1.1	NS	<0.27	
MERCURY (µg/L) ≤ 0.012 µg/L	0.00345	0.0018	NS	0.0016 I	



# **SURFACE WATER PARAMETER COMPARISON - CLASS III (FRESH) STANDARDS**

## **DeSoto C&D Disposal Facility**

### **FIRST SEMIANNUAL - 2024**

#### **SW-3**

	AUGUST 2022	MARCH 2023	JULY 2023	FEBRUARY 2023	COMMENTS
pH (field) (Standard Units) ≤NB ± 1 Unit 6.0 Min. 8.5 Max.	6.75	NS	NS	6.41	
SPECIFIC CONDUCTANCE (field) (umhos/cm) ≤50% Increase 1275 umhos/cm Max.	516	NS	NS	368	
TEMPERATURE ( degrees Centigrade)	26.15	NS	NS	6.32	
DISSOLVED OXYGEN (mg/L) ≥ 5 mg/L	5.33	NS	NS	10.26	
TURBIDITY (NTUs) ≤29 NTUs above Natural Background	10.6	NS	NS	15.7	
FECAL COLIFORM (col/100 ml) See Rule	18	NS	NS	488.4	
UN-IONIZED AMMONIA ≤0.02 mg/L	<0.0073	NS	NS	0.00043	
BIOCHEMICAL OXYGEN DEMAND (mg/L) See Rule	1.5 I	NS	NS	2.2	
ARSENIC (µg/L) ≤ 50 µg/L	0.842 I	NS	NS	3.4 I	
CADMIUM (µg/L) ≤ e(0.7852[lnH] - 3.49)	<0.200	NS	NS	<0.27	
CHROMIUM (µg/L) ≤ e(0.819[lnH] + 1.561)	1.24	NS	NS	3.7	
CHEMICAL OXYGEN DEMAND (mg/L)	57	NS	NS	160	
TOTAL HARDNESS (CaCO3) (mg/L)	139	NS	NS	220	
TOTAL NITROGEN (mg/L) Cause no Imbalance	2.0	NS	NS	3.0	
TOTAL PHOSPHORUS (mg/L) Cause no Imbalance	0.28	NS	NS	0.28	
IRON (µg/L) ≤ 1000 µg/L	1020	NS	NS	3600	
LEAD (µg/L) < e(1.273[lnH] - 4.705)	<0.250	NS	NS	<0.27	
MERCURY (µg/L) ≤ 0.012 µg/L	0.00296	NS	NS	0.0019 I	

STANDARDS FROM FAC 62-302

HISTORICAL DATA PRESENTED FOR TREND COMPARISON

+ = Outside of Class III Surface Water Quality Standards

NM = Not Measured

NS = Not Sampled



Site 23 – Alico (Formerly Orange Co)

FDEP Facility ID: FLD053957866 / 8521198 / 8520909 / 8520908

12010 NE Hwy 70

Arcadia, FL 34266





**Florida Department of  
Environmental Protection  
Hazardous Waste Inspection Report**

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**FACILITY INFORMATION:**

**Facility Name:** Orange Co

**On-Site Inspection Start Date:** 11/09/2011      **On-Site Inspection End Date:** 11/09/2011

**ME ID#:** 51741      **EPA ID#:** FLD053957866

**Facility Street Address:** 12010 NE Highway 70, Arcadia, Florida 34266-4267

**Contact Mailing Address:** PO Box 1860, Arcadia, Florida 34265-1860

**County Name:** DeSoto      **Contact Phone:** (941) 494-4939

**NOTIFIED AS:**

SQG (100-1000 kg/month)

**INSPECTION TYPE:**

Routine Inspection for CESQG (<100 kg/month) facility

Routine Inspection for Used Oil facility

**INSPECTION PARTICIPANTS:**

**Principal Inspector:** Rebecca Foster, Environmental Specialist II

**Other Participants:** Dinah Frazier, Environmental Specialist II; Jerry Newlin, Vice President of Citrus Operation; Glen Heleski, Shop Manager

**LATITUDE / LONGITUDE:** Lat 27° 12' 49.2144" / Long 81° 40' 3.9492"

**SIC CODE:** 0721 - Agriculture - crop planting and protecting

**TYPE OF OWNERSHIP:** Private

**Introduction:**

Orange Co (Orange) was inspected by the Department of Environmental Protection on November 9, 2011 to determine the facility's compliance with state and federal hazardous waste regulations. Mr. Jerry Newlin, Vice President of Citrus Operation, and Mr. Glen Heleski, Shop Manager assisted the inspectors during the inspection. Orange is a conditionally exempt small quantity generator of hazardous waste and a generator of used oil.

**Process Description:**

Orange maintains and harvests orange groves. The facility includes 15,000 acres of managed groves. There is no fruit processing conducted on site. There is an air strip on site for aircraft used to apply pesticides and fertilizers to the orange groves. The facility is on a well and has a septic tank.

There is a main maintenance area where fleet trucks and tractors are maintained. There is one drum top parts washer that contains mineral spirits. The parts washer is maintained by Orange and topped off as needed. Just outside the maintenance shop there is a 300 gallon above ground storage tank that does not have secondary containment. Following the inspection the used oil tank was replaced with a double wall tank. Used oil dollies in the maintenance shop were labeled with the words "Waste Oil". Following the inspection the dollies were labeled with the words "Used Oil". Lead acid batteries are sent to Battery USA Incorporated for core credit. Used oil and used oil filters are disposed through FCC. Orange generates 600 to 1,000 gallons of used oil every two months.

There are four field barns for the maintenance of pumps and equipment out in the groves. Each field barn has a labeled drums for used oil filters and a 300 gallon above ground storage tank for used oil. The tank and drums are properly labeled and within secondary containment.



Inspection Date: 11/09/2011

**New Potential Violations and Areas of Concern:****Universal Waste Lamps**

Type: Violation

Rule: 273.13(d)(1)

Question Number: 39.10

Question: Are lamps managed in a manner to prevent breakage or the release of universal waste or components of universal waste and are the packages or containers structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps?

Explanation: The box that containing universal waste lamps was not kept closed. (Corrected)

Corrective Action: Complete

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**Used Oil Generator Checklist**

Type: Violation

Rule: 62-710.401(6)

Question Number: 5.80

Question: Either double-walled or stored on an oil-impermeable surface with engineered secondary containment that has the capacity to hold 110% of the volume of the largest container within the secondary containment

Explanation: The used oil storage tank located outside the maintenance shop did not have secondary containment. (Corrected)

Corrective Action: Complete. The used oil tank was replaced with a double wall tank.

---

**Summary of Potential Violations and Areas of Concern:**Potential Violations

Rule Number	Area	Date Cited	Explanation
Universal Waste Lamps 273.13(d)(1)		11/09/2011	The box that containing universal waste lamps was not kept closed. (Corrected)
Used Oil Generator Checklist 62-710.401(6)		11/09/2011	The used oil storage tank located outside the maintenance shop did not have secondary containment. (Corrected)

Areas of Concern

No Areas of Concern

**Conclusion:**

Orange was found to be in violation of rules and regulations applicable to generators of used oil and universal waste lamps. The violations were corrected shortly following the inspection.



Inspection Date: 11/09/2011



Inspection Date: 11/09/2011

**Signed:**

A hazardous waste compliance inspection was conducted on this date, to determine your facility's compliance with applicable portions of Chapters 403 & 376, F.S., and Chapters 62-710, 62-730, 62-737, & 62-740 Florida Administrative Code (F.A.C.). Portions of the United States Environmental Protection Agency's Title 40 Code of Federal Regulations (C.F.R.) 260 - 279 have been adopted by reference in the state rules under Chapters 62-730 and 62-710, F.A.C. The above noted potential items of non-compliance were identified by the inspector(s).

This is not a formal enforcement action and may not be a complete listing of all items of non-compliance discovered during the inspection.

Rebecca Foster

**PRINCIPAL INSPECTOR NAME**

Environmental Specialist II

**PRINCIPAL INSPECTOR TITLE****PRINCIPAL INSPECTOR SIGNATURE**

FDEP

**ORGANIZATION**

1/3/2012

**DATE**

Dinah Frazier

**INSPECTOR NAME**

Environmental Specialist II

**INSPECTOR TITLE**

NO SIGNATURE

**INSPECTOR SIGNATURE**

FDEP

**ORGANIZATION**

Jerry Newlin

**REPRESENTATIVE NAME**

Vice President of Citrus Operation

**REPRESENTATIVE TITLE**

NO SIGNATURE

**REPRESENTATIVE SIGNATURE**

Orange Co

**ORGANIZATION**

Glen Heleski

**REPRESENTATIVE NAME**

Shop Manager

**REPRESENTATIVE TITLE**

NO SIGNATURE

**REPRESENTATIVE SIGNATURE**

Orange Co

**ORGANIZATION**

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Potential Violations" or areas of concern.